brother®

PE-DESIGN PLUS

PERSONAL EMBROIDERY DESIGN SOFTWARE SYSTEM

Operation Manual

Please visit us at **http://solutions.brother.com** where you can get product support and answers to frequently asked questions (FAQs).

IMPORTANT INFORMATION: REGULATIONS

Federal Communications Commissions (FCC) Declaration of Conformity (For USA Only)

Responsible Party: Brother International Corporation
100 Somerset Corporate Boulevard
Bridgewater, NJ 08807-0911 USA

declares that the product

Product Name: Brother USB Writer
Model Number: PE-Design

complies with Part 15 of the FCC Rules. Operation is subject to the following two conditions: (1) this device may not cause harmful interference, and (2) this device must accept any interference received, including interference that may cause undesired operation.

This equipment has been tested and found to comply with the limits for 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 harmful 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.
– Consult the dealer or an experienced radio/TV technician for help.
– 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 Class B digital apparatus complies with Canadian ICES-003.

Radio Interference (Other than USA and Canada)

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

Read the following before opening the CD-ROM package

Thank you for purchasing this software. Before opening the CD-ROM package for this software, carefully read the following Product Agreement, which has been provided for this product. Use this software only if you agree to the terms of this agreement. By opening the CD-ROM package, you agree to the conditions of its use. This product cannot be returned after it has been opened.

Product Agreement

1) General terms
    This is an agreement between you (the end-user) and our company for this product.

2) Use of this product
    You may install and use this product on only one computer.

3) Limitations on duplications
    You may not duplicate this product, except for backup purposes.

4) Limitations on modifications
    You may not modify or disassemble this product in any way.

5) Limitations on transfer
    This software may not be transferred to or used in any other way by a third party.

6) Warranty
    We accept no responsibility for your choice or use of this product or for any damages that may arise out of its use.

7) Others
    This product is protected by copyright laws.

Portions of this product were created using technology from Softfoundry International Pte. Ltd.

■ Opening the Operation Manual (PDF format)

This manual is provided in a PDF format on the enclosed CD-ROM. The Operation Manual is also installed during software installation.

Click **All Programs**, then **PE-DESIGN PLUS**, then **Operation Manual**.

Otherwise, with PE-DESIGN PLUS, click ▓▾, then **Operation Manual**. With PES-Writer, click Help, then **Operation Manual**.

📖 **Memo:**

• *Adobe® Reader® is required for viewing and printing the PDF version of the Operation Manual*

• *If Adobe® Reader® is not on your computer, it must be installed. It can be downloaded from the Adobe Systems Incorporated Web site (http://www.adobe.com/).*

• *The procedures in this manual are written for use in Windows® 7. If this software is used on an operating system other than Windows® 7, the procedures and appearance of the windows may differ slightly.*

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 Operation Manual carefully, and then keep it in a safe place together with your warranty.

Please read before using this product

For designing beautiful embroidery designs
- This system allows you to create a wide variety of embroidery designs and supports a wider range of sewing attribute settings (thread density, sewing pitch, etc.). However, the final result will depend 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.

For safe operation
- 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.

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 or cards.
- Do not drop or hit the unit.

For repairs or adjustments
- In the event that a malfunction occurs or adjustment is required, please consult your nearest service center.

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

Copyright acknowledgment
Windows® is a registered trademark of Microsoft Corporation. Other product names mentioned in the Operation Manual may be trademarks of registered trademarks of their respective companies and are hereby acknowledged.

Important
Using this unit for unauthorized copying of material from embroidery cards, newspapers and magazines for commercial purpose is an infringement of copyrights 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.

For additional product information and updates, visit our web site at:
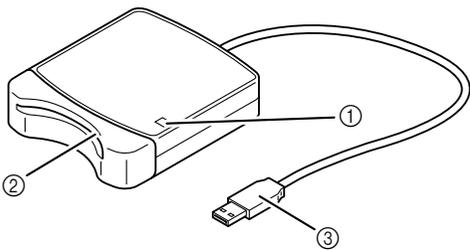**http://www.brother.com/ or http://solutions.brother.com/**

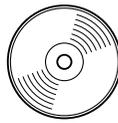# *Table of Contents*

Introduction

Package Contents

Check that the following items are included. If anything is missing or damaged, contact your authorized dealer or Brother Customer Service.
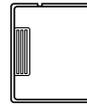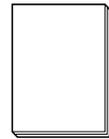
USB Card Writer Module   **CD-ROM**   **Original card**   **Operation Manual**

Contains the software and Operation Manual (PDF format).

① LED indicator
This indicator lights up when the unit is turned on, and flashes when the USB Card Writer Module is communicating with the computer.
② Card slot
Insert an original card/embroidery card here.
③ USB connector
Connect to the computer.

⚠ Note:
- *The only original cards that can be used with this USB Card Writer Module are those like the one enclosed or optional original cards of the same type.*
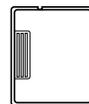- *Never remove an original card or unplug the USB cable while this indicator is flashing.*

📖 Memo:
- *Since power is supplied to the USB Card Writer Module through the USB connection to the computer, there is no power supply cable or power switch.*
- *Be sure to keep original cards away from high humidity, direct sunlight, static electricity and strong shocks. Furthermore, do not bend the cards.*

Optional Supply
Additional blank original cards can be purchased through an authorized dealer.

Original card

Installation

Please Read Before Installation

- Before beginning the installation, check that the computer meets the system requirements.
- In order to install the software on Windows® Operating System, you must log on to the computer using an account with administrator privileges. For details on logging on to the computer using an account with administrator privileges, refer to the Windows® manual.
- The installation procedure is described for Windows® 7. The procedure and dialog boxes for other operating systems may be slightly different.
- If the installation is canceled before it is completed or if the procedure is not performed as described, the software will not be installed correctly.
- Do not remove the CD-ROM from the CD-ROM drive of the computer while the installation is being performed. Remove the CD-ROM after the installation is completed.
- Before turning on the computer, be sure to disconnect the USB Card Writer Module.

System Requirements

Before installing the software on your computer, make sure that the computer meets the following minimum PC requirements.

Computer	IBM-PC or compatible computer
Operating system	Windows® XP, Windows Vista®, Windows® 7 (32 or 64 bit)
Processor	1GHz or higher
Memory	512MB (1GB or more is recommended.)
Hard disk free space	200MB
Monitor	XGA (1024 x 768), 16-bit color or higher
Port	1 available USB
Printer	A graphic printer that is supported by your system (if you wish to print your images)
CD-ROM drive	Required for installation
Internet access	Required for update

Note:
- *Power is supplied to the USB Card Writer Module through the USB connection. Connect the USB Card Writer Module to a USB connector on the computer or to a self-powered USB hub that can supply enough power to the Card Writer Module. If the Card Writer Module is not connected in this way, it may not operate correctly.*
- *This product may not operate correctly with some computers and USB expansion cards.*
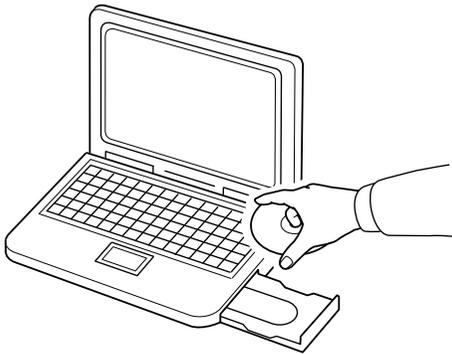
Installing the Software

This section describes how to install the application software.

> **⚠ Note:**
> • *If the installation is interrupted or not performed as described, the software will not be installed correctly.*
> • *Before turning on the computer, be sure that the USB Card Writer Module is DISCONNECTED.*
> • *In order to install the software, you must log on to the computer using an account with administrator privileges. If you are not logged on with the Administrator account, the password for the Administrator account (Administrators) may be requested with Windows® 7. Type in the password to continue the procedure.*

1. Insert the enclosed CD-ROM into the computer's CD-ROM drive.

■ Windows® XP users only

→ After a short while, the language selection dialog box for InstallShield Wizard automatically appears.
Continue with step **4.** on page 7.

> **📖 Memo:**
>
> ***If the installer does not automatically start up:***
> *1) Click the **Start** button.*
> *2) Click **Run**.*
>
> → *The **Run** dialog box appears.*
> *3) Type in the full path to the installer, and then click **OK** to start up the installer.*
> *For example: F:\setup.exe (where "F:" is the name of the CD-ROM drive)*

■ For Windows® 7 or Windows Vista® users:

→ After a short while, the **AutoPlay** dialog box automatically appears.

> **📖 Memo:**
>
> *If the **AutoPlay** Dialog does not automatically start up:*
> *1) Click the **Start** button.*
> *2) Click **All Programs → Accessories → Run**.*
>
> → *The **Run** dialog box appears.*
> *3) Type in the full path to the installer, and then click **OK** to start up the installer.*
> *For example: F:\setup.exe (where "F:" is the name of the CD-ROM drive)*

2. Click **Run setup.exe**.

→ The **User Account Control** dialog box appears.
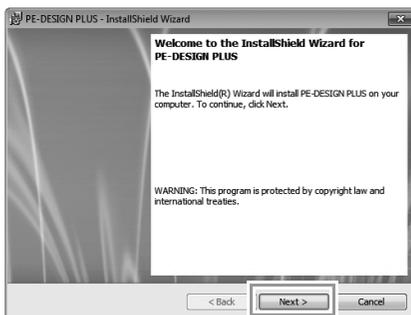
3. Click **Yes**.

→ After a short while, the following dialog box automatically appears.

4. Select the desired language, and then click **OK**.
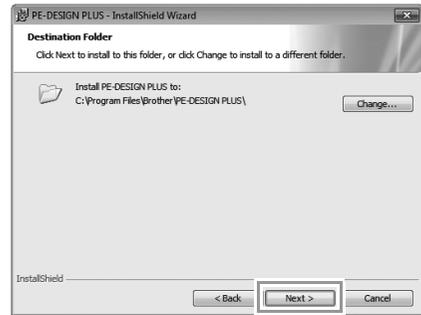
→ The InstallShield Wizard starts up, and the first dialog box appears.

5. Click **Next** to continue with the installation.

→ A dialog box appears, allowing you to select the folder where the software will be installed.

6. Check the installation location, and then click **Next**.

→ A dialog box appears, indicating that preparations for installation are finished.

7. Click **Install** to install the application.

→ When the installation is completed, the following dialog box appears.

Technical Support

Contact Technical Support if you have a problem. Please check the company web site (http://www.brother.com/) to find the technical Support in your area. To view the FAQ and information for software updates, visit the Brother Solutions Center at (http://solutions.brother.com/).

> **Note:**
>
> *Before contacting web site:*
>
> *1) Please have your Windows®*
>   *Operating System updated to the most*
>   *current version.*
> *2) The make and model number of the*
>   *computer that you are using as well as*
>   *the Windows® Operating System*
>   *version.*
> *3) Information about any error messages*
>   *that appear.*
>   *This information will help expedite your*
>   *questions more quickly.*
> *4) Please check and update the software*
>   *to the latest version.*

Online Registration

If you wish to be contacted about upgrades and provided with important information such as future product developments and improvements, you can register your product online by following a simple registration procedure.

Click **Online Registration** on the menu of PE-DESIGN PLUS to start up the installed Web browser and open the online registration page on our Web site.

http://www.brother.com/registration/

> **Memo:**
>
> *Online registration may not be available in*
> *some areas.*

Uninstallation

1. Click the button in the task bar, and then click **Control Panel**.

2. In the **Control Panel** window, select **Programs and Features**.

3. In the **Programs and Features** window, select this software, and then click **Uninstall**.
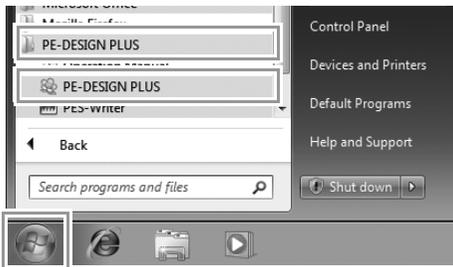
> **Memo:**
>
> • *The uninstallation procedure is described*
>   *for Windows® 7 and Windows Vista®.*
> • *For Windows® XP, click the **Start** button,*
>   *then **Control Panel**. Double-click **Add or***
>   ***Remove Programs**. Select this software,*
>   *and then click **Remove**.*
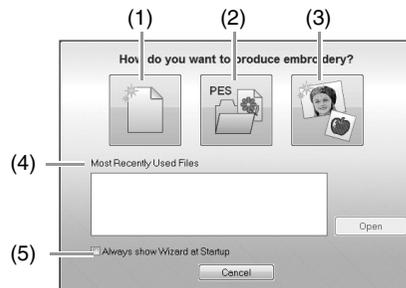
Starting Up Application

Starting up PE-DESIGN PLUS

Click , then **All Programs**, then **PE-DESIGN PLUS**, and then click **PE-DESIGN PLUS**.

About the Top Wizard

When PE-DESIGN PLUS starts up, the following wizard appears.

(1) **New**
Click this button to begin creating a new pattern.

(2) **Open PES**
Click this button to open embroidery data (.pes).

☞ *"Opening a PE-DESIGN PLUS file" on page 48*

(3) **Image To Stitch**
Click this button to start the wizard for creating an embroidery pattern from an image.

☞ *"Using the Photo Stitch 1 function to create an embroidery pattern from an image" on page 11*

(4) **Most Recently Used Files**
Click the name of a file from the list, and then click **Open**.

(5) **Always show Wizard at Startup**
Select this check box to start up the wizard each time PE-DESIGN PLUS is started up.

Creating Embroidery Patterns From Photos (Photo Stitch 1)

The sample file for this tutorial can be found at the following location.
Documents (My Documents)\PE-DESIGN PLUS\Tutorial

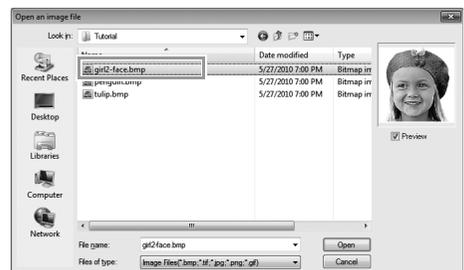| Step 1	Using the Photo Stitch 1 function to create an embroidery pattern from an image
Step 2	Changing color of the circle
Step 3	Adding text and setting character spacing
Step 4	Transforming the text
Step 5	Importing and rotating an embroidery pattern
Step 6	Transferring embroidery patterns to embroidery machines • Transferring the design to an original card • Transferring data to embroidery machines via a USB media

Step 1 **Using the Photo Stitch 1 function to create an embroidery pattern from an image**

Now, we will open the image of the girl and convert it to an embroidery pattern.

1. Click **1** in the Top Wizard.

2. Import the file **girl2-face.bmp**.
Select the file **girl2-face.bmp** in the folder **Documents (My Documents)\PE-DESIGN PLUS\Tutorial**

📖 **Memo:**

Image file formats
Images in the following formats can be imported.
• Windows bitmap (.bmp)
• Exif (.tif, .jpg)
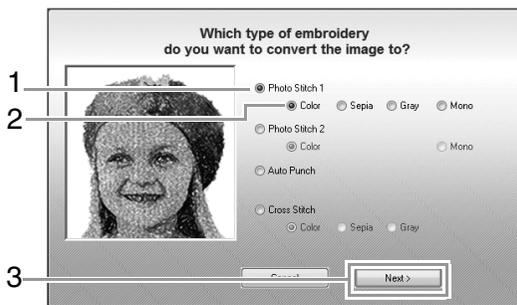*• Portable Network Graphics (.png)*
• GIF (.gif)

3. Click **1**, then **2**, then **3**.

☞ *"Image To Stitch Wizard" on page 30*

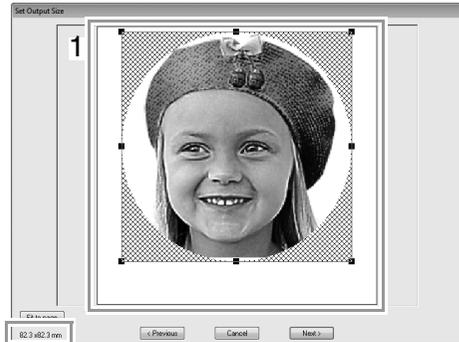**4.** Click **1** to select the circle mask, and then click **Next**.

☞ *"Select Mask dialog box" on page 30*

5. Adjust the size and position of the image. **1** indicates the Design Page.

* Move the pointer over a handle, and then, while holding down the **Shift** key and the left mouse button, drag the mouse to reduce the size of the image.
* Drag the image to adjust its output location.
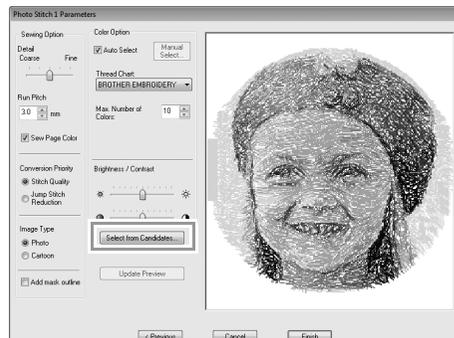

Embroidery pattern size

☞ *"Set Output Size dialog box" on page 31 and "Gray Balance / Set Output Size dialog box" on page 31*
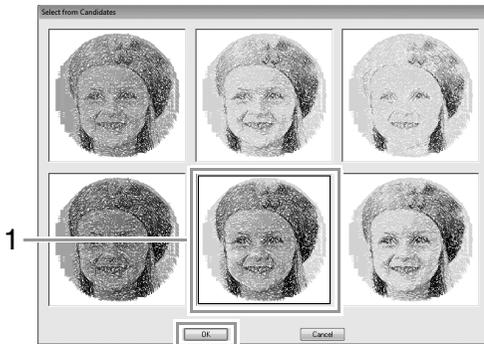
6. Check the preview of the area to be converted then click **Next**.

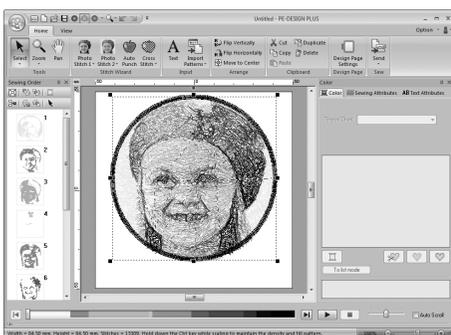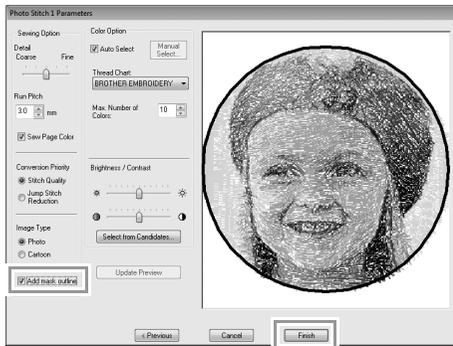**7.** Click **Select from Candidates**.

☞ *"Photo Stitch 1 Parameters dialog box" on page 19*

8. Select one of the candidates (**1**) and click **OK**.

→ This preview changes to the selected image.

9. Select the **Add mask outline** check box, check the preview image, and then click **Finish**.

→ Stitches are automatically input.

☐ **Memo:**

*If the created embroidery pattern contains colors that you do not wish to emphasize (for example, grays in the face), change the sewing order in the **Sewing Order** pane so that the undesirable color is sewn before all other colors.*
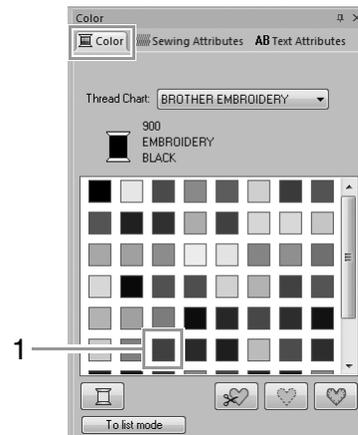
☞ *"Checking and Editing the Sewing Order" on page 43.*

Step 2 **Changing color of the circle**

1. In the Sewing Order pane, move the scroll bar until circle pattern (**1**) appears, and then click it.

2. Click **1** in the **Color** tab to change the color of the circle.
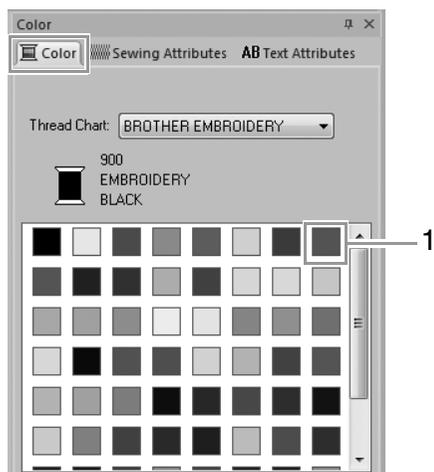
13

Step 3 Adding text and setting character spacing
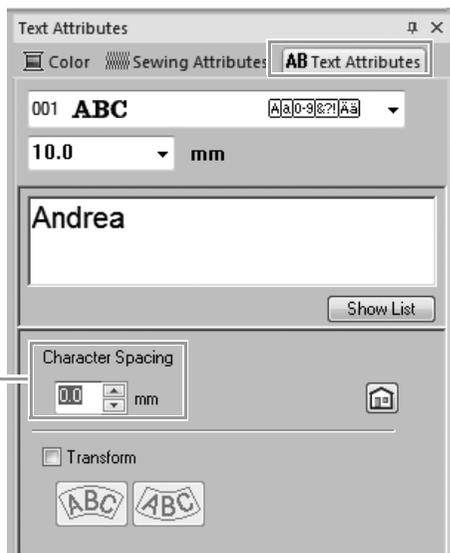
1. Click | Home |, then | A Text |.

2. Click below the girl in the Design Page.

  → A vertical dashed line will appear on the Design Page.

3. From the keyboard, type in "Andrea".

4. Press the **Enter** key.

  → The text is entered.

5. Click the text to select it.

6. Click the **Color** tab, and then click **1** to change the color of the font.

Thread Chart: BROTHER EMBROIDERY

900
EMBROIDERY
BLACK

7. Click the **Text Attributes** tab, and then set **Character Spacing** (**1**) to **3.0 mm**.

001 **ABC**

10.0   mm

Andrea

Show List
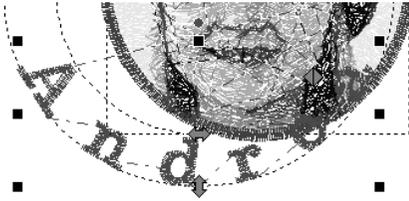
Character Spacing
0.0   mm

Transform

Specify the setting by clicking the selector and typing in the value, or by clicking ▼ or ▲.

Step 4 Transforming the text

1. Click the text to select it, select the **Transform** check box (**1**), and then click **2**.

2. Move the pointer over ⬍, ⬌ or ◆, and then, while holding down the left mouse button, drag the mouse to adjust the size, position or curve of the text.

⬍　　　　： Adjusts the text size.

⬌　　　　： Moves the text along the circle.

◆　　　　： Adjusts the radius of the circle.

☞ *"Transforming text" on page 33*

3. To adjust the positions of the embroidery patterns, click the pattern, and then position the pointer over the pattern. When the shape of the pointer changes to ✛, hold down the left mouse button and drag the pattern to the desired location.

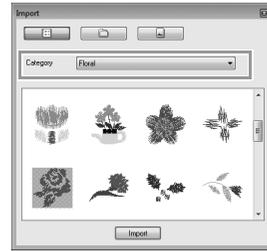☞ *"Editing Embroidery Designs" on page 37*

Step 5 **Importing and rotating an embroidery pattern**

Now, we will import the embroidery pattern for the rose.

1. Click Home , then Import Patterns ,

then from Design Library... .

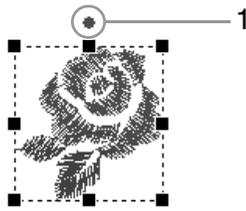**2.** From the **Category** selector, select **Floral**.

3. Move the pointer over the rose, and then, while holding down the left mouse button, drag the mouse to import the pattern into the Design Page, as shown in the illustration.

☞ *"Importing embroidery designs" on page 49*

4. Click ✖ in the **Import** dialog box to close it.

5. Move the pointer over the rotation handle (**1**), and then, while holding down the left mouse button, drag the mouse to adjust the angle of the pattern.

> ⚠ **Note:**
>
> *When imported stitch patterns are enlarged or reduced, the embroidering quality may be reduced.*
>
> ☞ *"Slightly Enlarging/Reducing Stitch Patterns" on page 38.*

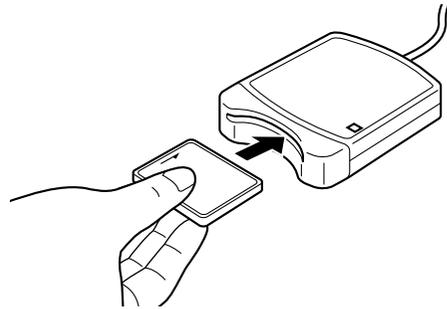## *Step 6* **Transferring embroidery patterns to embroidery machines**

You can sew a pattern transferred to your sewing machine by writing it to media.

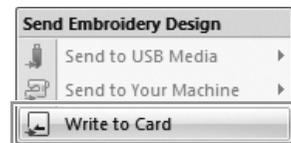There are many methods to transfer data; however, the procedures for two of these methods are described below.

• Writing to an original card (☞p. 16)

  Data can be transferred to embroidery machines compatible with original cards.

• Transferring data to embroidery machines via a USB media (☞p. 17)

  Data can be transferred to embroidery machines equipped with a USB-B connector.

■ **Transferring the design to an original card**

1. Insert an original card into the USB Card Writer Module.

2. Click <kbd>Home</kbd>, then ,

then <kbd>🔳 Write to Card</kbd>.

Send Embroidery Design
🔳 Send to USB Media ▶
🔳 Send to Your Machine ▶
🔳 Write to Card

3. Click **OK**.

PE-DESIGN PLUS

All original card data will be deleted.

OK   Cancel

> **Note:**
> • *When writing to an original card that already contains data, all data on the card will be deleted.*
> • *Before using an original card, check that the designs on the card are no longer needed.*
>
>   ☞ *"From an embroidery card" on page 50*
>
> • *If you wish to keep the designs, store them on a hard disk or other storage media.*

4. When the writing is finished, the following message appears. Click **OK**.

PE-DESIGN PLUS

Writing to original card is completed.

OK

> **Note:**
> ***Precautions for using the Card Writer Module/original cards***
> • *The original card is inserted correctly when you hear it snap into place.*
> • *Never remove an original card or unplug the USB cable while the LED indicator is flashing.*
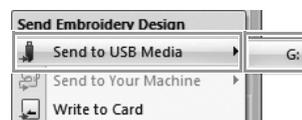
☞ *"Transferring to a machine by using an original card" on page 52.*
For details on saving embroidery patterns, refer to "Saving" on page 18.

5. Insert the original card into the card slot of the sewing machine.

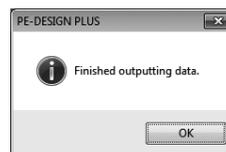## ■ **Transferring data to embroidery machines via a USB media**

1. Plug the USB media into the computer.

2. Click Home , then Send,

then Send to USB Media ▶ , then G: .

Send Embroidery Design

 Send to USB Media ▶ G:

 Send to Your Machine ▶

 Write to Card

→ Data transfer begins.

3. When the transferring is finished, the following message appears. Click **OK**.

PE-DESIGN PLUS

Finished outputting data.

OK

4. After an embroidery pattern is transferred, remove the USB media from the computer.

5. Insert the USB media into the USB port on the machine.

> **Memo:**
> *For details on using the embroidery machine, refer to the Operation Manual included with it.*

Creating Embroidery Patterns

Saving

Overwriting

Click **1**, then **2**.
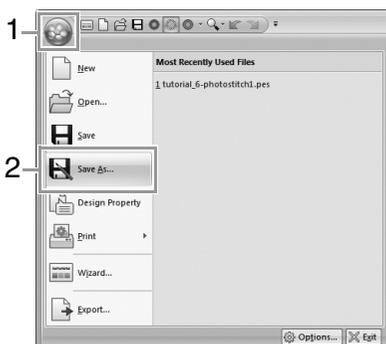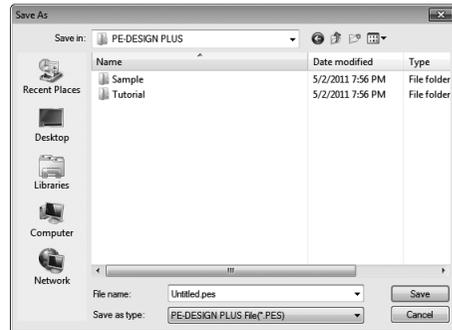
1 —

2 —

> 📖 **Memo:**
>
> *If no file name has been specified or if the file cannot be found, the **Save As** dialog box appears.*

Saving with a new name

1. Click **1**, then **2**.

1 —

2 —

2. Select the drive and the folder, and then type in the file name.
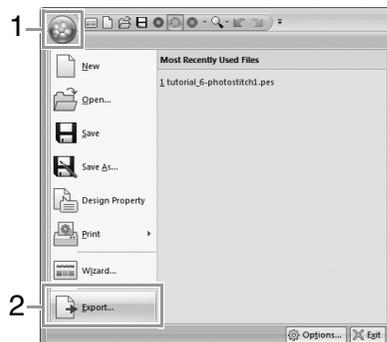
3. Click **Save** to save the data.

   → The new file name appears in the title bar of the PE-DESIGN PLUS window.
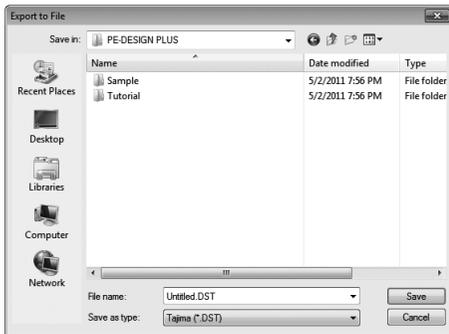
Exporting

The data shown in the Design Page can be exported as a file of a different format (.dst, .hus, .exp, .pcs, .vip, .sew, .jef, .csd, .xxx, and .shv).

1. Click **1**, then **2**

1 —

2 —

2. Select the drive and the folder, and then type in the file name.

3. Select a format (.dst, .hus, .exp, .pcs, .vip, .sew, .jef, .csd, .xxx, or .shv) that the file will be exported as.
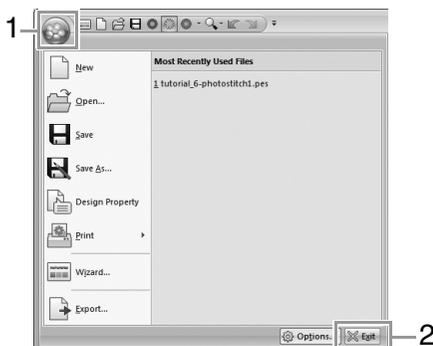
> **Note:**
> *Some patterns imported from embroidery cards cannot be exported.*

☞ *"Specifying the number of jumps in embroidery design of the DST format" on page 60.*
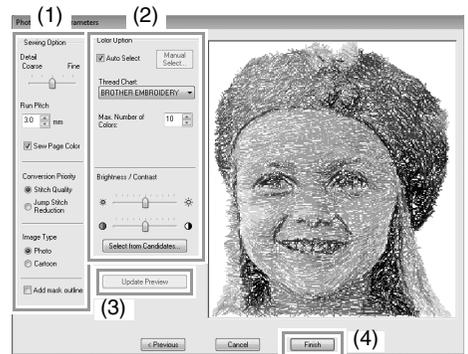
Exiting Application
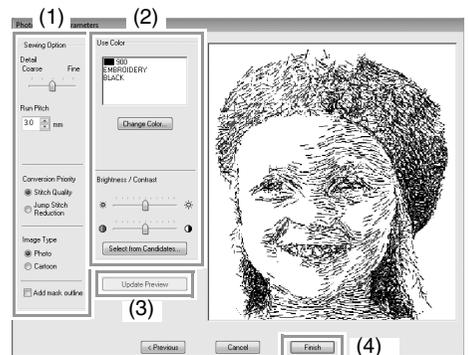
Click **1**, then **2**.

More detailed settings can be selected from the Parameters dialog box of Stitch Wizard.

Photo Stitch 1 Parameters dialog box

With **Color**, **Sepia** or **Gray**:

With **Mono**:

Specify the desired settings under **Sewing Option** (1) and **Color Option** (2), and then click **Update Preview** (3) to preview the effects of the specified settings. Click **Finish** (4) to convert the image to an embroidery pattern.

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(1) Sewing Option

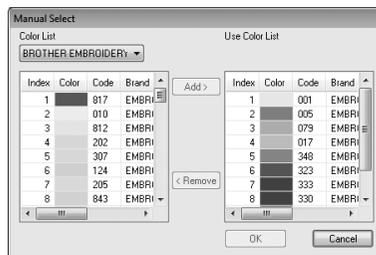|	
Detail	Selecting a setting closer to **Fine** creates more details in the pattern and increases the number of stitches. (The stitches will be overlapping.)
Run Pitch	When the value is lowered, the sewing pitch (stitch length) will be shortened, resulting in finer stitching.
Sew Page Color (Available only with Color, Sepia and Gray)	If this check box is cleared, the parts of the pattern that are the same color as the Design Page will not be sewn. If it is selected, those parts will be sewn.
Conversion Priority	To give priority to creating a pattern as close to the original photograph, select **Stitch Quality**. To give priority to reducing the number of jump stitches, select **Jump Stitch Reduction**.
Image Type	If **Photo** is selected, the thread colors will be mixed together, which will result in a more natural look. If **Cartoon** is selected, the thread colors will not be mixed together, which will result in a more simply colored look. Select **Photo** for image data from a photograph, etc. Select **Cartoon** for image data from an illustration, etc.
Add mask outline	If this check box is selected, line data is created from the mask outline.

(2) Color Option

Color/Sepia/Gray	
Auto Select	Select this check box to automatically select the thread colors.
Manual Select	Appears when the **Auto Select** check box is cleared. Click this button to open the **Manual Select** dialog box. ☞ *"Memo:" on page 20*
Thread Chart	Selects the thread chart for selecting the thread color with the Auto Select function.
Max. Number of Colors	Sets the number of colors selected by the Auto Select function.
Mono	
Change Color	Click this button to display the **Thread Color** dialog box, where the thread colors can be changed.

Color/Sepia/Gray/Mono	
Brightness / Contrast	The top slider is used to adjust the brightness. The bottom slider is used to adjust the contrast.
Select from Candidates	Variations of the image with different degrees of brightness and contrast are displayed. Click one of the variations, and then click OK to apply the settings. ☞ *7. on page 12.*
Update Preview	Update the previewed image after settings have been changed.

📖 **Memo:**
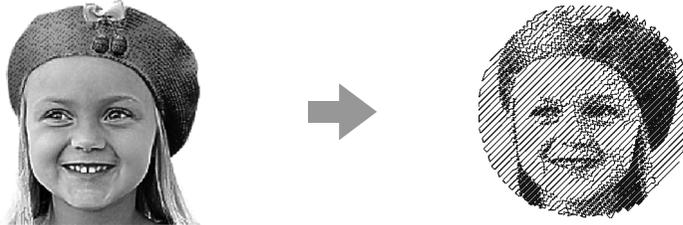
*About the **Manual Select** dialog box*

• *From this dialog box, the thread color to be used with Photo Stitch 1 can be selected manually.*
• *To move the color selected in the **Color List** to the **Use Color List**, click **Add**.*
• *To delete the color selected in the **Use Color List**, click **Remove**.*
• *The thread colors in the **Color List** and **Use Color List** are listed, in order, starting from the brightest. This order is the sewing order and cannot be changed.*
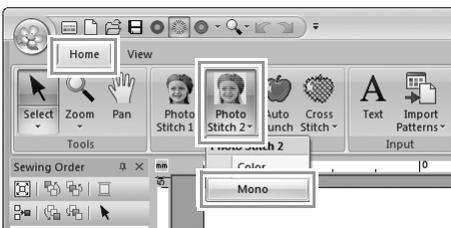
Photo Stitch 2

We will create an embroidery pattern with Photo Stitch 2 in a method different than that used with Photo Stitch 1.

Step 1	Starting the Photo Stitch 2 wizard
Step 2	Importing photo data into PE-DESIGN PLUS
Step 3	Applying an image mask and adjusting its size and position
Step 4	Changing the sewing angle

Step 1 **Starting the Photo Stitch 2 wizard**

Click [Home], then [Photo Stitch 2], then [Mono].

Step 2 **Importing photo data into PE-DESIGN PLUS**

1. Double-click the **Documents** (**My Documents**)\ **PE-DESIGN PLUS\Tutorial** folder to open it.

> 📖 **Memo:**
>
> *When this application is installed, the* ***PE-DESIGN PLUS*** *folder is installed in the* ***Documents (My Documents)*** *folder.*

2. Select the file **girl2-face.bmp**, and then click **Open**, or double-click the file's icon.
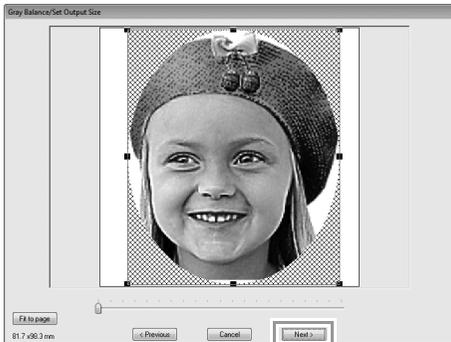
<table>
<tr>
<td>

Step 3 **Applying an image mask and adjusting its size and position**

1. Click **1** to select the circle mask.

   Drag handle **2** to adjust the size of the mask, and drag the mask to adjust its position.

   Click **Next**.

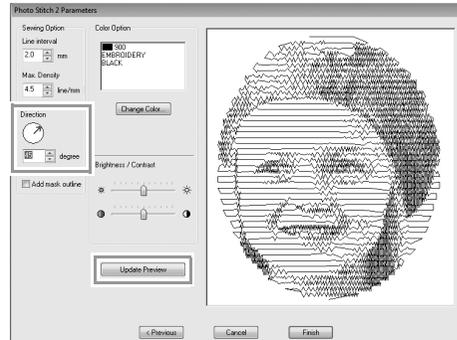   ☞ *"Select Mask dialog box" on page 30*

2. Click **Next**.

   From this dialog box, the size and position of the image can be adjusted. For this example, we will simply continue to the next step.

   ☞ *"Gray Balance / Set Output Size dialog box" on page 31*

</td>
<td>

Step 4 **Changing the sewing angle**

1. In the **Direction** box, type "45".

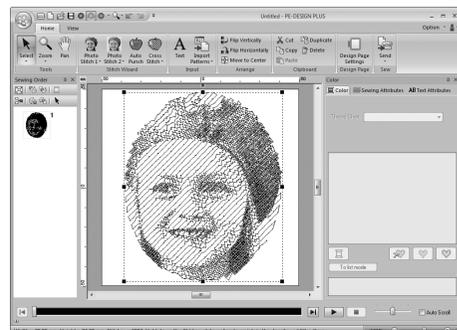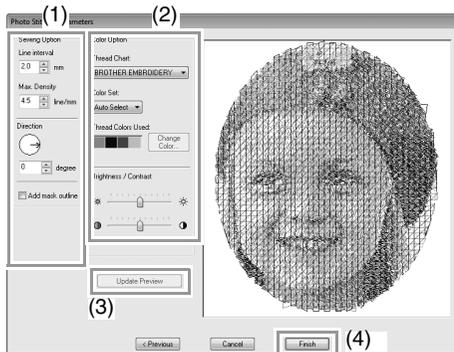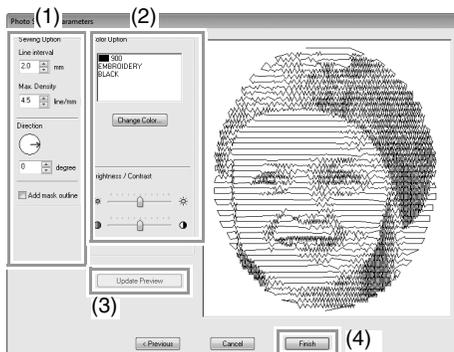2. Click **Update Preview**.

3. Click **Finish**.

</td>
</tr>
</table>

■ **Photo Stitch 2 Parameters dialog box**

With **Color**:

With **Mono**:

Specify the desired settings under **Sewing Option** (1) and **Color Option** (2), and then click **Update Preview** (3) to preview the effects of the specified settings. Click **Finish** (4) to convert the image to an embroidery pattern.
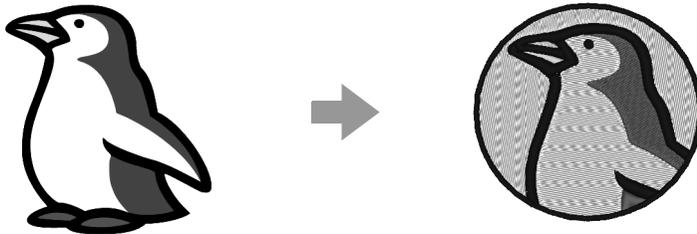
(1) Sewing Option

Line interval	↕ Line interval
Max. Density	Lower value Higher value
Direction	0° 45° 90°
Add mask outline	If this check box is selected, line data is created from the mask outline.

(2) Color Option

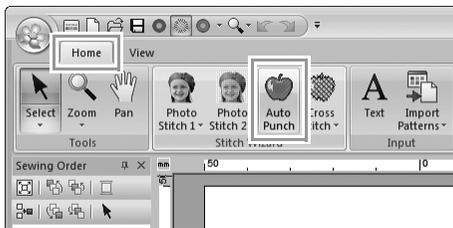| Color	
Thread Chart	You can select the brand of thread to use with the Color Set function.
Color Set	If **Auto Select** is selected, the most appropriate four colors will automatically be selected. Selecting a different option specifies the four colors used when creating the embroidery pattern. The color choices are: cyan (C), magenta (M), yellow (Y), black (K), red (R), green (G) and blue (B). Select one of the following combinations that contains the colors most used in the image. Color combinations: CMYK, RGBK, CRYK, BMYK
Thread Colors Used	Displays the four selected thread colors.
Change Color	Under **Thread Colors Used**, click a color. Then, click **Change Color** to display the **Thread Color** dialog box. Select the new color and click **OK**. The selected thread color will be applied to the image shown in the preview box.
Mono	
Change Color	Click on the **Change Color** button to open the **Thread Color** dialog box if you wish to change the color of the photo stitching. Select the color and click **OK** to make the color change.
Color/Mono	
Brightness / Contrast	The top slider is used to adjust the brightness. The bottom slider is used to adjust the contrast.
Update Preview	Updates the previewed image after settings have been changed.

Auto Punch

In this section, we are going to use the Auto Punch function to automatically create an embroidery pattern from an image.

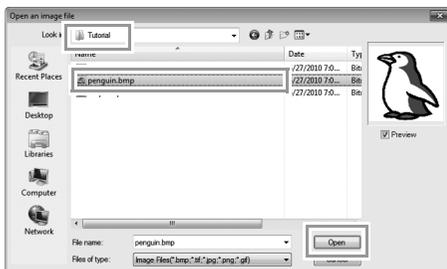| Step 1	Starting the Auto Punch wizard
Step 2	Importing image data into PE-DESIGN PLUS
Step 3	Applying an image mask and adjusting its size and position
Step 4	Creating a border from the mask outline and converting to an embroidery pattern

Step 1 **Starting the Auto Punch wizard**

Click Home , then Auto Punch .

Step 2 **Importing image data into PE-DESIGN PLUS**

Select the **Tutorial** folder, and then select **penguin.bmp** as the image.

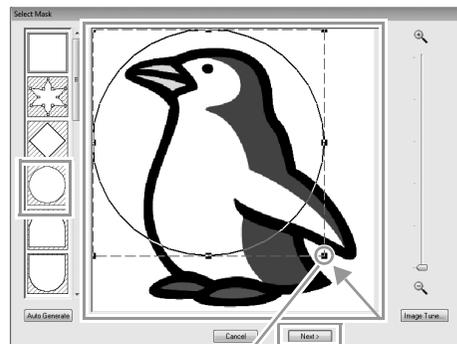☞ "Importing photo data into PE-DESIGN PLUS" on page 21

📖 **Memo:**

- *Images with few and distinct colors work best with Auto Punch.*
- *Various clip art images can be found in the ClipArt folder (in the folder where PE-DESIGN was installed) at: C:\Program Files (Program Files (x86)) \Brother\PE-DESIGN PLUS\ClipArt*

Step 3 **Applying an image mask and adjusting its size and position**

1. Click **1** to select the circle mask.
Drag handle **2** to adjust the size of the mask, and drag the mask to adjust its position.
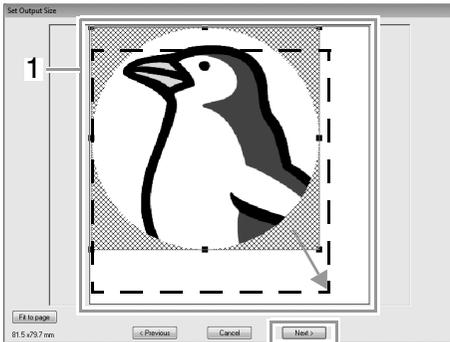Click **Next**.

📖 **Memo:**

The mask outline selected here can be used as line data (border) in Step 4.

☞ *"Select Mask dialog box" on page 30.*
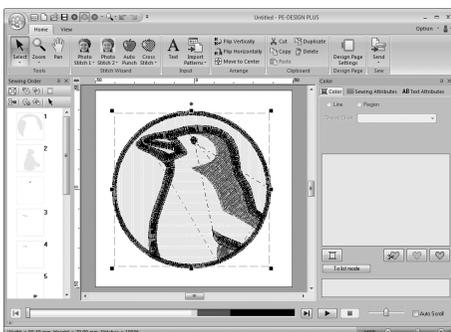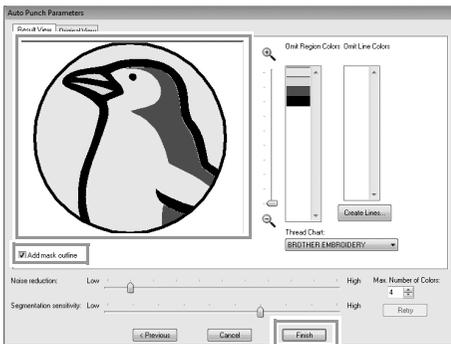
2. **1** indicates the Design Page.
   Drag the image to adjust its output location and size.
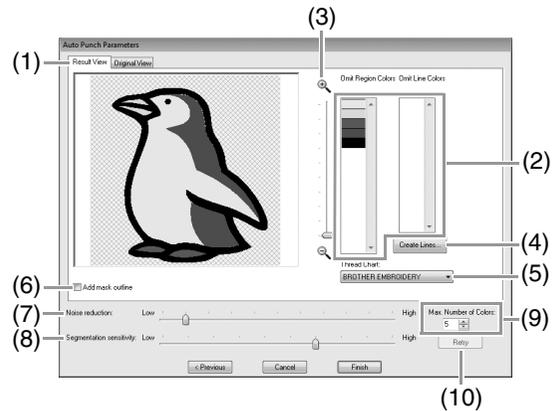   Click **Next**.

☞ *"Set Output Size dialog box" on page 31*

Step 4 Creating a border from the mask outline and converting to an embroidery pattern

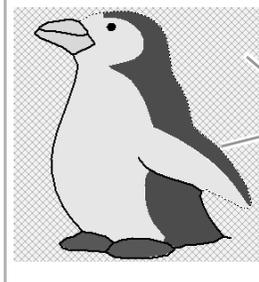Select the **Add mask outline** check box, check the preview image, and then click **Finish**.

■ Auto Punch Parameters dialog box

(1) **Result View**
   The resulting analyzed image appears in the image preview box on the **Result View** tab.
   To display the original image, click the **Original View** tab.

(2) **Omit Region Colors**/**Omit Line Colors**
   In the **Omit Region Colors** list and **Omit Line Colors** list, click the colors to select whether or not they will be sewn.
   You can select whether or not areas will be sewn by selecting their colors. Colors that are crossed out are set to not be sewn.
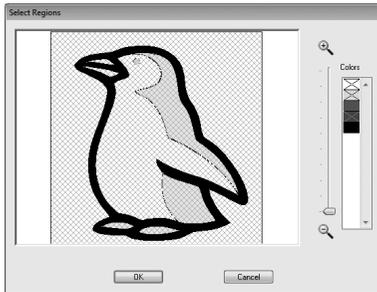
📖 **Memo:**
- *To select whether or not a part of the image is to be sewn, click in the preview box on the* ***Result View*** *tab, or click in the* ***Omit Region Colors*** *and* ***Omit Line Colors*** *lists.*
- *Areas filled with a crosshatch pattern on the* ***Result View*** *tab will not be sewn.*
  In addition, lines that appear as dotted lines will not be sewn.
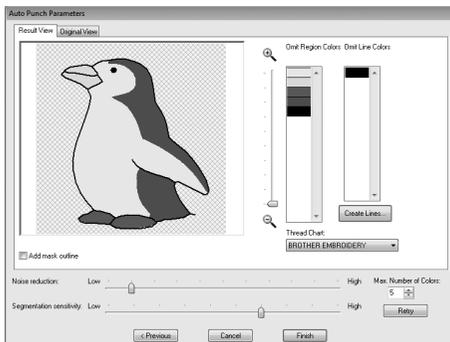

These areas will not be sewn.

(3) **Zoom**

(4) **Create Lines**
Click this button to display the **Select Regions** dialog box, where the areas to be converted to lines can be selected.

Click the areas to be converted to lines, and then click **OK**.

(5) **Thread Chart**
Select the thread chart to be used.

(6) **Add mask outline**
If this check box is selected, line data is created from the mask outline.

(7) **Noise reduction**
Sets the level of noise (distortions) that is removed from the imported image.

(8) **Segmentation sensitivity**
Sets the sensitivity for the image analysis.

(9) **Max. Number of Colors**
Sets the number of colors used.

(10) **Retry**
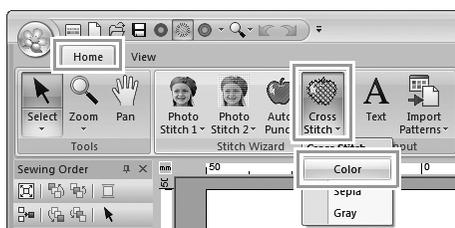To view the results of the changes, click this button.

Cross Stitch

Cross Stitch embroidery patterns can be created from images.

| Step 1 | Starting the Cross Stitch wizard |
| Step 2 | Importing image data into PE-DESIGN PLUS |

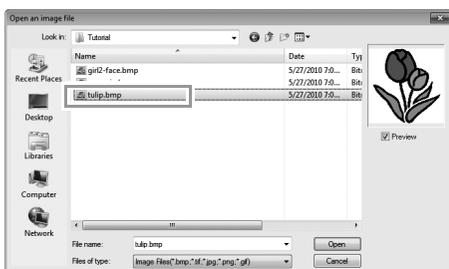## *Step 1* **Starting the Cross Stitch wizard**

1. Click ⬛ Home , then 🧵 Cross Stitch ▾ , then ⬛ Color .

Step 2 **Importing image data into PE-DESIGN PLUS**

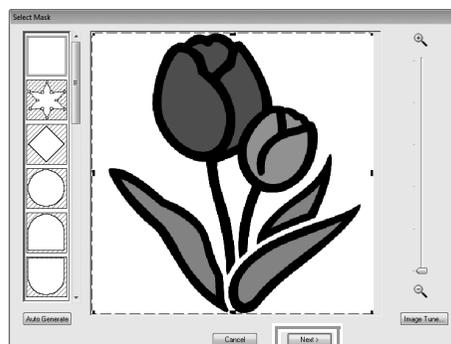Select the **Tutorial** folder, and then select **tulip.bmp** as the image.

☞ *"Importing photo data into PE-DESIGN PLUS" on page 21*

📝 **Memo:**

Various clip art images can be found in the ClipArt folder (in the folder where PE-DESIGN was installed) at: C:\Program Files (Program Files (x86)) \Brother\PE-DESIGN PLUS\ClipArt
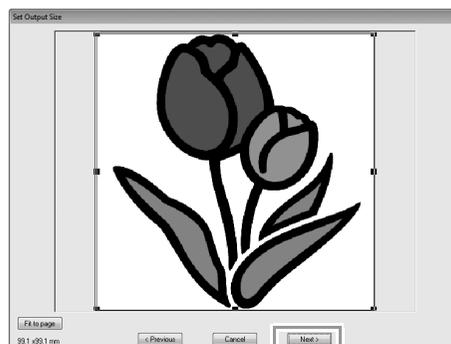
2. Click **Next**.

From this dialog box, an image mask can be applied and its size can be adjusted. For this example, we will simply continue to the next step.
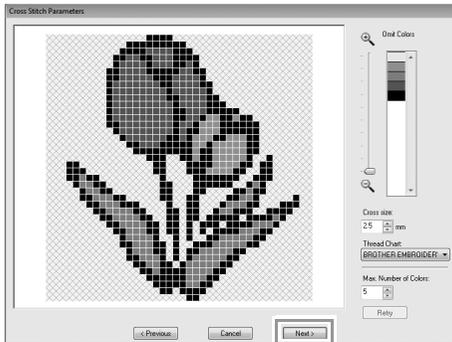
☞ *"Select Mask dialog box" on page 30*

3. Click **Next**.

From this dialog box, the size and position of the image can be adjusted. For this example, we will simply continue to the next step.
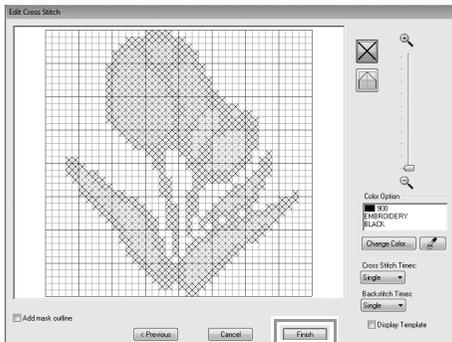
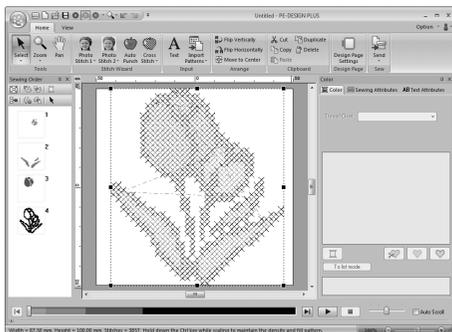☞ *"Set Output Size dialog box" on page 31*

4. Click **Next**.

In this dialog box, the cross size and the number of colors can be specified. For this example, we will use the default settings.
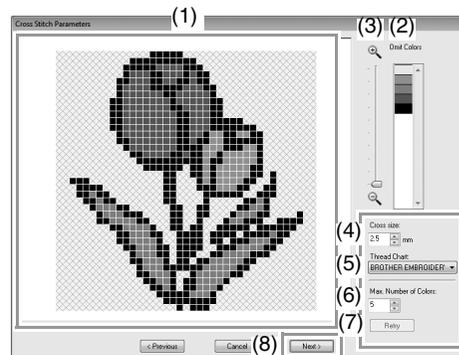
5. Click **Finish**.

In this dialog box, stitches can be added, deleted or edited, and colors and the number of times each stitch is sewn can be specified. For this example, we will use the default settings.
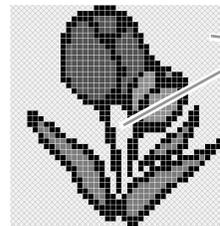
■ **Cross Stitch Parameters dialog box**

(1) **Result View**
Areas that will not be converted to cross-stitching are shown with a crosshatch pattern.

(2) **Omit Colors**
In the Omit Colors list, click the colors to select whether or not they will be sewn.

📖 **Memo:**

• To select whether or not a part of the image is to be sewn, click in the preview box on the **Result View** tab, or click in the **Omit Colors** list.

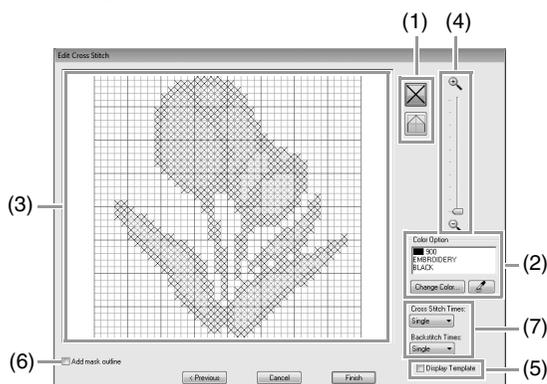• Areas filled with a crosshatch pattern on the **Result View** tab will not be sewn.

These areas will not be sewn.

(3) **Zoom**

(4) **Cross size**
Sets the size of the pattern.

(5) **Thread Chart**
You can select the brand of thread to use in the created cross stitch pattern.

(6) **Max. Number of Colors**
Sets the number of colors used in the created pattern.

(7) **Retry**
To view the results of the changes, click this button.

(8) **Next**
Continues to the next step (**Edit Cross Stitch** dialog box).

■ **Edit Cross Stitch dialog box**

Click a button in (1) to select the type of stitch, select a thread color in (2), and then click or drag in (3) to edit the stitches.

(1) **Selecting stitches**

Selecting stitches to be added/deleted

⊠ (cross-stitches): Specifies a cross-stitch inside a box.

⌂ (backstitches): Specifies a back stitch

inside (◻ or ◻) or on the edge (☐☐

or ├─) of a box.

(2) **Color Option**

To change the color, click **Change Color** to display the **Thread Color** dialog box, and then click the desired color.
To select the color to be used for a stitch,

click ✎ , and then click the stitch to be sewn with that color.

(3) **Editing area**

♦ For cross-stitches
Clicking a box: Adds one stitch.

♦ For backstitches
Clicking an edge of a box: Adds one stitch at the edge.
Clicking a diagonal line in a box: Adds one stitch on the diagonal.

♦ For both cross-stitches and backstitches
Dragging the pointer: Adds consecutive stitches.
Right-clicking/dragging with the right mouse button held down: Deletes one stitch/deletes consecutive stitches.

(4) **Zoom**

(5) **Display Template**
To display the imported image, click **Display Template**.

(6) **Add mask outline**
If this check box is selected, line data is created from the mask outline.

(7) **Cross Stitch Times/Backstitch Times**
For the number of times each stitch is to be sewn, select **Single**, **Double** or **Triple**.

> ⚠ **Note:**
>
> *If **Previous** is clicked to return to the **Cross Stitch Parameters** dialog box after the stitches have been edited, the edited stitches are reset to their previous arrangement.*

Creating Embroidery Patterns

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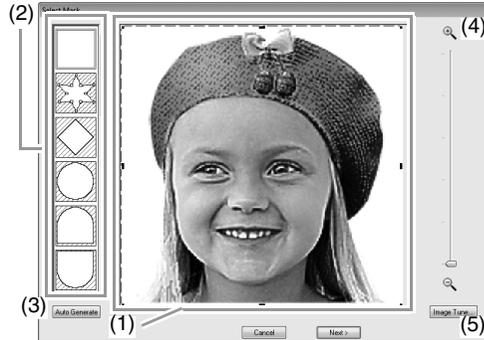# Common dialog boxes

■ Image To Stitch Wizard

When a conversion method is selected, a dialog box for selecting an image appears.

■ Select Mask dialog box

The **Select Mask** dialog box appears no matter which conversion method was selected.

(1) Drag the handles to adjust the shape of the mask. Drag the mask to adjust its position.

> **a Note:**
> *With a small original image, it may not be possible to reduce the size of the mask.*

(2) Mask shapes
The image will be masked with the selected shape.

> **Memo:**
>
> *If* *is selected, points can be entered, moved and deleted to create a mask with the desired shape.*
> *To add points, click the outline of the mask. To move a point, select the point, and then drag it. To delete points, select the point, and then press the* **Delete** *key.*

(3) If **Auto Generate** was clicked, ▨ is

selected and an outline of mask was automatically detected from the image.

The **Auto Generate** button is available only with images that have a light-colored background, like in this photo.

(4) **Zoom**

(5) Clicking the **Image Tune** button displays an **Image Tune** dialog box.
Settings for **Sharpness**, **Brightness** and **Contrast** can be selected with the sliders.

(6) To exit the Stitch Wizard, close the **Select Mask** dialog box.
To select a different image, click **Cancel**, and then repeat the procedure, starting by selecting a conversion method.

■ Set Output Size dialog box

If Color, Sepia or Gray was selected for Photo Stitch 1, Photo Stitch 2 or Cross Stitch, or if Auto Punch was selected:

The following dialog box appears.

Embroidery pattern size

Adjust the position and size of the image, and then click **Next** to continue to the next step.

- Drag the image to the desired position.

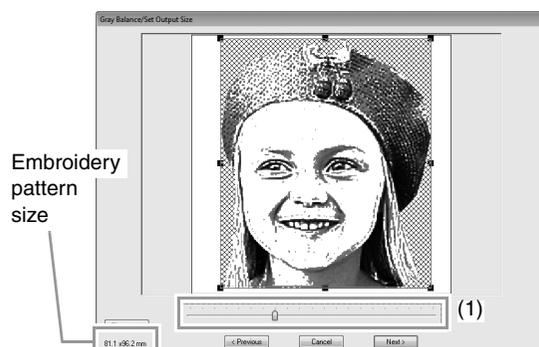- Drag the handle to adjust the image to the desired size.

☐ **Memo:**

*Click **Fit to Page** to adjust the image to the size of the Design Page.*

■ Gray Balance / Set Output Size dialog box

If Mono was selected for Photo Stitch 1 or Photo Stitch 2:

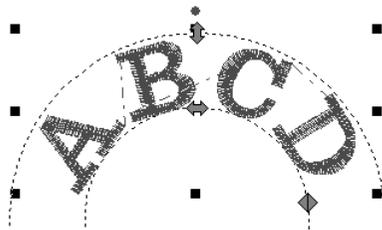The following dialog box appears.

Embroidery pattern size

(1)

Adjust the position and size of the image and the gray balance, and then click **Next** to continue to the next step.

- Drag the image to the desired position.

- Drag the handle to adjust the image to the desired size.

- Drag the slider (**1**) to adjust the gray balance.

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Entering Text

This section describes the procedures for entering text and arranging it in the Transform style with a fan shape.

The sample file for this tutorial can be found at the following location.
Documents (My Documents)\PE-DESIGN PLUS\Tutorial

Step 1	Entering Text
Step 2	Transforming text
Step 3	Specifying character spacing

Step 1 **Entering Text**

1. Click Home , then Text .

2. Click in the Design page.

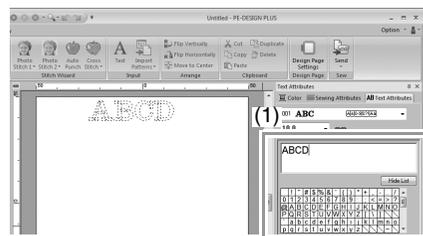→ A vertical dashed line will appear on the Design Page for typing directly on-screen.

3. From the keyboard, type in "ABCD".

The entered text appears.

Memo:

- *Text can also be entered by clicking characters in the character table (1) in the* **Text Attributes** *tab. This is particularly useful if you have to enter accented characters that are not available on your keyboard.*

- *Hold down the* **Ctrl** *key and press the* **Enter** *key to enter a new line of text.*
- *Click* **Hide List** *to hide the character table. While it is hidden, click* **Show List** *to display the character table.*

Note:

If the entered character is not available with the selected font or if the character cannot be converted to an embroidery pattern, the character appears as ⬚ in the Design Page. If this occurs, enter a different character.

4. Press the **(Enter)** key. The text appears in the Design Page.

> **📖 Memo:**
>
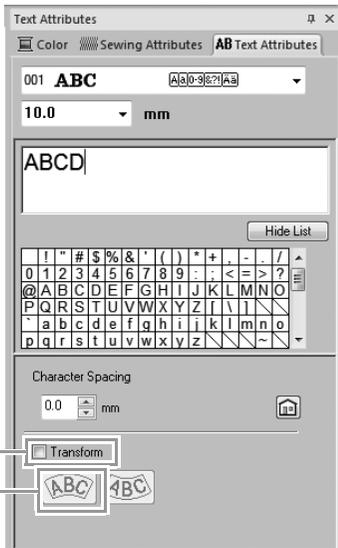> *The character font, size, color and sew type can be changed.*
>
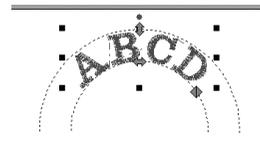> ☞ *"Setting text attributes" on page 35 and "Embroidery attributes for text" on page 36*

Step 2 **Transforming text**
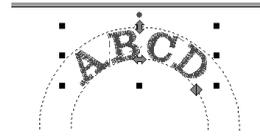
1. Click the text to select it.

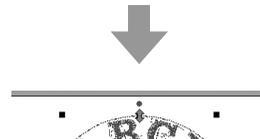

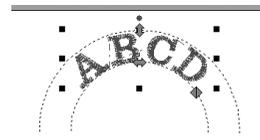**2.** Select the **Transform** check box (**1**), and then click **2**.
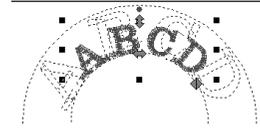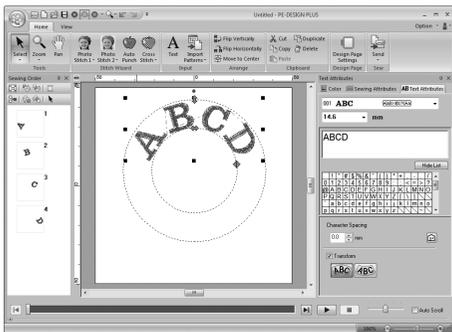

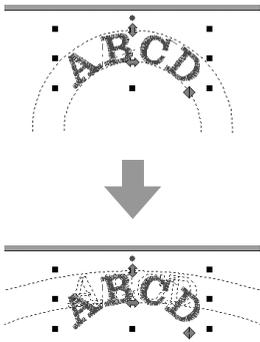**3.** Drag ↕, ↔ and ◇ to transform the text.

↕ :Adjusts the text size.

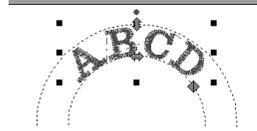

↔ :Moves the text along the circle.
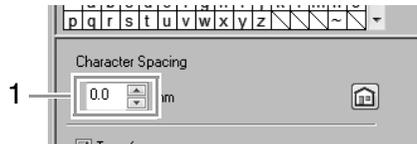
◆ :Adjusts the radius of the circle.

Step 3 **Specifying character spacing**

Sets the spacing between all characters.

1. Click the text to select it.

2. Change the **Character Spacing** (**1**).

Specify the setting by clicking the selector and typing in the value, or by clicking ▲ or ▼.

1

0.0 mm

Abcdef

2.0 mm

Abcdef

📖 **Memo:**

- *Character Spacing is always applied to the entire text pattern.*
- *To return to the default setting, click 🏠.*
- *If the **Text Attributes** tab is not displayed, click the **View** tab in the Ribbon, and then click **Text Attributes**.*
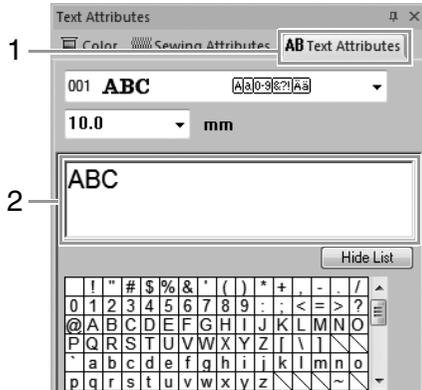
Advanced Operations for Entering Text
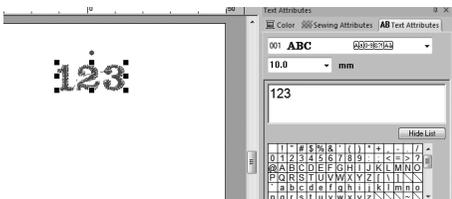
Editing entered text

1. First, select the Select tool.

Click [Home], then [▸].

2. Click a single text pattern to select it.

3. Click the **Text Attributes** tab (1).
If the **Text Attributes** tab is not displayed, click the **View** tab in the Ribbon, and then click **Text Attributes**.
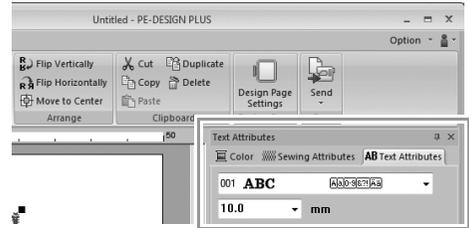And then click in the text field (2).

4. Edit the text as needed.

Press the **(Enter)** key or click the Design Page.

Setting text attributes

Text attributes can be specified with the **Font** selector and **Text Size** selector in the **Text Attributes** pane.

> ☐ **Memo:**
>
> *Click **Text Attributes** tab to display the **Text Attributes** pane. If the **Text Attributes** tab is not displayed, click the **View** tab in the Ribbon, and then click **Text Attributes**.*

■ Font

Click in the **Font** selector, and then click the desired font.

☞ *Memo of "Font List" on page 70*

■ Text size

Click in the Text Size selector. Type the desired height and press the **(Enter)** key, or click the desired value.

Embroidery attributes for text

When text is selected, settings can be specified for the following.

The **Color** pane allows you to set the thread color.

☞ *"Color" on page 47*

The **Sewing Attributes** pane allows you to set the embroidery attributes.

☞ *"Sew type" on page 45*

Scaling patterns

1. Select the pattern(s).

Handles

2. Drag the handle to adjust the selected pattern(s) to the desired size.
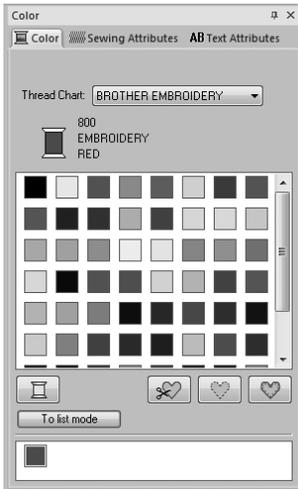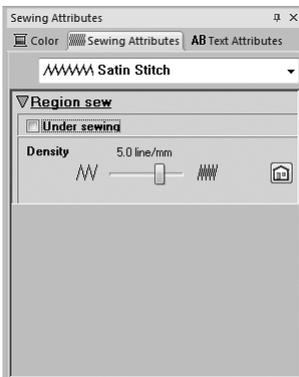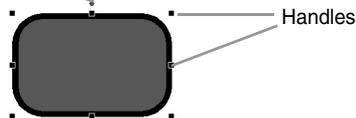
> **Note:**
>
> *Some patterns imported from embroidery cards cannot be scaled.*

> **Memo:**
>
> • *If the* **Shift** *key is held down while a handle is dragged, the pattern is enlarged or reduced from the center of the pattern.*
> • *As you drag the handle, the current size is displayed on the status bar.*

> **Note:**
> ***Slightly Enlarging/Reducing Stitch Patterns***
>
> *When stitch patterns are slightly enlarged or reduced, stitches become thicker or thinner without the number of stitches changing.*
> *In other words, greatly enlarging or reducing the pattern changes the quality of the embroidery since the thread density is adjusted. Use this method when only slightly enlarging/reducing the stitch pattern.*

> **Note:**
> ***Greatly Enlarging/Reducing Stitch Patterns***
>
> *If the* **Ctrl** *key is held down while the stitch pattern is enlarged or reduced, the thread density and needle drop point pattern are maintained.*
> *However, if the original thread density and needle drop point pattern in the stitch pattern are not uniform, the thread density and needle drop point pattern may not be maintained, even by using this method. Enlarge/reduce the pattern while checking the preview. Do not use this method when only slightly enlarging/reducing the stitch pattern.*

Rotating patterns

1. Select the pattern(s).

2. Drag the rotation handle.

1. The shape of pointer changes to ↻

Rotation handle

2. Rotate

> **Memo:**
>
> *To rotate the pattern in 15° increments, hold down the* **Shift** *key while dragging the handle.*

Flipping patterns horizontally or vertically

Select the pattern(s), and then click Home ,

then ![Flip Vertically / Flip Horizontally icons] .

![Flip Vertically / Flip Horizontally / Move to Center menu - Arrange]

Grouping/Ungrouping embroidery patterns

■ Grouping patterns

Select several patterns, right-click them, and then select **Group** in the pop-up menu that appears.

■ Ungrouping patterns

Select a grouped embroidery pattern, right-click it, and then select **Ungroup** in the pop-up menu that appears.

> **Note:**
> *Some patterns imported from embroidery cards cannot be flipped.*

Checking Embroidery Patterns

Zooming

Click [Home], then [Zoom], then **1**.

1

: Zooms In

: Zooms Out

1:1 : Zooms to Actual Size

: Fit selected objects to window

: Fit Design Page to window

> **Memo:**
>
> • *Zooming is also possible by dragging the Zoom slider in the status bar or clicking the Zoom ratio.*
>
> > ☞ *"PE-DESIGN PLUS Window" on page 61*
>
> • *While zooming in or out, right-click to reverse the zooming operation.*

Using the Pan tool

The part of the work area that is displayed can easily be changed by using the Pan tool.

Click [Home], then [Pan], then drug to **1**.

1

Changing the display of the embroidery design

Click [View], then .

■ **Solid View**

■ **Stitch View**

You can display a stitch view of it in order to see how the stitching is connected.

■ **Realistic View**

You can display a realistic view of it in order to see how the design will appear once it is sewn.

📖 **Memo:**

Changing realistic view settings

1. Click [View], then [Realistic ▾], then [Realistic View Settings].

2. If necessary, specify settings for **Thread Width** (1), **Contrast** (2) and **Brightness** (3), then click **Apply (OK)**.

Realistic View Settings

(1) Thread Width:
Thin ——◯—— Thick

(2) Contrast:
Flat ——◯—— Sharp

(3) Brightness:
Dark ——◯—— Bright

[Apply]   [Close]

Arranging Embroidery Designs

41

Checking the stitching with the Stitch Simulator

1. Click **1**, then **2**.

1 ─
2 ─

| Solid | Stitch | Realistic | Sewing Order | Stitch Simulator | ☑ Sewing Attributes ☑ Text Attributes ☑ Color Palette | ☐ Show Grid ☐ Snap to Grid Interval: 2.5 |
| Mode | | | | | Show/Hide | Grid |

2. Click the buttons to view a simulation of the stitching.

(3)   (1) (2)   (4)   (5)

(6)   (7)   (8)

(1) Starts the stitching simulation. During stitching simulation, this button changes to ▌▌, which can be clicked to temporarily stop the simulation.

(2) Stops the simulation and returns to the previous display.

(3) The slider shows the current location in the simulation. In addition, the slider can be moved to change the position in the simulation.

⏮ : Returns to the beginning of stitching and stops the simulation.

⏭ : Advances to the end of stitching and stops the simulation.

(4) Drag the slider to adjust the simulation stitching speed.

(5) Select this check box to automatically scroll the simulation of the pattern when it is too large to be fully displayed.

(6) Click to hide the bottom section of the Stitch Simulator. Click ⊞ to display it again.

(7) Shows the number of the current stitch/ total number of stitches.

[-100] [-10] [-1] : Reverses the simulation by the indicated number of stitches.

[+1] [+10] [+100] : Advances the simulation by the indicated number of stitches.

(8) Shows the number of the color being drawn/total number of colors used.

🔳 - : Returns to the beginning of stitching for the current or previous thread color.

🔳 + : Advances to the beginning of stitching for the next color.

📖 **Memo:**

• *The Zoom tools and Pan tool can be used while a simulation is being viewed. If any other command is selected, the simulation stops.*
• *If a value is entered at (7) or (8), the simulation is reversed/advanced to the indicated location.*

⚠ **Note:**

• *If a pattern was selected when the stitching simulation was started, only the selected pattern is drawn in the simulation.*
• *The **Auto Scroll** check box is not available in Realistic View.*

Checking and Editing the Sewing Order

Click [View], then [🔲 Sewing Order].

Show/Hide

[🔲]:Click to enlarge each pattern to fill its frame.

⟷

[🔲]:Click to display in one frame all patterns of the same color that will be sewn together.

📖 **Memo:**

When multiple same color patterns are combined into one frame, ⊞ appears to the left of that frame.

Click ⊞ to display the combined same color patterns in separate frames.

⊟ appears under the first frame, and each frame is displayed with a subnumber following the first, to indicate its sewing order within the patterns of the same color.

Click ⊟ to recombine all of the same color patterns back into one frame.

■ Selecting a pattern

1. Click a frame containing the pattern in the **Sewing Order** pane.

Blue line   Marching line

📖 **Memo:**

*• To select multiple patterns, hold down the **Shift** or **Ctrl** key while clicking the frames for the desired patterns. In addition, multiple frames can be selected by dragging the pointer over them.*

2. Click 🔲 at the top of the **Sewing Order** pane to select the pattern in the Design Page corresponding to the frame selected in the **Sewing Order** pane. The pattern can also be selected by double-clicking its frame in the **Sewing Order** pane.

■ Editing the sewing order

The sewing order can be changed by selecting the frame containing the pattern, then dragging the frame to the new location. A red line appears, indicating the position where the frame is being moved.

An alternative method for moving the frames is by clicking the buttons at the top of the Sewing Order pane.

:Click to move the selected pattern to the beginning of the sewing order.

:Click to move the selected pattern ahead one position in the sewing order.

:Click to move the selected pattern back one position in the sewing order.

:Click to move the selected pattern to the end of the sewing order.

> **⚠ Note:**
> *Check the stitching after changing the sewing order to be sure that overlapping patterns will not be sewn in the wrong order.*

■ Changing colors

1. Select one or more frames in the **Sewing Order** pane, and then click ■ at the top of the **Sewing Order** pane.

   → The **Color** pane appears in front of the other panes.

2. Click the desired color in the **Color** pane.

☞ *"Color" on page 47.*

■ Changing sewing attributes

1. Select one or more frames in the **Sewing Order** pane, and then click the **Sewing Attributes** tab. If the **Sewing Attributes** tab is not displayed, click **View** tab in the Ribbon, then **Sewing Attributes**.

2. Change the sewing attributes and sew type.

   ☞ *"Sew type" on page 45 and "Specifying sewing attributes" on page 46*

Applying Sewing Attributes to Lines and Regions

Setting the sew type

The **Sewing Attributes** pane allows you to set the embroidery attributes.

> 📖 **Memo:**
>
> *The following embroidery patterns have an outline and inside region. Sewing for this line and region can be turned on or off, and their thread colors and sewing attributes can be specified.*
> - *Patterns imported from the "Shapes" category of Design Library*
> - *Individual patterns of an ungrouped pattern created with the Auto Punch function*

■ Line sew 〜 / Region sew 〰

Click the **Sewing Attributes** tab. If the **Sewing Attributes** tab is not displayed, click the **View** tab in the Ribbon, and then click **Sewing Attributes**.

〜 switches on/off line sewing, 〰 switches on/off region sewing.

> 📖 **Memo:**
>
> *When line sewing or region sewing is switched off, it is not sewn (and the color or sew type cannot be selected).*

On: The **Line sew type/Region sew type** selector are displayed.

Off: The **Line sew type/Region sew type** selector are not displayed.

Line sew   Line sew type

Line sewing on: Line sewing off:

Region sew   Region sew type

Region sewing on: Region sewing off:

■ Sew type

Use these to set the sew type for outlines, inside regions, and text patterns.

Click in a sew type selector, and then click the desired sew type.

> → The available settings that appear differ depending on the object that is selected.

Object type	**Line sew type** settings	**Region sew type** settings
Text	None	**Satin**, **Fill**, **Prog. Fill** (programmable fill)
Shapes	**Zigzag**, **Running**	**Satin**, **Fill**, **Prog. Fill** (programmable fill)

☞ *"Line sew / Region sew" on page 45 and "Specifying sewing attributes" on page 46*

45

Specifying sewing attributes

1. Select an embroidery pattern or the Text tool.

2. Click the **Sewing Attributes** tab.

Adjust with slider.

— (1)

— (2)

(1) Click to return to the default setting.

(2) Hint view
With each change in the settings, a preview of the stitching can be checked here.

☐ **Memo:**

The sewing attributes displayed in the dialog box depend on the selected sew type.

3. Change the sewing attributes displayed under **Line sew** or **Region sew**.

→ The settings are applied to the embroidery pattern each time the settings are changed.

☞ *For details on the different sewing attributes and settings, refer to "Line sewing attributes" on page 68 and "Region sewing attributes" on page 69.*

Changing the pattern of programmable fill stitch

1. Select an embroidery pattern.

2. Display the **Sewing Attributes** pane.

3. From the **Region sew type** selector, select **Prog. Fill Stitch**.

4. Click **1** below **Programmable fill** in the **Region sew** section.

— (1)

5. Click the fill stitch pattern, and then click **OK**.

→ The pattern is applied to the inside regions of the embroidery pattern.

Setting the thread color

The **Color** pane allows you to set the thread color.

■ Color

Click the **Color** tab. If the **Color** tab is not displayed, click the **View** tab in the Ribbon, and then click **Color Palette**.

• Palette mode

(1)
(2)
(3)
(4)
(5)

• List mode

(1)
(2)
(3)
(4)
(5)

(1) Select the type of stitching (**Line, Region**) whose color is being selected.
      Line: Line color
      Region: Region color

(2) From the **Thread Chart** selector, select a thread brand or your user thread chart.

(3) From the list of thread colors, select the desired color.

(4) Click to switch the mode.

(5) Displays all thread colors being used in the embroidery design. When an embroidery pattern is selected, a frame appears around the colors used in that pattern. The same thread colors can be specified by selecting them here.

■ Special colors

(6)　　　　　　　　　　　　　　　　(9)
　　　　　　　　　　　　　　　　　　(8)

(7)

(6) **NOT DEFINED**: If you want to be able to manually select the color for a monochrome pattern, you can select **NOT DEFINED**.

Colors for creating appliqués:
You can create appliqués using the following three special colors.

(7) **APPLIQUE MATERIAL**: marks the outline of the region to cut from the appliqué material.

(8) **APPLIQUE POSITION**: marks the position on the backing material where the appliqué must be sewn.

(9) **APPLIQUE**: sews the appliqué on the backing material.

Arranging Embroidery Designs

Opening/Importing Embroidery Designs

Creating a new embroidery design

Click **1**, then **2**.

> 📖 **Memo:**
>
> *The size of the Design Page can be changed.*
>
> ☞ *"Specifying the Design Page Size and Color" on page 56*

Opening a PE-DESIGN PLUS file

1. Click **1**, then **2**.

2. Select the drive, the folder and the file, and then click **Open**, or double-click the file's icon.

> 📖 **Memo:**
>
> *• To view the data in the selected folder as thumbnails in the **Browse** dialog box, click **Browse**.*
>
>
>
> *To see a more detailed design, select a file, and then click **Preview**.*
>
>
>
> *• To open the displayed file, click **Open**.*
> *• If no files are listed, there are no .pes files in the selected folder. Select a folder containing a .pes file.*
> *• If the selected file is in a format other than the .pes format, the message "Unexpected file format" appears in the **Preview** box.*

> 📖 **Memo:**
>
> *A file can be opened in any of the following ways.*
> *• Drag the embroidery design from file Windows Explorer into the PE-DESIGN PLUS window.*
> *• Double-click the embroidery design file in Windows Explorer.*

Memo:

Multiple files can be opened in PE-DESIGN PLUS. In addition, data can be copied and pasted between files that are open at the same time.

⚠ Note:

If a .pes file created with PE-DESIGN NEXT or earlier is opened with this software, the message "This file will be imported into a new Design Page." appears before the embroidery design is displayed on the new Design Page.

Importing embroidery designs

■ From Design Library

1. Click Home , then Import Patterns ▾ ,

then 📇 from Design Library... .

Import Patterns ▾

Import

📇 from Design Library...

📋 from File...

🖼 from Card...

2. From the **Category** selector, select a category to display the corresponding embroidery data.

3. Select the file icon for the design to be imported, and then click **Import**, or double click the file icon.

Memo:

- *The design can be imported by dragging its file icon from the **Import** dialog box to the Design Page.*
- *Multiple files cannot be selected to be imported at the same time.*
- *With the buttons at the top of the **Import** dialog box, change the location from where the file is to be imported.*

Import

4. Click ☒ to close it.

■ From a folder

1. Click Home , then Import Patterns ▾ ,

then 📋 from File... .

Import Patterns ▾

Import

📇 from Design Library...

📋 from File...

🖼 from Card...

2. Click 📂 .

C:\Users\admin\Documents\PE-DESIGN PLUS\Sample
File Type   All Embroidery Files (*.PEC,*.PES,*.DST...)

bird.pes   dog-face2-cross...   dog.pes   girl-face1.pes

girl-face2.pes   girl-face3.pes   girl2-face-sepia...   hare.pes

Import

Indicates the path to the currently selected folder.

3. Select a folder, and then click **OK**.

4. From the **File Type** box, select a file name extension to display the corresponding embroidery data.

5. Select the file icon, and then click **Import**. The file is imported.

> **⚠ Note:**
> *When importing designs from other vendors, be sure to choose a design that will fit in the Design Page.*

> **📖 Memo:**
> *Since .dst files do not contain thread color information, the colors of an imported .dst file may not appear as expected. You can change the thread colors by using functions in the Sewing Order pane.*
>
> ☞ *"Changing colors" on page 44*

☞ *"Specifying the number of jumps in embroidery design of the DST format" on page 60.*

■ From an embroidery card

1. Insert an embroidery card into the USB Card Writer Module.

☞ *Refer to "Transferring to a machine by using an original card" on page 52*

2. Click Home , then Import Patterns,

then from Card... .

→ After the card has been read, the embroidery designs on the card are displayed.

3. Select the file icon, and then click **Import**. The file is imported.

> **⚠ Note:**
> *Due to copyright issues, some embroidery cards cannot be used with this function.*

Checking embroidery design information

Click **1**, then **2**.

You can enter comments and information about the pattern to a saved .pes file.

> 📖 **Memo:**
> - *You can select and check the properties of individual patterns within the embroidery design by selecting the pattern before opening this dialog box. In this case, clearing the **Show about selected Object(s)** check box switches the dialog box to display properties for all patterns in the Design Page.*
> - *To display the colors as the machine's preset color names, select the **with Basic Color** check box.*

Transferring Embroidery Designs to Machines

The procedures for transferring the created embroidery pattern to an embroidery machine differ depending on your embroidery machine model. For details, refer to the Operation Manual provided with your embroidery machine.

Transferring to a machine by using an original card

Designs can be transferred to an embroidery machine equipped with a card slot.

> ⚠ **Note:**
> - *Be sure that the hoop size of the design does not exceed the hoop that will be used on the embroidering machine.*
> - *When writing to an original card that already contains data, all data on the card will be deleted. Before writing to a card, save all necessary data to a hard disk or other media, and check that no necessary data remains on the card.*
>
> ☞ *"From an embroidery card" on page 50*

☞ *For details on writing multiple embroidery designs, refer to "Writing Multiple Embroidery Files to an Original Card" on page 72.*

1. Insert an original card into the USB Card Writer Module.

2. Click Home , then Send ,

then 🔲 Write to Card .

Send Embroidery Design
🔲	Send to USB Media	▶
🔲	Send to Your Machine	▶
🔲	Write to Card	

3. When the following message appears, click **OK**.

PE-DESIGN PLUS

ℹ All original card data will be deleted.

OK   Cancel

→ Data transfer begins. The following message appears while the data is being transferred.

Now transmitting...
Please wait for a while.

4. After the data has been transferred, the following message appears, indicating that the transfer is finished. Click **OK**.

PE-DESIGN PLUS

ℹ Writing to original card is completed.

OK

Transferring to a machine by using USB media

Designs can be transferred to an embroidery machine compatible with the USB Host function.

1. Plug the USB media into the computer.

2. Click Home , then Send ,

   then Send to USB Media ▶, then G: .

   → Data transfer begins.

> ⚠ **Note:**
> *If there is already a file with the same name at the destination, the following dialog box appears. Select whether to overwrite the existing file, to stop copying or to copy the file using a different name.*
>
>

3. After the data has been transferred, the message "Finished outputting data." appears, indicating that the transfer is finished. Click **OK**, and then remove the USB media.

> 📖 **Memo:**
> *If multiple USB media are connected, specify where the data is to be transferred in the area shown below.*
>
>

Transferring directly to a machine's memory

Designs can be transferred to embroidery machines that can be connected to a computer using a USB cable.

1. Connect the embroidery machine to the computer.

2. Click Home , then Send ,

   then Send to Your Machine ▶, then G: .

   → Data transfer begins.

3. After the data has been transferred, the message "Finished outputting data." appears, indicating that the transfer is finished. Click **OK**.

> 📖 **Memo:**
> • *For details on transferring designs with this method, refer to the Operation Manual provided with your embroidery machine.*
> • *If multiple machines are connected, specify where the data is to be transferred in the area shown below.*
>
>

Arranging Embroidery Designs

Printing

Specifying print settings

Before printing, you may need to change the print settings for the embroidery design files.

1. Click **1**, then **2**, then **3**.

2. Specify the print settings.

   (1) Specify the paper size.

   (2) Specify the paper orientation.

   (3) **Print type**

   Actual Size:
   Select this option to print the design at actual size and the sewing information (dimensions of the embroidery pattern, sewing color order, stitch count and hoop position) on separate pages.

   Reduced Size:
   Select this option to print a reduced image together with all of the above-mentioned information on a single page.

(4) **Print option**

   Print sewing area box & center axes:
   Select this option to print black lines to indicate the sewing area and the center axes for the data. (This setting is only available when **Actual Size** is selected.)

   Print template grid:
   Select this check box to print green lines to represent the grid printed on the embroidery sheet included with the hoop.

   Divide embroidery image into 2 pages:
   Select this check box to print at actual size and on A4- or Letter-size paper a design that is larger than the paper size by dividing it in two and printing each half on different pages.
   (This setting is only available when **Actual size** is selected in the **Print Setup** dialog box and when the Design Page is set to the larger hoop sizes. This setting is not available if a **User Hoop** size is selected.)

   With this split printing feature, 🔳 / 🔳

   or 🔳 / 🔳 is printed in the lower-right corner of the paper to indicate which half is printed.

(5) **Stitch image**

   Normal:
   Select this option to print the design as lines and dots.

   Realistic:
   Select this option to print a realistic image of the design. To change the settings of the realistic image, click **Attributes**.

   ☞ *"Changing realistic view settings" on page 41*

3. Click **OK**.

   ☞ *"Changing the display of the embroidery design" on page 41.*

Checking a print image

You can preview the contents of the Design Page before printing.

1. Click **1**, then **2**, then **3**.

> **Memo:**
>
> *The print image can also be displayed by clicking **Print Preview** in the **Print Setup** dialog box.*

Printing

You can print the Design Page together with its sewing information.

1. Click **1**, then **2**, then **3**.

2. Select the necessary settings.

3. Click **OK** to begin printing.

4. Follow the instructions for the printer to finish printing.

Specifying the Design Page Size and Color

The color and size of the Design Page can be changed. You can select a Design Page size according to the size of hoop that you will be using with your embroidery machine.

1. Click [Home], then [Design Page Settings].

2. Specify the settings for the Design Page, and then click OK.

   (1) **Hoop Size**:
   Select the desired hoop size from the selector.

   (2) **Rotate 90 Degrees**:
   Select this check box to arrange the pattern in a Design Page rotated 90°.

   (3) **Page**:
   Select the desired color for the Design Page.

   (4) **Background**:
   Select the desired color for the work area.

   (5) **Default**:
   To return to the default settings, click this button.

   (6) **Edit User Hoop**:
   Click this button to display the **User Hoop Settings** dialog box, where a user hoop size can be added. The added user hoop size appears at the bottom of the list.

   Note:
   Do not select a hoop size larger than the embroidery hoop that can be used with your machine.

User Hoop Setting

   (1) **Width**, **Height**:
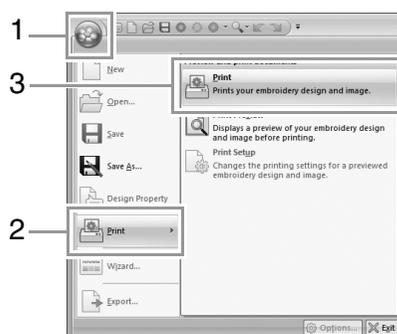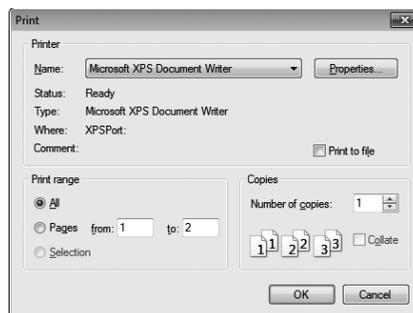   Type in the size of the hoop to be added.

   (2) **Comment**:
   If text was entered in this box, that text appears beside the size.

   (3) **Add Hoop**:
   Click this button to add the hoop size.

   (4) **User Hoop List**:
   The added hoop size appears in the list. Select a hoop size in this list to change the display order or to delete it.

   (5) **Up**, **Down**:
   Click these buttons to move the selected hoop size up or down in the display order.

   (6) **Delete Hoop**:
   Click this button to delete the selected hoop size.

   Note:
   • *A User Hoop cannot rotate 90°.*
   • *Do not create a Custom Hoop larger than the embroidery hoop that can be used with your machine.*

Changing Application Settings

Changing the grid settings

A grid of dotted lines or solid lines can be displayed or hidden, and the spacing for the grid can be adjusted.

1. Click View.

2. Specify the grid settings.

Show Grid:
Select this check box to display the grid.

Snap to Grid:
Select this check box to align patterns with the grid.

Interval:
Specify the grid spacing.

☐ **Memo:**

The snap feature works whether or not the grid is displayed.

System unit

Click mm / in. to switch the measurement units between millimeters and inches.

☐ **Memo:**

The system units can also be changed with the following operation.

*Click **1**, then **2**.*

*Click **System Unit**, and then select the desired measurement units (**mm** or **inch**).*

57

Editing user thread color lists

If you have a list of thread colors that are frequently used, they can be saved in a user thread chart.

1. Click Option ▾, then 🖼 Edit User Thread Chart... .

2. A user thread chart can be saved, edited or deleted.

(7) User Thread Chart
(8)
(11)
(9) Thread Chart
(10)

→ The operations that can be performed are described below.

■ Creating a new thread chart

1. Click **New Chart** (1).

2. Type in the name of the chart, and then click **OK**.

> **Memo:**
> *A saved chart can be selected from the **User Thread Chart** selector.*

■ Deleting a chart

1. From the **User Thread Chart** selector (7), select the chart.

2. Click **Delete Chart** (2).

3. If a message appears, click **Yes**.

■ Editing a chart

1. From the **User Thread Chart** selector (7), select the chart.

2. Continue with the appropriate procedure. To save the changes, click **OK**.

■ Adding items from a thread chart

1. From the **Thread Chart** selector (9), select the brand of thread.

2. From the list (10), click the thread colors.

> **Memo:**
> *To add multiple items, hold down the **Shift** or **Ctrl** keys while selecting thread colors.*

3. Click ⬆ (11).

→ The selected items are added to the list in the user thread chart (8).

■ Adding a new item

1. Click **New Item** (4).

2. To create a new color, click **Mix**.

3. Specify the color, and then click **OK** to add the specified color to the **Edit Thread** dialog box.

> 📖 **Memo:**
>
> *The color cannot be changed if the slider (A) is moved to the top of the scale.*

4. If necessary, type in the code, brand and description into the appropriate boxes.

> 📖 **Memo:**
>
> *Only numbers can be entered for the code.*

5. Click **OK** to add the new item to the user thread chart (8).

> 📖 **Memo:**
>
> *An asterisk (*) appears in front of the index number for items created or edited by the user.*

■ Deleting items

1. From the list for the user thread chart (8), select the item to be deleted.

2. Click **Delete Item** (5) to delete the item from the user thread chart.

■ Editing an item

An item registered in the list for a user thread chart can be edited to change the color or thread number.

1. From the list for the user thread chart (8), select the item to be edited, and then click **Edit Item** (6).

2. Edit the item details in the same way as adding a new item.

> 📖 **Memo:**
>
> *As with newly added items, an asterisk (*) appears in front of the index number of edited items.*

■ **Changing the order of items**

1. From the list for the user thread chart (8), select the item to be moved.

2. Click **Up** or **Down** (3) to change the order of the item.

> **⚠ Note:**
>
> *Thread colors in embroidery patterns created with this application may appear differently on the embroidery machine, depending on the model used.*
>
> *1. Embroidery machines without a function for displaying thread colors*
> *The specified thread color information cannot be displayed at all.*
> *2. Embroidery machines with a function for displaying thread colors*
> *Of the thread color information specified in the embroidery pattern, only the thread color names are displayed on the machine.*
> *However, the names that are displayed are limited to the machine's preset thread color names. Therefore, the machine displays the names of its preset thread colors that are closest to the colors specified in the embroidery pattern.*
> *3. Embroidery machines with a thread color index*
> *Some machines can display the thread information specified with this application. However, for thread colors that have been edited or added by the user (thread colors with an asterisk (*) at the left side), only the thread number is displayed.*

> **📖 Memo:**
>
> *The edited user thread chart can also be used on a different computer. Simply copy* **chart2.btc** *from* **C:\Program Files (Program Files (x86))\Brother\PE-DESIGN PLUS\Color** *on the original computer to the* **Color** *folder at the same path on the destination computer.*

Specifying the number of jumps in embroidery design of the DST format
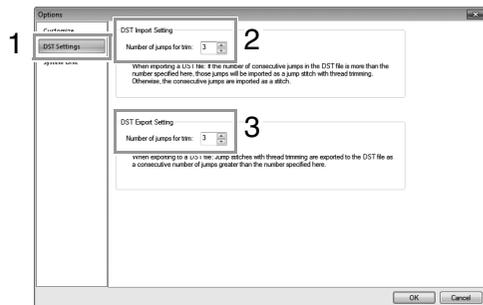
With the DST format, you can specify whether or not the jump stitches are trimmed according to the number of jump codes. Since the number of codes differ depending on the embroidery machine being used.

Display the **Options** dialog box.

☞ *"Customizing Quick Access Toolbar/ Shortcut keys" on page 63*

Select **DST Settings** (1), specify the number of jumps, and then click **OK**.

> To specify a setting for importing, enter a value beside **DST Import Setting** (2). To specify a setting for exporting, enter a value beside **DST Export Setting** (3).

DST Import Setting
If the number of consecutive jumps in the DST file is less than the number of jumps specified here, those consecutive jumps will be replaced with a stitch.
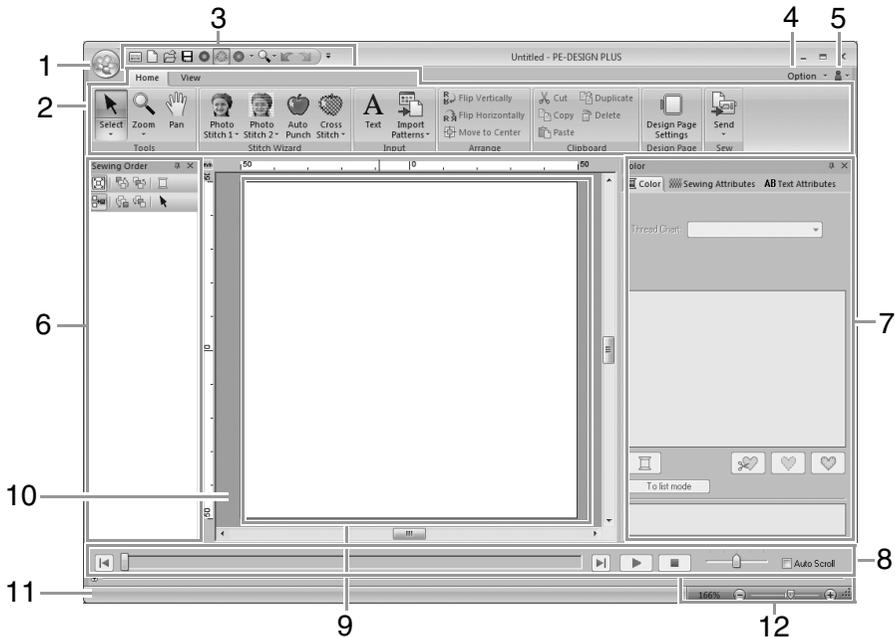If the number of consecutive jumps in the DST file is greater than or equal to the number of jumps specified here, those jumps will be replaced with a jump stitch where the thread is trimmed.

DST Export Setting
When .pes files are output, jump stitches with thread trimming are replaced with more consecutive jump codes than the specified number of jumps.

PE-DESIGN PLUS Window

1   Application button
Click to display a menu containing commands for file operations, such as **New**, **Save** and **Print**.

2   Ribbon
Click a tab at the top to display the corresponding commands.
Refer to the name below each group when selecting the desired command. Clicking a command with the ▾ mark displays a menu containing a choice of commands.

3   Quick Access Toolbar
This contains the most frequently used commands. Since this toolbar is always displayed, regardless of the Ribbon tab that is selected, adding your most often used commands makes them easily accessible.

☞ *"Customizing Quick Access Toolbar/ Shortcut keys" on page 63*

4   Option button
Click this button to specify settings for the Design Page and user thread chart.

5   Help button
Click this button to display the Operation Manual and view information about the software.

6   Sewing Order pane
This pane shows the sewing order. Click the buttons at the top of the pane to change the sewing order or thread color.

7   Color/Sewing Attributes/Text Attributes pane
This pane combines tabs for specifying thread colors, sewing attributes and text attributes.
Click a tab to display the available parameters.

8   Stitch Simulator pane
The Stitch Simulator shows how the pattern will be sewn by the machine and how the stitching will appear.

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

10 Work area

11 Status bar
This displays the size of the embroidery data, the number of stitches or a description of the selected command.
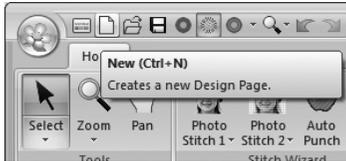
12 Zoom
This displays the current magnification ratio.
Click to specify a value for the magnification ratio.
Drag the slider to change the magnification ratio.

> **Memo:**
> • Panes 6, 7 and 8 can be displayed or
>   hidden from the **Show/Hide** group in the
>   **View** tab. In addition, these panes can be
>   displayed as separate dialog boxes
>   (**Floating**) or attached to the main window
>   (**Docking**).
> • Position the pointer over a command to
>   display a ScreenTip, which provides a
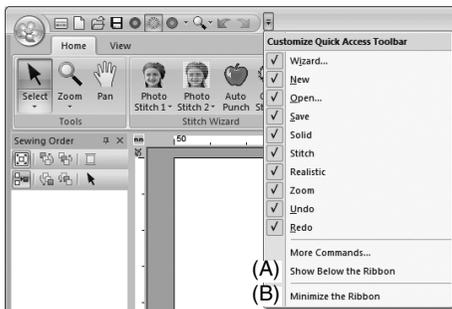>   description of the command and indicates
>   its shortcut key.
>
>

Customizing the window

■ Quick Access Toolbar/Ribbon

A menu appears when **1** in the Quick Access
Toolbar is clicked.

1

Click (A) to move the Quick Access Toolbar below
the Ribbon.
To return it to its original position, display the menu
as described above, and then click **Show Above
the Ribbon**.

If a check mark appears beside (B), the Ribbon is
minimized. When a tab is clicked, the Ribbon
appears. After a command is selected, the Ribbon is
minimized again.
To restore it to its original display, clear the check
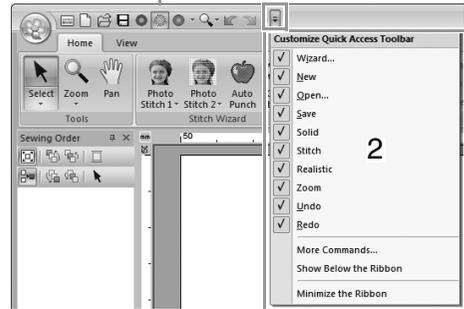mark.

Example: With (A) selected and a check mark
beside (B)

■ Quick Access Toolbar commands

(A)   1

The first time this application is started up, the
following commands appear in the Quick Access
Toolbar (A).

🔲 : Wizard		◉ : Solid View
🗋 : New		✻ : Stitch View
🗁 : Open		◉ : Realistic View
🖫 : Save		◤ : Undo
🔍 : Zoom		◥ : Redo

Click **1**, then **2** to switch between displaying and
hiding each command.
When the check mark is cleared, the command is
hidden.
Alternatively, changes to the Quick Access
Toolbar can be specified in the **Options** dialog
box and all applied at the same time.

■ Color/Sewing Attributes/Text Attributes pane, Sewing Order pane and Stitch Simulator pane

Floating

Each tab or the entire pane can be undocked to become a dialog box that can be moved around the screen.

- Double-click the title bar of the pane, or tab.
- Right-click the pane or tab, and then click **Floating**.
- Drag a tab out of the pane.

Docking

Each pane can be docked back to the window.

- Double-click the title bar.
- Right-click the pane, and then click **Docking**.
- Drag the title bar to the location where the pane will be docked.

Hide

When a tab or a pane is no longer needed, it can be hidden.

- Click ✕ in the upper-right corner of the dialog box.
- Right-click the tab or dialog box, and then click **Hide**.
- To hide the tab, click **View** tab in the Ribbon, and then click the name in the **View** tab. To display the tab again, perform the same operation.

Auto Hide

When a pane is temporarily not needed, it can be moved to the side bar, then displayed by clicking it or positioning the pointer over it. The pane is automatically hidden again when it is no longer being used, for example, when you click anywhere outside of the pane.

- Right-click the tab or the title bar of the pane, and then click **Auto Hide**.
- In the upper-right corner of the pane, click 📌.

To cancel Auto Hide, right-click the title bar, and then click **Auto Hide**, or simply click 📌 in the title bar.

> 📖 **Memo:**
>
> *The Stitch Simulator pane cannot be temporarily hidden (Auto Hide).*
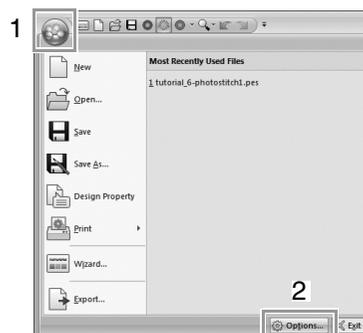
■ Using access keys

When the **Alt** key is pressed, a KeyTip (label showing the letter of the access key) appears on each command. On the keyboard, press the key corresponding to the command that you wish to use.

To stop using the access keys and hide the KeyTips, press the **Alt** key.

Customizing Quick Access Toolbar/Shortcut keys

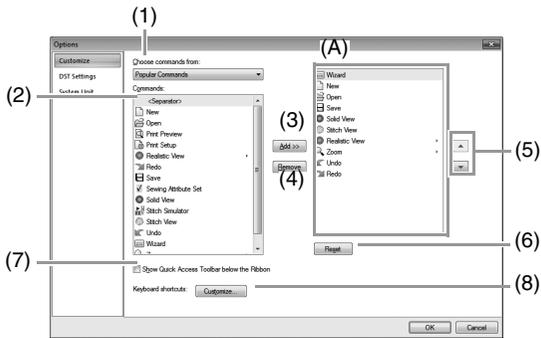1. Click **1**, then **2** to display the **Options** dialog box.

> 📖 **Memo:**
>
> *The **Options** dialog box can also be displayed using either of the following methods.*
>
> - *Click ▼ at the right end of the Quick Access Toolbar, and then click **More Commands**.*
> - *Click **Option** in the upper-right corner of the window, and then click **Options**.*

■ **Quick Access Toolbar**

1. Click **Customize**.

(1)

2. Repeat the following operations until the desired commands are displayed.

   (1) **Choose commands from**: selector
   Select a command category.

   (2) **Commands**: list
   Select the command to be added.

   (3) **Add** button
   Selected command is added.
   The command appears in (A).

   (4) **Remove** button
   Selected command is removed.
   The command is removed from (A).

   (5) ▲
   ▼
   Select an icon in (A), and then click the buttons at to move it to the desired position.

   (6) **Reset** button
   Reverting to the default commands.

   Settings for the following can also be specified from this dialog box.

   (7) **Show Quick Access Toolbar Below the Ribbon**
   Select where the Quick Access Toolbar is displayed. Select the check box to display the Quick Access Toolbar below the Ribbon.
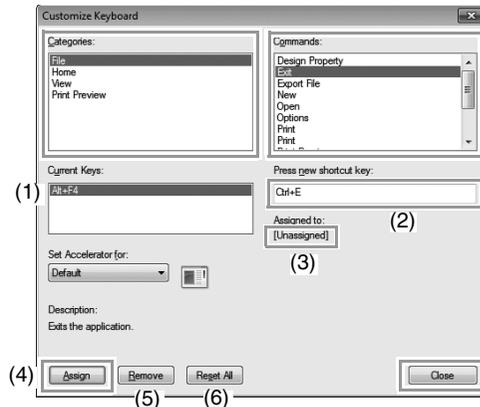
   (8) **Keyboard shortcuts**
   Click **Customize** to customize shortcut keys.

   ☞ *"Shortcut keys" on page 64*

3. After the settings have been specified, click **OK** to apply them.

■ **Shortcut keys**

1. Click **Customize**, then **Customize** (8).

2. In the **Categories** list, select a command category. Then, in the **Commands** list, select the command whose shortcut keys are to be specified.

   → The default shortcut keys appear in the **Current Keys** box (1).

3. Use the keyboard to record the new shortcut keys in the **Press new shortcut key** (2) box, and then click **Assign** (4). The new shortcut keys appear in the **Current Keys** box (1).

   → Usage information about the entered key combination appears. If the key combination has already been assigned to another command, the name of that command appears at (3).

   To remove the default or specified shortcut keys, select the shortcut keys in (1), and then click **Remove** (5).

   To revert to the default settings, click **Reset All** (6).

4. Repeat steps 2 and 3 until the desired shortcut keys have been specified for the commands, and then click **Close**.

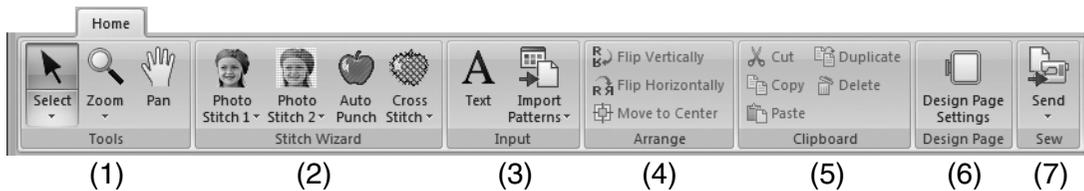5. Click **OK** in the **Options** dialog box.

Menus

Application button menu

Menu	Reference
New	p. 48
Open	p. 48
Save	p. 18
Save As	p. 18
Design Property	p. 51
Print	p. 54
Wizard	p. 10
Export File	p. 18
Options	p. 57, p. 60, p. 63
Exit	p. 19

Ribbon menu tabs

■ Home tab

(1)   (2)   (3)   (4)   (5)   (6)   (7)

No.	Menu	Reference	No.	Menu	Reference
(1)	Select	p. 37	(4)	Flip Vertically/Horizontally	p. 39
	Zoom	p. 40		Move to Center	p. 37
	Pan	p. 40		Cut	—
(2)	Photo Stitch 1	p. 11, p. 19		Copy	—
	Photo Stitch 2	p. 21	(5)	Paste	—
	Auto Punch	p. 24		Duplicate	—
	Cross Stitch	p. 27		Delete	—
(3)	Text	p. 32	(6)	Design Page Settings	p. 56
	Import Patterns	p. 49	(7)	Send	p. 52

■ View tab

(1)   (2)   (3)

No.	Menu	Reference	No.	Menu	Reference
(1)	Solid View	p. 41	(2)	Text Attributes	p. 32, p. 35
	Stitch View	p. 41		Color Palette	p. 47
	Realistic View	p. 41	(3)	Show Grid	p. 57
(2)	Sewing Order	p. 43		Snap to Grid	p. 57
	Stitch Simulator	p. 42		Grid Interval	p. 57
	Sewing Attributes	p. 46			

Tips and Techniques

This software 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 embroidery 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 type of fabric as your final material and to use the same needle and the same machine embroidery thread.

Sewing Direction

In order to limit pulling or puckering, select a stitch direction perpendicular to the larger edge of the area.

Pulling or puckering more likely to occur   Pulling or puckering less likely to occur

Sewing Order

After creating an embroidery pattern made of several different parts, be sure to check the sewing order and correct it if necessary.

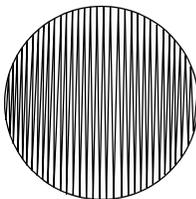The default sewing order is the order in which the elements are drawn.

Be careful when changing the sewing order since overlapping areas may be incorrectly positioned.
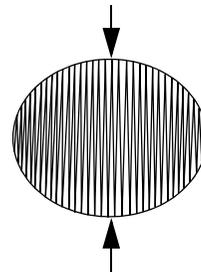
Sewing Wide Areas

• For best sewing results, set **Under sewing** to **On** when sewing wide regions.

   ☞ *For more details, refer to "Under sewing" on page 69.*

• Changing the **Sewing Direction** setting prevents pulling-in or puckering of the stitching.

• When embroidering, use stabilizer material specifically for embroidering. Always use stabilizer material when embroidering lightweight or stretch fabrics, otherwise the needle may bend or break, the stitching may pull and pucker, or the pattern may become misaligned.

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

Pattern   After sewing
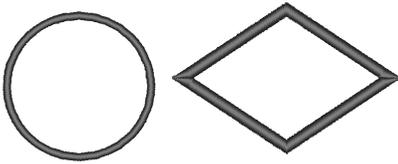
Supplement

67

Reference

Sewing Attributes

The sewing attributes for each sew type are first set to their default settings; however, by changing the settings of the sewing attributes, you can create custom stitching.

☞ *For more details, refer to "Line sewing attributes" on page 68 and "Region sewing attributes" on page 69.*
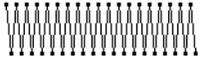
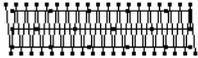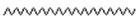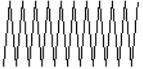## Line sew types
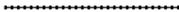
Zigzag Stitch   Running Stitch

■ Line sewing attributes

The available attributes differ depending on the selected sew type.

Zigzag stitch

	Sets underlay stitching on or off. To specify underlay stitching, select the check box.
Under sewing	Off On
Zigzag width	Narrow Wide
Density	Coarse Fine

Running stitch

Run pitch	Specify the length of one stitch.	Short Long
Run time(s)	Specify the number of times the outline is sewn.	1 time 5 times

Region sew types

Satin Stitch   **Fill Stitch**   **Programmable Fill Stitch**

■ Region sewing attributes

The available attributes differ depending on the selected sew type.

Satin stitch/Fill stitch/Programmable fill stitch

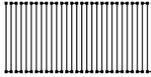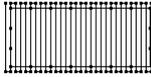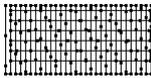|	
Under sewing	Sets underlay stitching on or off. To specify underlay stitching, select the check box. Off On With text patterns With other patterns (Shapes)
Density	Coarse Fine
Direction	This cannot be specified for text patterns. **Constant**: Sews at a fixed angle. Drag ⟶ or select a value to specify the angle. **Variable**: Automatically varies the sewing direction according to the shape of the region. Constant Variable

Programmable fill stitch

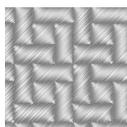|	
Programmable fill	Click the pattern display box to display the Browse dialog box. Select the desired pattern from the list of patterns that appears.

Notes on programmable fill stitches

In some case of the sew type and pattern directions setting of a programmable fill stitch, lines will not be sewn. Use the Realistic View to view exactly how the stitch pattern will be sewn. To get an even better view, make test samples of different settings.
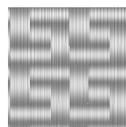
Examples of programmable fill stitching:

Example 1
Stitch direction: 45° (default)

Example 2
Stitch direction: 90°

Example 3
Stitch direction: 0°

Font List

Text	
001	**ABCDE abcde 012345** Aa0-9&?!Ää
002	*ABCDE abcde 012345* Aa0-9&?!Ää
003	**ABCDE abcde 012345** Aa0-9&?!Ää
004	*ABCDE abcde 012345* Aa0-9&?!Ää
005	*ABCDE abcde 012345* Aa0-9&?!Ää
006	**ABCDE abcde 012345** Aa0-9&?!Ää
007	**ABCDE abcde 012345** Aa0-9&?!Ää
008	ABCDE abcde 012345 Aa0-9&?!Ää
009	ABCDE abcde 012345 Aa0-9&?!Ää
010	*ABCDE abcde 012345* Aa0-9&?!Ää
011	ABCDE abcde 012345 Aa0-9&?!
012	*ABCDE abcde 012345* Aa0-9&?!

013	**ABCDE abcde 012345** Aa0-9&?!
014	*ABCDE abcde 012345* Aa0-9&?!
015	**ABCDE abcde 012345** Aa0-9&?!
016	ABCDE abcde 012345 Aa0-9&?!
017	*ABCDE abcde 012345* Aa0-9&?!
018	ABCDE A
019	ABCDE A
020	**ABCDE abcde 012345** Aa0-9&?!
021	ABCDE A
022	ABCDE abcde Aa
023	*A.B.C.D.E.* A
024	ABCDE A
025	ABCDE A
026	ABCDE A
027	ABCDE A
028	ABCDE A

Text		
029	ABCDE 012345	A 0-9
030	ABCDE abcde 012345	A a 0-9 &?! Ää
031	ABCDE abcde 012345	A a 0-9 &?! Ää
032	ABCDE abcde 012345	A a 0-9 &?! Ää
033	ABCDE abcde 012345	A a 0-9 &?! Ää
034	ABCDE abcde 012345	A a 0-9 &?! Ää
035	ABCDE abcde 012345	A a 0-9 &?! Ää

Memo:

- A Uppercase letters of the English alphabet
- a Lowercase letters of the English alphabet
- 0-9 Numerals
- &?! Punctuation marks, brackets and other symbols
- Ää Uppercase and lowercase accented letters

Writing Multiple Embroidery Files to an Original Card

Starting up PES-Writer

Click 🔵, then **All Programs**, then **PE-DESIGN PLUS**, and then click **PES-Writer**.

Write to card

You can save multiple .pes or .pen files to an original card at the same time.

> 📖 **Memo:**
>
> *About .pen files*
> * *.pen files, like .pes files, can be written to original cards.*
> * *.pen files are copyright-protected embroidery data and can only be used with the compatible embroidery machine.*
> * *Some features may not be available, for example, the embroidery cannot be previewed.*
> * *These files can be purchased through the embroidery data sales site "iBroidery.com Download Center". (US only)*
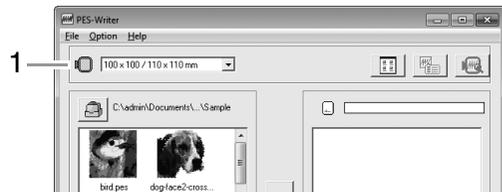
1. Insert an original card into the USB Card Writer Module.

> ☞ *"Transferring to a machine by using an original card" on page 52*

> ❗ **Note:**
>
> * *The original card is inserted correctly when you hear it snap into place.*
> * *It is not necessary to turn off the computer when original cards are inserted or removed from the USB Card Writer Module.*
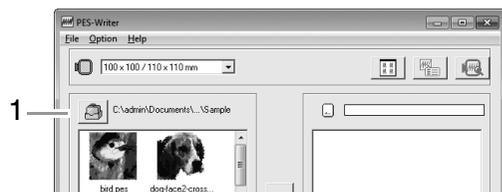
2. From the **Hoop size** selector (**1**), select the appropriate size of embroidery hoop.

> 📖 **Memo:**
>
> * *Do not select a hoop size larger than the embroidery hoop that can be used with your embroidery machine. Otherwise, the created original card will not work correctly with the embroidery machine.*
> * *Make sure to select a hoop size that is the same or larger than the largest hoop size of the files you want to write to the card, otherwise the pattern cannot be written to a card and "⬛" appears.*

3. Click **1**, and then select the folder where the desired pattern files (.pes or .pen) are saved, and then click **OK**.

→ The available pattern list displays the image of the embroidery pattern files.

4. Select an embroidery pattern from the available patterns list (**1**), and then click **2** to add the pattern to the selected patterns list (**3**). After all embroidery patterns to be written are added to the selected patterns list, click **4**.

- To deselect a file, click the white area around the pattern.

- To remove the embroidery pattern selected in the selected patterns list, click **5**.

  → The patterns are written to an original card in the order that they are listed after all data already on the card is erased. After the patterns are written to the original card, the card containing the patterns can be used with the embroidery machine.

> **Note:**
>
> • *Since original cards are erased completely before patterns are written to it, it is useful to keep a copy with the contents of each card that comes with the software so that you can easily recover the files that were on the card.*
>
>   ☞ *"From an embroidery card" on page 50*
>
> • *To check the contents of the original card, open the Browse dialog box, and then click ☐ , which appears at the top of the list in the Browse window. The patterns saved on the inserted card appear in the available patterns list.*
>
> • *Do not remove the card or unplug the USB cable while patterns are being written to the card (while the LED indicator is flashing).*

■ **Operation screen**

(1) **Icon size button**
Switch between the large and small display size of the embroidery pattern images shown in the lists.

(2) **Properties button**
Display the information (size, number of stitches, and colors) for the pattern selected in either list. (This button is available only if a single pattern is selected.)

(3) **Preview button**
Display a realistic image of the pattern selected in either list. (This button is available only if a single pattern is selected.)

(4) **Card capacity indicator**
Shows the capacity of the patterns selected in the selected patterns list. The space used by patterns in the selected patterns list appears in blue.

The space used by the files selected in the available patterns list appears in light blue.

If several files exceed the available space, the progress bar appears in red.

Exiting application

Click ▣ in the upper-right corner of the window, or click **File** then **Exit** from the menu bar.

Selecting system units

1. Click **Option**, then **Select System Unit** from the menu bar.

2. Select the appropriate units (mm or inch) and then click **OK**.

```
Select System Unit

System Unit is :
   ⊙ mm
   ○ inch

   OK        Cancel
```

Help menu

■ Operation Manual
Displays the Operation Manual.

Click **Help**, then **Operation Manual** from the menu bar.

■ About PES-Writer
Displays version and copyright information.

Click **Help**, then **About PES-Writer** from the menu bar.

Troubleshooting

If a problem occurs, click **Customer Support** on the menu of PE-DESIGN PLUS to visit the following Web site, where you can find causes and solutions to various problems and answers to frequently asked questions.

If you have a problem, check the following solutions. If the solutions suggested do not correct the problem, contact your authorized dealer or Brother Customer Service.

Problem	Estimated Cause	Solution	Page
The software is not installed correctly.	An operation not described in the installation procedure was performed. (For example, Cancel was clicked or the CD-ROM was removed before the procedure was completed.)	Follow the instructions as the software installs to correctly install the software.	
	The installer does not automatically start up.	Refer to the memo on page 6 of the Operation Manual, "If the installer does not automatically start up".	
The message "No card writer module is connected. Please connect card writer module." appeared.	The driver for the USB Card Writer Module is not installed correctly.	When the USB connector is correctly plugged into the USB port, the installer for the driver of the USB Card Writer Module starts up.	If the operation described at the left does not correct the problem, go to the Web site mentioned under "Technical Support". (Refer to page 9.)
When trying to upgrade from an older version, the message "Cannot connect to the Internet." or "The server could not be connected to. Wait a while, and then try connecting again." appeared and the USB Card Writer Module could not be upgraded.	The computer with the USB Card Writer Module connected to its USB port could not establish a connection to the Internet.	To upgrade the USB Card Writer Module, the computer with the Card Writer Module connected to its USB port must connect to the Internet. If firewall software is being used, it must be temporarily disabled during the upgrade. If a connection to the Internet cannot be established, contact your authorized dealer.	
The USB Card Writer Module does not operate correctly.	Not enough power is being supplied.	Connect the USB Card Writer Module to a USB port on the computer or to a self-powered USB hub that can supply enough power to the Card Writer Module.	

Supplement

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