

PE-DESIGN

VERSION 2.0

Instruction Manual



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 2.0

General

- Additional Region sew type
- Pattern regions can be filled with stitch patterns created by the new Programmable Stitch Creator application.
- Color-adjustable display (Design Page and background)
- Additional Design Page size (180 × 130 mm)
- Content previewing in color before opening files
- Preview windows for settings added to some dialog boxes (e.g., Sewing Attribute Setting)
- Pattern rotation by 1° increments, or 15° increments with the SHIFT key
- Selecting and editing several points at the same time
- Zooming function added in the Preview window

Design Center

“Cut out to Line Image” dialog box (moving from stage 1 to stage 2):

- Additional selectable color (5 in total) to recreate the outlines of a color bitmap image
- Zooming function

Line Image stage (stage 2):

- Zooming function

Figure Handle stage (stage 3):

- Additional editing functions (image rotation, horizontal and vertical mirror, and line drawing)

Layout & Editing

- Additional file formats supported (from Husqvarna, Melco and Pfaff)
- 12 additional text transformation types (24 in total)
- Sewing information (colors, order, pattern dimensions, and stitch number) available on-screen
- Reorientation of patterns imported from Design Center
- Print preview of the pattern and the sewing information on one or two pages
- Text editing
- 6 additional fonts (35 in total)
- Stitch to Block function, allowing you to keep the stitching quality when scaling imported patterns as well as to change sewing attribute settings.
- Content browsing in color before opening files

Programmable Stitch Creator

- New application for creating and editing fill stitch patterns, which can be applied to regions of patterns both in Design Center and Layout & Editing

File Utility

- Selectable COM port

Note:

*This user's manual has been written based on Ver.2.0 for Windows 95, Ver 2.0 Windows 3.1 differs somewhat in screen handling, so please pardon the variation.
(Please use Ver 2.0 for Windows 3.1 if you are running Windows 3.1 on your personal computer.)*

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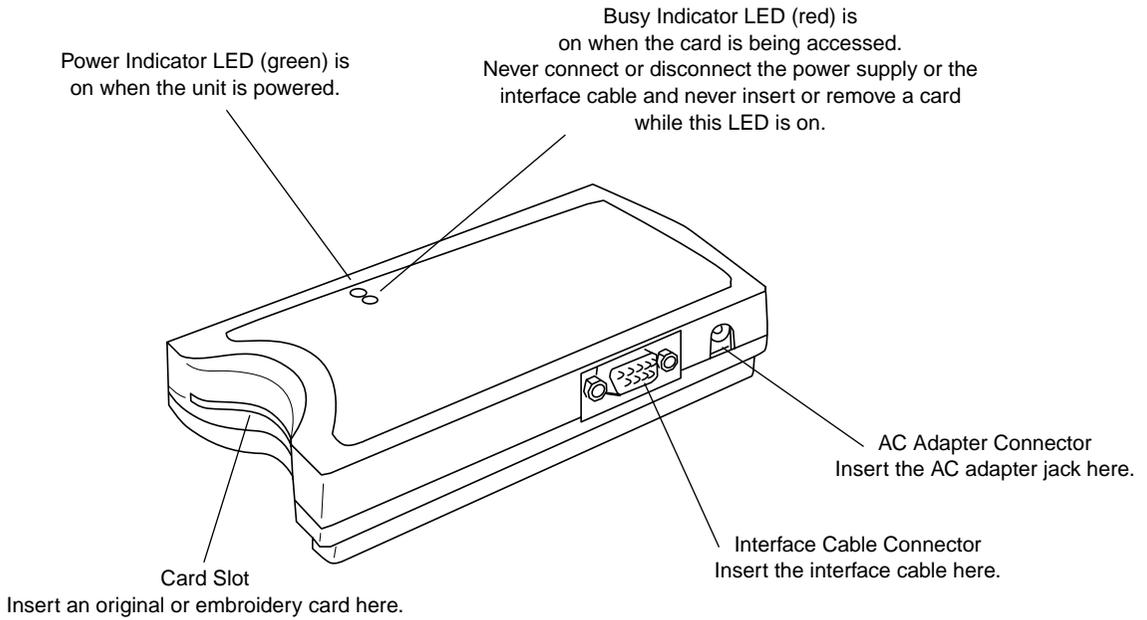
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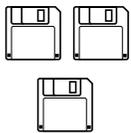
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Before Using

Principal Parts



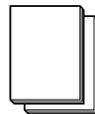
Accessories



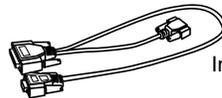
Disks (3)



Original Card (1)

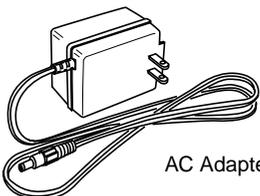


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Interface Cable

Options

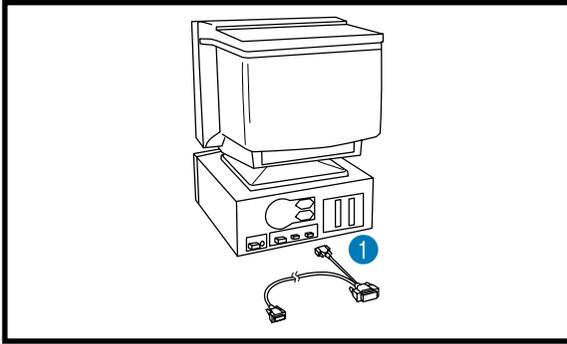


AC Adapter



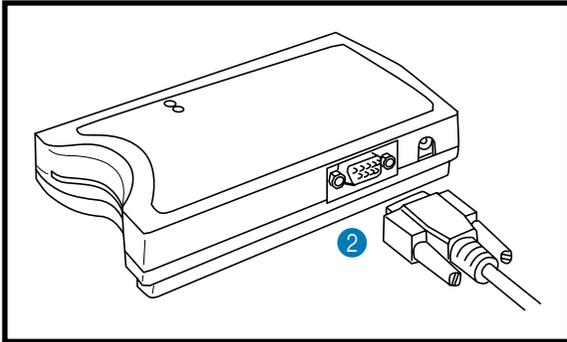
Original Cards

Setting Up

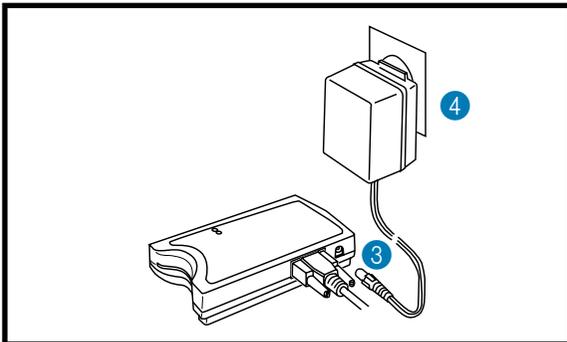


IMPORTANT: Be sure the PC is turned off before making any connection.

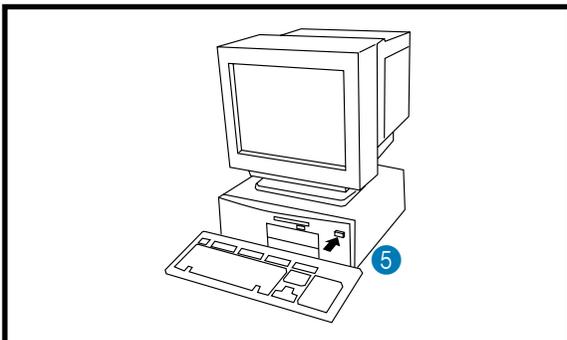
- 1 Plug the supplied interface cable into an RS-232C serial port of your PC.
 - Choose a port that is not used for another peripheral.
 - In the **File Utility** application, choose the default port **AUTO** if no other peripheral is connected. Choose the first available **COM** port if other peripherals are connected to your computer. See *Serial Port Setting* on page 168.
 - The PC end of the interface cable has two different pin connectors. Use the appropriate pin connector for your computer.



- 2 Plug the interface cable into the unit.



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



- 5 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.

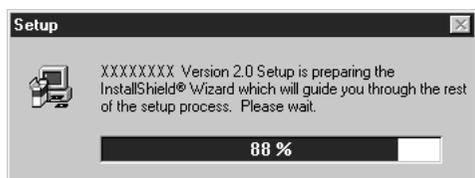
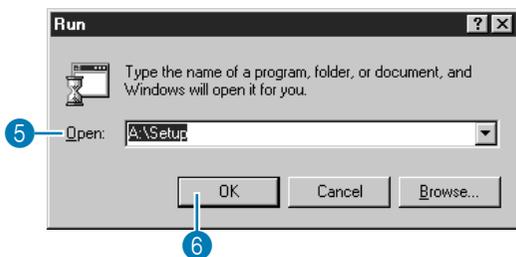
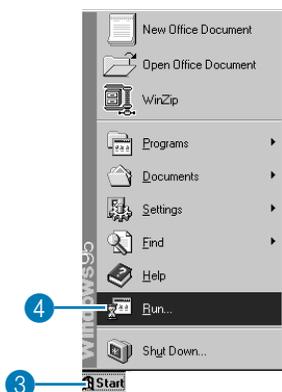
Installing the Software

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	80486 or more
Windows	Windows 3.1 or Windows 95
Memory	12M or more (we recommend 16M or more because 12M might not be enough for some computers)
Hard disk free space	6M or more
Display	VGA or more (we recommend a minimum of 256 colors SVGA)
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

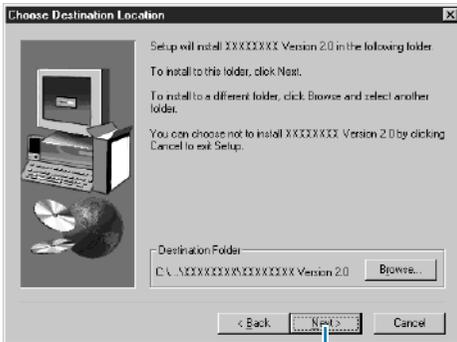


- 1 Start Windows (refer to the Windows manual).
 - If you have other Windows applications running, click **Cancel** to exit, close all the other applications and start again.
- 2 Insert the disk marked Disk1 into your floppy disk drive.
- 3 Click .
- 4 Click **Run** on the menu. The **Run** dialog appears.
NOTE:
In the case of Windows version 3.1, starts from File-Run in the Program Manager Menu.
- 5 Type the full path of the installation program. Example: **A:\Setup** if the disk is in drive A, or **B:\Setup** if the disk is in drive B.
- 6 Click **OK** to start the installation program.

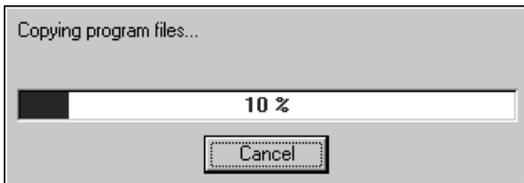
- 7 Wait until the panel shown here is replaced with the **Welcome** dialog shown next.



8



9



8 Click **Next** to proceed with the installation.

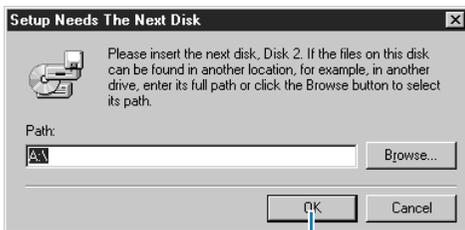
- If you have other Windows applications running, click **Cancel** to exit, close all the other applications and start again.

9 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.

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



11

After the data on Disk1 is copied, you will be prompted to insert the disk marked Disk2:

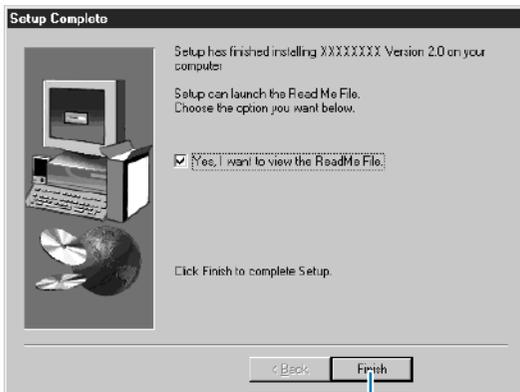
- 11 Insert Disk2 and click **OK**.
- Click **Cancel** to exit.



12

After the data on disk 2 is copied, you will be prompted to insert the disk marked Disk3:

- 12 Insert Disk3 and click **OK**.
- Click **Cancel** to exit.



When the setup is completed, this dialog appears.

- 13 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:

- 14 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 floppy disk drive and finally the **Setup.exe** file or by selecting the name of your floppy disk 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 2.0 and the Internet Explorer

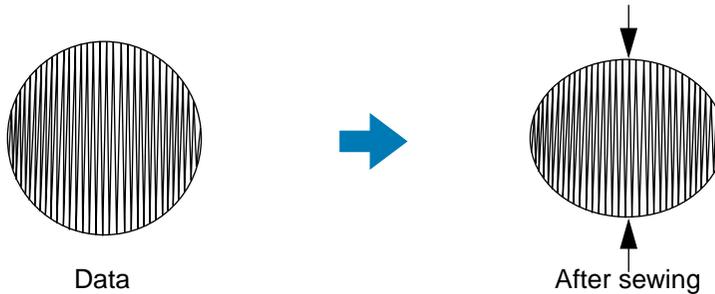
Version 2.0 does not work properly on a PC which is running Internet Explorer Version 4.0.

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.

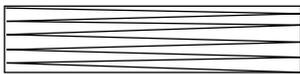
Tips and Techniques for Creating Embroidery Patterns

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.

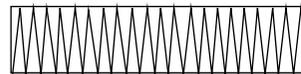


Note: When using Satin stitch in a wide area, the needle may move out of position by about 10 mm with some machines. To avoid this, use the above mentioned alternate method.

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®. 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.

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.

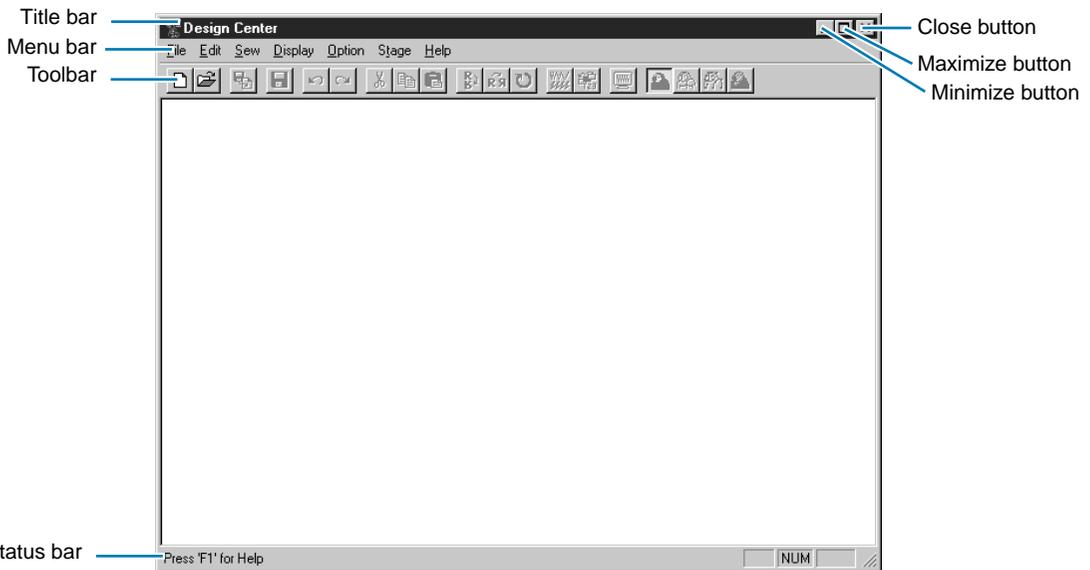
Step 1 Starting Design Center

- 1 To start Design Center, click the **Start** button, then select Programs, Version 2.0, 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 sub-menu.

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.



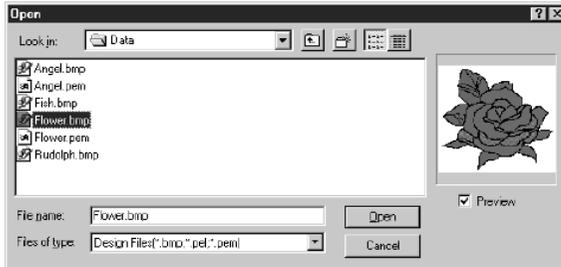
To return to the Design Center window, click the icon, bearing the name of the opened document, at the bottom of your screen.

Step 2 Opening a Bitmap Image

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

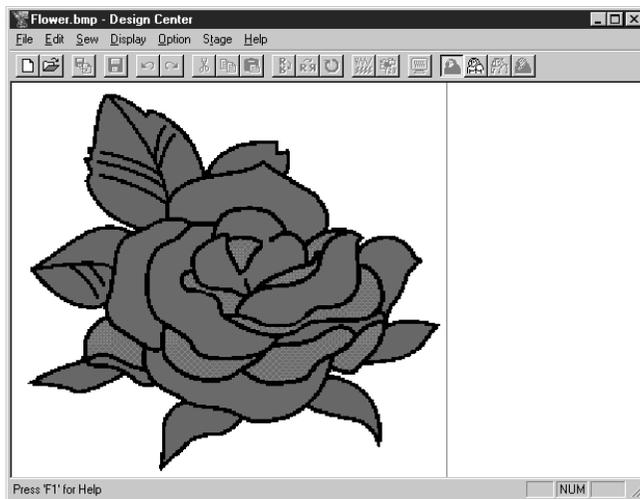
- 1 Click **File** on the menu bar, then click **Open** on the submenu.

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.



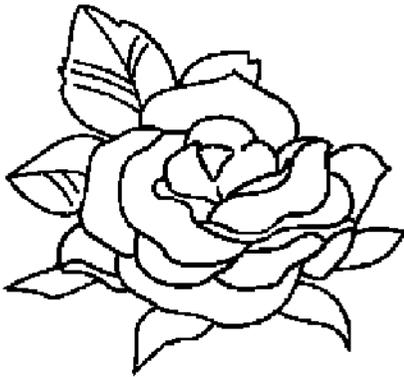
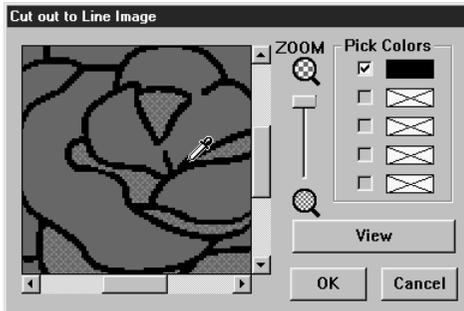
Step 3 Converting to Line Image

- 1 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:

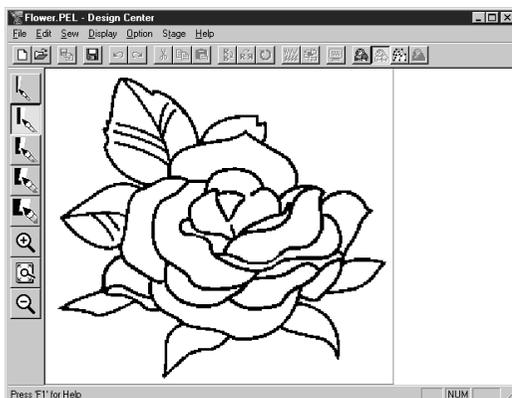


NOTE: Many menu functions can be activated by clicking a button on the Toolbar.

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.



- 2 When you click **OK**, the line image displays.



- ◆ If necessary, scroll and zoom the image.
- ◆ Move the cursor over the image. Its shape changes to . Click on any point of the outline. The selected color displays in the upper box under **Pick Colors** and a  appears in the check box to show that the color is selected.
- 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.
- At this stage, the data can be saved as a ***.pel** file.

Step 4 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 52.

- 3 Click  on the Tool Box. The shape of the cursor changes to  when you move it over the work area.

- 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:

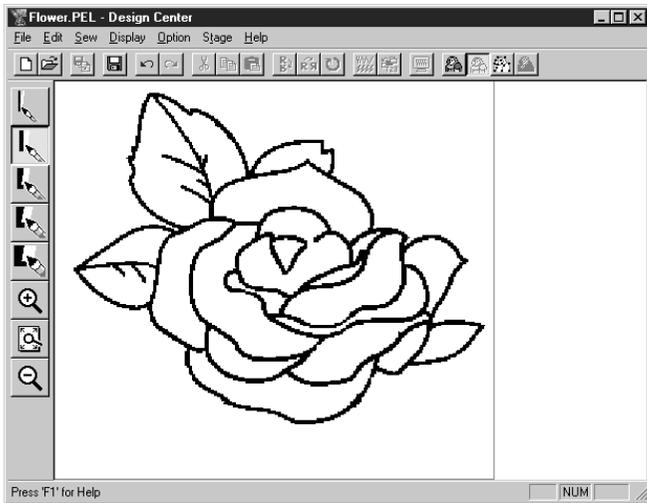
If you deleted parts of the outline by mistake, you may need to redraw some of lines. To do this, simply hold down the left mouse button and start drawing the line.

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.

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



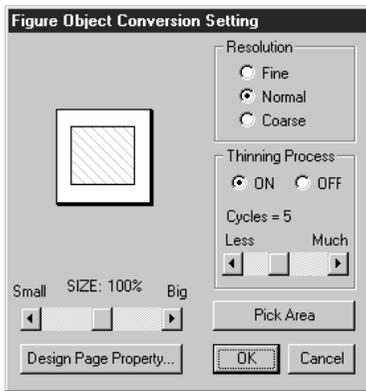
Step 5 Converting to Figure Handle Image

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:



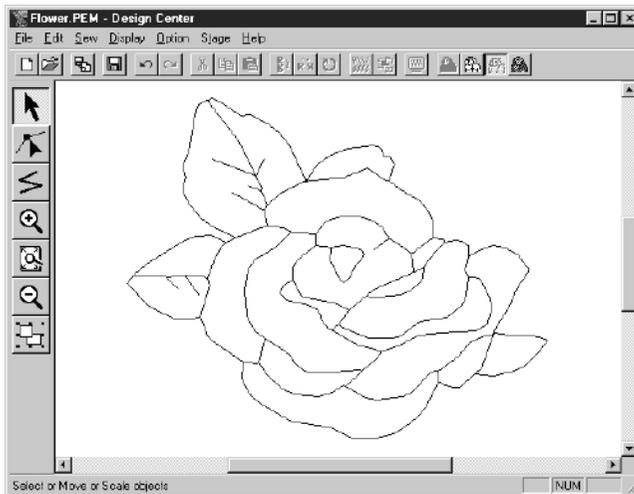
The following dialog will display.



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 84 and “To Figure Handle” on page 88.

- 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 53.

NOTE:

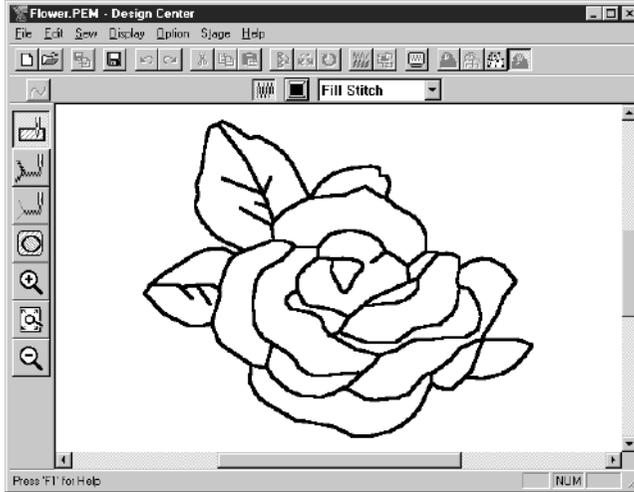
You may also change the Design Page properties at this stage using the menu command **Option - Design Page Property**, which will open the **Design Page Property** dialog.

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

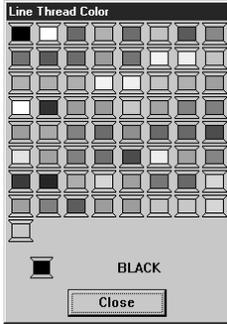
- 1 Click  on the Tool Box.

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:



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



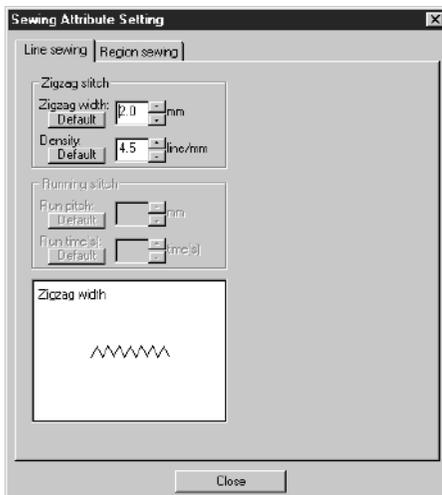
- ◆ Click the desired color if you want a color other than black.
- ◆ Click **Close** only if you want to remove the dialog from the screen.
- ◆ Place the cursor on the title bar; click and drag the dialog box to a more convenient place on the screen.

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

- 3 To set the stitch type: Click the **Line sew type** selector  on the Sewing Attributes bar, then click **Zigzag Stitch**.
- 4 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.

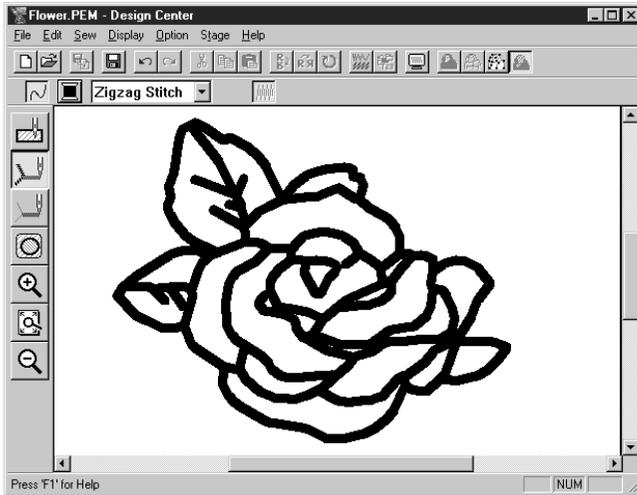


The **Sewing Attribute Setting** dialog appears. The dialog displays the default settings for the line stitch (**Line sewing** tab).



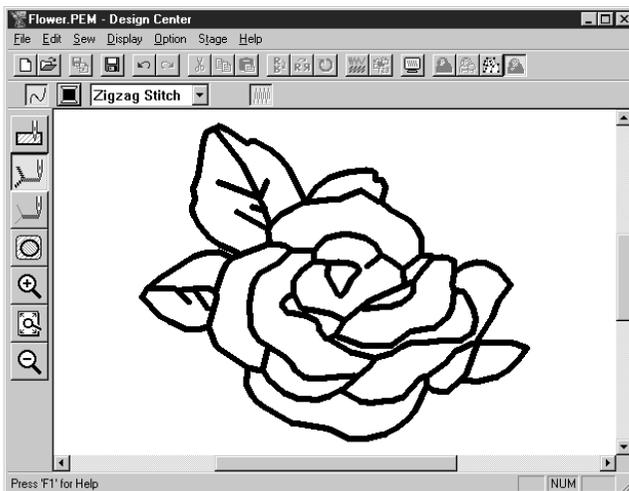
- ◆ To change the width from 2.0 mm to 1.5 mm, for example, type or select **1.5** in the **Zigzag width** selector.
- ◆ Click **Close** if you want to remove the dialog from the screen.

- 5 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.
- 7 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  and is displayed together with a small rectangle. The Sewing Attributes bar now looks like this:



For the leaves:

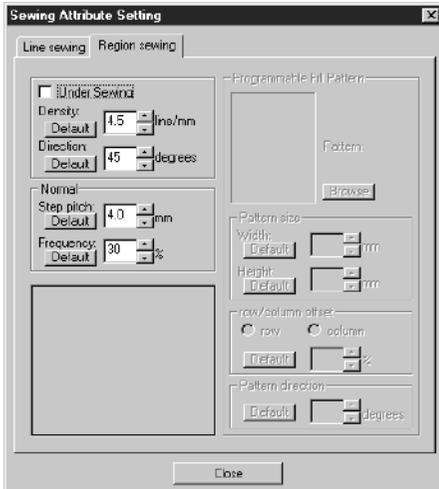
Click the **Region color** button  on the Sewing Attributes bar to display the **Region Thread Color** dialog, then select the **LEAF GREEN** color. Refer to the list of color names on page 179.

The **Region color** button  shows the selected color.

Click the **Region sew type** selector  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.



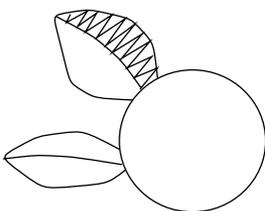
The **Sewing Attribute Setting** dialog appears. The dialog displays the default settings for the region stitch (**Region sewing** tab).



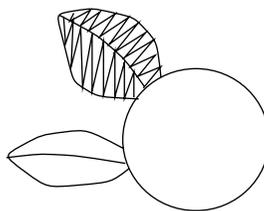
- ◆ Set the direction of the fill stitch as explained in the “NOTE” below.
- ◆ Click on the regions of the leaves to which you want to apply a setting.
- ◆ Repeat the same operation for each stitch direction.

NOTE:

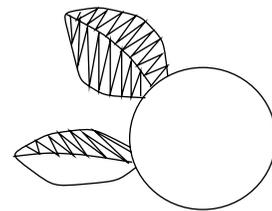
Using different directions for different regions can add contrast and improve the appearance of the embroidery.



Set the direction to 45° and click.



Set the direction to 90° and click.

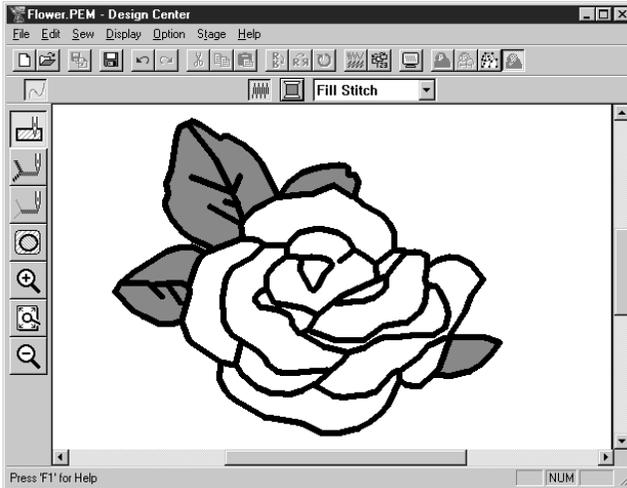


Set the direction to 135° and click.

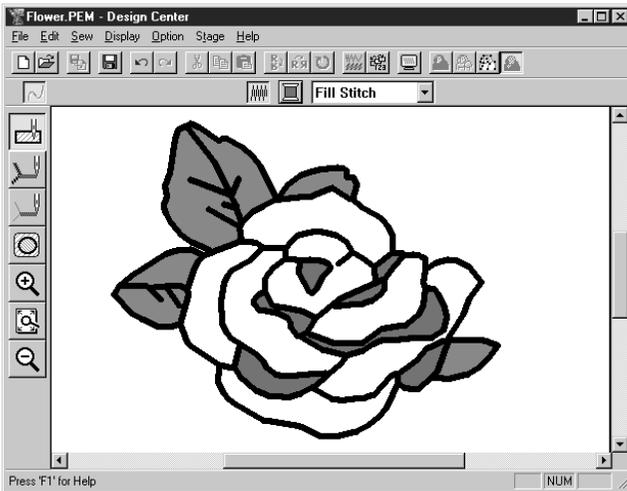
NOTE:

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 56.

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 179.



- 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 179.

Step 8 Previewing the Image

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

Toolbar:



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.

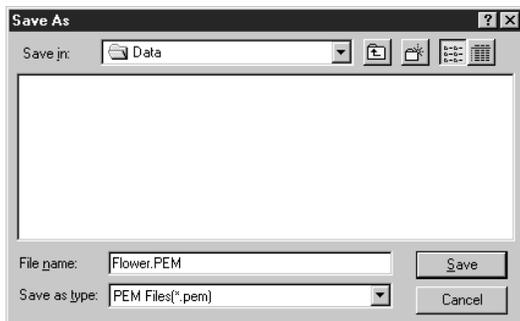
NOTE:

You cannot do any editing on the preview screen.

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**.*

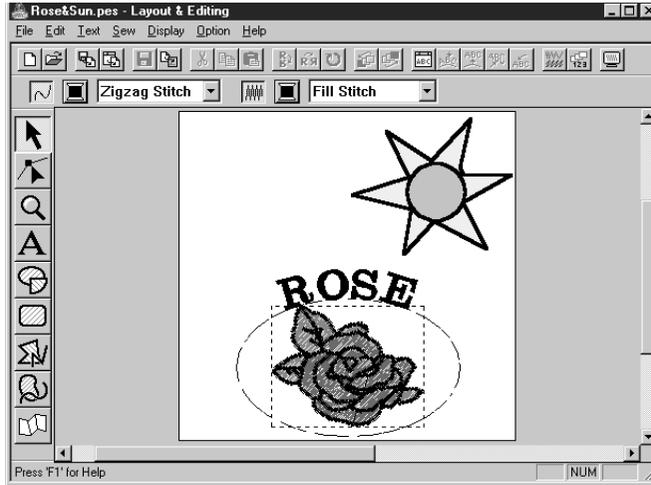
*If you did not save the line image data, you will be asked whether you want to save it as a ***.pel** file.*

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 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.

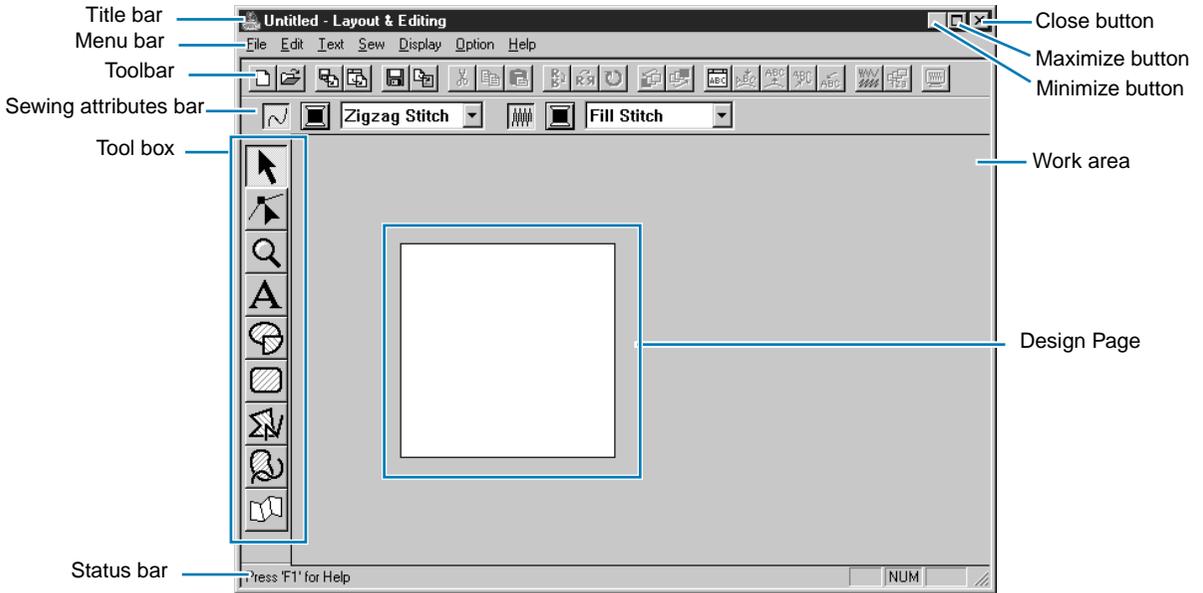
Step 1 Starting Layout & Editing

- 1 To start Layout & Editing, click the  button, then select Programs, Version 2.0, then double-click Layout & Editing to open the Layout & Editing window. You may also double-click the Layout & Editing icon in the program group.



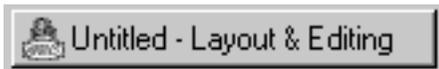
Layout & Editing

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.

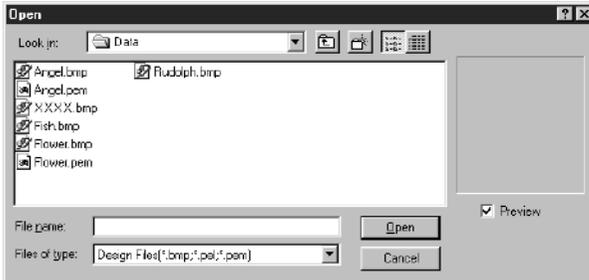
NOTE:

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

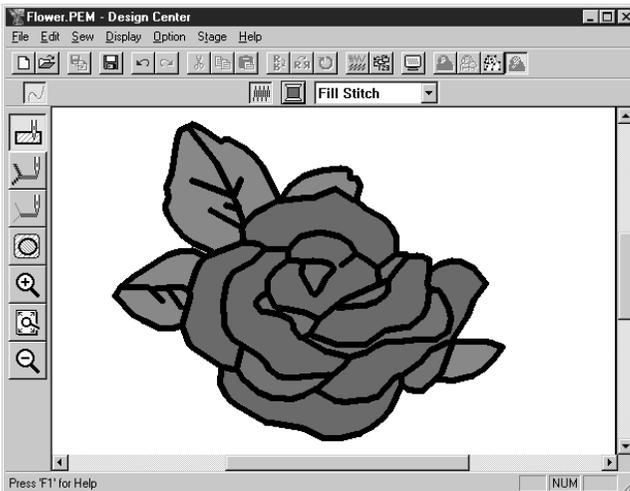
The first components of our embroidery picture will be a pattern imported from Design Center. If you interrupted the exercise and closed the Design Center window, you will have to start the application again and open the saved **Flower.pem** file again.

- 1 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.

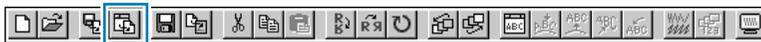


- ◆ Select the drive, the folder and the file name (**Flower.pem**), then click **Open**.
- If the **Preview** check box is checked, you may view your files in the **Preview** window.
- Be sure to select a **pem** file saved in stage 4. You cannot import another file type from Design Center.

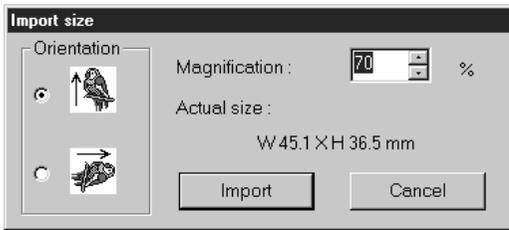
- 3 The embroidery pattern appears on the Design Page of the Design Center application.



- 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.

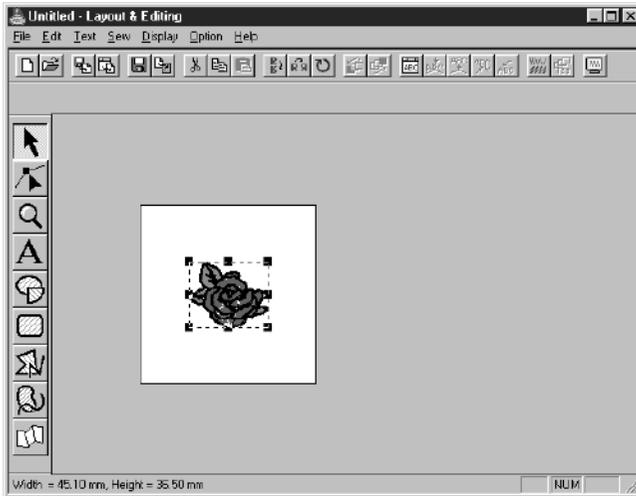


6 The **Import Size** dialog appears.



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

7 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 100.

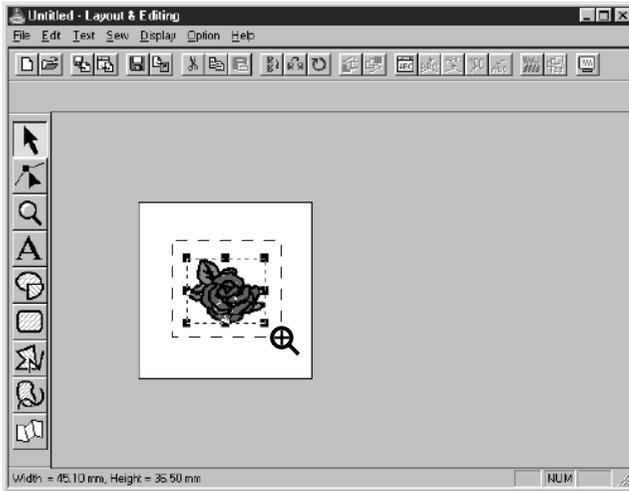
- 1** Click  on the Tool Box.

Five buttons appear:     .

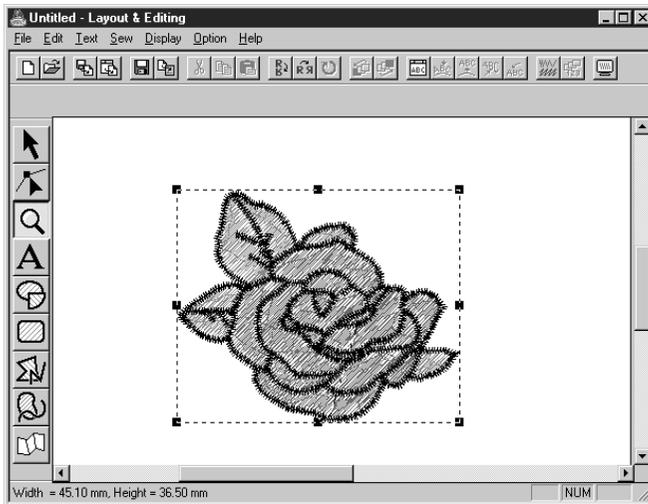
- 2** Click .

The shape of the cursor changes to .

- 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.

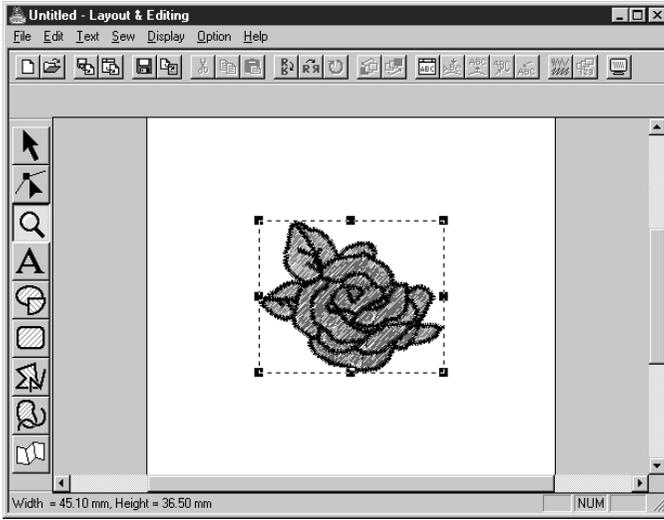


The whole picture is enlarged at the same time. Repeat this procedure to enlarge the pattern even more.

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

Five buttons appear:     .

5 Click **1:1**.



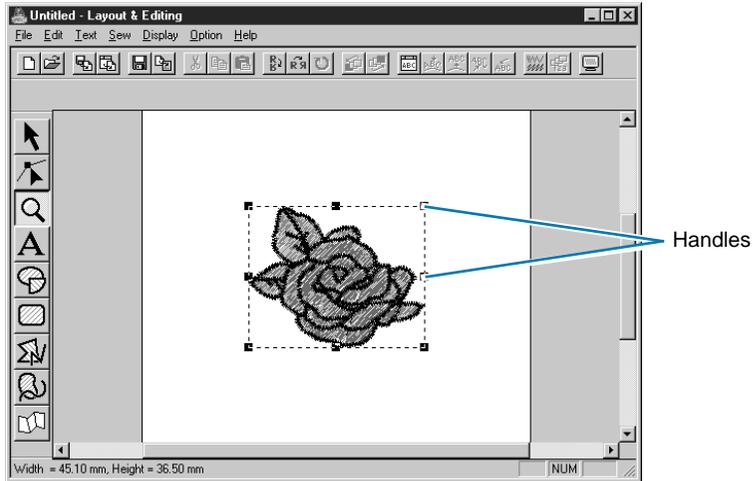
Step 4 Moving the Embroidery Pattern

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  .

- 2 Click the pattern.

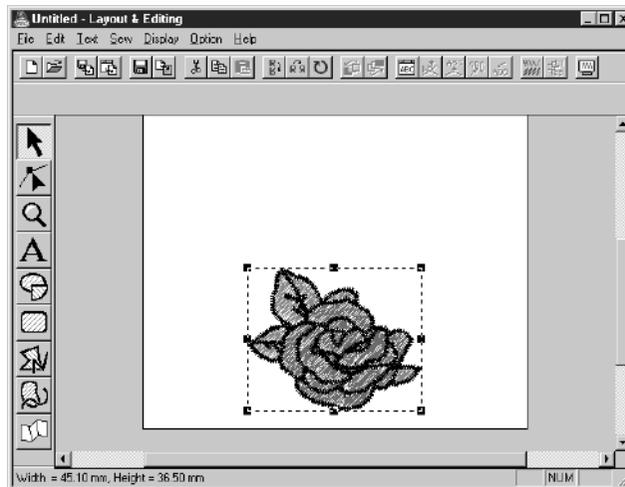


The Status bar shows the dimensions (width and height) of the selected pattern.

- 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.



Step 5 Adding an Oval

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.

- 1 Click  on the Tool Box.

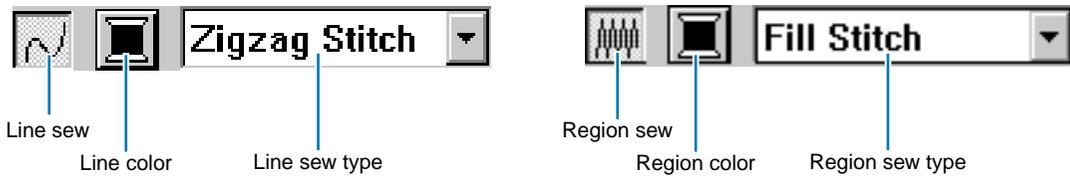
The shape of the cursor changes to  and displays together with a small ellipse. The Sewing Attributes bar now looks like this:



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.

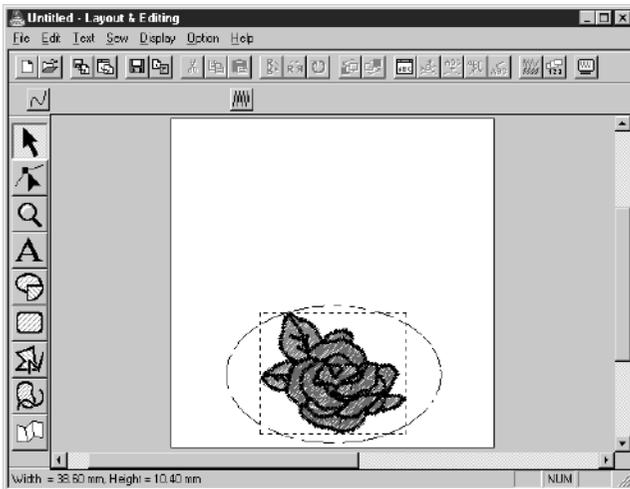
The **Arc shape** selector allows you to select the shape of the pattern. For example, **Circle** is used to draw circle and ellipses. The other options are used to draw circle-related patterns such as arcs. *For more details, see "Circle and Arc Drawing Mode" on page 102.*

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.

- 2 **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.
- 4 **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 Tool Box, 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.
- 2 Click the oval to select it. The shape of the cursor changes from  to .
- 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.
- 4 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.

■ 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 .

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

The shape of the cursor will change to .

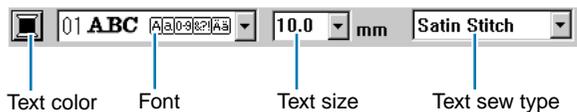
- 4 You can now drag the oval to its final location.

Step 7 Adding Text

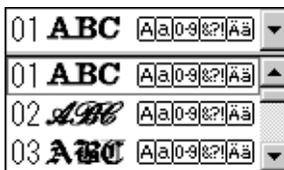
The next component of our embroidery picture is a piece of text.

- 1 Click  on the Tool Box.

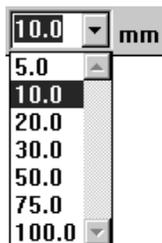
The shape of the cursor changes to  and this appears on the Sewing Attributes bar:



- 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.
- 3 **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.

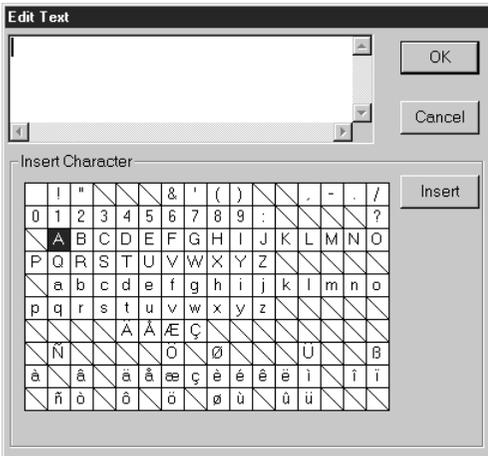


- 5 **Set the text stitch:** Click on the **Text sew type** selector and select the desired stitch for the text. For this example, we will keep the default stitch **Satin stitch**.



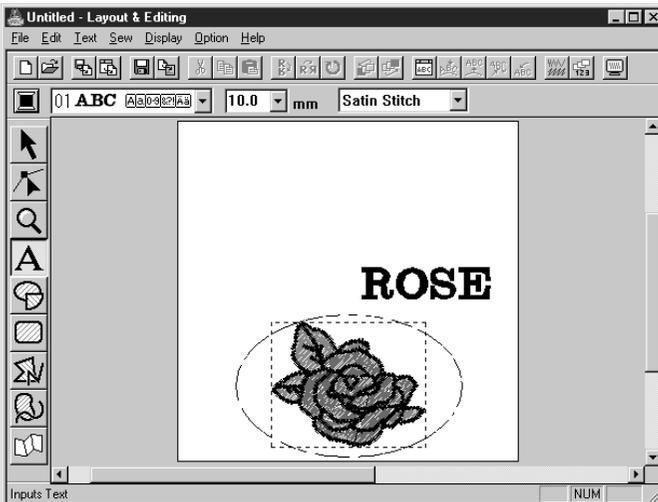
For more precise setting of the text attributes, see “Text Attribute Setting” on page 138.

- 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**.

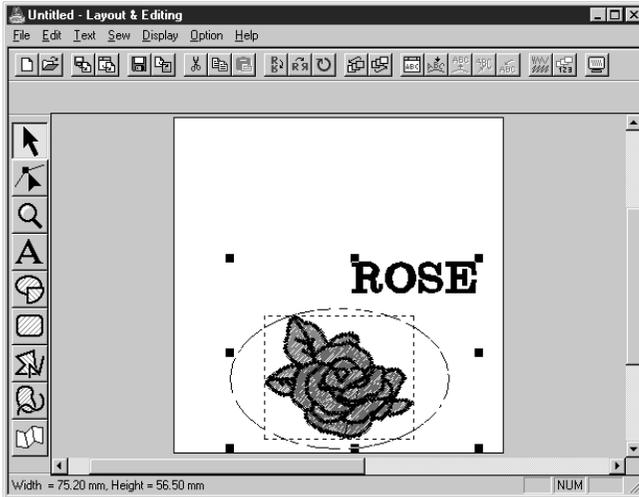


If you want to edit the entered text, click  on the Tool Box, then click on the text to select it and click **Text – Edit Text Letters** on the menu bar to open the **Edit Text** dialog. You may then edit your text as necessary. If you simply wanted to delete the text, select it, then press **Delete**.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

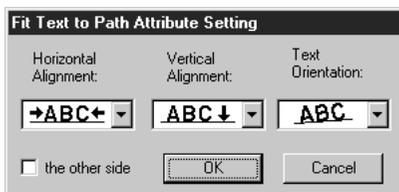
- 1 Click  on the Tool Box to set the cursor in selection mode .
- 2 Click the text ("ROSE") to select it.
- 3 Press the **Shift** key and hold it down while clicking on the oval. This allows you to select the oval without deselecting the text.



- 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.

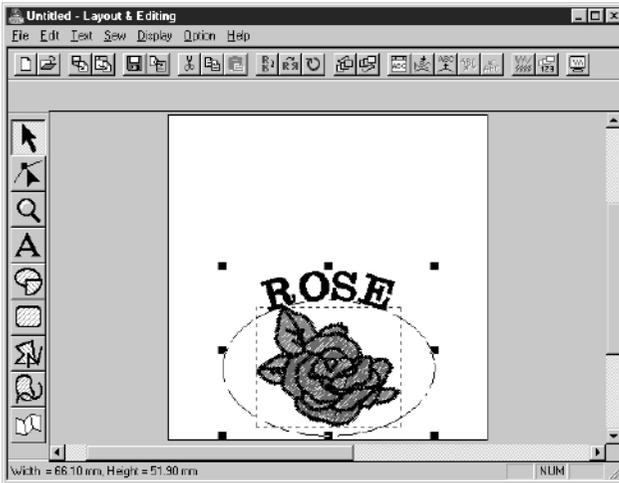


This dialog appears.



- ◆ Click **OK** without changing any setting.
- For more details about this setting, see "Fit Text to Path Setting" on page 140.

- 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

- 1 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.

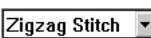
- 1 Draw a circle.

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.

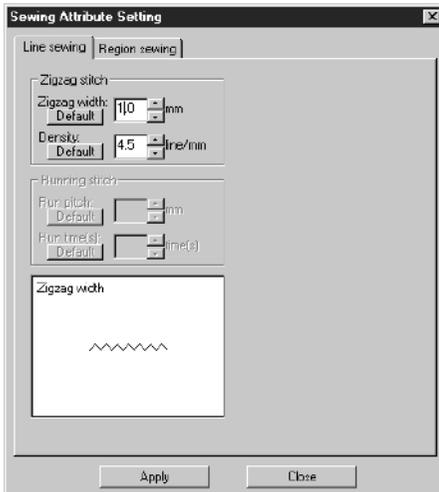
To do this, you must first select the circle using the  button. Next, click on the Line sew button

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

- 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.

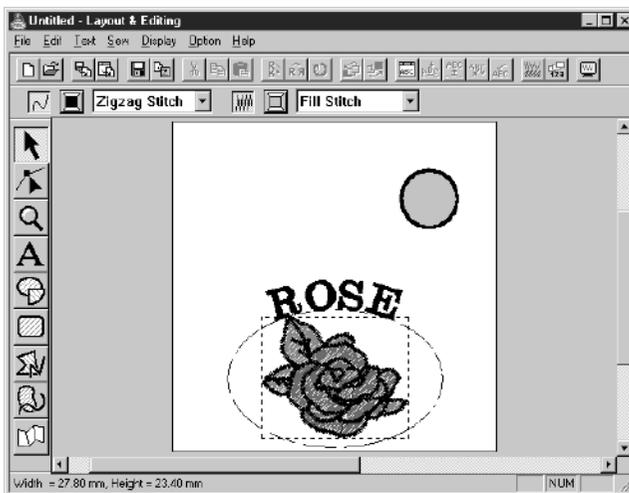


The **Sewing Attribute Setting** dialog opens.



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

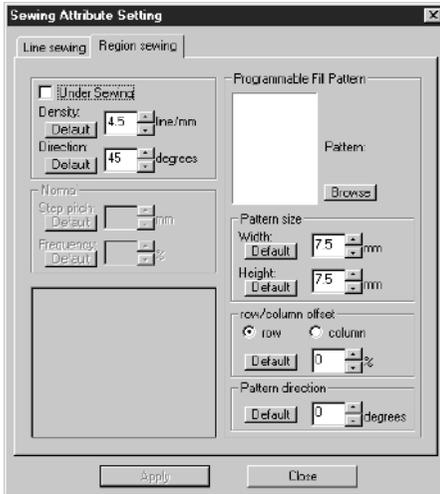
- 4 Set the sewing attributes of the region. Click on the **Region sew button**  so that the **Region color**  button and the **Region sew type selector** **Fill Stitch** appear and select a region color and a stitch. In this example, we will leave the other sewing attributes of the region as is. Your display will look as follows.



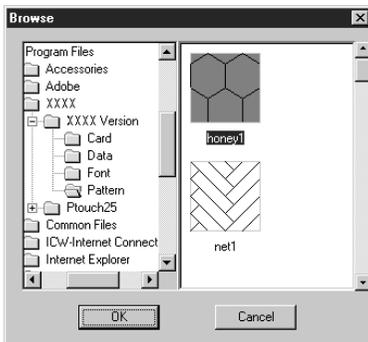
Step 11 Selecting a Programmed Stitch

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 2.0/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.

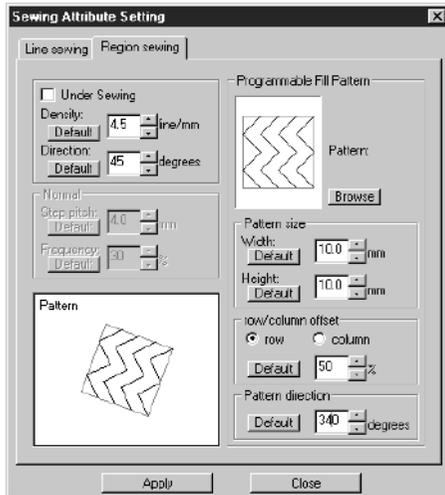
You may also type in a value. In that case however, you cannot preview the setting immediately as you set it.

- 4 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.

- 5 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 144.

- 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.

- 7 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.

- 8 Select a line color and stitch using the **Line color**  button and the **Line sew type** selector

Zigzag Stitch . (You can also set the characteristics of the pitch in the **Line sewing** tab of the **Sewing Attribute Setting** dialog.)

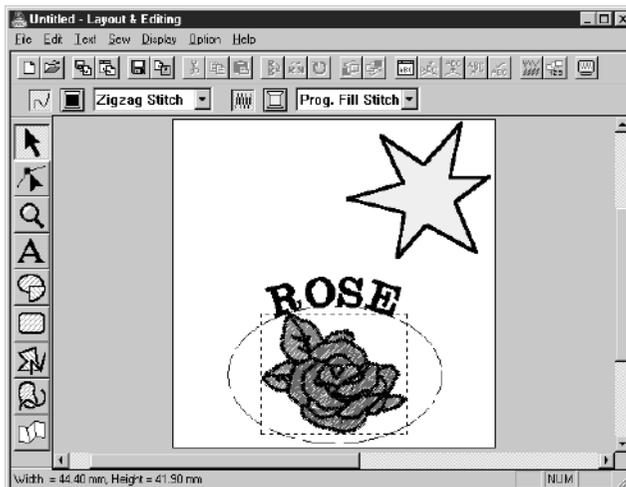
Step 12 Adding Broken Lines for Drawing the Sun Rays

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.

- 1 Click  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.
- 4 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".

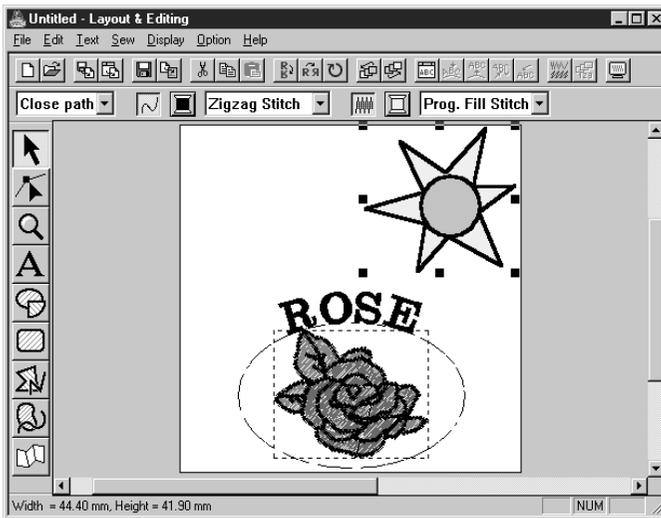
Step 13 Changing the Sewing Order of Sun and Rays

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.

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

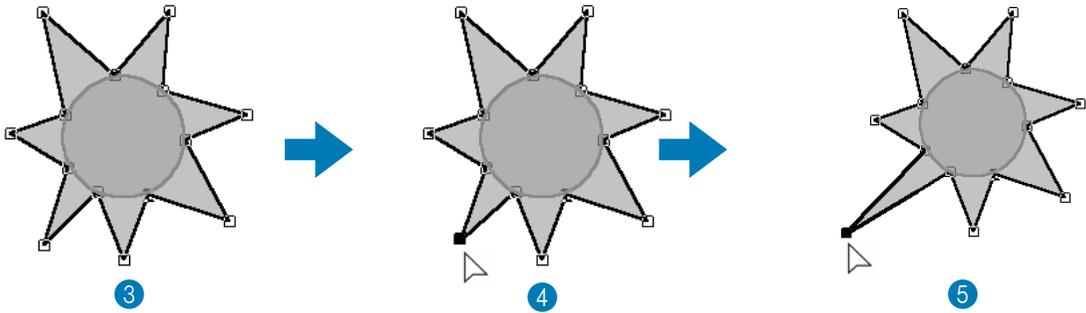
Two buttons appear:  .

- 3 Click .

The shape of the cursor changes to  and 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.

- 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 98 and “Deleting points” on page 99.

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 cursor , then release the hole sewing setting by clicking **Sew** on the menu bar, then **Cancel Hole Sewing**.

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.

- 1 To preview the entire embroidery picture, deselect everything by clicking on the white space with the selection cursor .

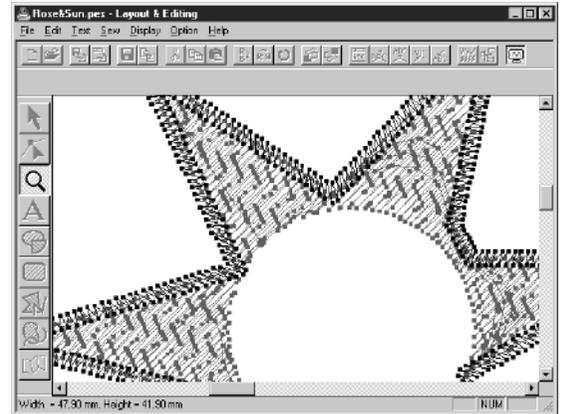
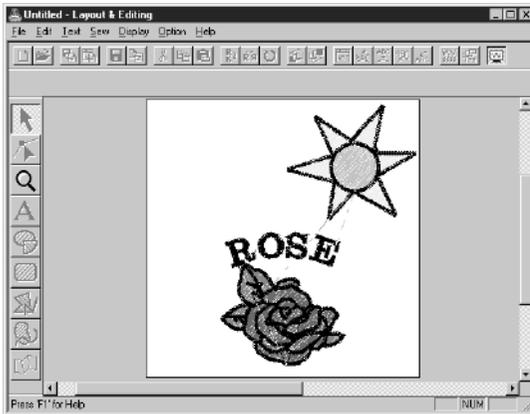
To preview a single pattern, or a group of patterns, select the pattern(s).

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 128 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 164.

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:



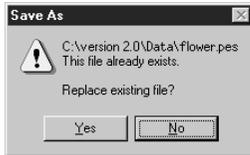
If the file already exists on the disk (the file has been saved at least once), the file is saved immediately.

- 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.

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.

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.

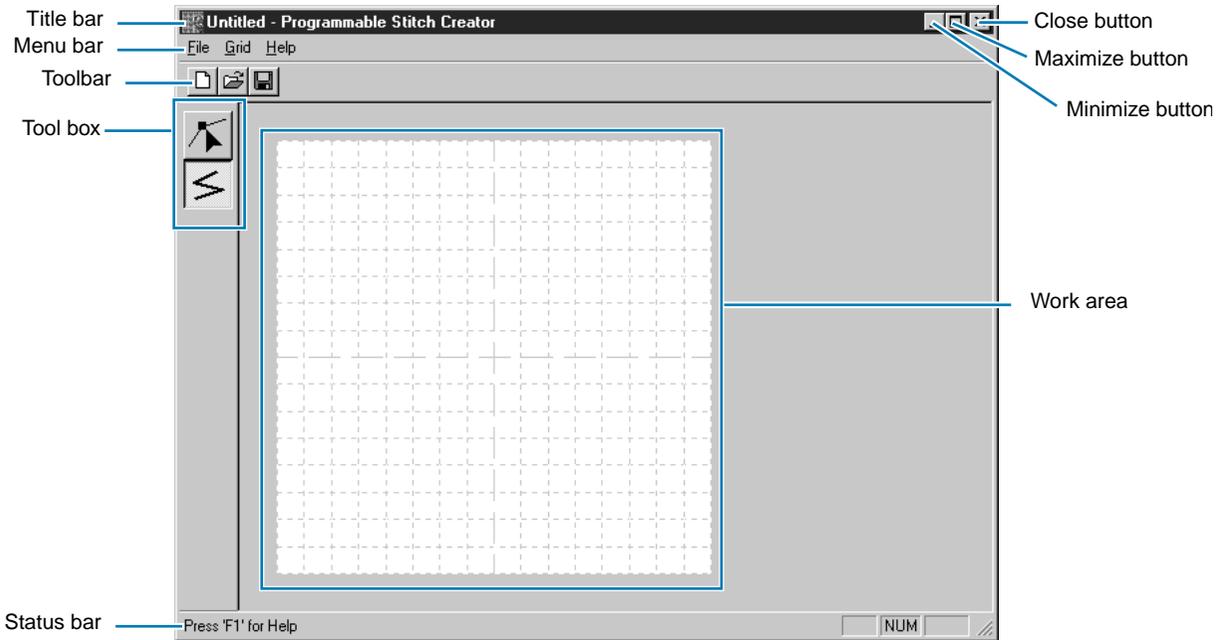
Step 1 Starting Programmable Stitch Creator

- 1 To start Programmable Stitch Creator, click the  button, then select Programs, Version 2.0, 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.



Programmable
Stitch Creator

The Programmable Stitch Creator window displays.



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

- 1 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.



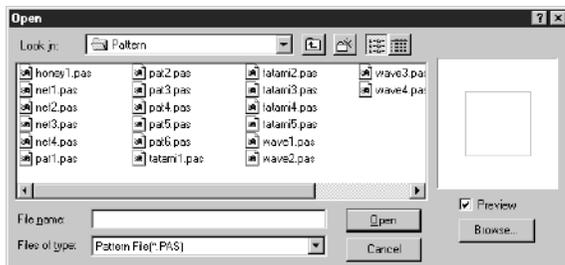
To return to the Programmable Stitch Creator window, click the icon.

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.



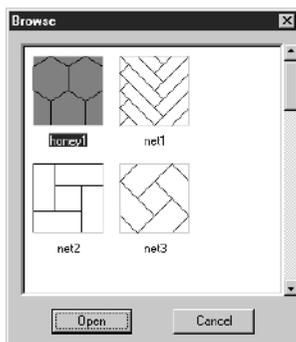
If you know which file you want to open:

- ◆ 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.

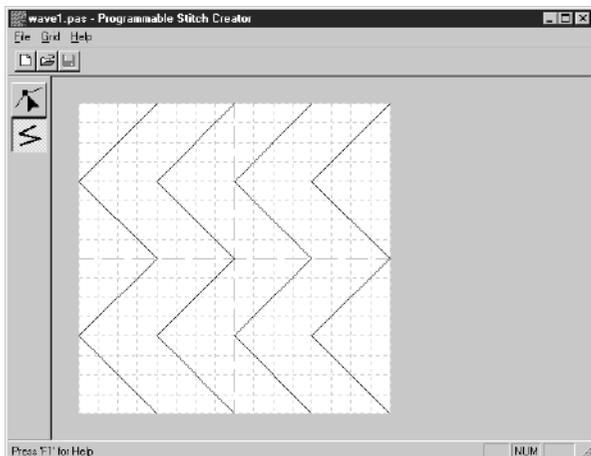
If you want to scroll through the available files before opening one:

- ◆ 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.



Step 3 Drawing Lines to Edit the Programmed Stitch

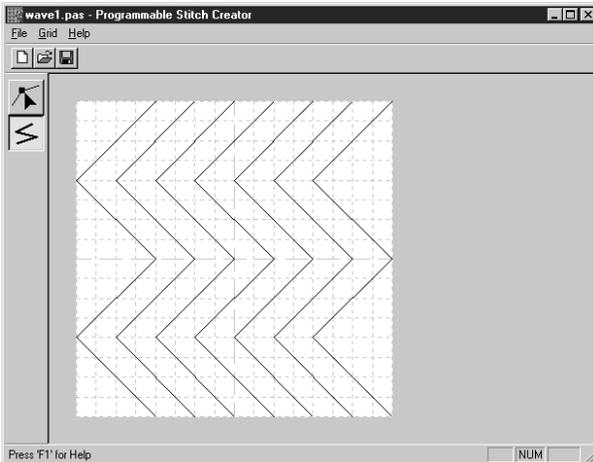
We are going to draw a wave between the displayed ones using the Line drawing tool of the Tool Box. To draw these waves, we will use the grid setting **medium** with which the **pes** file stitch pattern was saved.

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 177.

- 1 Click  on 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 172 or go back to Step 15 "Adjusting the Rays" on page 39).

Step 4 Saving the Edited Programmed Stitch

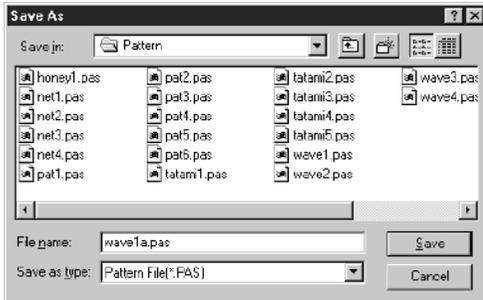
In order to apply your edited stitch pattern to a region in Layout & Editing or Design Center, you must first save it as a **pas** file. To do this, proceed as follows.

- 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.

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.

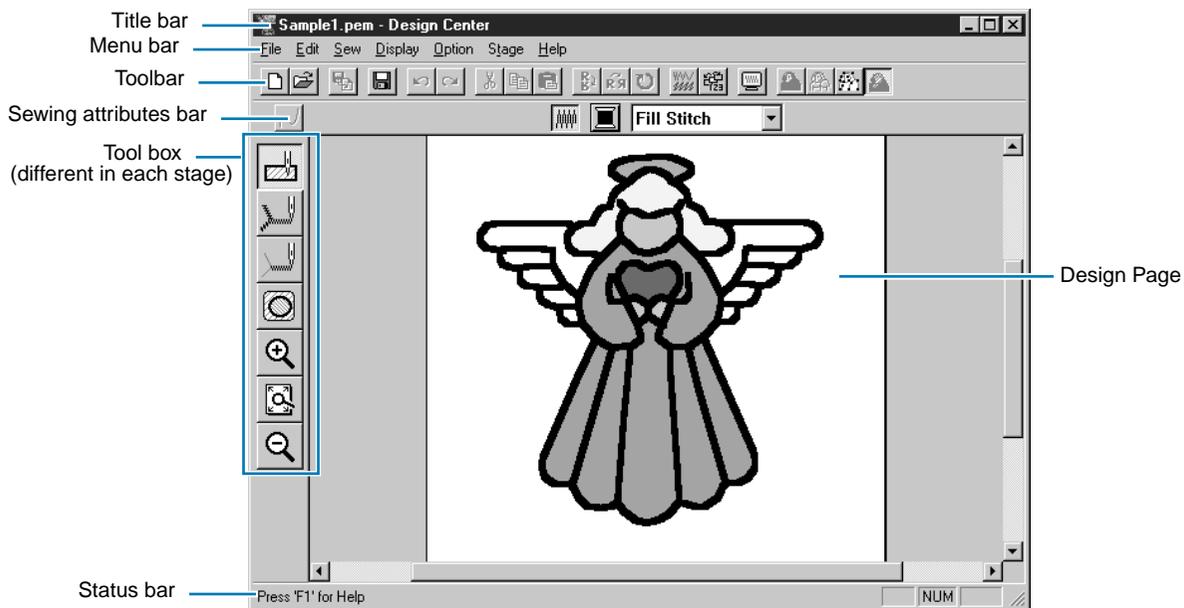
◆ **STAGE 4:** Sewing settings

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.

	<p>The five first buttons are used as pens and erasers of different thicknesses. Cursor shape when moved or dragged over the work area:</p> <p> for the pens and  for the erasers.</p> <p>When you start the application, the number 2 Pen tool is active by default.</p>
	<p>Sets the cursor in zoom-in mode. Cursor shape: </p>
	<p>Maximizes the selected Design Page to fit in the window.</p>
	<p>Sets the cursor in zoom-out mode. Cursor shape: </p>

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.

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

- 1 Click  on the Tool Box. The shape of the cursor changes to .
- 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

- 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 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 51
	Sets the cursor in point edit mode. Cursor shape: 	page 56
	Sets the cursor in line drawing mode. Cursor shape: 	page 57
	Sets the cursor in zoom-in mode. Cursor shape: 	page 57
	Maximizes the selected Design Page to fit in the window.	page 58
	Sets the cursor in zoom-out mode. Cursor shape: 	page 58
	Fills the display with the selected objects.	page 58

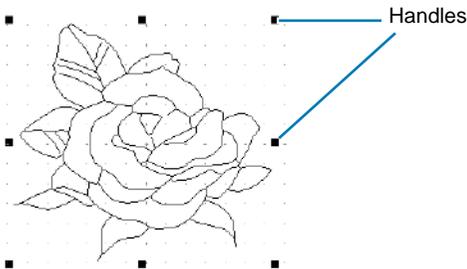
Selection Mode

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.



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.

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 , ,  or , 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.

■ 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.

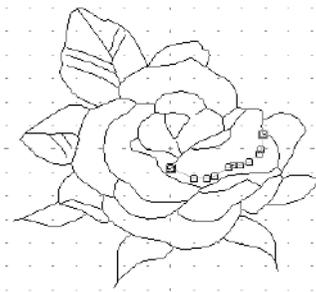
A simple dragging of the mouse will rotate the pattern by 1° increments. Pressing the **Shift** key will rotate it by 15° increments.

Point Edit Mode

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

Moving points

- 1 Click  on the Tool Box. The shape of the cursor changes to .
- 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.

Inserting points

- 1 Click  on the Tool Box. The shape of the cursor changes to .
- 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

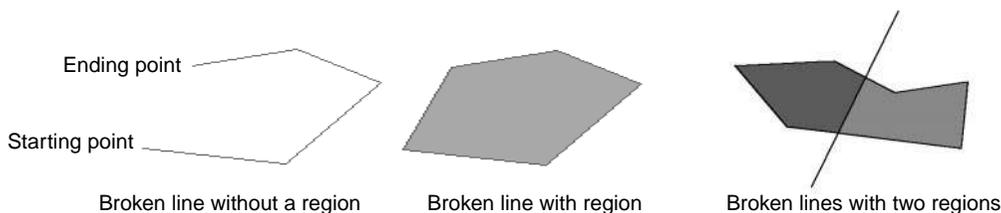
- 1 Click  on the Tool Box. The shape of the cursor changes to .
- 2 Click the outline that you want to edit.
The existing points of the outline are marked with small empty squares.
- 3 Click the point that you want to delete.
To select an additional point, click that point while holding the **Shift** 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 82.*

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

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 .

- 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  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.

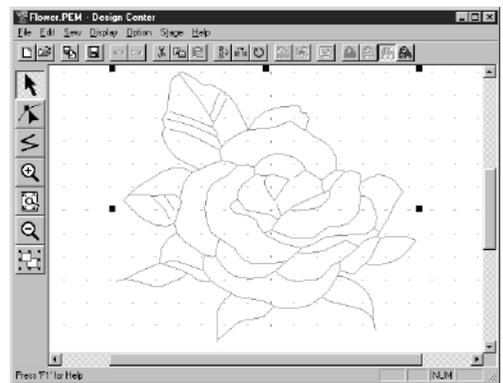
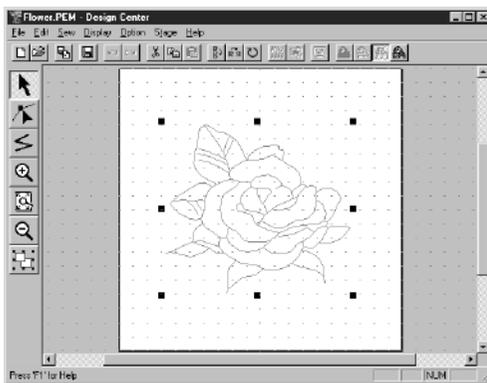
Enlarging Selected Outlines to the Screen Size

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

- 1 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. When you start the application, this tool is active by default Cursor shape:  , with a miniature of the button	page 59
	Sets the cursor in line (all) setting mode. Cursor shape:  , with a small image of the button	page 60
	Sets the cursor in line (single) setting mode. Cursor shape:  , with a small image of the button	page 62
	Sets the cursor in hole sewing mode. Cursor shape:  , with a small image of the button	page 63
	Sets the cursor in zoom-in mode. Cursor shape: 	page 64
	Maximizes the selected Design Page to fit in the window.	page 64
	Sets the cursor in zoom-out mode. Cursor shape: 	page 64

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.

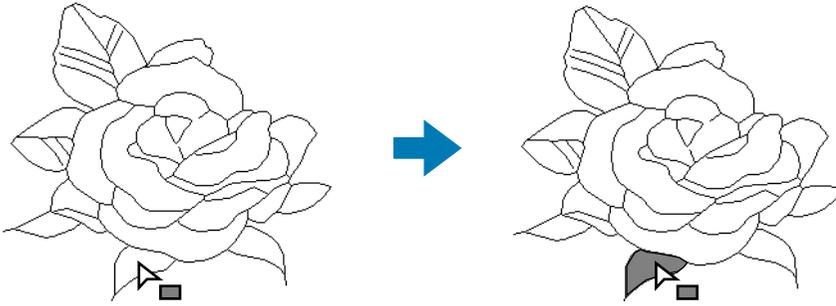
The shape of the cursor changes to  and is displayed together with a small rectangle. The Sewing Attributes bar now looks like this:



You can select the color and stitch at this step or after applying them to the region. See “Color” on page 67 and “Stitch” on page 67.

You can also use the menu (see “Sewing Attributes” on page 77) 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.

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

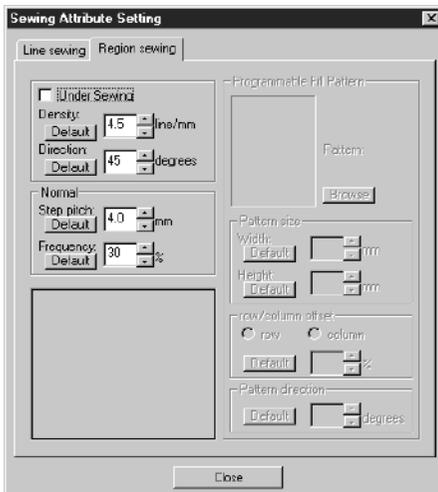


■ Checking the sewing attributes of a region

- Click  on the Tool Box.

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

- 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 77.
- 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.

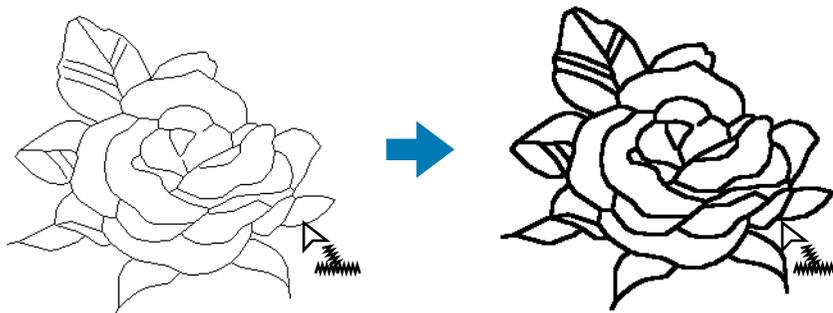
The shape of the cursor changes to  and is displayed together with a small figure of the Tool Box button. The Sewing Attributes bar now looks like this:



You can select the color and stitch at this step or after applying them to the outline. See “Color” on page 67 and “Stitch” on page 67.

You can also use the menu (See “Sewing Attributes” on page 77) 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.

- Click the outline that you want to set.
The color and stitch selected on the Sewing Attributes bar are applied to the clicked outline.

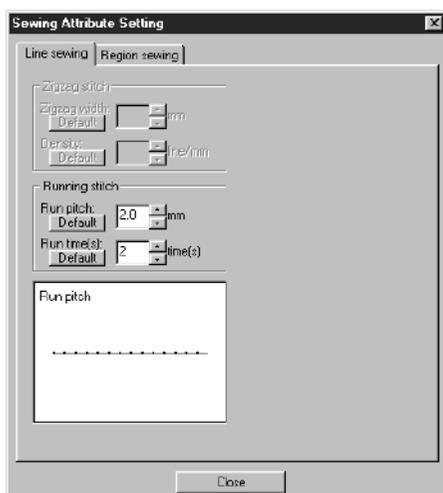


■ Checking the sewing attributes of an outline

- Click  on the Tool Box.

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

- 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 77.
 - 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

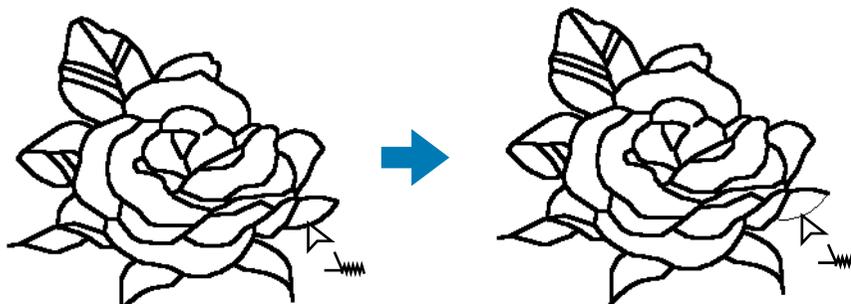
- 1 Click  on the Tool Box.

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 stitch at this step or after applying them to a portion of the outline. See “Stitch” on page 67. 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.

- 1 You can also use the menu (see “Sewing Attributes” on page 77) 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.



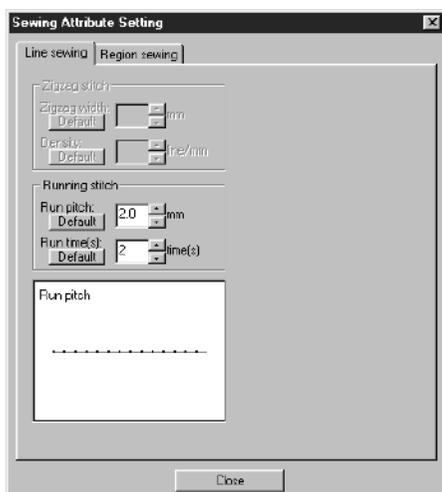
■ Checking the sewing attributes of a portion of an outline

- 1 Click  on the Tool Box.

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

- 2 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 59).

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



- ◆ If necessary, change the settings. See “Sewing Attributes” on page 77.
- 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.

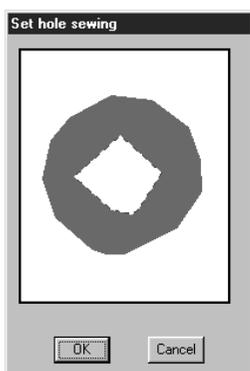
- 1 Click  on the Tool Box.

The shape of the cursor changes to  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.



- 3 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.

- 1 Click  on the Tool Box. The shape of the cursor changes to .
- 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  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 65
	Line sew: Switches line sew on/off.	page 66
	Region color, Line color: Sets the thread color for outline or region inside.	page 67
 	Region sew type, Line sew type: Sets the stitch for outline or region inside.	page 67

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.

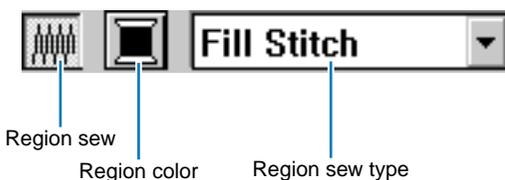
Operation:

- 1 Click the **Region sew** button.

This button has two states:

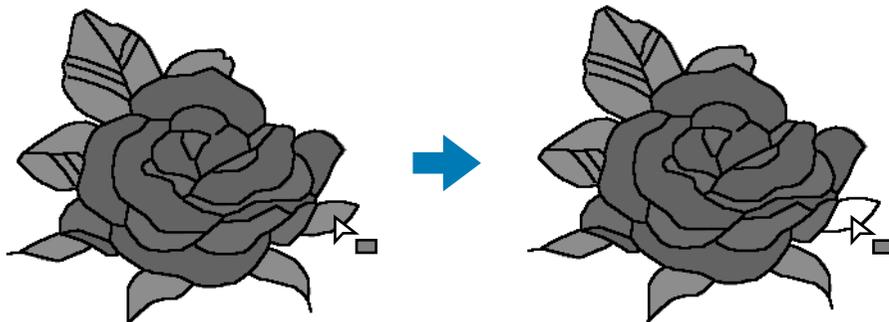
on: the Region color button and the Region sew type selector are displayed.

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 67 and “Stitch” on page 67

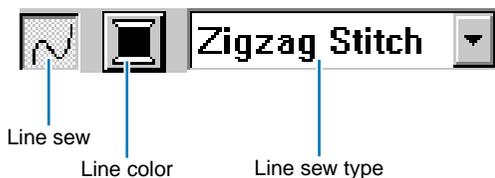
■ Line sew

Purpose: Switches the outline on/off.
When the outline is switched off, it is not sewn (and you cannot set its color or stitch).

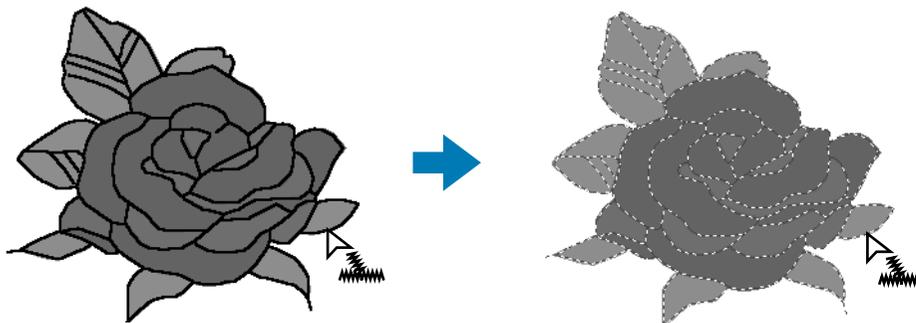
Available: When you click  or  on the Tool Box to put the cursor in the Line (all or parts) sewing mode.

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.



- 2 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 67 and “Stitch” on page 67

■ Color

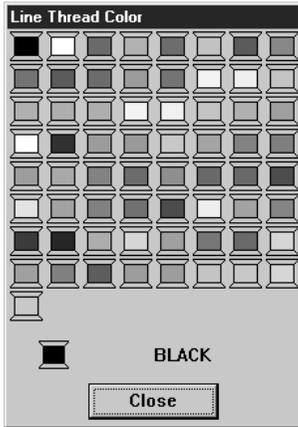
Purpose: Sets the thread color for outline or region inside.

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 117.*
 - *For a list of the different color names, see page 179.*
- ◆ 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 65, “Line sew” on page 66 and “Special colors” on page 117

■ 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:

① 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.

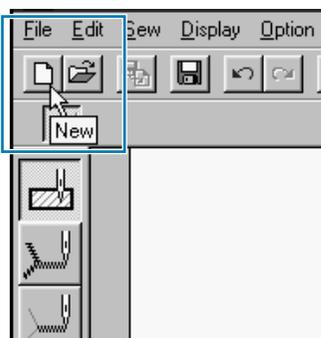
“Region sew” on page 65 and “Line sew” on page 66

Using the Menu Bar and the Toolbar

File	Handles file input/output, such as opening and saving.	page 68
Edit	Performs simple actions on selected objects, such as cutting and pasting.	page 73
Sew	Allows you to control the way the pattern will be sewn.	page 77
Display	Modifies the appearance of the screen.	page 82
Option	Allows you to start the other applications and to set the Design Page size and unit system.	page 84
Stage	Allows you to move from one stage to the next or previous one.	page 86
Help	Gives you access to the on-screen help information system.	page 90

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 69
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.	page 69
Save	Saves your Design Page on the disk as a Version 2.0 file (default). To read this file with Version 1.0, select the File Type Version 1.0.	page 70
Save As	Saves the current file under a new file name.	page 70
Import Figure	Adds a *.pem file to your Design Page (available only in Stage 3).	page 71
Exit	Exits the application.	page 72

New

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

Shortcut key: **Ctrl** + **N**

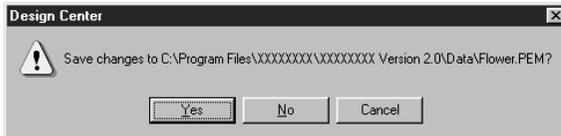
Toolbar: 

Operation:

❶ Click **File**, then **New**.

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

❷ 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.

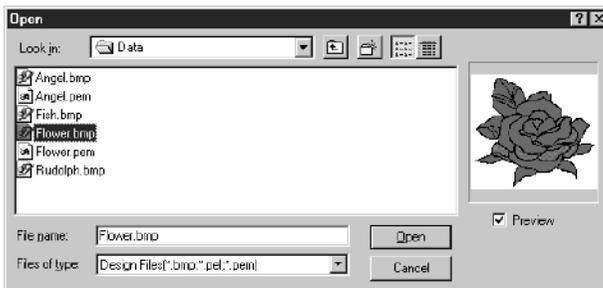
Shortcut key: **Ctrl** + **O**

Toolbar: 

Operation:

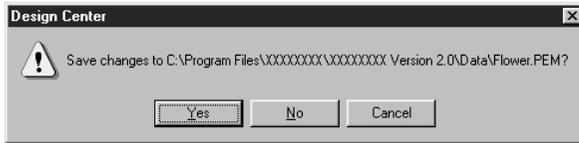
❶ Click **File**, then **Open**.

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.

- 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 a Version 2.0 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**

Toolbar:



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

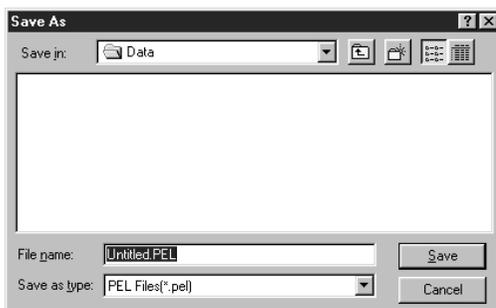
Purpose: Saves the current file under a new file name.

Shortcut key: No shortcut key for this function

Toolbar: No button for this function

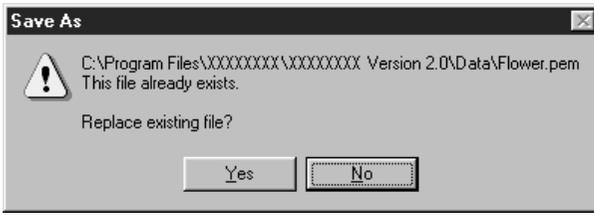
Operation:

- 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).

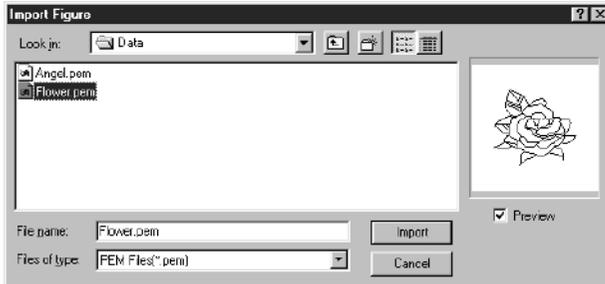
Shortcut key: **F8**

Toolbar: 

Operation:

1 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 69

■ Exit

Purpose: Exits the application.

Shortcut key: **Alt** + **F4**

Toolbar: No button for this function

Operation:

❶ Click **File**, then **Exit**.

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

❷ 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 70

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 73
Redo		Cancels the effect of the last Undo.	page 73
Cut		Removes the selected data from the screen while saving a copy in the clipboard.	page 73
Copy		Saves the selected data in the clipboard without removing them from the screen.	page 74
Duplicate		Makes a copy of the selected data.	page 74
Paste		Pastes the contents of the clipboard on the screen.	page 74
Delete		Removes the selected data from the screen without saving them in the clipboard.	page 74
Mirror	Horizontal	Flips the selected data up/down.	page 75
	Vertical	Flips the selected data left/right.	page 75
Rotate		Allows you to change the direction of the pattern.	page 75
Select All		Selects all the data.	page 76

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**

Toolbar: 

Operation:

- 1 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: 

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**

Toolbar:



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

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 73

Mirror – Horizontal

Purpose: Flips the selected data up/down.

Shortcut key: **Ctrl** + **H**

Toolbar:

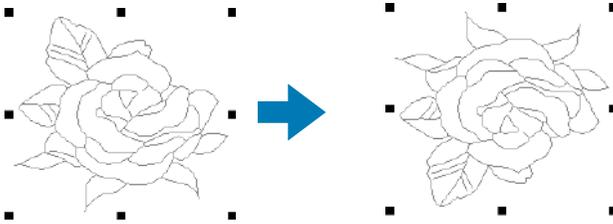


Operation:

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 55 and “Mirror – Vertical”

Mirror – Vertical

Purpose: Flips the selected data left/right.

Shortcut key: **Ctrl** + **J**

Toolbar:

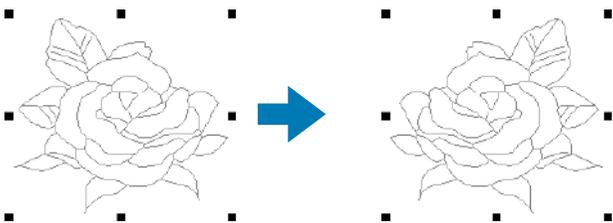


Operation:

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 55 and “Mirror – Horizontal”

Rotate

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

Shortcut key: **Ctrl** + **Y**

Toolbar:



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 55

■ 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 77
Sewing Order	Allows you to check and modify the sewing order of the different colors of a pattern as well as the sewing order of each color individually.	page 80

■ Sewing Attributes

Purpose: Sets the sewing attributes for outlines and regions.

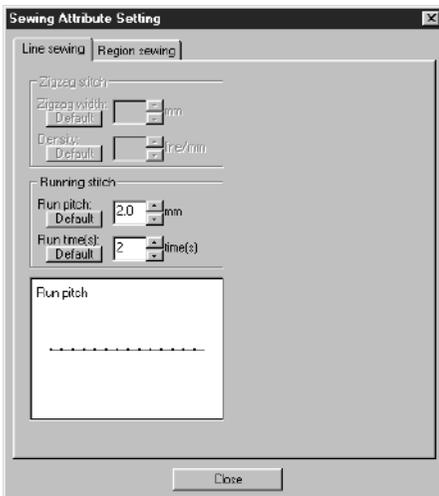
Shortcut key: **Ctrl** + **W**

Toolbar: 

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

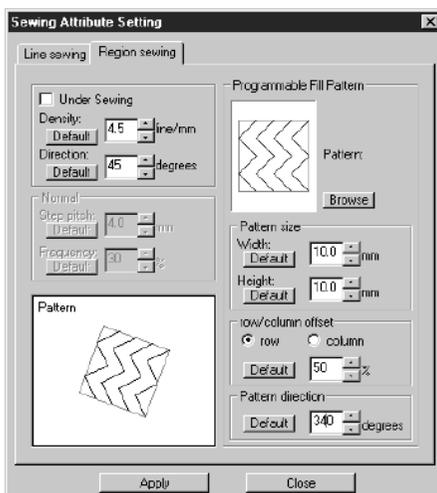
ZigZag width	Sets the width of the zigzag stitch (when Zigzag Stitch is selected for the outline). Range: 1 ~ 10 mm (0.04 ~ 0.39 inch) Default: 2 mm (0.08 inch)
Density	Sets the number of lines per mm (inch) (when Zigzag Stitch is selected for the outline). Range: 1 ~ 7 lines per mm (25 ~ 178 lines per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

Running stitch

Run pitch	Sets the pitch of the line sewing (when Running Stitch 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: 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:

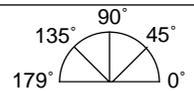


- ◆ Enter the desired values for each setting either by clicking on the arrows or by typing the value directly in the edit box window.
- When you click a selector, a preview image of that setting displays. The image will change and reflect your setting changes each time you click an arrow.
- ◆ To restore 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 ~ 179 degrees Default: 45 degrees



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 
Frequency	Sets the spacial frequency steps. Range: 0 ~ 99% Default: 30%	0%  30% 

Note the difference between Fill and Satin stitches: Fill stitch  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 Browse dialog. Select the directory of the folder containing the pas 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)
	Height	Sets the stitch pattern height. Range: 5 ~ 10 mm (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

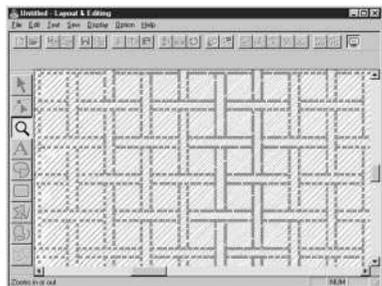
Note on the programmed fill stitch:

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.

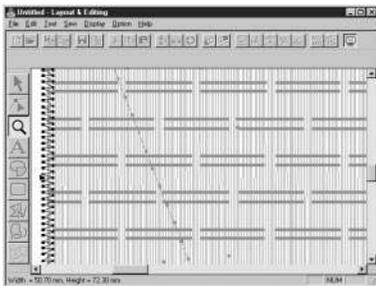
Use the preview function of your application to view exactly how your stitch pattern will be sewn and set the stitch direction and pattern direction according to the selected stitch or to the effect that you want to produce. To get an even better view, make test samples of different settings.

Example of a programmed fill stitch:

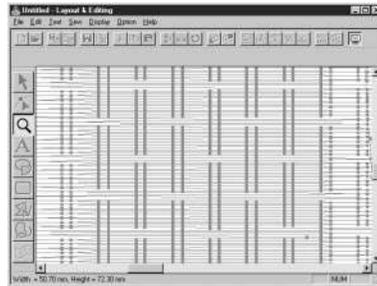
Ex. 1:
Stitch direction: Default: 45°



Ex. 2:
Stitch direction: 90°



Example 3:
Stitch direction: 0°



See also: “Preview” on page 82, “Programmable Stitch Creator” on page 171

■ Sewing Order

Purpose: Allows you to check and modify the sewing order of the different colors of a pattern as well as the sewing order of each color individually.

Shortcut key: **F10**

Toolbar:

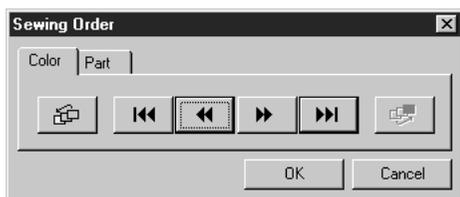


Operation:

② Click **Sew**, then **Sewing Order**.

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

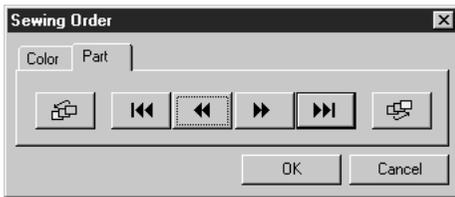
③ To check and review the sewing order of the different colors of a pattern:
Make sure the **Color** tab is displayed.



- ◆ 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.

- 4 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 82

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.	page 82
Preview	Displays a realistic image of how the patterns will look like when embroidered.	page 82
Refresh Window	Updates the screen.	page 83
Toolbar	Turns the Toolbar on/off.	page 83
Status Bar	Turns the Status bar on/off.	page 83

■ Grid Setup

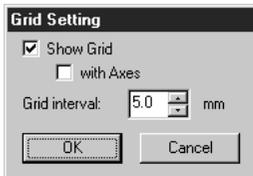
Purpose: Allows you to set up the grid, to switch it on or off and to display it with or without the horizontal and vertical lines.

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.
- 4 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 157

■ Preview

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

Shortcut key: **F9**

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** key.

See also: "Sewing Order" on page 80

■ 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.

■ 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 84
Programmable Stitch Creator	Starts Programmable Stitch Creator and displays its window up front.	page 84
File Utility	Starts File Utility and displays its window up front.	page 84
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 84
Select System Unit	Allows you to select the system unit (mm or inch).	page 85

■ 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.

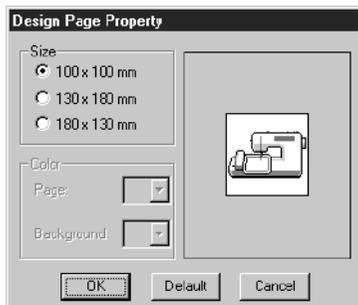
Shortcut key: No shortcut key for this function

Toolbar: No button for this function

Operation:

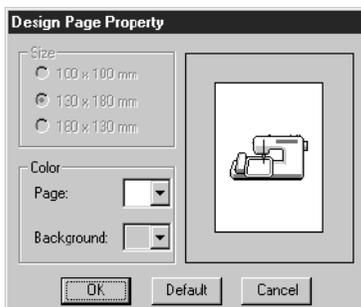
1 Click **Option**, then **Design Page Property**.

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).

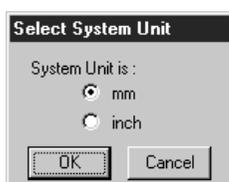
Shortcut key: No shortcut key for this function

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.

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 86
To Line Image	Moves to Stage 2.	page 86
To Figure Handle	Moves to Stage 3.	page 88
To Sew Setting	Moves from Stage 3 to Stage 4.	page 89

■ To Original Image

Purpose: Moves back to Stage 1.

Shortcut key: No shortcut key for this function

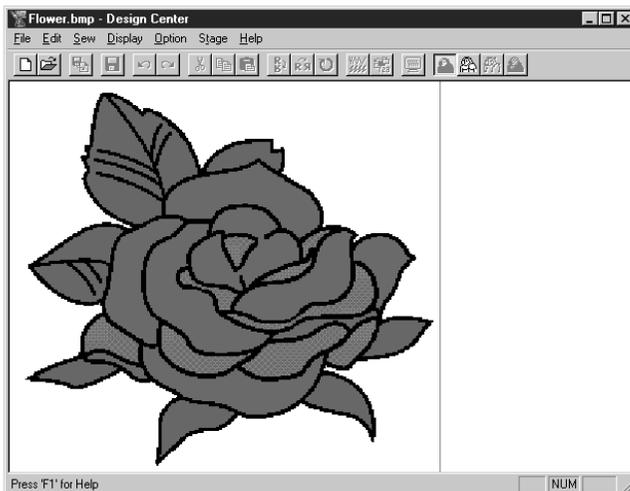
Toolbar: 

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

Toolbar: 

Operation:

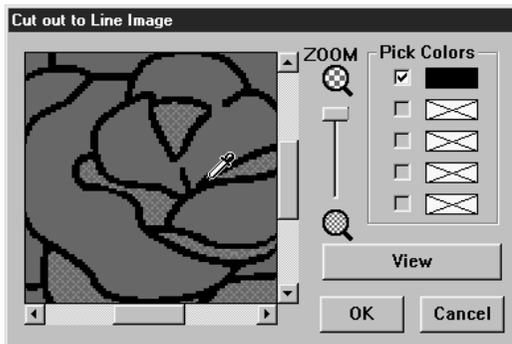
① Click **Stage**, then **To Line Image**.

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.

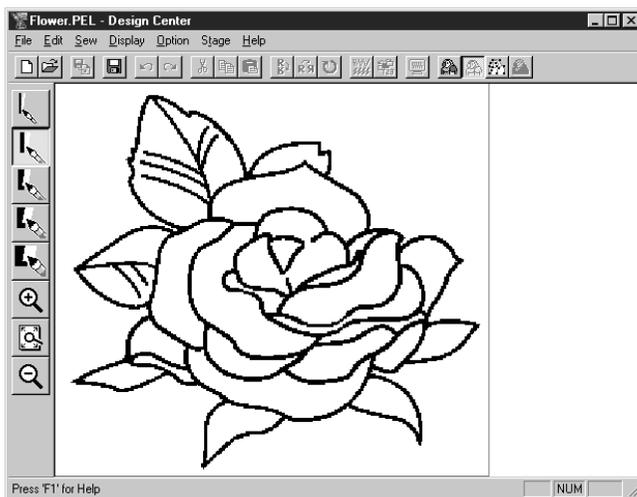
Note that if you started in Stage 3 by opening a Stage 3 file, you cannot go to Stage 2.

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

■ To Figure Handle

Purpose: Moves to Stage 3.

Shortcut key: No shortcut key for this function

Toolbar:

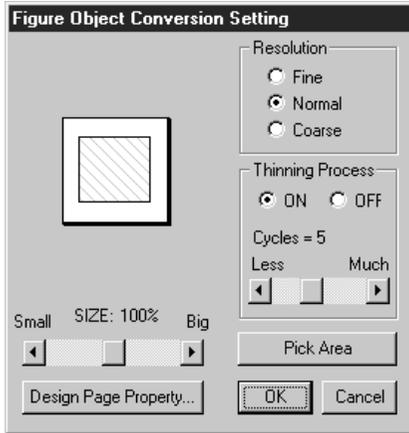


Operation:

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

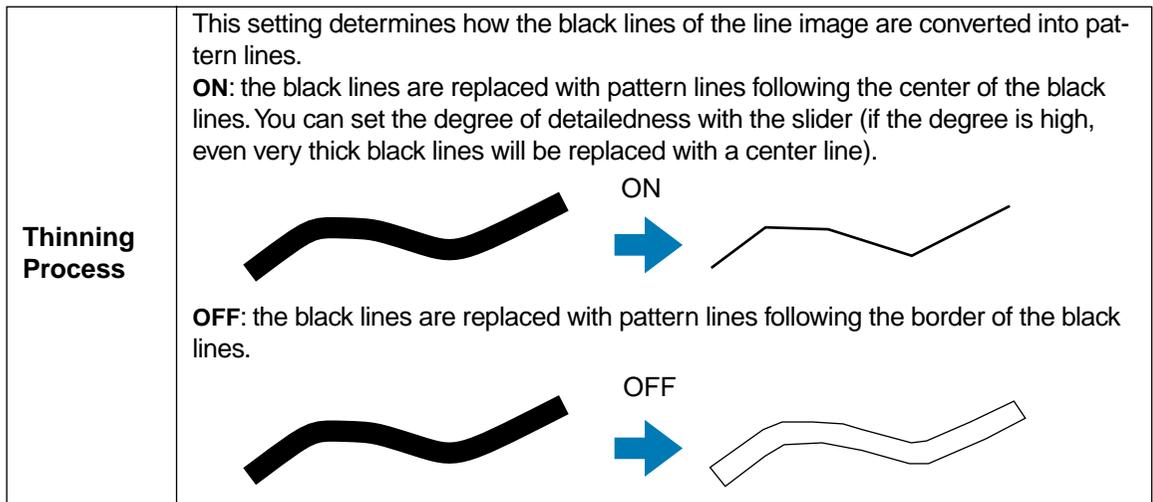
If you were in Stage 4, a message warns you that may lose some data if you go back to Stage 3. If you want to make sure no data is lost, click **Cancel** in that dialog and save your settings. Otherwise, click **OK** and you are returned to Stage 3.

If you were in Stage 2, this dialog displays.

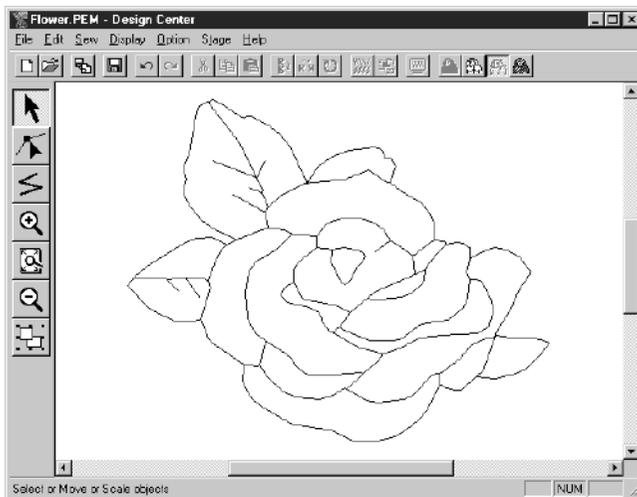


- ◆ Set the resolution. For details, see the following table.
- ◆ Set the thinning process. For details, see the following table.
- ◆ Set the size as a percentage of the original using the **SIZE** slider (setting range: 25 % ~ 400 %). You will not be able to enlarge the image beyond the limits of the 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	<p>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.</p> <p>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.</p> <p>Select Fine only if the image contains many small details, and Normal does not give a satisfactory result.</p>
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- 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 86, “To Sew Setting” below, “Grid Setup” on page 82 and “Design Page Property” on page 84

■ To Sew Setting

Purpose: Moves from Stage 3 to Stage 4.

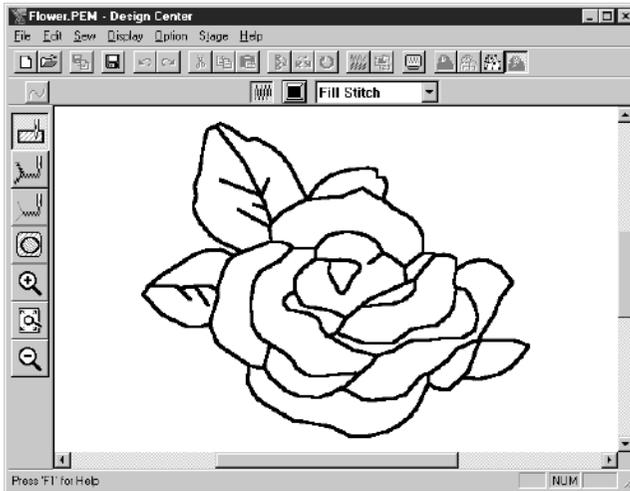
Shortcut key: No shortcut key for this function

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 86 and “To Figure Handle” on page 88

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 90
Using	Explains how to use the on-screen help system.	page 91
About Design Center	Gives information about the version of this application.	page 91

■ 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

■ 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

❶ Click **Help**, then **Using**.

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

❷ 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:

❶ Click **Help**, then **About Design Center**.

A dialog will display.

❷ Click **OK** to remove it.

See also: “Contents” and “Using”

Contents

Before Using

Getting Started

Design Center

Layout & Editing

File Utility

Programmable
Stitch Creator

Quick Reference

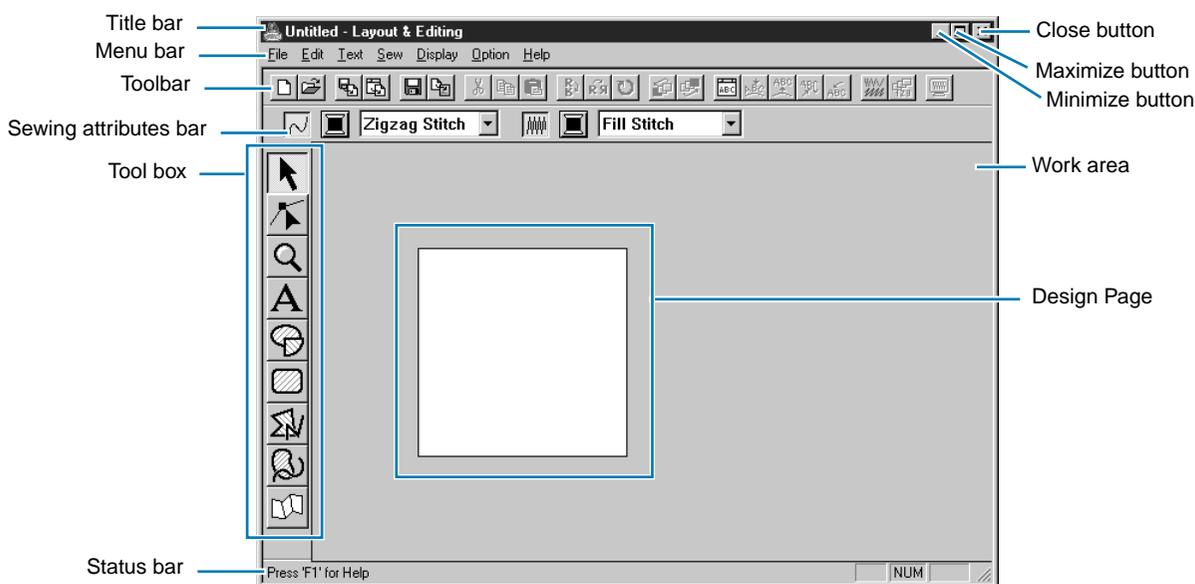
Alphabetic Index

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	The actual part of the work area that can be saved and sewn.

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.

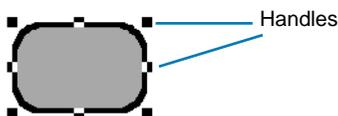
	Sets the cursor in selection mode. When you start the application, the selection mode is active by default. Cursor shape: 	page 95
	Sets the cursor in point edit mode. Cursor shape: 	page 97
	Sets the cursor in zoom mode. Cursor shape:  or 	page 100
	Sets the cursor in text input mode. Cursor shape: 	page 101
	Sets the cursor in circle and arc drawing mode. Cursor shape:  with a miniature of the tool button	page 102
	Sets the cursor in rectangle drawing mode. Cursor shape:  with a miniature of the tool button	page 105
	Sets the cursor in line drawing mode. Cursor shape:  with a miniature of the tool button	page 105
	Sets the cursor in curve drawing mode. Cursor shape:  with a miniature of the tool button	page 106
	Sets the cursor in manual punching mode. Cursor shape:  with a miniature of the tool button	page 107

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

- 1 Click  on the Tool Box. The shape of the cursor changes to .
- 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.

■ 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.

■ 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 , ,  or , 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.

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 149.

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.

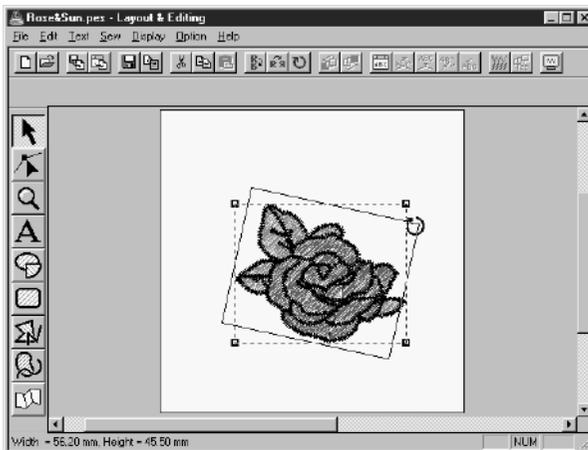


- 2 Select the menu command **Edit – Rotate** or click  on the Toolbar. The handles around the selected pattern are replaced by smaller boxes on the four corners of the selected area.

- 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 pattern;
- ◆ 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.

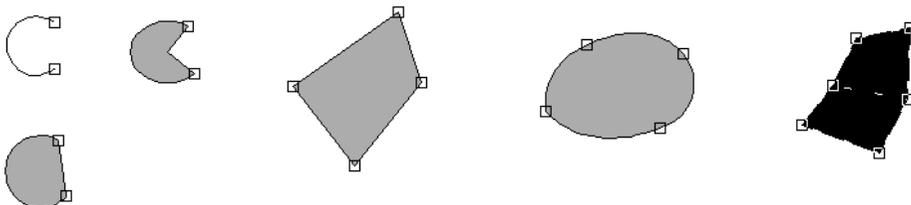
Two buttons appear:  .

- 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.

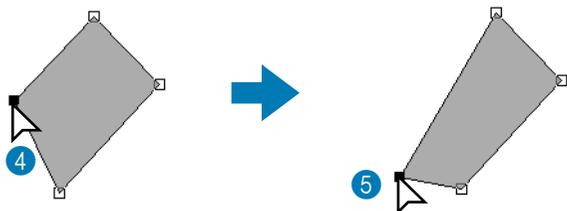
You can select more than one point by clicking them while holding the **Shift** key down, or by dragging the mouse across the area.

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.



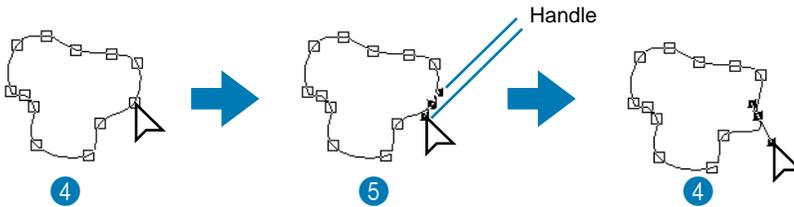
Note that you must drag a point that is selected. If you start dragging by clicking elsewhere on the outline, a new point will be inserted or the selected point(s) will be deselected.

■ 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.
- 5 Click on one end of the handle and drag it without releasing the mouse.

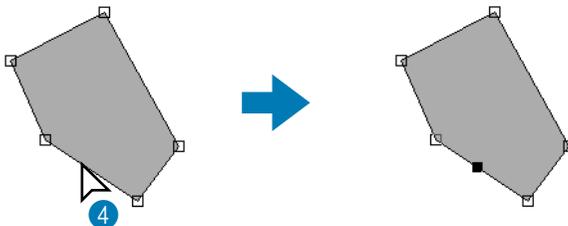


■ Inserting points

- 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.

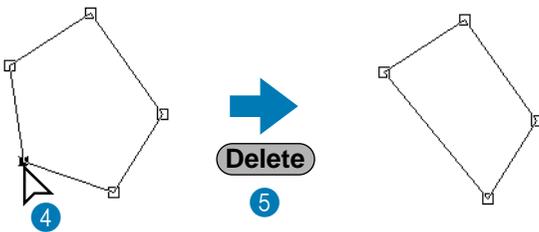


■ Deleting points

- 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 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.

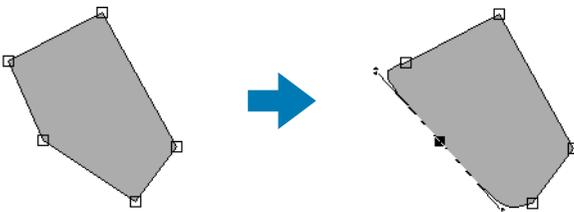


■ Realigning

- 1 Click  on the Tool Box.

Two buttons appear: .

- 2 Click . The shape of the cursor changes to  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 98).

■ Selecting characters on a text pattern

- 1 Click  on the Tool Box.

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.

- 5 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 .

Five buttons appear: .

- 2 Click .

The shape of the cursor changes to .

- 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 .

Five buttons appear: .

- 2 Click .

The shape of the cursor changes to .

- 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

- Click .

Five buttons appear: .

- Click .

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

Enlarging selected objects to the screen size

- Select one or more patterns.

- Click .

Five buttons appear: .

- Click .

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

Returnig to the standard scale

- Click .

Five buttons appear: .

- Click .

The Design Page is zoomed in or out automatically to fit the window.

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

- Click  on the Tool Box.

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

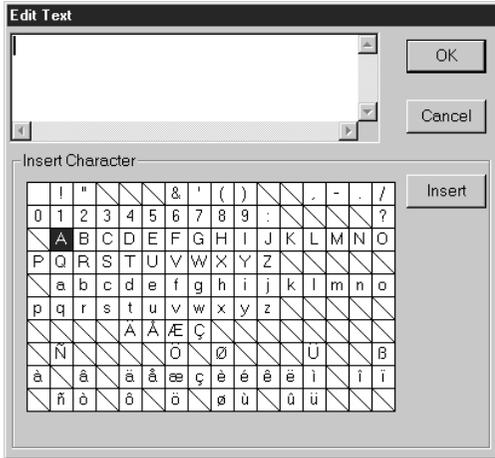


You can select a color, a font and a size at this step or after creating the pattern.

See “Color” on page 117, “Font” on page 111 and “Text size” on page 112.

You can also set the sewing attributes using the **Sew** menu (see “Sewing Attribute Setting” on page 144) and the text attributes using the **Text** menu (see “Text Attribute Setting” on page 138).

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



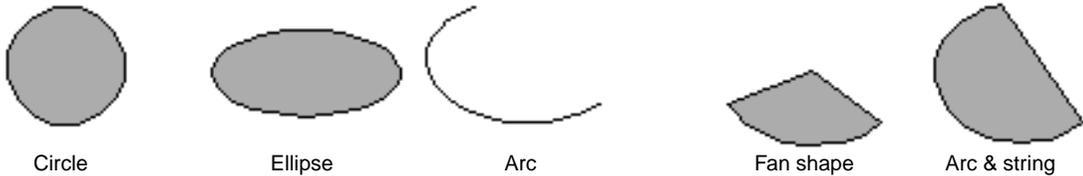
- Type your text. Press the **Enter** key to enter new lines of text.
- You can also enter a character by clicking it on the character table, then clicking **Insert** or simply by double-clicking it. This is specially useful if you have to enter accented characters that are not available on your keyboard.
- 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.

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 138.

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

- 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 117 and “Stitch” on page 119.

You can also set the sewing attributes using the **Sew** menu (see “Sewing Attribute Setting” on page 144).

You must decide now which kind of circle-related graphic you need.

- 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 its 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

- 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:

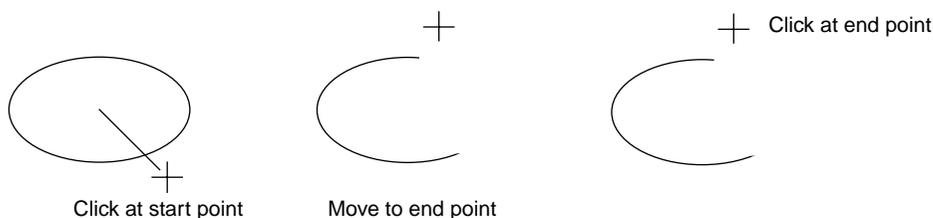


You can select the colors and stitches at this step or after creating the pattern. See “Color” on page 117 and “Stitch” on page 119.

You can also set the sewing attributes using the **Sew** menu (see “Sewing Attribute Setting” on page 144).

You must decide now which kind of circle-related graphic you need.

- Click the **Arc shape** selector, then click **Arc**.
- 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 and click.
The radial line disappears.
- Move the cursor (without dragging) to the end point of the arc and click.



■ Drawing a fan shape

- Click  on the Tool Box.

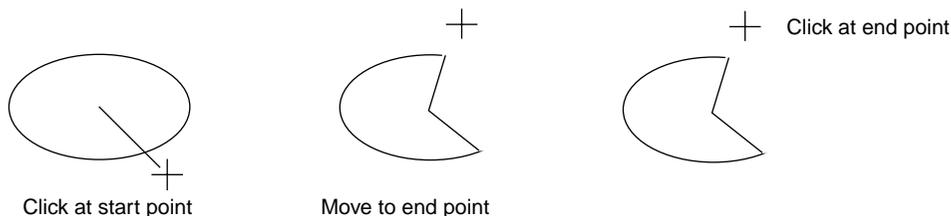
The shape of the cursor changes to  and displays together with a small ellipse. The Sewing Attributes bar now looks like this:



You can select the colors and stitches at this step or after creating the pattern. See “Color” on page 117 and “Stitch” on page 119.

You can also set the sewing attributes using the **Sew** menu (see “Sewing Attribute Setting” on page 144). 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.
- 4 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

- 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:

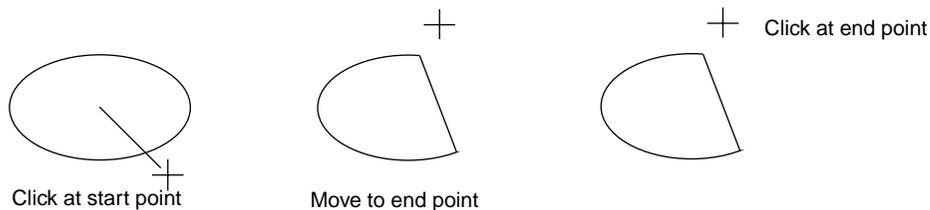


You can select the colors and stitches at this step or after creating the pattern. See “Color” on page 117 and “Stitch” on page 119.

You can also set the sewing attributes using the **Sew** menu (see “Sewing Attribute Setting” on page 144).

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.
- 4 Move the cursor (without dragging) to the start point of the arc & string and click.
The radial line disappears.
- 5 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 110, “Color” on page 117 and “Stitch” on page 119.

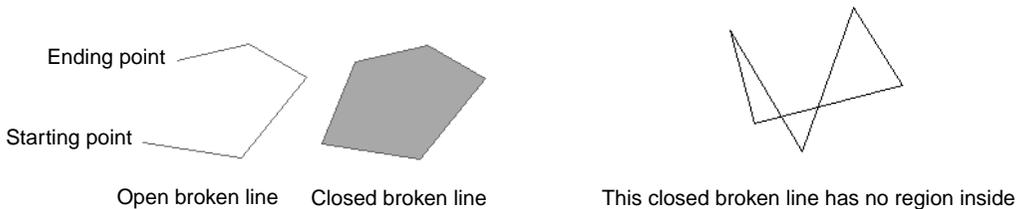
You can also set the sewing attributes using the **Sew** menu (see “Sewing Attribute Setting” on page 144).

- 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.



Drawing a broken line

- 1 Click  on the Tool Box.

The shape of the cursor changes to  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 111, “Color” on page 117 and “Stitch” on page 119.

You can also set the sewing attributes using the **Sew** menu (see “Sewing Attribute Setting” on page 144).

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 152.

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

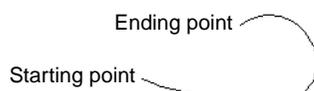
③ Repeat until you arrive at the last end point. At that point double-click.

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.

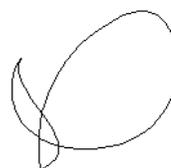
If the line is closed, the last point will be automatically joined with the first one to form a smooth contour. The contour has an outline and a region inside that can be assigned different stitches and colors. However, if the curved line crosses itself, the application cannot determine a region inside, and the pattern will be a simple outline.



Open curve



Closed curve



This closed curve has no region inside

Drawing a curve

① Click  on the Tool Box.

The shape of the cursor changes to  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 111, “Color” on page 117 and “Stitch” on page 119.

You can also set the sewing attributes using the **Sew** menu (see “Sewing Attribute Setting” on page 144).

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:   .

 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 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.

- Click  to start creating a block-type pattern.

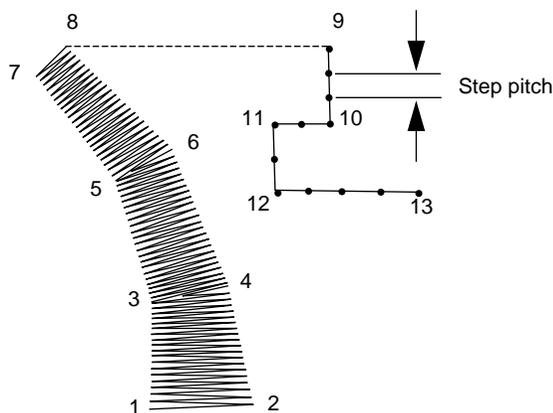
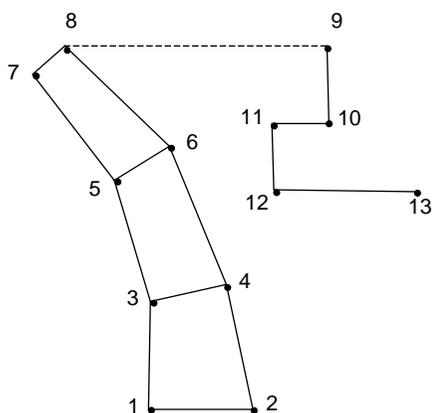
The shape of the cursor changes to  and displays together with a small image of the block-type button. The Sewing Attributes bar now looks like this:



You can select the color and stitch at this step or after creating the pattern. See “Color” on page 117 and “Stitch” on page 119.

You can also set the sewing attributes using the **Sew** menu (see “Sewing Attribute Setting” on page 144).

- 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.

- 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).
- 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.

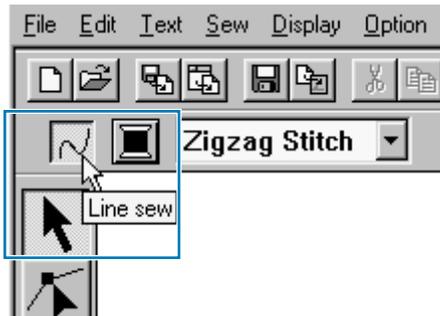
Example 1: The cursor is in selection mode, but nothing is selected.



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

	Arc type: Selects the type of arc.	page 110
	Edge radius: Sets the corners of rectangles.	page 110
	Path shape: Opens and closes broken lines and curves.	page 111

Text attributes

	Font: Selects a font for text.	page 111
	Text Size: Selects the size for text.	page 112
	Transform level: Selects the level of transformation.	page 113
	Text sew type: Selects the stitch type for the text.	page 114

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).	page 115
	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 116
	Line color, Region color, Text color, Punch color: Sets the thread color for outline, region inside, text, manual punching pattern and imported pattern.	page 117
<div style="border: 1px solid black; padding: 2px; margin-bottom: 5px;">Running Stitch ▾</div> <div style="border: 1px solid black; padding: 2px;">Fill Stitch ▾</div>	<p>Line sew type: Sets the stitch for the outlines.</p> <p>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).</p>	page 119

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:

- 1 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 102

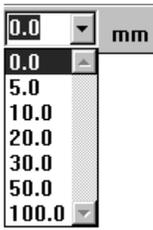
■ Edge radius 0.0 ▾ mm

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:

- 1 Type the desired value on the Edge radius selector (0 ~ 100 mm or 0 ~ 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 105

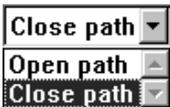
■ Path shape

Purpose: Opens and closes broken lines and curves.

Available: When you click  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:

- 1 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 105, "Curve Drawing Mode" on page 106

Setting Text Attributes

■ Font

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.

Operation:

- 1 Click on the **Font** selector.
A list of fonts displays.



Font number Font sample Types of characters available

- 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 ABC [A][a][0-9][&?][Ää]	13 ABC [A][a][0-9][&?]	25 ABC [A]
02 <i>ABC</i> [A][a][0-9][&?][Ää]	14 <i>ABC</i> [A][a][0-9][&?]	26 ABC [A]
03 ABC [A][a][0-9][&?][Ää]	15 ABC [A][a][0-9][&?]	27 ABC [A]
04 <i>ABC</i> [A][a][0-9][&?][Ää]	16 ABC [A][a][0-9][&?]	28 ABC [A]
05 <i>ABC</i> [A][a][0-9][&?][Ää]	17 <i>ABC</i> [A][a][0-9][&?]	29 ABC [A] [0-9]
06 ABC [A][a][0-9][&?][Ää]	18 ABC [A]	30 <i>ABC</i> [A][a][0-9][&?][Ää]
07 ABC [A][a][0-9][&?][Ää]	19 <i>ABC</i> [A]	31 ABC [A][a][0-9][&?][Ää]
08 ABC [A][a][0-9][&?][Ää]	20 ABC [A][a][0-9][&?]	32 ABC [A][a][0-9][&?][Ää]
09 ABC [A][a][0-9][&?][Ää]	21 ABC [A]	33 ABC [A][a][0-9][&?][Ää]
10 <i>ABC</i> [A][a][0-9][&?][Ää]	22 ABC [A][a]	34 ABC [A][a][0-9][&?][Ää]
11 ABC [A][a][0-9][&?]	23 ABC [A]	35 <i>ABC</i> [A][a][0-9][&?][Ää]
12 <i>ABC</i> [A][a][0-9][&?]	24 ABC [A]	

- [A] Upper case letters of the English alphabet
- [a] Lower case letters of the English alphabet
- [0-9] Numerals
- [&?] Upper case and lower case accented letters
- [Ää] Punctuation, brackets and other symbols

See also: "Text Input Mode" on page 101, "Point Edit Mode" on page 97

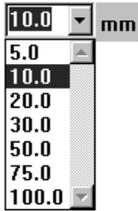
Text size [10.0] mm

Purpose: Selects the size for 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 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 101, "Point Edit Mode" on page 97

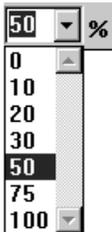
■ Transform level

Purpose: Selects the level of transformation.

Available: When you select an existing transformed text with the cursor in Selection mode.

Operation:

- 1 Type the desired value in the Transform level selector (0 ~ 100%) and press the **Enter** key
or
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 101 and "Transform Text" on page 142

■ Text Sew Type

Purpose: Selects the stitch type for the 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.

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.

See also: “Text Input Mode” on page 101, “Point Edit Mode” on page 97

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

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 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)

When you click  ,  ,  ,  on the Tool Box to start drawing such a pattern.

Operation:

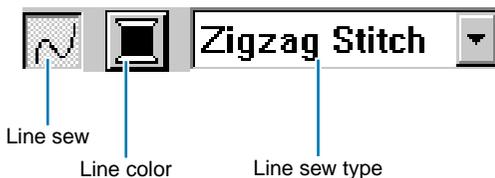
① Click the **Line sew** button.

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.

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 on:



Line sew off:



② To restore the outline click the Line sew button again.

See also: “Color” on page 117 and “Stitch” on page 119

■ 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:

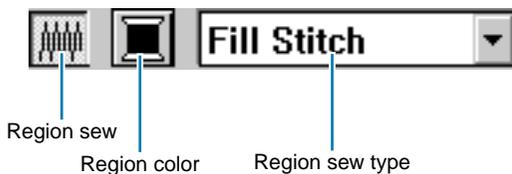
① Click the Region sew button.

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 117 and “Stitch” on page 119

■ Color

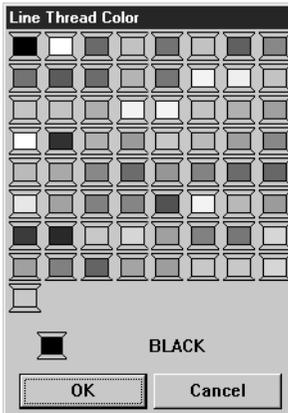
Purpose: Sets the thread color for outline, region inside, text, manual punching pattern and imported pattern (after the Stitch to Block function has been applied).

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 **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” below.*
- *For a list of the different color names, see page 179.*
- ◆ Click **OK** to confirm.
- ◆ Click **Cancel** to exit.

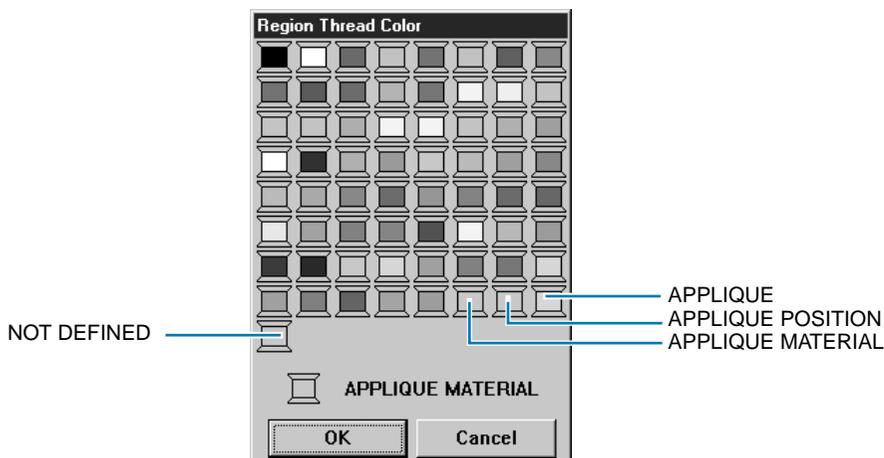
The setting applies to all the patterns of the same categories that you will create until you change it. The color button of each category shows the current color for that category.

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 115 and “Region sew” on page 116

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.

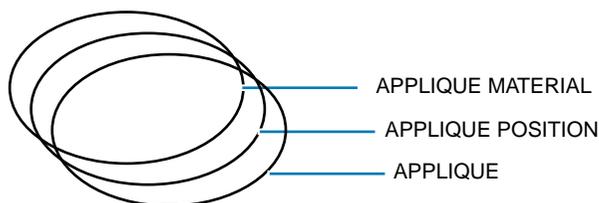
APPLIQUE POSITION marks the position on the backing material where the appliqué must be sewn.

APPLIQUE sews the appliqué on the backing material.

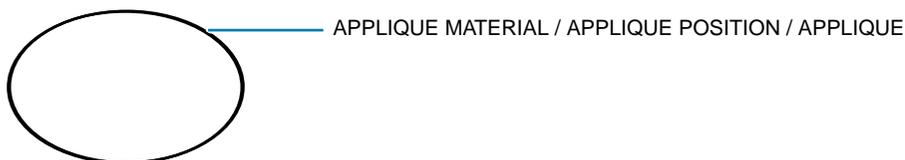
Example:

- ❶ Create an oval.
- ❷ Duplicate the oval and move it apart from the first one. Repeat this step to obtain a total of three identical ovals.
- ❸ Select the ovals one by one and make the following settings:

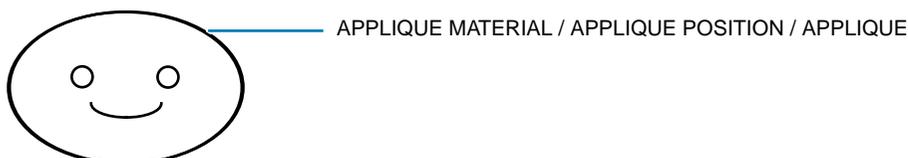
Oval	Sewing Attributes bar			Sewing Attributes
	Region sew button	Line color	Line sew type	
1	OFF	APPLIQUE MATERIAL	Running	RUN TIME = 1
2	OFF	APPLIQUE POSITION	Running	RUN TIME = 1
3	OFF	APPLIQUE	Zigzag	–



❹ 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 153).



❺ Add details as you would with a normal embroidery picture.



When sewing, proceed as follows:

- ① Place the appliqué material on the machine and start sewing. At this step, only the **APPLIQUE MATERIAL** outline will be sewn.
- ② 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 POSITION** outline will be sewn.
- ④ Affix the appliqué on the marked position with a small amount of fabric glue.
- ⑤ 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** → **POSITION** → **APPLIQUE**.

■ **Stitch** Running Stitch Fill Stitch

Purpose: Sets the stitch 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 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:

- ① 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**.*

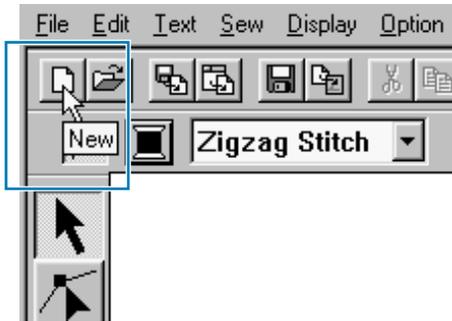
*When you select **Prog. fill Stitch**, you also need to select a programmed stitch in the **Sewing Attribute Setting dialog**, as there is no default programmed stitch setting.*

See also: “Line sew” on page 115, “Region sew” on page 116 and “Sewing Attribute Setting” on page 144

Using the Menu Bar and the Toolbar

File	Handles file input/output, such as opening, saving and printing.	page 121
Edit	Performs simple actions on selected patterns, such as cutting and pasting.	page 132
Text	Performs actions on text patterns, such as fitting text to a curved path.	page 138
Sew	Defines how each pattern will be sewn.	page 144
Display	Modifies the appearance of the screen.	page 152
Option	Provides additional options.	page 155
Help	Gives you access to the on-screen help information system.	page 158

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 121
Open		Opens a previously saved Design Page file (*.pes file).	page 122
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 123
	from Design Center	Imports an embroidery pattern from Design Center.	page 125
Template Open		Opens a background bitmap image that can be used as a guide to draw a new embroidery pattern.	page 126
Save		Saves your Design Page on the disk as a Version 2.0 file (default).	page 126
Save As		Saves your Design Page on the disk under a new file name.	page 127
Write to Card		Writes your Design Page to an original card.	page 128
Print Setup		Allows you to change the printing settings for previewed embroideries.	page 128
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 129
Print		Prints your Design Page and some sewing information.	page 130
Exit		Exits the application.	page 130

■ New

Purpose: Creates a new blank Design Page.

Shortcut key: **Ctrl** + **N**

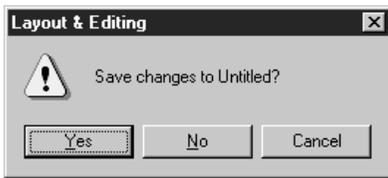
Toolbar: 

Operation:

① 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.



- ◆ 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 127

Open

Purpose: Opens a previously saved Design Page file (*.pes file).

Shortcut key: **Ctrl** + **O**

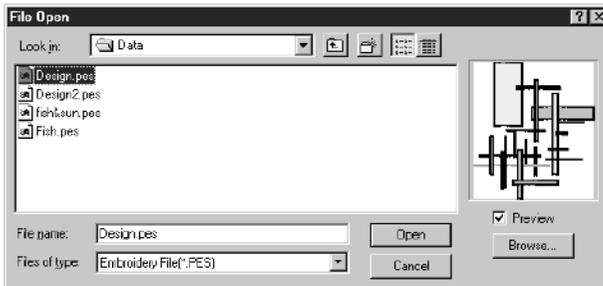
Toolbar:



Operation:

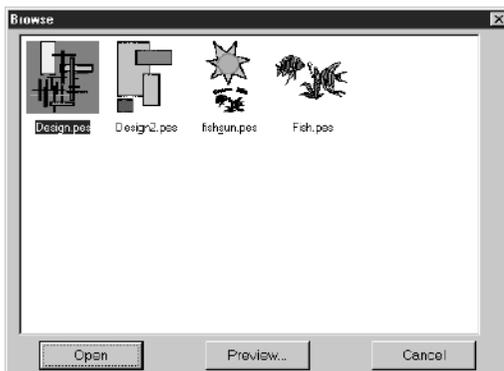
- 1 Click **File**, then **Open**.

A **File Open** dialog similar to this will display.



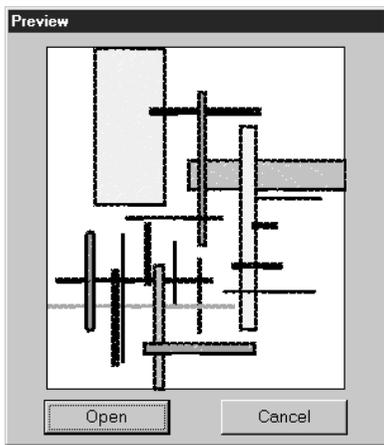
- ◆ Select the drive, the folder and the file name.
- *Be sure to select a folder containing pes files.*
- *The contents of the selected file displays in the **Preview** window, provided its check box is checked.*
- ◆ Click **Open** or double click the file name. The file will appear on the Design Page.
- ◆ 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.

- 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 double-click the icon.
- ◆ To see a more detailed image, click **Preview**.
- ◆ To return to the **File Open** dialog, click **Cancel**.

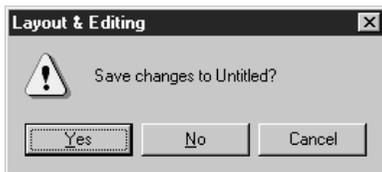
3 If you choose to preview, a **Preview** dialog similar to this will display.



- ◆ 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 121, "Save" on page 126, "Save As" on page 127

■ 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**

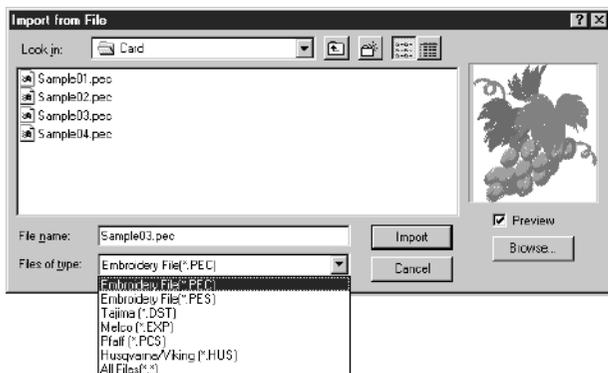
Toolbar:



Operation:

- 1 Click **File**, then **Import**, then **from File**.

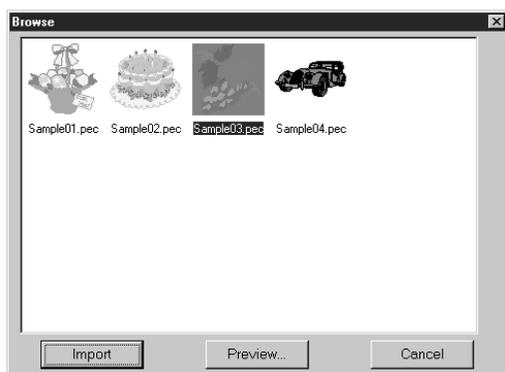
An **Import from File** dialog similar to this displays.



- ◆ 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.

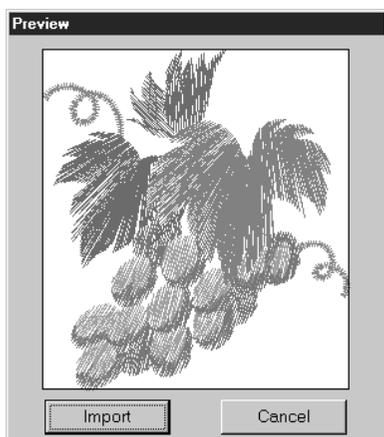
Note that *.pec files are files installed from a card. See “Reading from an Embroidery Card” on page 160.

- 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.

- 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 127

■ Import – from Design Center

Purpose: Imports an embroidery pattern from Design Center.

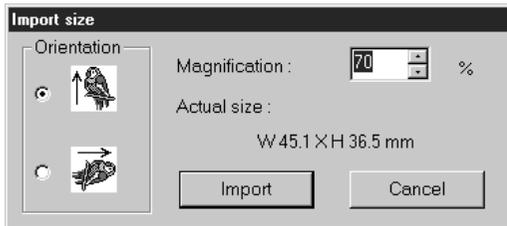
Shortcut key: **F7**

Toolbar:



Operation:

- Start Design Center and open the file that you want to import into Layout & Editing.
- 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 **Orientation** radio button opposite the appropriate icon.

- ◆ Click **Import** to import the data.

- ◆ Click **Cancel** if you want to exit the function.

- 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 49

■ Template Open

Purpose: Opens a background bitmap image that can be used as a guide to draw a new embroidery pattern.

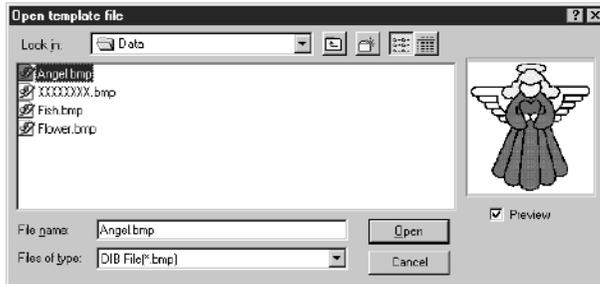
Shortcut key: No shortcut key for this function

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".

② 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 page 153

■ Save

Purpose: Saves your Design Page on the disk as a Version 2.0 file (default).

NOTE:

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

Shortcut key: **Ctrl** + **S**

Toolbar:

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 127, “Write to Card” on page 128

Save As

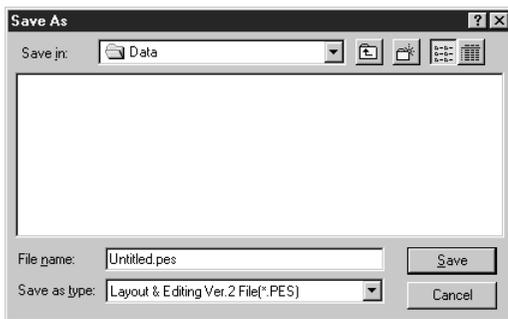
Purpose: Saves your Design Page on the disk under a new file name.

Shortcut key: No shortcut key for this function

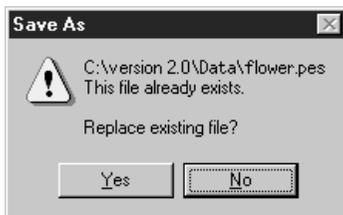
Toolbar: No button for this function

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 126, “Write to Card” on page 128

Write to Card

Purpose: Writes your Design Page to an original card.

Shortcut key: **F4**

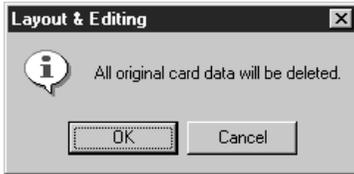
Toolbar:



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.

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 126, "Save As" on page 127

Print Setup

Purpose: Allows you to change the printing settings for previewed embroideries.

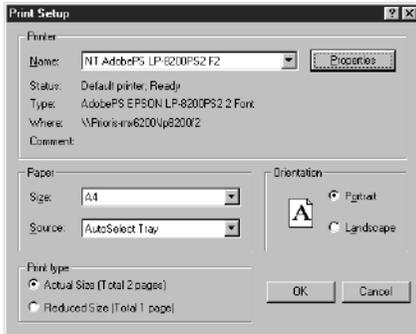
Shortcut key: No shortcut key for this function

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** 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.

The default setting **Reduced Size** will print a reduced illustration of the image and all the above mentioned items on a single page.

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.

See also: "Print Preview" and "Print" below

■ 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.

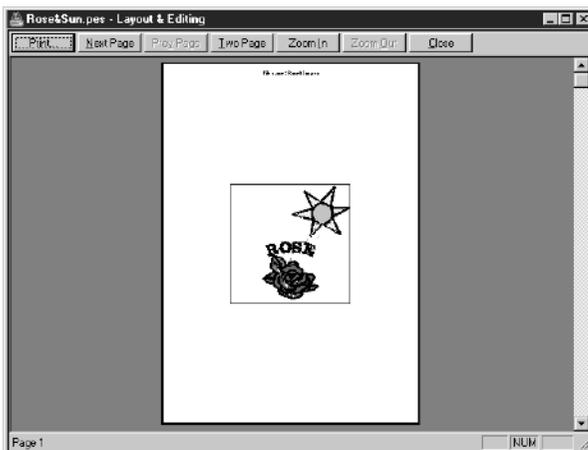
Shortcut key: No shortcut key for this function

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 sewing information on page 2.
- ◆ 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.

5 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.

NOTE:

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 156

Print

Purpose: Prints your Design Page and some sewing information.

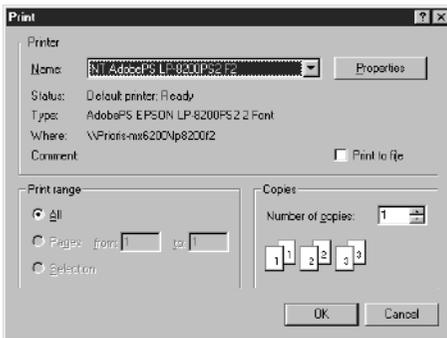
Shortcut key: **Ctrl** + **P**

Toolbar: No button for this function

Operation:

1 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.

See also: “Print Setup” and “Print Preview” 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 122.

See also: “Save” on page 126, “Save As” on page 127

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 132
Redo		Cancels the effect of the last Undo.	page 132
Cut		Removes the selected pattern(s) from the screen while saving a copy in the clipboard.	page 133
Copy		Saves the selected pattern(s) in the clipboard without removing them from the screen.	page 133
Duplicate		Makes a copy of the selected pattern(s).	page 133
Paste		Pastes the contents of the clipboard on the screen.	page 133
Delete		Removes the selected pattern(s) from the screen without saving them in the clipboard.	page 134
Mirror	Horizontal	Flips the selected pattern(s) up/down.	page 134
	Vertical	Flips the selected pattern(s) left/right.	page 134
Rotate		Allows you to manually rotate the selected pattern(s) by an arbitrary angle.	page 135
Sew First		Sends the selected patterns behind every other patterns. Allows you to set the sewing order of many patterns.	page 136
Sew Last		Brings the selected patterns in the foreground of every other patterns. Allows you to set the sewing order of many patterns.	page 136
Select All		Selects all the patterns.	page 137

■ Undo

Purpose: Undoes the last operation.

Shortcut key: **Ctrl** + **Z**

Toolbar: No button for this function

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**

Toolbar: No button for this function

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”

Cut

Purpose: Removes the selected pattern(s) from the screen while saving a copy in the clipboard.

Shortcut key: **Ctrl** + **X**

Toolbar:



Operation:

- 1 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:

- 1 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:

- 1 Select one or more patterns.
- 2 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:

- 1 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 clipboard.

Shortcut key: **Delete**

Toolbar: No button for this function

Operation:

- 1 Select one or more patterns.

- 2 Click **Edit**, then **Delete**.

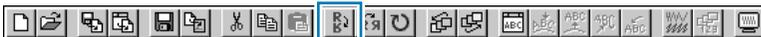
The selected pattern(s) are removed from the screen. Since they are not saved in the clipboard, the only way to make them reappear is to use **Edit – Undo**.

See also: “Undo” on page 132, “Cut” on page 133

Mirror – Horizontal

Purpose: Flips the selected pattern(s) up/down.

Shortcut key: **Ctrl** + **H**

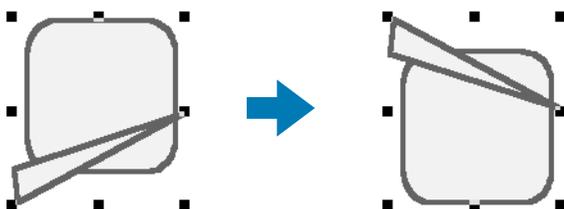
Toolbar: 

Operation:

- 1 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 134, “Rotate” on page 135

Mirror – Vertical

Purpose: Flips the selected pattern(s) left/right.

Shortcut key: **Ctrl** + **J**

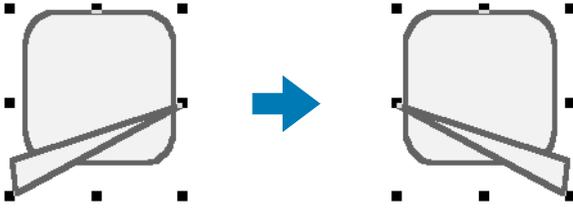
Toolbar: 

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 134, “Rotate” on page 135

■ Rotate

Purpose: Allows you to manually rotate the selected pattern(s) by an arbitrary angle.

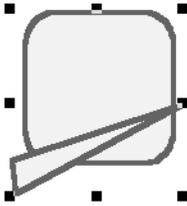
Shortcut key: **Ctrl** + **Y**

Toolbar:



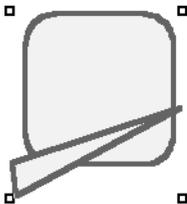
Operation:

① Select one or more patterns.



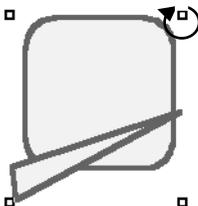
② Click **Edit**, then **Rotate**.

The shape of the handles changes.

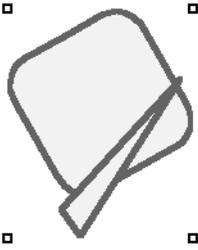


③ Move the cursor to one of the handles.

The shape of the cursor changes.



- 4 Drag the handle to rotate the pattern the desired angle and 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 134, “Mirror – Vertical” on page 134

■ Sew First

Purpose: Sends the selected patterns behind every other patterns. Allows you to set the sewing order of many patterns.

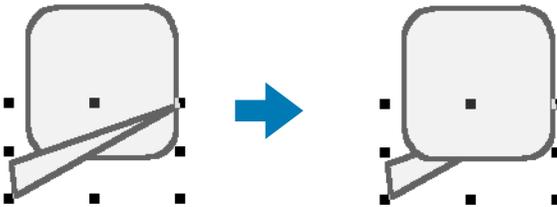
Shortcut key: **Ctrl** + **B**

Toolbar:



Operation:

- 1 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 136, “Check Sewing Order” on page 147

■ Sew Last

Purpose: Brings the selected patterns in the foreground of every other patterns. Allows you to set the sewing order of many patterns.

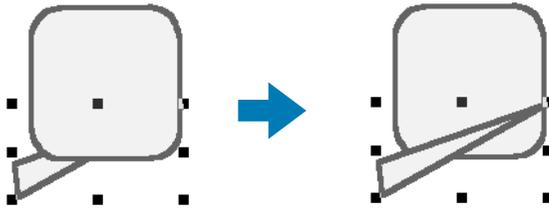
Shortcut key: **Ctrl** + **F**

Toolbar:



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 147

■ 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 138
Text Attribute Setting	Allows for precise control of character attributes.	page 138
Fit Text to Path Setting	Fits a line of text along a path.	page 140
Release Text from Path	Release the text from the path.	page 142
Transform Text	Applies a preset transformation to text.	page 142
Clear Transformation	Restores the original shape of the text.	page 143

■ Edit Text Letters

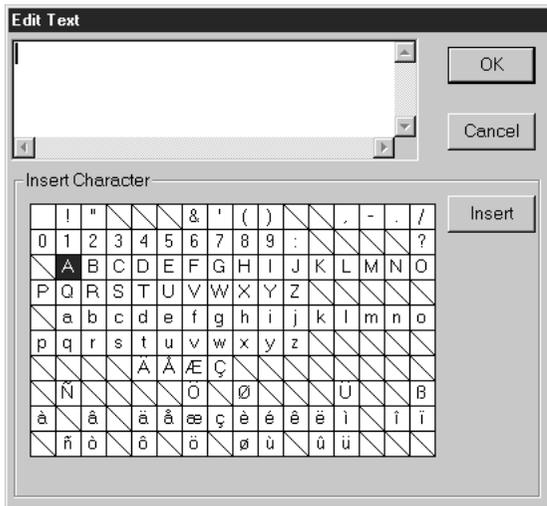
Purpose: Allows you to edit an entered text.

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.

See also: "Entering text" on page 101

■ Text Attribute Setting

Purpose: Allows for precise control of character attributes.

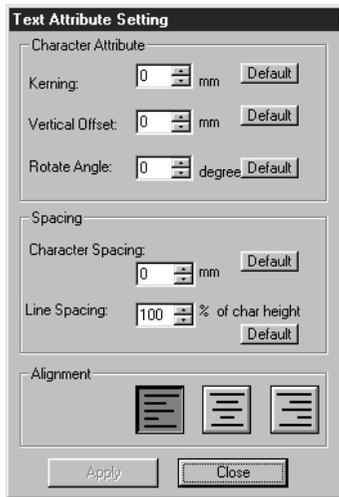
Shortcut key: **Ctrl** + **K**

Toolbar:



Operation:

- ❶ Select one or more text patterns.
- ❷ 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 inches) Default: 0	0.0 mm A b c d e f	5.0 mm (between "A" and "b") A b c d e f
Vertical Offset	Moves the text vertically. Range: -100 ~ 100 mm (-3.94 ~ 3.94 inches) Default: 0	0.0 mm A b c d e f	2.0 mm A b c d e f
Rotate angle	Rotates the characters. Range: 0 ~ 359 degrees Default: 0	0 degree A b c d e f	20 degree A b c d e f
Character Spacing	Sets the spacing between all characters. Range: -100 ~ 100 mm (-3.94 ~ 3.94 inches) Default: 0	0.0 mm A b c d e f	2.0 mm A b c d e f
Line Spacing	Sets the spacing between lines in percents of the character height. Range: 0 – 1000% Default: 0	100% A b c d e f g h i j k l	150% A b c d e f g h i j k l
Alignment	Aligns several lines of text to the left, center or right.	Center A b c d e f g h i j k l	Right A b c d e f g h i j k l

Note that 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 100 for more details about selecting individual characters in a text pattern.

See also: "Fit Text to Path Setting" and "Transform Text" on page 142

Fit Text to Path Setting

Purpose: Fits a line of text along a path.

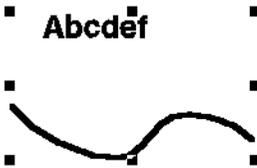
Shortcut key: **Ctrl** + **T**

Toolbar:

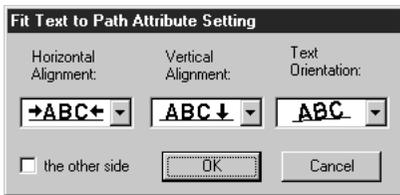


Operation:

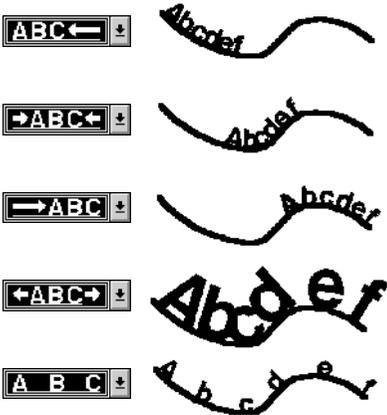
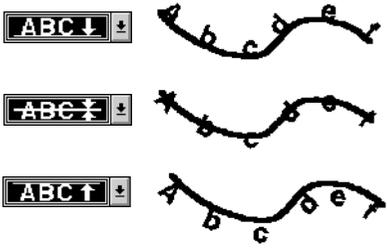
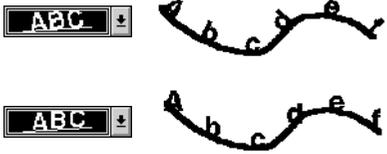
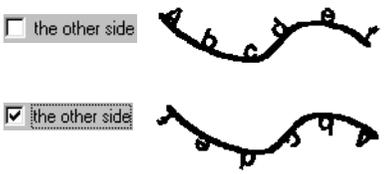
❶ Select a line of text and a path.



❷ 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.

<p>Horizontal Alignment</p>	<p>Sets the distribution of characters along the path.</p>	
<p>Vertical Alignment</p>	<p>Sets the distance between the text and the path.</p>	
<p>Text Orientation</p>	<p>Sets the orientation of the characters relative to the path.</p>	
<p>The other side</p>	<p>Reverses the characters.</p>	

See also: "Release Text from Path" below

Release Text from Path

Purpose: Release the text from the path.

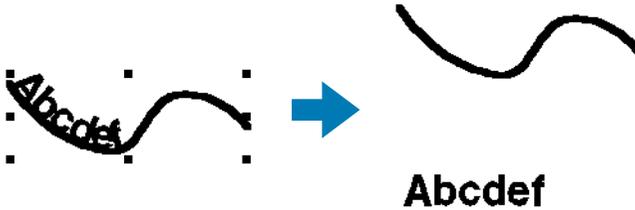
Shortcut key: **Ctrl** + **Q**

Toolbar:



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.

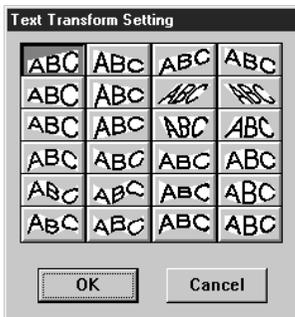
Shortcut key: **F2**

Toolbar:



Operation:

- ① 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.

ABCDE → **ABCDE**

- ③ If necessary, set the level of transformation. See “Transform level” on page 113.

See also: “Clear Transformation” below

■ Clear Transformation

Purpose: Restores the original shape of the text.

Shortcut key: **F3**

Toolbar:



Operation:

- 1 Select transformed text.
- 2 Click **Text**, then **Clear Transformation**.

ABCDE  **ABCDE**

See also: "Transform Text"

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 144
Check Sewing Order	Allows you to check the sewing order of patterns.	page 147
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 148
Cancel hole sewing	Cancels hole sewing setting.	page 149
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 149
Change colors of a stitch object	Changes the color of imported stitch data.	page 150
Select Sewing Area	Sets the sewing area	page 151

■ Sewing Attribute Setting

Purpose: Sets the sewing attributes of the regions and the outlines of a pattern.

Shortcut key: **Ctrl** + **W**

Toolbar:



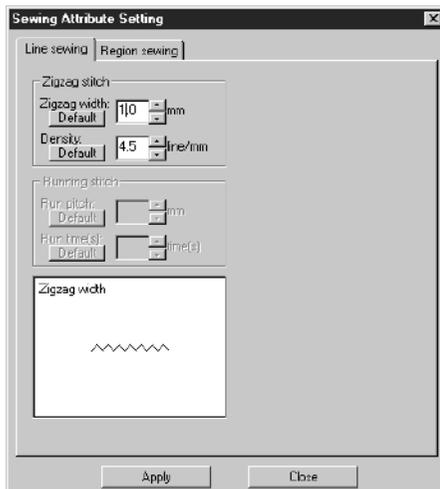
Operation:

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

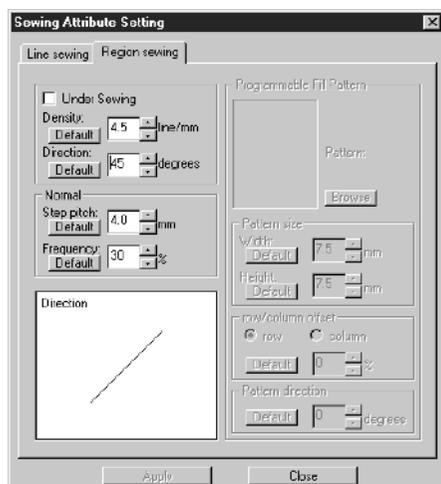
ZigZag width	Sets the width of the zigzag stitch (when Zigzag Stitch is selected for the outline). Range: 1 ~ 10 mm (0.04 ~ 0.39 inch) Default: 2 mm (0.08 inch)
Density	Sets the number of lines per inch (when Zigzag Stitch is selected for the outline). Range: 1 ~ 7 lines per mm (25 ~ 178 lines per inch)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

Running stitch

Run pitch	Sets the pitch of the line sewing (when Running Stitch 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.

When the Fill Stitch is selected in the of the **Region sew type** selector, the **Sewing Attribute Setting** displays like this.

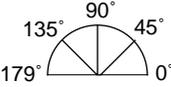


- ◆ Enter the desired values for each setting either by clicking on the arrows or by typing the value directly in the edit box window.
- When you click a selector, a preview image of that setting displays. The image will change and reflect your setting changes each time you click an arrow.
- ◆ To restore 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	
------------------	--	--

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 
Frequency	Sets the spacial frequency steps. Range: 0 ~ 99% Default: 30%	0%  30% 

Note the difference between Fill and Satin stitches: Fill stitch  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 Browse dialog. Select the directory of the folder containing the pas 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)
	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

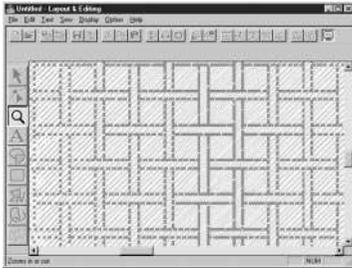
Note on the programmed fill stitch:

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.

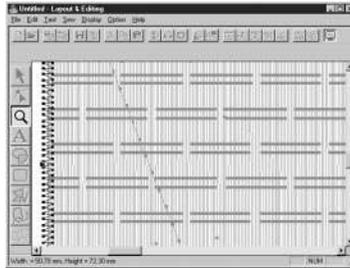
Use the preview function of your application to view exactly how your stitch pattern will be sewn and set the stitch direction and pattern direction according to the selected stitch or to the effect that you want to produce. To get an even better view, make test samples of different settings.

Example of a programmed fill stitch

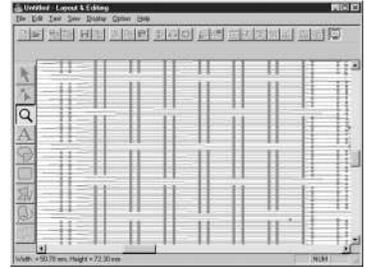
Ex. 1:
Stitch direction = Default: 45°



Ex. 2:
Stitch direction: 90°



Example 3:
Stitch direction: 0°



See also: “Preview” on page 153, “Programmable Stitch Creator” on page 171

■ Check Sewing Order

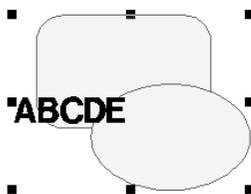
Purpose: Allows you to check the sewing order of patterns.

Shortcut key: **F10**

Toolbar: 

Operation:

① 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 , 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 136 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

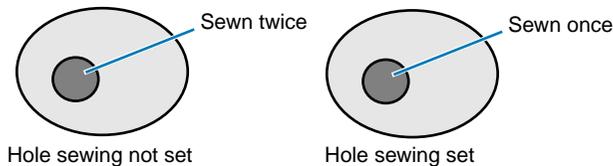
Operation:

- 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.

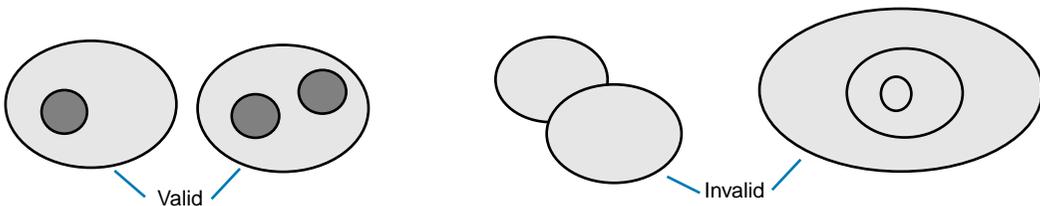


If the selected pair cannot be set for hole sewing, this message displays.



◆ 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 153).

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:

- ❶ Select a pattern that has been set for hole sewing.
- ❷ Click **Sew**, then **Cancel Hole Sewing**.
The pair of patterns can now be moved independently.

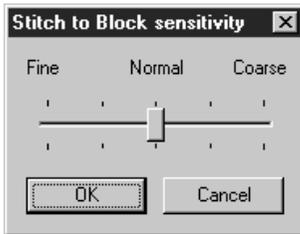
See also: “Set hole sewing” on page 148

■ 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:

- ❶ Select the imported stitch data opened in the Design Page to which you want to apply the setting to.
- ❷ 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**.*

- ❸ After applying this function, the Sewing Attributes bar displays as follows:

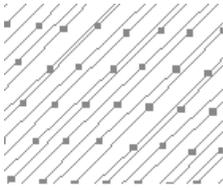


You can select and modify the sewing settings of the blocks of the same color. To do this, select a block whose color or sewing settings you want to change. All the blocks of that color are selected and the block color and stitch type display in the Sewing Attributes bar.

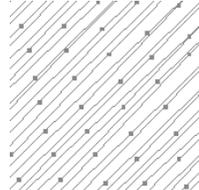
NOTE:

The sewing setting changes apply globally to the blocks of the same color.

- 4 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 144, “Scaling patterns” on page 95 and “Point Edit Mode” on page 97

■ 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 117

■ Select Sewing Area

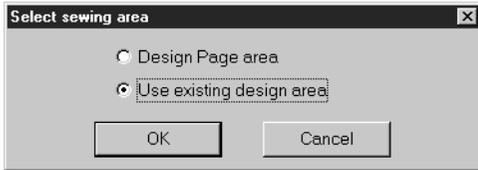
Purpose: Sets the sewing area

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.

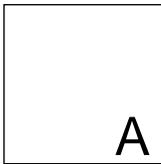
NOTE:

*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:

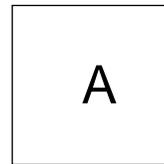
*When **Use existing design area** is selected, the actual pattern size is maintained, therefore allowing greater mobility when using the layout function of your embroidery machine.*



Design Page (on your screen)



Sewing area = Design Page



Sewing area = Use existing design

See also: "Design Page Property" on page 156

Display Menu

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

Grid Setup	Controls the display and characteristics of the grid.	page 152
Preview	Displays a realistic image of how the patterns will look like when embroidered.	page 153
Refresh Window	Updates the screen.	page 153
Template	Turns the template bitmap image on/off.	page 153
Toolbar	Turns the Toolbar on/off.	page 153
Status Bar	Turns the Status bar on/off.	page 154

■ Grid Setup

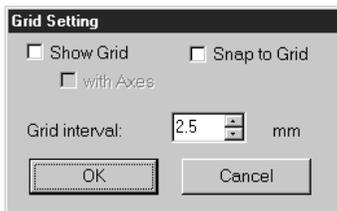
Purpose: Controls the display and characteristics of the grid.

Shortcut key: No shortcut key for this function

Toolbar: No button for this function

Operation:

- 1 Click **Display**, then **Grid**.
The **Grid Setting** dialog appears.



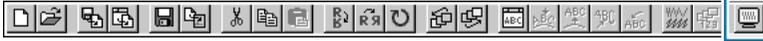
- ◆ Check **Snap to Grid** when you want to use the grid for aligning patterns or creating patterns of the same size. The cursor will move by the amount set in **Grid Interval**.
 - *The snap feature works whether or not the grid is displayed.*
- ◆ Check **Show Grid** to see the grid on your Design Page.
- ◆ 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.*
- ◆ Click **OK** to confirm.
- ◆ Click **Cancel** to exit.

See also: "Select System Unit" on page 157

Preview

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

Shortcut key: **F9**

Toolbar: 

Operation:

① Click **Display**, then **Preview**.

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** key.

See also: "Check Sewing Order" on page 147

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 respond correctly, for example, when residue of a pattern remains on the screen after the pattern has been cut.

Template

Purpose: Turns the template bitmap image on/off.

Shortcut key: **F6**

Toolbar: No button for this function

Operation:

① Click **Display**, then **Template**.

The template bitmap image will be toggled on/off. If you did not open a template bitmap image, this function cannot be activated.

See also: "Template Open" on page 126

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:

- 1 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 155
Programmable Stitch Creator	Starts Programmable Stitch Creator and displays its window up front.	page 155
File Utility	Starts File Utility and displays its window up front.	page 155
Design Property	Opens a dialog containing sewing information for the selected pattern(s).	page 156
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 156
Select System Unit	Allows you to select the unit of length (mm or inch).	page 157

■ 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 125

■ 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 Property

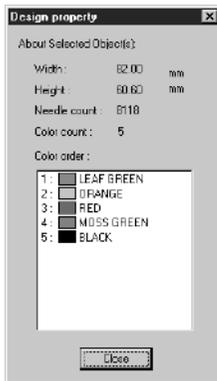
Purpose: Opens a dialog containing sewing information for the selected pattern(s).

Shortcut key: No shortcut key for this function

Toolbar: No button for this function

Operation:

- 1 Click **Option**, then **Design Property**.
The **Design Property** dialog displays.



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.

- ◆ Click **Close** to close the window.

See also: "Print Setup" on page 128

■ Design Page Property

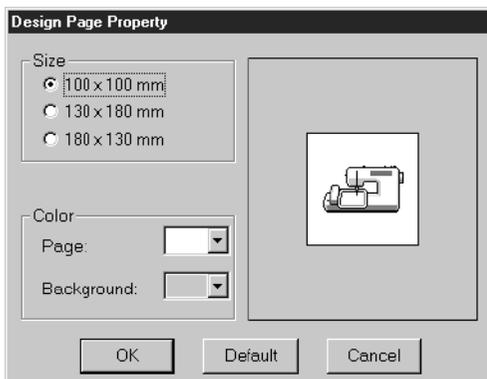
Purpose: Allows you to change the size of the Design Page and the color of the Design Page and the Design Page background.

Shortcut key: No shortcut key for this function

Toolbar: No button for this function

Operation:

- 1 Click **Option**, then **Design Page Property**.
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.

See also: “Select System Unit” on page 157

■ Select System Unit

Purpose: Allows you to select the unit of length (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 appear.



- ◆ Select the unit (mm or inch).
- ◆ Click **OK** to confirm.
- ◆ Click **Cancel** to exit.

See also: “Grid Setup” on page 152, “Design Page Property” on page 156

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 158
Using	Explains how to use the on-screen help system.	page 158
About Layout & Editing	Gives information about the version of this application.	page 158

■ 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”, “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.

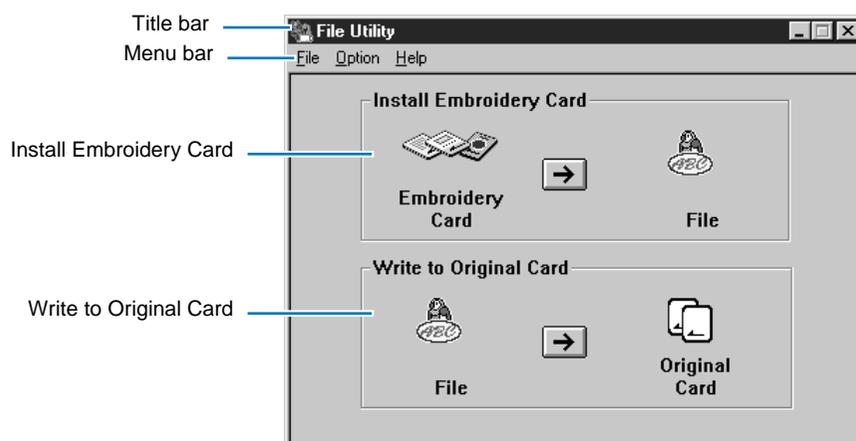
See also: “Contents” and “Using” above

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



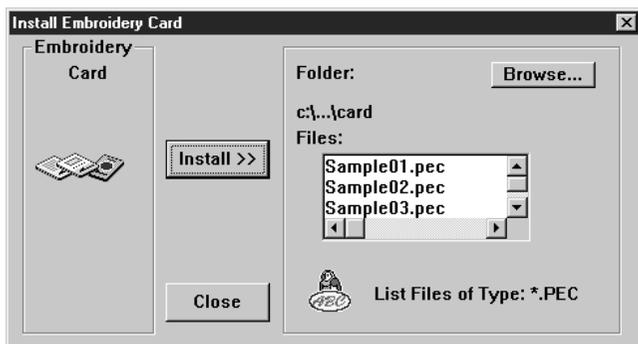
Menu bar	Gives access to the functions.
Install Embroidery Card	Click the arrow button in this area to start the card reading process.
Write to Original Card	Click the arrow button in this area to start the card writing process.

Reading from an Embroidery Card

Operation

To transfer embroidery data from an embroidery card to your hard disk, proceed as follows:

- 1 Click the arrow button in the **Install Embroidery Card** area.
An **Install Embroidery Card** dialog similar to this displays.



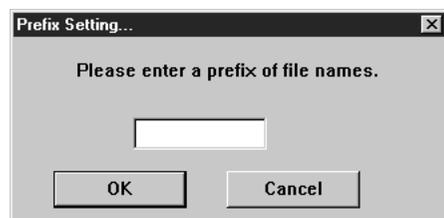
- ◆ The current folder and the *.PEC files it contains are shown.
- ◆ Click **Browse** to change the folder.
- ◆ Click **Install** to install the data in the current folder.
- ◆ Click **Close** to remove the dialog from the screen.

- 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.



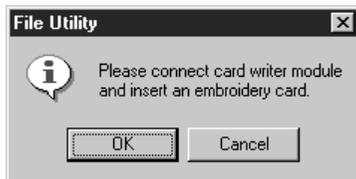
- ◆ Type a name for the file.
- ◆ Click **OK** to start.
- ◆ Click **Cancel** to return to the **Install Embroidery Card**.

- 4 If you don't type anything, this message will appear.



- ◆ Click **OK** to remove the message and return to the previous dialog.

- 5 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.

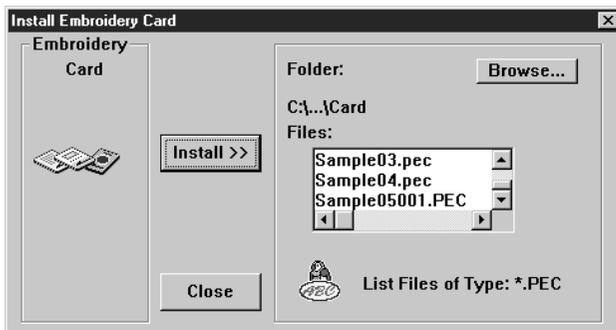
Note that it is better to switch your computer off before connecting any peripheral.

- 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.
- 7 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

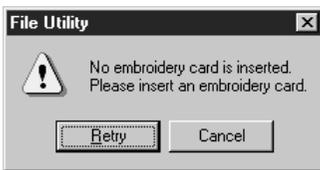
The application is able to detect problems that may occur before or during data transfer. Here is the complete list of error messages that may appear.

❶ 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.

❷ 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.

❸ If an incorrect or defective card is inserted:



- ◆ Insert another Embroidery card in the module.
- ◆ Click **Retry** to start reading.
- ◆ Click **Cancel** to exit.

❹ 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 is 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.

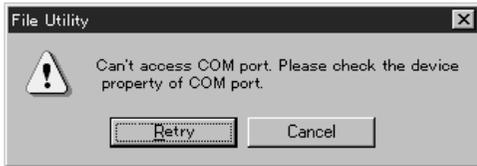
- 5 If the data cable between the card module and the computer or the power adaptor is disconnected while reading is in progress, reading will stop and this message will display:



- ◆ 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 **OK** to remove the message.

Disconnect a peripheral connected to your computer and try again.

Writing to an Original Card

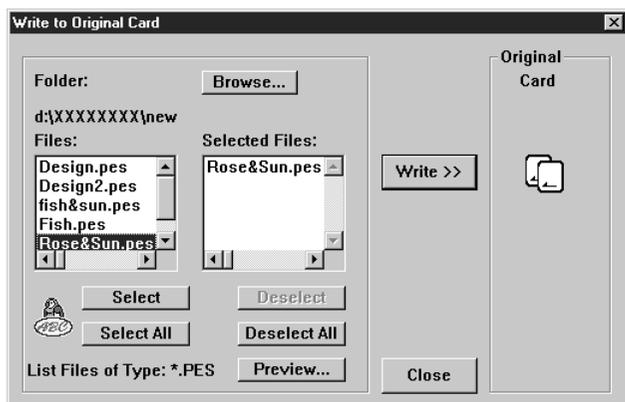
IMPORTANT: If you are using our company's scanner system, use two separate sets of original cards: one for the scanner system, and one for this system.

Operation

To transfer an embroidery file that you have created or edited with Layout & Editing to an original card, proceed as follows:

- 1 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.

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.

4 The application starts transferring the selected files to the card and informs you that the transfer is in progress.

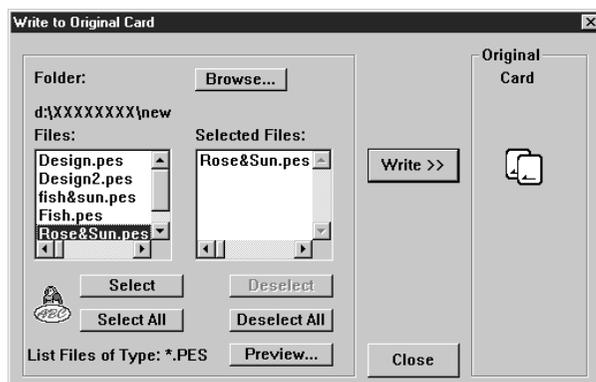
5 Wait until the transfer is completed.

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.

❶ 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.

❷ If there is no card in the card module:



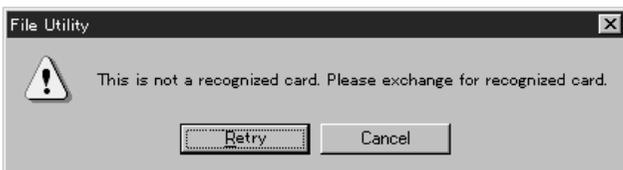
- ◆ Insert an Original card in the module.
- ◆ Click **Retry** to start reading.
- ◆ Click **Cancel** to exit.

❸ If a read-only card is inserted:



- ◆ Insert an Original card in the module.
- ◆ Click **Retry** to start reading.
- ◆ Click **Cancel** to exit.

❹ If an incorrect or defective card is inserted:



- ◆ Insert an Original card in the module.
- ◆ Click **Retry** to start reading.
- ◆ Click **Cancel** to exit.

❺ 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.

You should never remove a card while the red indicator light is 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.

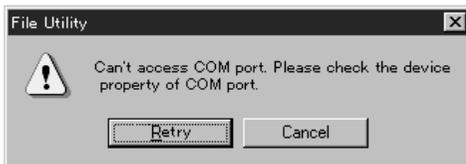
- 6 If the data cable between the card module and the computer or the power adaptor is disconnected while writing is in progress, writing will stop and this message will display:



- ◆ 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.

- 7 When every COM port is already in use for other peripherals, the following message appears.



- ◆ Click **OK** to remove the message.

Disconnect a peripheral connected to your computer and try again.

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.

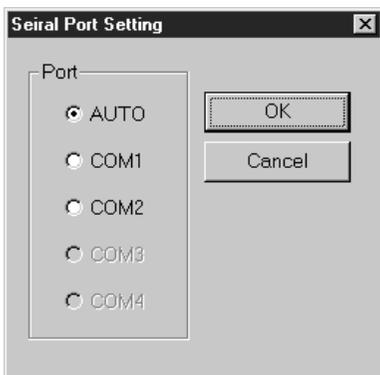
Serial Port Setting

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 169
Using	Explains how to use the on-screen help system.	page 169
About File Utility	Gives information about the version of this application.	page 169

■ 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 169, "About File Utility" on page 169

■ 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.
- 2 Refer to your Windows manual for the next operation.

See also: "Contents" on page 169, "About File Utility" on page 169

■ 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 169, "Using" on page 169

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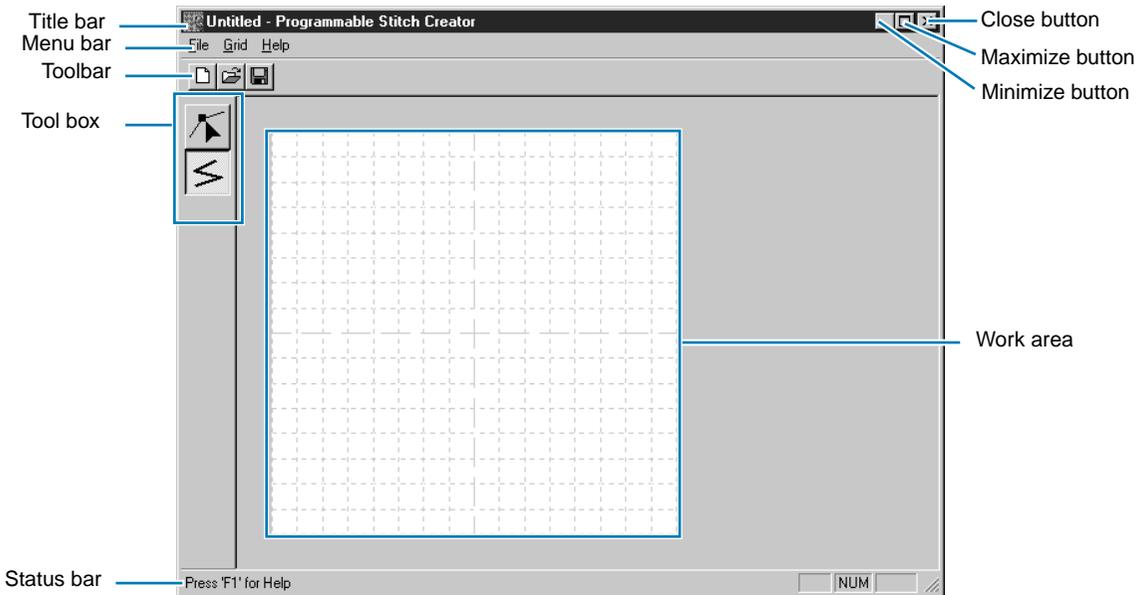
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Programmable Stitch Creator

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 point edit mode. Cursor shape: 	page 172
	Sets the cursor in line drawing mode. When you start the application, the drawing mode is active by default. Cursor shape:  with a miniature of the tool button	page 173

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.

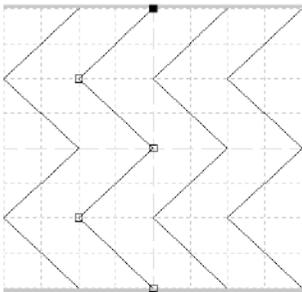
Depending on the stitch you want to create, you may need to select a different working grid.

For more information on the grids and on how to select them, refer to “Grid Menu” on page 177.

■ Moving points

❶ Click  on the Tool Box. The shape of the cursor changes to .

❷ 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.



❸ 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.

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

■ Inserting points

- 1 Click  on the Tool Box. The shape of the cursor changes to .
- 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 177.

■ 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.
- 3 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.
- 4 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.

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 174
Open	Opens a previously saved programmed stitch file.	page 174
Save	Saves your work area on the disk.	page 175
Save As	Saves the current stitch pattern under a new file name.	page 176
Exit	Exits the application.	page 176

■ New

Purpose: Creates a new blank work area.

Shortcut key: **Ctrl** + **N**

Toolbar:   

Operation:

- 1 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.

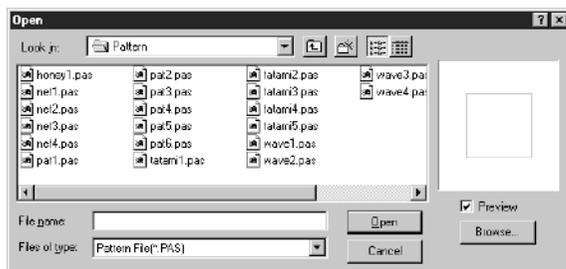
Shortcut key: **Ctrl** + **O**

Toolbar:   

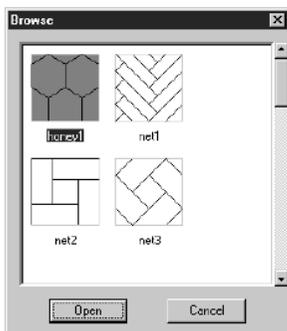
Operation:

1 Click **File**, then **Open**.

A **Open** dialog similar to this will display.



2 When you click **Browse**, the **Browse** dialog opens.



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.



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:

- ◆ 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.
- ◆ 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.
- ◆ 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).

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**, 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

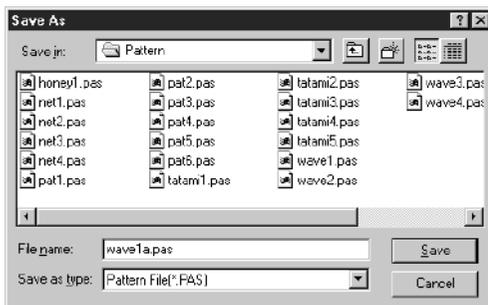
Purpose: Saves the current stitch pattern under a new file name.

Shortcut key: No shortcut key for this function

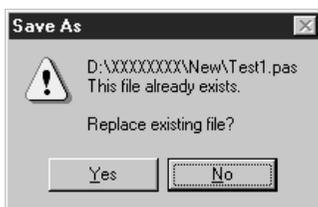
Toolbar: No button for this function

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

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.

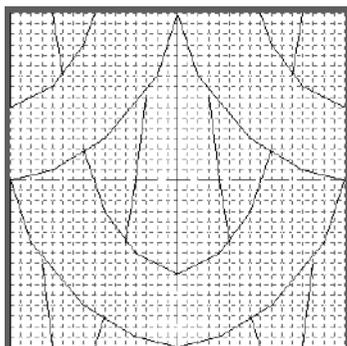
Shortcut key: No shortcut key for this function.

Toolbar: No button for this function

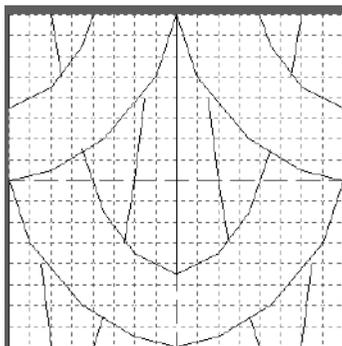
Operation:

- 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.

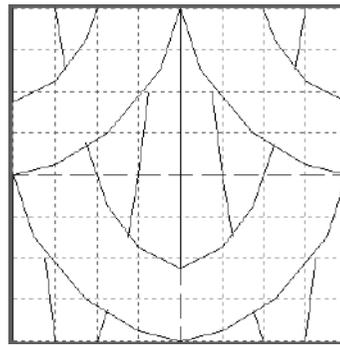
Example 1: **Narrow** grid



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 178
Using	Explains how to use the on-screen help system.	page 178
About Programmable Stitch Creator	Gives information about the version of this application.	page 178

■ 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.

- 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 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.
- 2 Click **OK** to remove it.

See also: “Contents” and “Using” above

Color Palette

Thread Color

Black	White	Red	Pink	Deep Rose	Flesh Pink	Dark Fuschia	Vermilion
Carmine	Royal Purple	Magenta	Salmon Pink	Amber Red	Lemon Yellow	Yellow	Harvest Gold
Orange	Pumpkin	Tangerine	Cream Brown	Cream Yellow	Khaki	Deep Gold	Brass
Linen	Dark Brown	Reddish Brown	Gray Brown	Beige	Warm Gray	Russet Brown	Light Brown
Sea Crest	Mint Green	Leaf Green	Olive Green	Dark Olive	Teal Green	Emerald Green	Deep Green
Fresh Green	Light Green	Moss Green	Blue	Ultra marine	Light Blue	Sky Blue	Electric Blue
Peacoc Blue	Prussia Blue	Corn Flower	Light Lilac	Lilac	Violet	Purple	Lavender
Wisteria Violet	Pewter	Dark Gray	Silver	Gray	Applique material	Applique Position	Applique
Not Defined							



Close

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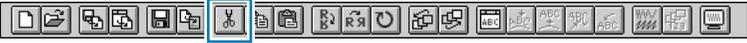
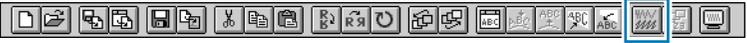
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	Redo	Ctrl + A		73
	Cut	Ctrl + X		73
	Copy	Ctrl + C		74
	Duplicate	Ctrl + D	-	74
	Paste	Ctrl + V		74
	Delete	Delete	-	74
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	Import – from Design Center	F7		125
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	Save	Ctrl + S		126
	Save As	-	-	127
	Write to Card	F4		128
	Print Setup	-	-	128
	Print Preview	-	-	129
	Print	Ctrl + P	-	130
	Exit	Alt + F4	-	130

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	Redo	Ctrl + A	-	132
	Cut	Ctrl + X		133
	Copy	Ctrl + C		133
	Duplicate	Ctrl + D	-	133
	Paste	Ctrl + V		133
	Delete	Delete	-	134
	Mirror – Horizontal	Ctrl + H		134
	Mirror – Vertical	Ctrl + J		134
	Rotate	Ctrl + Y		135
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