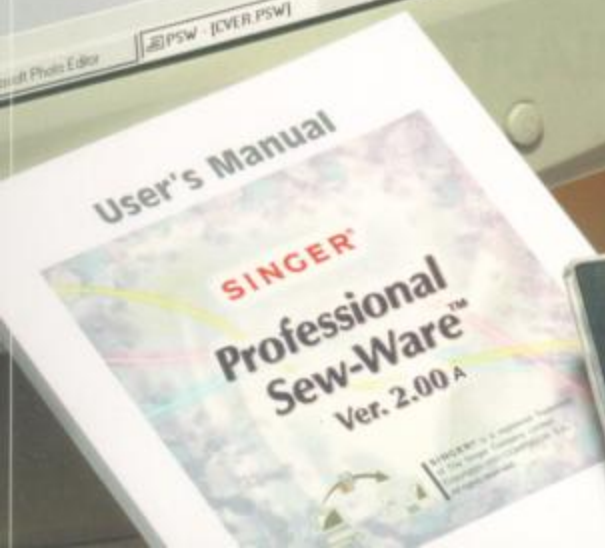
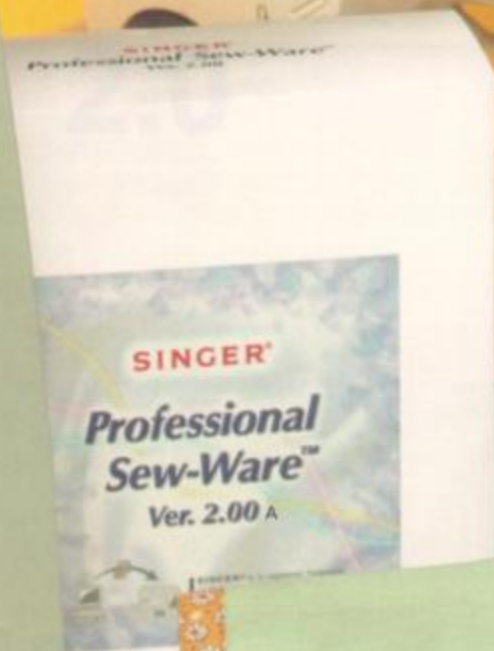


SINGER®

Professional Sew-Ware™

PSW 2.00_A

Workbook



SINGER[®]

PROFESSIONAL SEW-WARE[™] 2.00a

BASIC TRAINING GUIDEBOOK

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Part # 640—505255ODD

Revised 06-24-04

CONVERTER BOX

CONVERTER AS STAND-ALONE DEVICE

The Converter can be used as a stand-alone device (no connection to PC), with the ability to transfer data between cards. The Converter can copy from / to the following types of SINGER® cards:

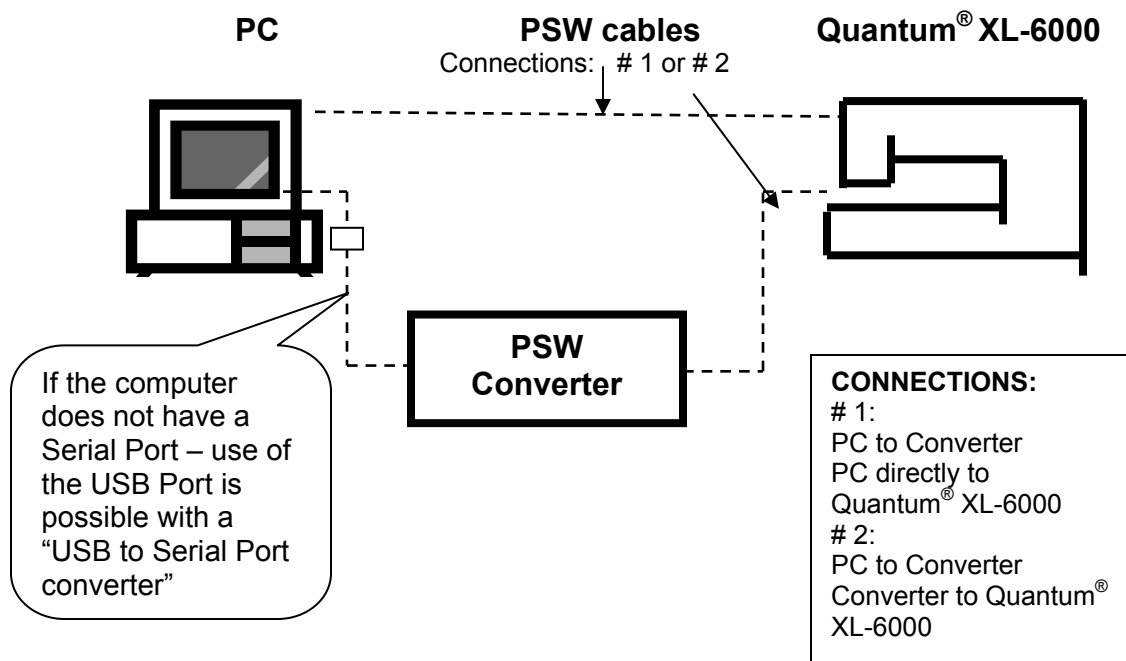
CARD NAME	ALSO KNOWN AS	QUANTUM® MACHINE	MEMORY
SmartMedia Card		XL-5000, XL-6000	8 to 128 MB
Flash Card	PSW Original Design Card	XL-150, 1000	512KB
RAM Card	Pictall / SJ-1 Scanner Card	XL-100, 150, 1000	512KB
ROM Card	Singer Embroidery Card	#1, 2 ----- 20 XL-100, 150, 1000 #I, II ----- X XL-150, 1000	512KB

LIGHT INDICATORS ON CONVERTER BOX

1. Power indicator - Converter is plugged in.
2. Transfer indicator - Converter is transferring data when flashing.
3. CANCEL - Press to terminate a procedure before removing card.
4. Press to copy data from SmartMedia Card to SJ-1 (Pictall Card).
5. Press to copy data from SmartMedia Card to Flash Card.
6. Press to copy data from SJ-1, Flash or Embroidery cards to SmartMedia Card.

PSW 2.00a SOFTWARE WITH CONVERTER

To operate the PSW 2.00a program the Converter must be connected to the PC.



COMPUTER REQUIREMENTS

Type of PC: IBM compatible
Operating System: Windows 95, 98, 2000, NT, ME or XP

TUTORIAL

There are interactive Tutorials to promote easier learning available in four languages: English, French, Spanish, and German.

1. From the Main Menu click on **Help: Tutorial**.
2. When the Tutorial screen appears, icons for *five general categories* will be listed on the left: Input & Output data, Drawing Tools, Punching (Digitizing) Tools, Editing Options, and General Functions.
3. Move mouse pointer over icons displayed on the left, to select a category.
4. Clicking on a category will then offer a choice of sub-categories.
5. Click a sub-category to access an interactive guide pertaining to that subject.

NOTE: To set the PSW 2.00a to read in another language:

- a. Close the Tutorial
- b. Go to Main Menu and select **Parameters: System Parameters**
- c. Click the down-arrow to select new language, then click OK
- d. The entire PSW 2.00a program will now display in the new language, including the Tutorial

OPENING A SEWING FIELD AREA

1. File: **New**.
2. **Open Image** dialog box: **New**.
3. **New** dialog box; click the down-arrow; Select appropriate hoop size for the machine being used; click **OK**.

NOTE: Before opening a sewing field area, the program can be set up to work in Metric units (cm/mm) or in English units (inches).

- From Main Menu, select **Parameters: System Parameters**.
- Click the down-arrow to the right of **Unit System**, to select either English or Metric units; click **OK**.

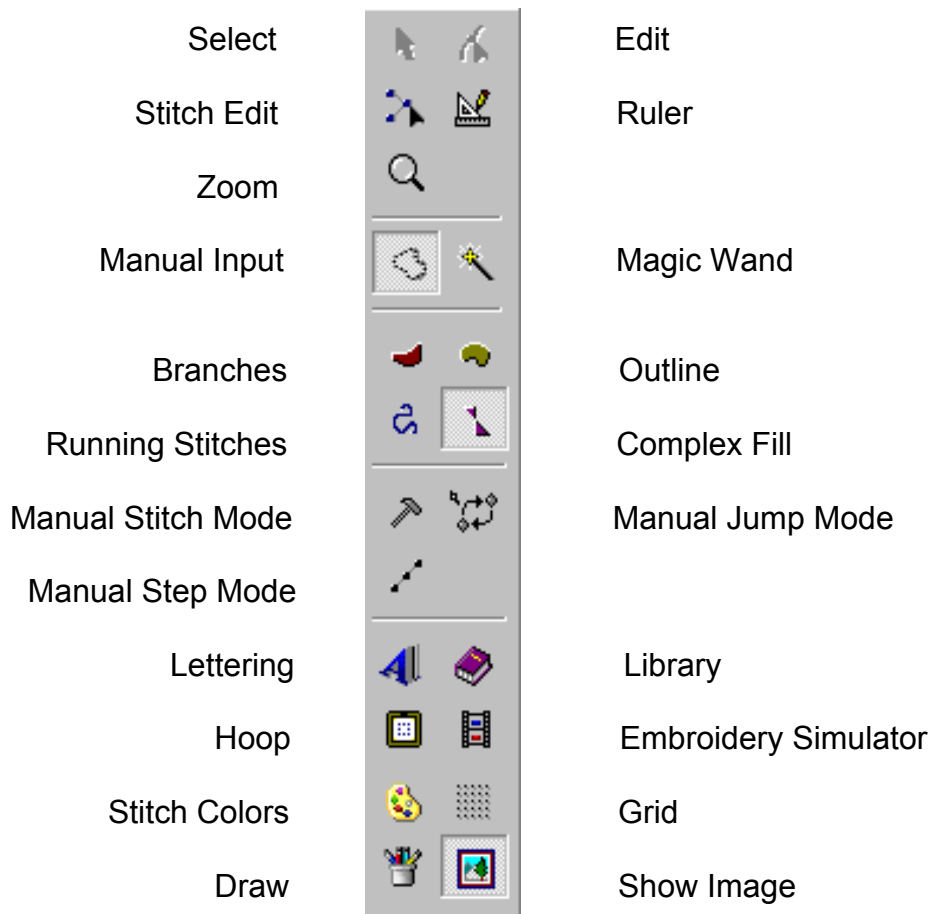
TOOLBARS & ICONS

HORIZONTAL TOOLBAR ICONS (from left to right)



1. Coordinates – displays current mouse position in relationship to the left top corner of the screen
2. New
3. Open
4. Save
5. Print
6. Copy
7. Paste
8. Undo – undo a step or function
9. Redo – redo a step or function
10. Next Color – to insert a color stop
11. Realistic View
12. Properties – for selecting stitch type and defining respective parameters
13. Stitch Type
14. Density/Size – displays density or stitch length value
15. Number of Stitches – displays current number of stitches in the active design

VERTICAL TOOLBAR ICONS



THE PSW 2.00a FILE FORMATS

READING DESIGN FORMATS (FILE: OPEN)

PSW 2.00a will open files that are in the most common commercial and home embroidery machine formats: PSW Design (**PSW**), Stitch Data (**XXX**), Tajima (**DST**), Zsk (**ZSK**), Melco (**EXP**), Pfaff (**PCS**), Husqvarna Viking (**HUS**), Janome (**SEW**), Brother/Bernina/Babylock (**PES**), and Brother/Bernina/Babylock (**PEC**).

1. File: **Open**.
2. In the **Open Design** dialog box, first select Drive then the folder where the design is stored.
3. Click the down-arrow to the right of **File-Type**, to access a list of file formats; Click on the desired file format.
4. Click on the design name, then click **OK**.
5. The **Open Image** dialog box appears; Click **Cancel**, and the selected design appears on screen.

IMPORTING IMAGE FILES (FILE: NEW)

To import a new image, go to the Main Menu and select File: **New**. Image files brought in are images (or artwork) only. There is no stitch data. The program also provides 2 drawing packages in order to create images.

1. File: **New**.
2. In the **Open Image** dialog box, first select Drive then the folder where image is stored.
3. Click the down-arrow to the right of **File-Type**, to access a list of image file formats; Click on the desired image file format or select All files (*.*) to access all the formats the program can read.
4. Click on the image name, and then click **OK**.
5. Image appears on screen, ready to digitize.

SAVING DESIGN FORMATS (FILE: SAVE AS)

PSW 2.00a can save in the most common home embroidery machine formats: PSW Design (**PSW**), Stitch Data (**XXX**), Pfaff (**PCS**), Husqvarna Viking (**HUS**), Janome (**SEW**), Brother/Bernina/Babylock (**PES**), and Brother/Bernina/Babylock (**PEC**).

PSW 2.00a has a choice of 2 native formats to save in: PSW Design (**PSW**) and Stitch Data (**XXX**).

Saving in PSW will save all of the stitch data information - the image information and the reference information (blocks of stitches).

Saving a design in the PSW format will enable resizing the design and automatically recalculating the stitch count (keeping the selected density in fact). Editing in the **.psw** format is easy and unlimited, editing either in blocks or in stitches.

Saving in **.xxx** format will save only the stitch data. When reloading, the design the program will ask "Convert stitches to block?"

Answer **NO** and the editing is limited to each stitch within the design. If the dimensions of the design are changed the density will change.

If the answer is **YES**, the program will convert the stitches to blocks. The design can then be resized and the stitches will be recalculated keeping the density. Stitch types and parameters can also be edited.

LIBRARY

The PSW 2.00a Library has the following features:

1. Provides a selection of **more than 500** ready-to-sew designs.
 - Click on the **Library** icon in Vertical toolbar.
 - Choose a category, then use the scroll-bar to view designs within that category.
2. Read designs from a CD and view in Library function.
 - Place a Library CD into the appropriate drive.
 - Click on the **Library** icon in Vertical toolbar.
 - Click **CD** icon, in the lower left area of **Library** dialog box.
 - Select a category, then scroll through to view designs within that category.
 - Click on desired design, then **OK**.

PREVIEWING DESIGNS

The **Realistic View** and the **Embroidery Simulator** are 2 functions available for viewing stitch data.

1. Realistic View allows 3D-simulation of the stitch data, while still retaining the image file on screen. It is also possible to edit designs while in the Realistic View mode.
Click the **Realistic View** icon, located in the Horizontal toolbar.
2. The Embroidery Simulator shows how the design on the screen will appear actually stitched out. It also shows how different light sources will change the appearance of the stitches, and how different weight of thread will affect the embroidery. The Simulator now also has the additional option to change the background fabric to any desired fabric that was previously scanned and saved on the computer.
Click the **Embroidery Simulator** icon, located in the Vertical toolbar. When the Embroidery Simulator screen appears, click the **Blue Arrow** icon to run the Simulator function and view the stitches.

LETTERING

PRE-DIGITIZED FONTS

There are 48 pre-digitized fonts, including some Running Stitch fonts.

1. File: **New**.
2. **Open Image** dialog box: **New**.
3. **New** dialog box: **OK**.
4. Click on the **Lettering** icon from the Vertical toolbar.
5. In the Textbox, type **SINGER**; click **OK**.
6. From the Horizontal toolbar, click down-arrow next to the **Font Name** list.
7. Move the scroll bar to view the font list.
8. Click on a font, and text is automatically changed.

NOTE: There are suggested sizes and density settings for each pre-digitized font, located in the 'font preview' box (just to the right of the pull-down font list).

TRUE-TYPE FONTS

True-type fonts can be selected and automatically digitized in the lettering program. The font is then automatically added to the built-in fonts list for future reference.

1. Click the down-arrow next to the **Font Name** list.
2. Click on **New TT Font** (at the top of the list).
3. When the **Font** dialog box appears, select a font.
4. Click **OK**, and a **Font Name** box appears.
5. Click **OK**; the word **SINGER** is created in the new font; in addition, the entire alphabet of the new font is built and automatically placed into the Font List for future use.

LETTERING FRAMES

There are **20 Lettering Frames** from which to choose, allowing more flexibility and efficiency when positioning lettering.

1. Click the **Letters Frame** icon from the Vertical toolbar.
2. There are 20 different frames to choose from; notice the **box frame** is the default setting.
3. There are various reference marks surrounding the frame of the word.
 - The marks located outside of the dotted-line frame control size and rotation of the text; in addition, the diamond-shaped mark can be used to “pull” words diagonally, keeping letters evenly spaced.
 - The marks on the dotted-frame control the shape of the frame.

INDIVIDUAL LETTER MANIPULATION

1. From the Vertical toolbar, click the **Point Mode** icon.
2. Click the diamond-shaped mark within a letter; this will put a frame around that letter, so that it can be adjusted individually for height, width, size and rotation.
3. Make the desired changes to the letter, and then click the left mouse to “set” the changes to the letter.
4. Click right mouse to access the pop-up menu; click on **Build Stitches**.

EDIT LETTERING

1. To edit after building stitches, click **Edit: Edit Outlines**.
2. The last letter digitized is highlighted.
3. Click right mouse to access pop-up menu, then left click **Edit Lettering**.
4. The text is now back in a frame and can be edited.

DIGITIZING

Digitizing is the process of applying stitch data to artwork. The digitizing methods in the PSW 2.00a are quick, easy and efficient.

The Left and Right mouse have different functions in the digitizing process. The Left mouse is mainly used for inputting reference points, direction lines, and first & last points. The Right mouse introduces **pop-up menus** that offer further choices for design adaptations.

CREATION METHODS

Creation methods are used to generate various stitch effects to artwork. There are 4 Basic Categories:

Branches (Reference Line Fill)

This method defines the length and inclination of stitches by drawing the reference lines at various lengths and inclinations.

Outline Fill

This method allows drawing around an area, for filling with stitches at varying angles of inclination.

Complex Fill

This method allows drawing around an area, for filling with stitches of varying pattern types or textures. It has the ability to create blocks with holes inside.

Running Stitches

This method allows inputting a sequence of points representing a line of stitches.

- Running stitches
- Column stitches
- Cross stitches

CREATING STITCHES – The Digitizing Process

Digitizing can be done using an **Autotracing** method (referred to as Magic Wand), or by inputting points **Manually**. To practice these 2 methods, a Teddy Bear design will be digitized. In this design, the fill-stitch areas will be digitized automatically with Autotracing, and then the design outline will be digitized manually.

AUTOTRACING (Automatic Digitizing)

1. File: **New**.
2. **Open Image** dialog box: Select **JPEG (JPG)** file type.
3. Select Image File called **TEDDY**; click **OK**.
4. Select **Complex Fill** stitch type from Vertical toolbar.
5. Enable the **Magic Wand** icon from the Vertical toolbar.
6. Place mouse pointer within the body area of the bear; click left mouse once to generate reference points outlining the fill area of the bear.
7. Click the right mouse to access pop-up menu.
8. Click the left mouse on **Build Stitches**.
9. Place the mouse pointer within the head area of bear; click left mouse once to generate reference points outlining the fill area of the head; Notice that the 'holes' for the eyes and nose areas were created automatically.
10. Click the right mouse to access pop-up menu.
11. Click the left mouse on **Build Stitches**.
12. Go to Horizontal toolbar and select **Next Color**, to add a color stop.
13. Place the mouse pointer on the bear's nose; click the left mouse once to outline the fill area of the nose.
14. Click the right mouse to access pop-up menu.
15. Click left mouse on **Build Stitches**.
16. Place mouse pointer on bear's left eye; click the left mouse to outline the fill area of the left eye.
17. Click the right mouse to access pop-up menu.
18. Click left mouse on **Build Stitches**.
19. Place the mouse pointer on bear's right eye; click the left mouse to outline the fill area of the right eye.

20. Click the right mouse to access pop-up menu.
21. Click left mouse on **Build Stitches**.
22. Go to Horizontal toolbar and select **Next Color**, to add a color stop.
23. Place mouse pointer inside the left inner ear of bear; click left mouse to outline the fill area of left inner ear.
24. Click right mouse to access pop-up menu.
25. Click left mouse on **Build Stitches**.
26. Place mouse pointer inside the right inner ear of bear; click left mouse to outline the fill area of right inner ear.
27. Click right mouse to access pop-up menu.
28. Click left mouse to **Build Stitches**.

EDITING THE STITCH BLOCKS

Autotrace works differently with various types of image files. Therefore, at times it may be necessary to adjust reference points once the autotrace procedure is complete.

1. Select **Edit: Edit Outlines** from the Main Menu.
2. Place the mouse pointer within the bear body area; click the left mouse once to bring back the fill area reference points.
3. From the Edit toolbar, click on **Edit Outlines** icon (the prompt line will read 'edit the outline').
4. From the Vertical toolbar, select **Zoom**; click and drag the mouse to draw a 'box' around the left arm of the bear, so that the reference points are seen more easily.
5. Begin moving the fill area reference points: click the left mouse onto a reference point, move the point, and click left again to set it into place; continue on through the design, moving points as required.
6. If extra reference points need to be added (for making more accurate outlining of the fill area), click the right mouse to access pop-up menu; click left mouse on **Insert Point**.

7. Click the left mouse where the new point is to be inserted; click right mouse to set the new point in place.
8. Click the left mouse on the new point to move to the new position.
9. Continue working through the design, moving reference points as desired to cover the image.
10. When finished moving points, click the right mouse to access pop-up menu; click left mouse on **Build Stitches**.

Continue the above procedure for all remaining stitch areas of the design (head, eyes, nose, inside ear areas).

EDITING DENSITY AND UNDERLAY

The pre-set density of the Complex Fill Step-Satin stitch is 5.0. Also, the stitch block areas are created without underlay. *Underlay stitching* is important in that it stabilizes the fabric and helps to 'lift' the design. The following procedure will demonstrate how to change design density and how to add underlay stitching.

1. To change stitch density, go to Main Menu and select **Edit: Edit Outlines**.
2. Click left mouse on stitch block to be edited.
3. Go to Horizontal toolbar and select the **Properties** icon.
4. From the **Parameters** list, click on **Density**.
5. Change density from 5.0 to 4.0.
6. Click on **Zig-Zag Underlay**, then click on **Enable Zig-Zag Underlay: Yes**; click **OK**.
7. Continue Steps 2-6 for the remaining stitch areas of the design.
8. Click **Cancel** (the red 'X') to exit the editing functions.

CHANGING STITCH TYPE – APPLIQUE

PSW 2.00a has a new **Appliqué** stitch.

- **Running stitches** are first placed around the outline edge.
- A second_block of **outline running stitches** (for securing appliqué fabric to background fabric).
- **Outline of running satin stitches** (for stitching around the trimmed edge of the appliqué).

Blocks in Complex Fill can be changed to Appliqué instantly! At times the appliqué method may be a better stitch choice for a given design because it reduces the overall design density (depending on fabric) and greatly reduces stitching time. Design segments and/or entire designs can be appliquéd, creating interest and artistic effects.

1. From the Main Menu, select **Edit: Edit Outlines**.
2. Click the left mouse on the stitch block to be changed.
3. Click on **Properties** icon from Horizontal toolbar.
4. Click on **Stitch Type**, then click on **Appliqué**.
5. Click **OK**, and the stitch block automatically becomes an appliqué.

CHANGING STITCH TYPE – TEXTURED FILL STITCHES

The PSW 2.00a offers a wide variety of stitch types for filling stitch block areas. Add dimension and interest to designs using textured fill stitches!

1. From the Main Menu, click on **Edit: Edit Outlines**.
2. Click left mouse on the stitch block to be edited.
3. Go to Horizontal toolbar and select the **Properties** icon.
4. Click on **Stitch Type**, then click on **Pattern Step**.
5. Click on **Catalog**, to view the **120 different Pattern Step types**; click the left mouse on #38, then click **OK**; the new texture automatically replaces the Step-Satin fill. The change can be seen in Realistic view.

6. If desired, the **Angle of Inclination** can be altered to change the look of the Pattern Step stitches. Pattern Step stitches look best with a horizontal angle of inclination. This is done as follows:
 - Select **Edit: Edit outlines**.
 - Click on the block to be edited.
 - Click on the **Edit Outlines** icon.
 - Click on **Change Edit Mode** icon, and the *Prompt Line* will read 'Edit the Inclination'.
 - Click on either end of the **Inclination Angle Line** - it will become an elastic line, which can be moved to a new angle. Drag the line into a horizontal position, then click the left mouse again to 'set' it in place.
 - Click the right mouse to access pop-up menu, then left mouse on **Build Stitches**.

*NOTE: There are also 31 **Special Stitch Motifs** that can be used in place of the Pattern Step fills. These will give a more open-looking stitch type.*

MANUAL DIGITIZING

(Manual Input of Reference Points)

The Teddy Bear design is now ready for the outline to be digitized. The design outline can be created to look like a *straight stitch* (Running Stitches) or a *satın stitch* (Column Stitches). Outlines can also be edited if desired.

1. From the Vertical toolbar, select the **Running Stitches** icon.
2. Click the **Manual Input** icon (just left of Magic Wand in Vertical toolbar).
3. From Horizontal toolbar, click pull-down arrow (right of 'normal run stitch').
4. Click on **Column Stitches**, then click **OK**.
5. Click on **Zoom** in the Vertical toolbar, then zoom in on the design to allow more accurate inputting of points.
6. Place the mouse pointer on the design outline; the first click will activate the digitizing process.

*NOTE: To make it even easier to follow around the fill stitch area, click the **Show Image** icon (bottom of Vertical toolbar) to view just the stitch data. Proceed to digitize design outline. When digitizing is complete, click **Show Image** again to replace background image.*

7. Continue following around the design, clicking reference points along the already-digitized fill area of the design.

*NOTE: Short left clicks produce curves.
Long left clicks produce corners.*

8. When the outline is complete, click the right mouse to access the pop-up menu, then click **Finish**.
9. Digitize the **Column Stitch** outline for the bear head.
10. The bear's eyes, nose, and inner ears will be outlined with a Step 3 Running stitch. Click on the down-arrow to the right of 'column stitches' and select **Step 3**; click **OK**.
11. Begin clicking reference points around the bear's nose; click the right mouse to access the pop-up menu, then click **Finish**.
12. Continue (as in Step 11) creating outlines around the eyes and inner ear areas.

WRITING DESIGN TO SMART MEDIA CARD

The design is finished. Send it to the SmartMedia Card in the Converter Box.

1. Place SmartMedia card into the right slot of the Converter Box with the notched corner to the right (brass rectangle facing up).
2. From the Main Menu, click on **File: Write to Converter**.
3. In the **Save Design** dialog box, click on the **Smart Media card** icon.
4. Click on **Initialize** (Format successful; OK).
It is recommended to initialize the SmartMedia Card the first time using it.

NOTE: Initializing the card will remove everything on the card.

5. Click on **Save in New Page**.
6. When the data of the design has all been transferred to the Smart Media Card, the message; **Design successfully written** appears; click **OK**.

Attention should be given not to interrupt any copy/read/write procedure of the PSW Converter. Green light flashing shows data is still being transferred. Taking the card out before it has finished the procedure could lead to malfunction of the card. Use the CANCEL button on the Converter to stop the data transfer and then remove the card.

READING DESIGN FROM SMARTMEDIA CARD

1. From the Main Menu, click **File: Read from Converter**.
2. Double click on the **SmartMedia card** icon, and a list of **Pages** appears.
3. Double click on a **Page**; a list of **Tags** appears (there are 5 Tags in a Page).
4. The **Tags** will each display up to 8 designs; double-click on the design.
5. Design is now open and ready for editing.

COLOR REDUCTION

Due to the amazing number of colors that are scanned into a bitmap image the Autotrace function may not be able to read all the colors and fill the area with stitches. Use **Color Reduction** (found under **Utilities**) to define all the colors in the image and select the ones to remove from the image. This makes the image become “simpler” and makes it possible to use Autotrace.

To practice using the Color Reduction feature, an image file of a *dolphin* will be imported and then digitized using Autotrace.

1. File: **New**.
2. **Open Image** Dialog Box: Select **JPEG** file-type.
3. Click on **Dolphin**; click **OK**.
4. From the Main Menu, click on **Utilities: Color Reduction**.
5. Click on **Suggest** to display the respective colors of the image – outline color (black) selected.
6. Click on **Remove** to eliminate the Dolphin outline color; Click **OK** – Image no longer has the black outline.
7. From Vertical toolbar, select **Complex Fill**. From Horizontal toolbar click the drop down arrow; select **Step Satin**; Click **OK**.
8. Click on **Magic Wand** icon (Autotrace).
9. Digitize the Dolphin body; click on **Next Color** to insert a color stop.
10. Digitize the Dolphin nose; click on **Next Color** to insert a color stop.
11. Digitize the Dolphin belly; click on **Next Color** to insert a color stop.

NOTE: Pull Compensation

Once Autotrace is complete, it is possible there may be “gaps” between the fill stitch areas. The “push-pull” of stitches can effect how a design sews.

*There are two types of Pull Compensation - **Stretch and Outline Shift**. **Stretch** will “pull” a design in the direction of the angle of inclination in a stitch block.*

***Outline Shift** will increase or decrease the size of the block an equal amount throughout. Use the Outline Shift to adjust the Dolphin nose and belly.*

- From Main Menu, click on **Edit: Edit Outline**.
 - Click on the Dolphin nose.
 - Click the right mouse to access pop-up menu; click on **Properties**.
 - Click on **Pull Compensation**.
 - Change **Outline Shift** to 6; click **OK** and the block is compensated.
 - Click on Dolphin belly.
 - Click the right mouse to access pop-up menu; click on **Properties**.
 - Click on **Pull Compensation**.
 - Change **Outline Shift** to 6; click **OK** and the block is compensated.
 - Click on **Cancel** (the red 'X') to exit the edit function.
12. From the Main Menu, Click on **Utilities: Undo Color Reduction**, and the “reduced” color (black) from the Dolphin image file resurface.
13. From the Vertical tool bar, click on **Manual Input** icon.
14. Digitize the eye of the Dolphin as follows:
- Using the left mouse, click reference points around the eye area.
 - When finished inputting points, click right to access pop-up menu.
 - Click left mouse on Finish Outline.
 - Prompt-line reads *“Input direction”*; click left mouse anywhere on screen, to anchor a point. As mouse pointer is moved, an elastic line is pulled from the anchor point. This is the angle of inclination. Choose an angle, then click left to secure the angle line in place.
 - Prompt-line reads *“Input the entry point”*; click the left mouse where stitching is to begin for this block of stitches.
 - Prompt-line reads *“Input the exit point”*; click the left mouse where stitching is to finish for this block of stitches.
 - Stitches for the eye area of the dolphin are complete.

15. From the Vertical tool bar, select **Running Stitches** icon.
16. From the Horizontal tool bar, click the drop-down menu; select **Column Stitches**; Click OK.
17. From the Horizontal tool bar, click on **Realistic View** to view stitch data along with the image file.
18. Manually click the reference points to create the outline of the Dolphin.
19. When finished inputting points, click right mouse to access pop-up menu.
20. Click left mouse on **Finish** to generate outline stitches.

PARAMETERS ASSISTANT

Various combinations of threads and fabrics can affect embroidery designs. It may be necessary to adjust a design for the fabric and thread combination of a given project. The PSW 2.00a program offers an effective tool to aid in selecting the proper parameters.

1. From the Main Menu, click on **Parameters: Block Properties**.
2. In the **Block Properties** box, click on **Assistant**.
3. In the **Parameters Assistant box**, click to select the thread weight which will be used in the embroidery.
4. Now move the scroll bar on the right, to select the type of fabric on which embroidery will be done.
5. Click **OK** to confirm; adjustments will automatically be done to the stitch data of the design (recommended defaults have been tested).

SENDING A DESIGN TO THE QUANTUM[®] XL - 6000 SEWING MACHINE

Directly from PC to Quantum[®] XL-6000 - 2 ways to connect:

In order to send a design directly from the computer to the sewing machine, it is necessary to set the Baudrate (Bits Per Second) of the sewing machine to match that of the computer. The Baudrate value defines the speed at which the computer transmits data, and the speed at which the machine will accept data. (Refer to page 113 in the Sewing Machine Manual.)




→ Connect the PC to the Quantum[®] XL-6000 via the PSW 2.00a Converter.

1. Connect the PC to the Converter Box with serial cable provided with PSW 2.00a.
Use the PC serial port and port marked with a computer icon on the Converter Box.
2. Connect the Converter Box to the Quantum[®] XL-6000 with second serial cable provided with PSW 2.00a.
Use the second port on the Converter Box marked with a sewing machine icon and the port on the right hand side of the Quantum[®] XL-6000.

→ Connect the PC to the Quantum[®] XL-6000 directly.

1. Connect the PC to the converter Box with the serial cable provided with the PSW 2.00a.
The Converter must be connected to the PC to operate the PSW 2.00a.
2. Connect the PC (using second serial port) to the Quantum[®] XL-6000 using the port on the right hand side of the Quantum[®] XL-6000.

Setup of the Quantum[®] XL-6000 Embroidery Machine

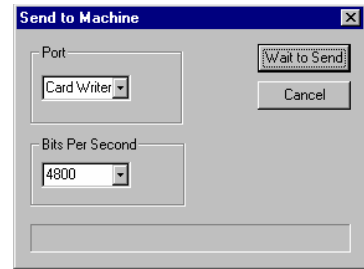
1. Touch the  key.
2. Touch the  pictogram to change the settings on the machine.
3. Turn back one page .
4. Set the "Baudrate" to 38400. Touch **OK** – Returns to the <help> screen.
5. Setup of the Quantum[®] XL-6000 is done.

Setup of the computer in PSW 2.00a program



6. Open a design from the Library in the PSW as a “test” design.
7. Click on **File**. Select the option **Transmit to machine**.
8. Dialog box **Send to Machine**:
 - Select **Port**.
 - Setup 1) **Card Writer** (connected via the converter).
 - Setup 2) **COM Port #** used on the PC (connected directly to PC).
 - Select the **Bits per second** value for the PC of 38400.

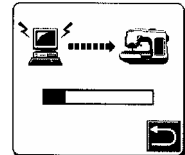
To transfer data from PC to Quantum® XL-6000 the same transfer rate must be selected.

9. Click on **Wait to Send**.
10. Setup of the computer is done.



Transfer data from PC to Quantum® XL-6000

11. On **help screen** in Quantum® XL-6000 touch  pictogram (upper left hand corner).
12. Computer to sewing machine. Data being transferred from one to the other.
13. Touch  to get out of help screen.
14. Design transferred will appear on the LCD screen of the Quantum® XL-6000, ready to be used like any built-in designs.



NOTE:

- *Setup of Quantum® XL-6000 and computer only has to be done once.*
- *If the design does not transfer at the “rate” selected.*
- *Change selection in the Quantum® XL-6000 and the computer to a different number.*

MULTIPLE-HOOP EMBROIDERY

PSW 2.00a software provides you with the advantage of digitizing and writing a Multiple-hoop design for the Quantum® XL-1000, Quantum® XL-5000 and Quantum® XL-6000 Sewing Machines. Depending on which Multiple-hoop setting is selected on the computer screen, PSW 2.00a will allow you to write a design to the respective card as a Multiple-hoop design.

*NOTE: The hoop size and sewing field size for the Quantum® XL-5000 and Quantum® XL-6000 are identical, therefore you may use the **Singer XL-5000 Multiple 250x450** hoop selections for both machines.*

1. File: **New**.
2. **Open Image** dialog box: **New**.
3. **New** dialog box: Click the down-arrow. Select **Singer XL-5000 Multiple 250x450**; click **OK**.
4. From the Main Menu, click on **Utilities: Hoop**.
5. From the **Hoop Frame box**, select **Singer XL-5000 Multiple 250x450**; Click **OK**.

NOTE:

*The **Read/Create Hoop Frames** dialog box allows you to select a hoop from the program's predefined hoop frames or enables you to create a new one. You can create a custom hoop that is not among the predefined hoops in the program. If you click on "New HOOP", it will prompt you for the specific attributes of the custom hoop. However, the Multiple-hoop function is only available for the Quantum® XL-1000, Quantum® XL-5000, and Quantum® XL-6000.*

Remember: Whichever hoop you choose (Quantum® XL-1000 or Quantum® XL-5000) will also determine which machine this multiple-hoop design is being constructed for, as the software will allow you to save only to the card specified for the selected machine.

6. From the Horizontal tool bar, click on **Choices: Grid**; Choice of 2 kinds of grid points; Set the **Point Distance** for the X and Y at 400(mm); Click **OK**. The Grid will aid in the placement of the design elements being arranged on the screen.
7. From the Vertical tool bar, choose the **Lettering** icon.
8. In the **Text Box**, type WELCOME.

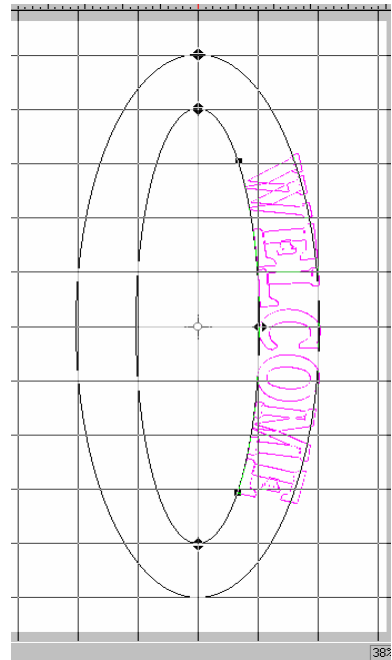
9. Click OK. The word “WELCOME” now appears on the screen with a box around it.
10. Resize the word “WELCOME” by typing in the number 400(mm) in the **Height** box, found in the Horizontal tool bar; Click **Enter**.
11. Choose the font style by clicking on the down-arrow beside the **Font Names**, found in the Horizontal tool bar; select “**Cheltenham Large**”.
12. Click on the **Letter Frame** icon, found on the Vertical tool bar. Select the third letter frame in the second row.
13. From the Horizontal tool bar, click on the down-arrow to change the Stitch Type. In the **Block Properties**, change the Satin to Step Satin; click **OK**.
14. Click the ‘inside’ top center reference point to enlarge the circle.

NOTE: To move the entire circle, click and drag. To change letter size, click the ‘outside’ center reference point.

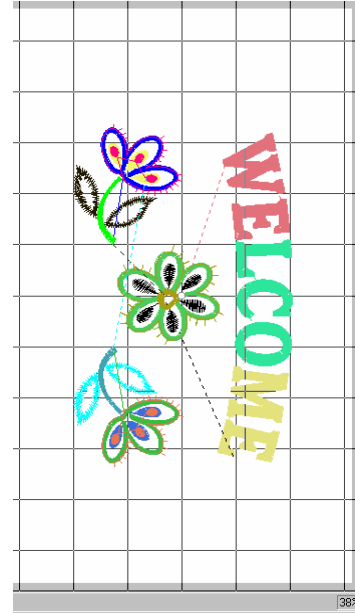
15. Click the ‘inside’ right and bottom center reference points to change the circle frame into an ellipse.
16. To change the position of “WELCOME”, click and drag the reference point at the end of the word and move it to the bottom of the inside circle. Click and drag the reference point at the beginning of the word to the top of the circle.

NOTE: Where you place your reference points will determine the length of your word inside the circle.

17. For ease in splitting the word for Multiple-hoop, color stops can be added by clicking the left mouse once on **Machine Code** icon, from the Vertical tool bar.
18. When **Machine Code** dialog box appears. Click the mouse between the letters **E & L**. Click the **Stop** icon. Click the mouse between the letters **O and M**. Click the **Stop** icon. Click **OK**.



19. When the word has been sized and rotated as desired, click the right mouse; click left mouse on **Build Stitches**; click Yes.
20. From the Horizontal tool bar, click **Next Color** icon to insert a color stop.
21. From the Vertical tool bar, select the **Library** icon.
22. Select the **Flowers** Category; double-click on #007. Click and drag bottom right square or top left square to enlarge the flower.
23. Click and drag flower to the center of the hoop and left of the WELCOME.
24. Right click to access pop-up menu, then left click on **Finish**.
25. From Horizontal tool bar, click the **Next Color** icon to insert a color stop.
26. From Vertical tool bar, select the **Library** icon. Select **Flowers** category. Double click on #008. Click and drag to position above the first flower; right click to access pop-up menu, then left click on **Finish**.
27. From the Horizontal tool bar, click **Next Color** icon to insert a color stop.
28. From the Vertical tool bar, select the **Library** icon. Select **Flowers** category. Double-click on #008. Right click to access pop-up menu, then left click on **Flip Vertically**. Click and drag into position below the center flower. Right click to access pop-up menu, then left click on **Finish**.
29. From the Horizontal tool bar, click **Next Color** icon to insert a color stop.
30. From the Horizontal tool bar, click on **Choices: Grid**. Grid disappears.



NOTE: Save design to Floppy, CD or Folder in computer for future use.

WRITE USING MULTIPLE HOOP

1. When finished entering the design in Multiple Hoop, go to the Main Menu and select **File: Write using Multiple Hoop**. Now select the parts of

which your multiple-hoop design will consist. This function allows you to draw an outline around the areas selected.

2. Notice in the lower left corner - it reads: **Input the points**. The design is now ready to be broken down into segments to send to the card.
3. Click the left mouse to 'block out' a section of the design. To begin, click around the **WE**.
4. After surrounding the section, click the right mouse.
5. A color box will appear at the top of the screen.
6. Click the left mouse on each color you want to transfer. In this case it would be the color **WE**. When selected the color change to black.
7. Move cursor down in hoop area. Click the right mouse to activate the storing function. Message reads:

PSW

The current selected part of design has been stored. Select next multi-hoop part or write multi-hoop data to card.

8. Selected parts that became black now turn gray.
9. Repeat steps #32-#38 for all the design sections of the multiple-hoop layout. The complete multi-hoop layout has become gray (stored to transfer to card).
10. From the Horizontal tool bar, click the SmartMedia card icon, **Write multiple-hoop data to card**.
11. **Save Multiple Hoop on SmartMedia (XL-6000)** box appears. Click on the **SmartMedia Card** icon.
12. Click on the box to the right **Save in New Page or Tag**. It will now save the multiple-hoop layout in its entirety to the SmartMedia card - broken down to a maximum of 8 designs.
13. Message appears: **Designs were successfully written; OK**.
14. Remove the SmartMedia card from Converter box and place in the Smart Media slot on the Quantum[®] XL-6000. Select Multiple Hoop and enter all the saved parts and they will enter in relation ship to each other as they were on the computer layout. Stitch out the design, using the Multiple-hoop function of the sewing machine.

CONTINUOUS HOOP EMBROIDERY

The PSW 2.00a software provides the capability of digitizing and writing designs especially for use with the Continuous Hoop Attachment. The design can be sent to the machine directly or onto a SmartMedia Card that is then taken to the machine.

*NOTE: The same Continuous Hoop Attachment is used on both the Quantum[®] XL-5000 and the Quantum[®] XL-6000, therefore use the same **Singer XL-5000 Continuous 50x120** selection for either machine.*

1. Click on **File: New>New**.
2. Select the Continuous Hoop from the drop down menu in the **New** dialog box. Click **OK**.
3. Click on **Library** icon; **Flowers** category; **Design 003**; click **OK**.
4. Click top right corner of rectangle which frames the design. Drag and rotate design 90 degrees.
5. Click right mouse button for pop-up menu; Click on **Finish**.
6. From Main Menu, left click on **Modify>Center Design**.
7. From Vertical toolbar; click on the **Hoop** icon.
8. Click on the **Singer XL-5000 Continuous 50x 120**: Click **OK**.
9. From Main Menu, select **File: Write using Continuous Embroidery**.

NOTE: The option Write using Continuous Embroidery will not be activated unless Continuous Hoop has been placed on the design.

10. **Save Continuous Embroidery** box appears.
11. Click **SmartMedia Card** – Save in New Page or Tag.

NOTE: Saving designs to the SmartMedia Card for the Continuous Hoop will create pages numbered separately from other pages and identified as belonging to the Continuous Hoop. Other files on the Card will not appear, but they are still there. (When going to “Read from Converter”, all pages will appear).

12. Transfer of data is completed; **Design Successfully Written; OK**.
13. Place SmartMedia Card in Quantum[®] XL-6000. Attach Continuous Hoop.
14. Touch **Continuous Hoop** icon (bottom right hand corner). Touch **SmartMedia Card** icon; touch design and enter.

NOTE: The “V”-shaped placement marker (that is used for placing the next design in the border) is automatically added by the program.

EDITING BASICS

1. File: **New**.
2. **Open Image** dialog box: **New**.
3. **New** dialog box: Click **OK**.

MOVE A DESIGN

1. From the Vertical tool bar, click on the **Library** icon.
2. From the **Animals** Category, click on #001 Lion, Click OK.
3. Click the right mouse to access the pop-up menu.
4. Click **Finish** to fill with stitches.
5. To move the design, go to Main Menu and choose **Edit: Select**.
6. From the Horizontal tool bar, click on **Select All**. Design is ready to move.
7. Click and drag the design into the new position.
8. Click the right mouse to access the pop-up menu. Click **Finish** to set the stitches.

MODIFY A DESIGN

1. From the Main Menu, select **Modify: Dimensions**.
2. The **Dimension** text box appears.
3. The design is shown as a “white silhouette”.
4. **X: and Y:** represent the height and width in 1/10 mm and can be changed by pressing the arrows or typing the number in the box.

NOTE: If desired, metric units can be changed to work in inches. Click the units icon to access inches. Click on inches and the X: and Y: numbers will change from metric to inches automatically.

5. The **Lock** icon maintains the ratio of the design. Clicking the **Lock** icon allows working with X: and Y: independently.

6. Click the **% box** to change dimensions as a percentage value. A check mark will appear in the box.
 - 100% is the default setting
 - 150% will increase size by 50%
 - 80% will decrease size by 20%
7. Click the **Mirror** Icon to flip the design horizontally.
8. Click the **Invert** Icon to flip the design vertically.
9. **Rotate** in increments of 1 degree; type the **Rotation Angle**, then click the direction of rotation.
10. The **Offset X and Y** cannot be accessed.
11. Click **OK**.

ADDING A COLOR STOP



1. File: **New**.
2. **Open Image** dialog box: **New**.
3. **New** dialog box: **OK**.
4. From the Vertical tool bar, select the **Library** icon.
5. Select the **Flowers** Category; double-click on #041. Right click to access pop-up menu, then left click on **Finish**.
6. From the Main Menu, click **Edit: Edit Outlines**. Lower left corner: (Eod = end of design).
7. Place the mouse pointer within the top petal; click the left mouse once to show the outline of the selected petal block. Lower left corner give detail about the block: Branches, Satin.
8. From the Horizontal tool bar, click on **Next Color** icon (Stop sign), and a color stop is automatically inserted at the beginning of selected Block.
9. From the Horizontal tool bar. Click **CANCEL**.

DELETING A STOP

1. To delete the added color stop.
2. From Main Menu click **Edit: Stitch edit** (Lower left corner s=1 flashing).
3. From Horizontal tool bar; click on **Move to function** and select **STOP; OK**.
4. Click on **Go to next function** twice to get to added color stop. (Lower left prompt line: f: stop, s = 1537).
5. Right click to access pop-up menu; click on **Properties**.
6. Change the **Stitch code** from **Stop** to **Hit**. Color stop is removed.

DELETING A SEGMENT

1. To delete a segment of the flower.
2. From the Main Menu, click **Edit: Edit Outlines**. Lower left corner: (Eod = end of design).
3. Place the mouse pointer within the top petal; click the left mouse once to show the outline of the selected petal block. Lower left corner give detail about the block: Branches, Satin.
4. Click right mouse to access pop-up menu, then click left mouse on **Delete Block**. Block is deleted.

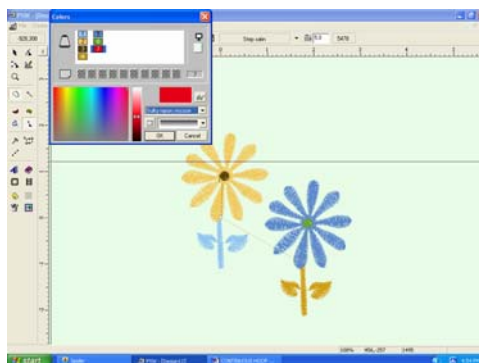
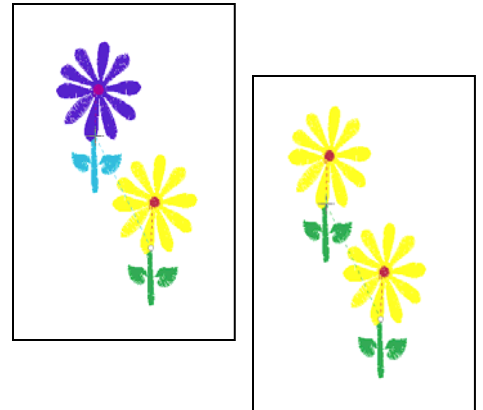
COPYING A SEGMENT

1. From the Main Menu, click on **Edit: Edit Outlines**.
2. Click on the block to be copied; reference points appear around the block.
3. Click the right mouse to access pop-up menu, click left mouse on **Select**. Highlighted block now appears in black with a box frame around it.
4. Click right mouse to access pop-up menu, left click on **Copy**.
5. From the Horizontal tool bar, click **Cancel** twice to exit function.
6. Click on **Paste**. Move copied block to desired position. **Finish**.

AUTO SORT COLORS

The **Auto Sort Colors** feature has been added to the PSW 2.00a program. The 'same' colors are placed into one color group, reducing the overall number of color changes for the entire design. (*NOTE: This function only works with either designs created in the software or designs that have had "stitches converted to block".*)

1. Click on **File: New > New > OK**.
2. From Vertical toolbar, click on the **Library** icon.
3. Select **Flowers** Category; double-click design #041.
4. Right click to access pop-up menu, and then left click on **Finish**.
5. From Horizontal toolbar, click **Next Color** icon to insert a color stop.
6. From Horizontal toolbar, click **Copy** then click **Paste**.
7. Click and drag second flower, above the first flower.
8. Right click to access pop-up menu, and then left click on **Finish**.
9. There are two flowers – each with 3 colors.
10. From the Vertical toolbar; click on the **Stitch Colors** icon; six color boxes appear in the color palette.
11. In the Colors box, left click on the down arrow below the "glasses". Select Sulky Rayon. Left click on the first color in the box, and then left click on the down arrow in the box below the color to have the software select the closest Sulky number. (Select the Sulky number for each color.)



12. Select color 4. Place the “dropper” on the green leaf of the first flower. Select the same color as that for color 1. Then left click on the color number. Make sure that it shows the same color number as color 1.
13. Select color 5. Place the “dropper” on the yellow (petals) of the first flower. Select the same color as color 2. Left click on the color number, making sure that they are the same.
14. Select color 6. Place the “dropper” on the brown (center) of the first flower. Select the same color as color 3. Left click on the color number, making sure it is the same color number as color 3. (To view the change on screen, left click on the “eyeglasses” icon.)
15. Click **OK** to set the selections.
16. From the Main Menu, click **EDIT: Auto sort Colors**.