UltraPunch

Users Manual

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About this manual

Welcome to using UltraPunch, the powerful revolutionary software application for digitizing and working with designs fleetly for the embroidery industry. The UltraPunch software application is a Windows95,98,2000 and Windows NT-based product and integrates many functions into one easy-to-use product.

New users using this manual

If you are new to UltraPunch, you'll be pleased with its flexible powerful processing capabilities. The ease at which you can create and edit design, and how simple it is to create and edit your own lettering. Obviously you are anxious to get started using UltraPunch as quickly as possible now. But before you using UltraPunch, be sure to read the Introduction to UltraPunch starting on chapter 1. This chapter introduces an overview of the basic concepts, which can make you clearer with UltraPunch.
Otherwise, we also recommend that you familiarize yourself with the chapter called UltraPunch Installation Instruction and Managing designs with UltraPunch application. Here you will learn how to install and start the application, create, load and save a design, print design, and how to import and export a design,

Guidance
We will try our best to guide you through using UltraPunch and how to get the best effect of the design as easy as possible. While all of the UltraPunch's features are introduced in an easy-to-follow, step-by-step style throughout our manual and it will provide you with an enjoyable way to produce a design while you become familiar with UltraPunch. You can gain several especial examples explanation with the Appendix C called Examples explanation. Otherwise, you can gain a quick overview of UltraPunch's functions with the Appendix A called Quick Reference Guide and Menu Chart.

Old users using this manual

UltraPunch Level III is a greatly-enhanced version of our earlier products. It has many new powerful and expanded features, which make embroidering even easier and more efficient. This manual will show you where these features are.

Using the relative documentation

UltraPunch provides you with a number of ways to gain information about the application and how to use it as quickly as possible.

User's Manual

The User's Manual is produced in a printed form and an abbreviated version can also be gained from the Help menu in UltraPunch application. The printed manual is complete with hundreds of step-by-step instruction as well as illustrations and screen capturing to guide you most productively through the application.

As a convenience to UltraPunch users, information on all UltraPunch products is contained in this manual. So you can pick an UltraPunch product to fit your needs. To help you identify the information that is specific to your UltraPunch level, the major headings in subsequent chapters have labels telling you to which product the topic or chapter applies.

For Example, if a heading is written

"Resizing design or object (I, II, III)"

This means that the chapter information applies to level I, level II and level III if you have purchased that produce. Similarly, the label "Changing working mode (II, III)" indicates that the chapter information applies to level II and level III but not to level I.

On-line Help

The On-line Help is gained from the Help menu in UltraPunch. The On-line Help is a version of the User's Manual and contains the same text and instructions that are in printed manual, but for the sake of brevity, illustrations and screen capturing have been omitted.

Topic One
Basic Concepts

About this Topic

Chapter 1. Introduction to UltraPunch

Overview of UltraPunch

The key concepts of UltraPunch

The new features of UltraPunch

Chapter 2. UltraPunch Installation Instruction

Minimum system requirement

Security Device

Installing the UltraPunch Software

Creating a shortcut

Starting UltraPunch

Exiting UltraPunch

Chapter 1.

Introduction to UltraPunch

UltraPunch gives embroiderers the fastest, easiest, most flexible and powerful way of creating, editing and processing embroidery designs.

Some key concepts underlay the new features and capabilities of UltraPunch. It is important that you understand these concepts in order to maximize benefit from the system, and to minimize the learning curve.

Overview of UltraPunch

UltraPunch is a Windows95,98,2000 and a Windows NT application, which allows the users to create, edit and process embroidery designs, which then can be punched on several kinds of embroidery machines.

UltraPunch application

UltraPunch application allows the users to process new designs and modify existing ones. Once a design is open, you can save it as UltraPunch design or others design format. You can also load existing UltraPunch designs from disk or import others design format from disk.

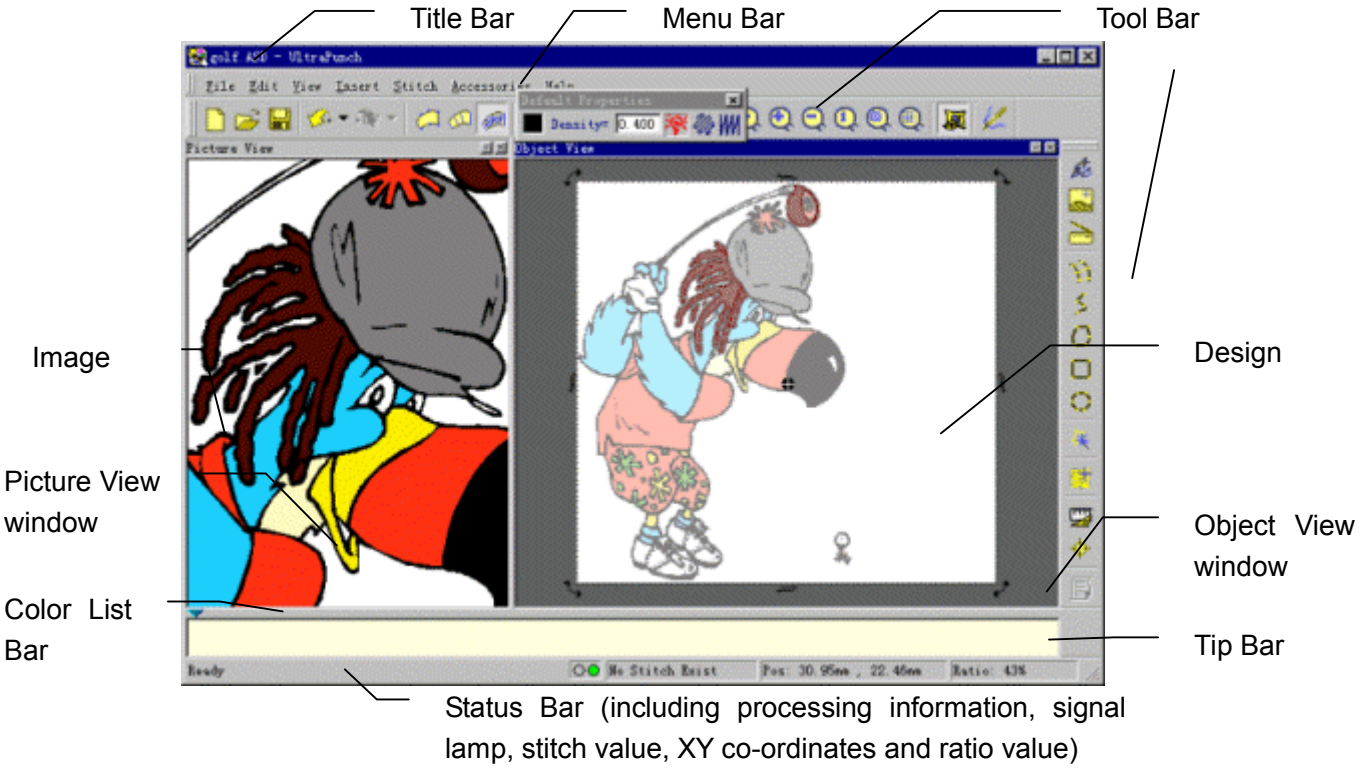
- UltraPunch software will attempt to exactly duplicate the original design when you generate the stitches. After this, you may add or delete sections, change the colors, and make many other changes to the outlines and stitch values
- The amount of work you need to do to create a high quality embroidery design depends greatly on the quality of the original image. Initial results from a clean, medium sized, "camera-ready" image scan will always be better than the results from the same logo scanned in a tiny size off of a business card.

- UltraPunch software will produce embroidery from the design using a set of default stitch values. Although these will generally produce fine quality embroidery, there are many circumstances in which the default values should be changed. As you use the software, you will learn with experience when you should make changes to stitch density and other values.
- When you generate stitches from a design, UltraPunch creates outlines from the design which become the basis for the stitches. These outlines ate temporary, they are not remembered after a design is closed.

Your most powerful editing tools are available only when the design is open in the UltraPunch after being generated. If you are unsure about the appearance of some of the outlines or stitch values, it is best to do a test sew-out while the design is still open on the screen, so you are best able to make changes.

Screen Overview

The various components of the UltraPunch screen follow Windows naming conventions. However, if you are not familiar with the names for various parts of the screen, please refer to the illustration below.



Tool Tips

UltraPunch provides you with "tool tips" for the various icons in the Toolbars. If you are unsure about the command activated by a particular icon, just place the mouse pointer over the icon and wait a few seconds for the "tool tip" to appear.

The key concepts of UltraPunch

The new features of UltraPunch

Chapter 2.

UltraPunch
Installation Instruction

You can install UltraPunch on Pentium computer, which satisfies the requirements of Windows95,98,2000 or Windows NT operating system. UltraPunch requires standard serial and parallel ports, depending on the number of peripheral devices you are using.
The UltraPunch software requires the Windows 98 or Windows NT operating system to run.

Minimum system requirement

You can install UltraPunch on any Pentium computer, which satisfies the requirements of the Windows95,98,2000 or Windows NT operating system.

UltraPunch uses standard serial and parallel ports, the exact number will vary depending on how many peripheral devices (scanner, printer, etc.) you need to connect.

- Pentium II/III processor
- Minimum 64MB RAM - more RAM is always preferred, the software will run smoother and faster.
- Two printer ports (if scanner and printer both require a parallel interface)

Security Device

UltraPunch software is enabled and protected from unauthorized duplication by a security device (sometimes called a "dongle" or "protection key"). It looks similar to the connector on a printer cable.

Before installing or using the software, plug the security device into the parallel port on your computer. If you have other equipment (printer or scanner) that uses the parallel port, you must remove it and insert the software dongle. After the UltraPunch dongle is in place, you may be able to connect the printer or scanner behind the dongle.

Note:

Depending on the setup of your computer and type of printer or scanner being used, it is not always possible to plug peripherals into the back of the software dongle. Hardware conflicts may prevent your device from communicating to the computer through the software dongle. In this case, you must install a second parallel port on the computer, giving you one place to connect the dongle, and a second for the printer or scanner.

You must be very careful with the security device. It is your authorization to use the software. If it is lost or stolen, it cannot be replaced - a new copy of the software must be purchased.

Warning:

It is possible to damage or "burn out" the security device by incorrectly powering up your computer system. **Always turn on any devices (scanners/printers, etc) BEFORE turning on the computer.**
Turning on devices after the computer is running will cause your security device to burn out, and disable the program. You will need to return the damaged device to your dealer and await a replacement from the manufacturer.

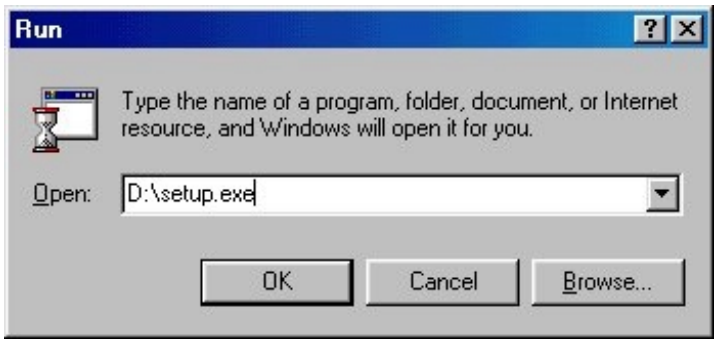
Installing the UltraPunch Software

Install UltraPunch is the same way as any other Windows98 or Windows NT application.

To install the UltraPunch software

UltraPunch is installed the same way as any other Windows application.

1. Close any Windows98 or Windows NT applications you have running.
2. Insert the **UltraPunch CD** in the **CD-ROM drive**.
3. On the Windows task bar, click on the **Start button** in the lower left corner, then choose **Run** from the menu.
4. When the Run dialog box appears, type "**D:\setup.exe**". If your CD-ROM drive has a different name, replace D with the correct letter.



5. Click **OK**.
6. Follow the instructions on your screen. Click **Next** to continue the setup process.
7. Click **Browse** to choose the destination folder if you want to make a change. (The default directory is **C:\UltraPunch**) If you want to undo the last step please click **Back**.
8. Click **Next**.
9. Enter the new folder in the Program Folder or choose the Existing Folder.
10. Click **Next** to continue installation of UltraPunch onto your computer's hard drive.
11. Lastly, click **Finish** to complete setup.

Desktop Shortcut

To easily access UltraPunch from your Windows desktop, follow the steps below to create a shortcut icon.

Creating a Desktop Shortcut

If you want to create a shortcut to the UltraPunch application on your Windows98 or Window NT desktop, follow the steps below:

1. At the Windows desktop, **double-click** on the **My Computer** icon.
2. **Double-click** on the **C:\drive** to display the list of folders.
3. Find the **folder** named **UltraPunch** and double-click to open it.
4. Look for the file named **UltraPunch.exe**. Place the mouse pointer over the icon, and click the **right mouse button**.
5. From the menu, select **Create Shortcut**. This places the UltraPunch icon right on you desktop.
6. Click on the small **x** in **the top right corner** of the "My Computer" window to close it.

Alternatively

1. **Right-click** the mouse in an open area of the desktop.
2. Scroll to **New**, then choose **Shortcut**.

3. Enter the **path** for the UltraPunch program in the **Command line** field, then click **Next**.
4. Enter a **name** of the shortcut such as "**UltraPunch**" and click **Finish**.

A new icon will be created on your Windows95,98,2000 or Windows NT desktop. **Double-click** the new icon to run the UltraPunch application. The same way to create a shortcut to the LibManager.

Starting UltraPunch

After attaching the valid security device (dongle) to the parallel port, you are ready to run UltraPunch.

Running UltraPunch

■ **Double-click** the UltraPunch execution file (**UltraPunch.exe**) under the UltraPunch directory to start the application.

■ You also can run the UltraPunch application by clicking the **Start button** on the task bar, choosing **Run**, and then entering the **path** to the UltraPunch application. Click **OK** to start the application.

■ If you created a shortcut to the application, **double-click** the **shortcut icon** to start the application.

The application window is a reference screen designed to display information about the UltraPunch application.

Closing UltraPunch

When you have finished your work for the day, you should always properly exit UltraPunch.

Exiting UltraPunch

Click the **Close button** in the upper right corner of the UltraPunch window. Alternatively, click the **File** menu, scroll to **Exit** and click it.
If you have a new design or changed a design without saving you will be prompted to save it before exiting.

Topic Two
Design Manager

About this Topic

Chapter 3. Managing designs with UltraPunch application

- New Design
- Existing Designs
- Designs in Other Formats
- Save Design and Save Design As
- Export Design
- Printing a design
- Getting a design from recent files list

Chapter 3.

Managing designs to UltraPunch application

UltraPunch application provides the user with a way of creating, loading, importing, saving, exporting, & printing a design.
Conveniently, the user can get a recent used design from the recent files list without seeking.

New Design

When you first open UltraPunch, a new design window is always displayed. Whenever you are finished working with one design and wish to begin another, follow the instructions below to get a fresh screen.

Creating a New Design

You can create new designs yourself which looks exactly like the design you want.

Click the **File** menu, scroll to **New Design** and click it.

Alternatively

Click the **New Design button** on the **toolbar**.

Alternatively

Use the shortcut key **Ctrl + N** to new a design.

A new design is created and it is named untitled.

Notes:

1. If you have a modified design without saving in the Object View window, creating a new design will be allowed after saving the current design or giving up the modification of the current design.
2. The Object View window can run only one design for a time. If you want to create another new design or load, import another design, you must save and close the current design being worked upon.

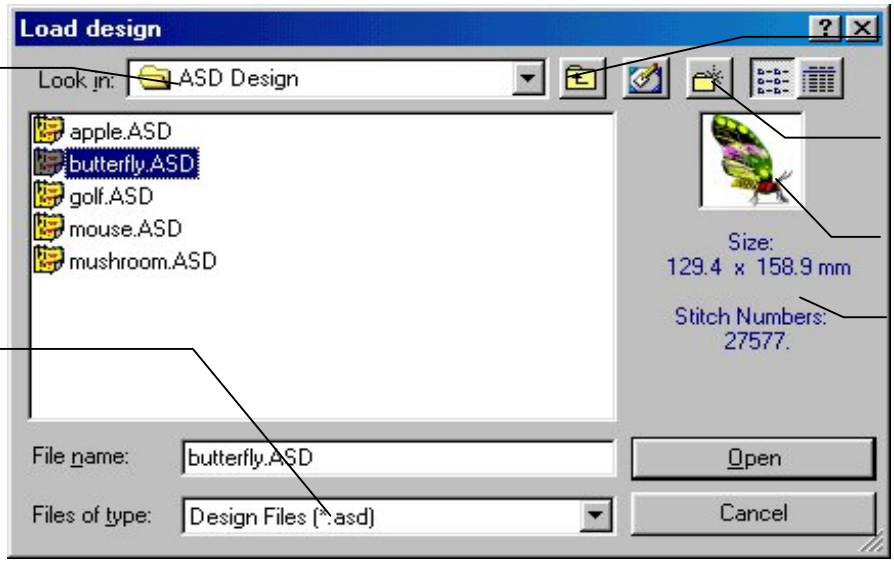
Existing Designs

You can open existing designs by using the Load design dialog box. An existing design is one that you previously created in UltraPunch and saved somewhere on computer's hard drive. These designs are stored in UltraPunch ASD format.

Loading an Existing Design

You can load existing designs by using the Load design dialog box.

1. Click the **File** menu, scroll to **Load Design** and click it. Alternatively click the **Load Design button** on the **toolbar**. Alternatively use the shortcut key **Ctrl + L**. The "Load design " dialog box displays.
2. Find the **folder** on your computer where your designs are stored. Select the name of the design you want to load.



name of current folder

click here to list all files or files with common extension

click here to change folder

create a new folder

preview the current design

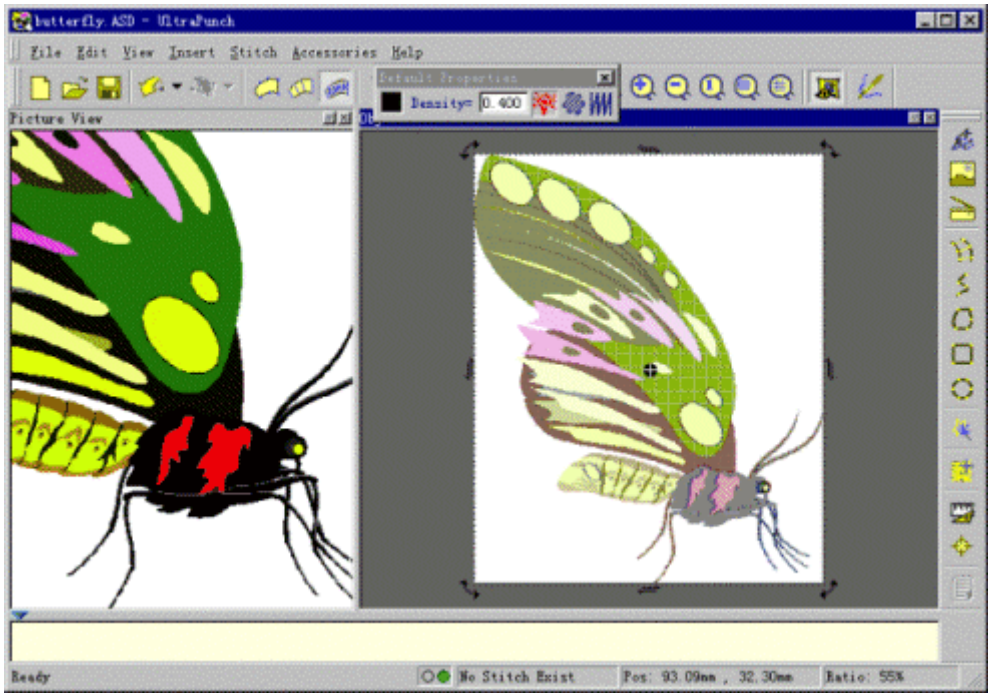
information of current design

To load a design in one step, **double click** its name in the list. If the design you want to load is not in the list, change to another folder.

For example, double click butterfly.ASD

3. Click **Load**.

The Selected design will display in the UltraPunch screen.



Designs in Other Formats

You can import the existing design by using the Import dialog box.

When working on one design, you can also use the import function to bring in another, merging the two designs so that they overlap or sew one beside the other.

Importing an Existing Design from Floppy Disk

1. Click the **File** menu, scroll to **Import** and click it.
2. Select the **source** of the file you are trying to import. When using a floppy disk, select **A:**.
3. Select the **file format** your design is stored in.
4. Click on the **Directory** button to display the files on the floppy disk.
5. Select the design you want to import, then click on **OK**.

Or

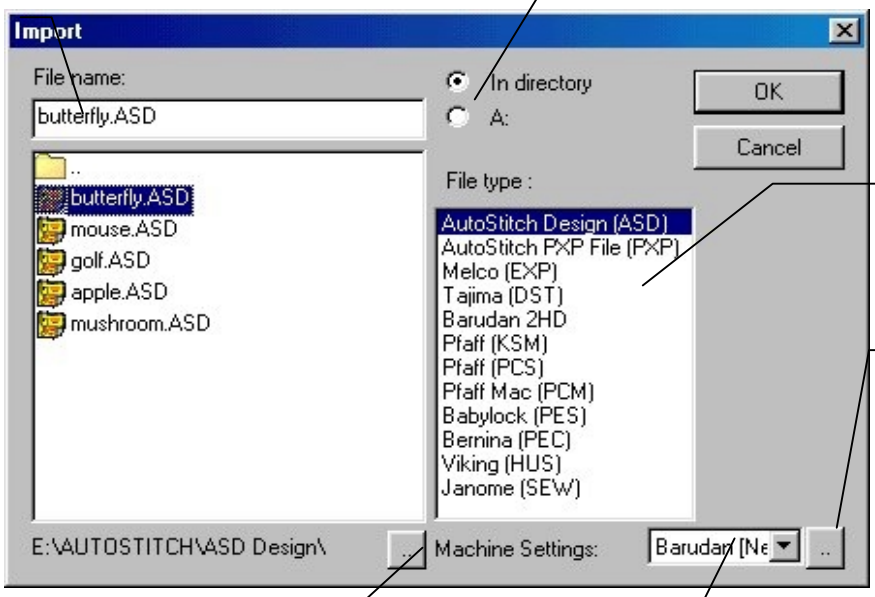
Double click on the design name, to open it in one step.

Note:

When you haven't closed the current design, the import function can import the existing design or other companies' design file or stitch file into the Object View window so that they overlap upon or lie beside the unsaved design.

Importing an Existing Design from a Directory

1. Click on **File**, then scroll to **Import** and click it.
2. Select the **source** of the file you are trying to import. When importing from a directory on your PC or a CD-ROM, click on the button for "**In directory**".
3. Select the **file format** your design is stored in.



4. If the correct drive and directory where your file is stored is not displayed, click on the **Change Directory Button**. A second dialog box displays, in which you can change the drive and directory just as you would in any other windows program.
5. Select the design you want to import, then click **OK**.

Or

Double click on the design name, to open it in one step.

Note:

When you haven't closed the current design, the import function can import the existing design or other companies' design file or stitch file into the Object View window so that they overlap upon or lie beside the unsaved design.

Save Design and Save Design As

It is important that you save a new design shortly after first generating the stitches and frequently during the time you are working.

DO NOT WAIT UNTIL YOU ARE COMPLETELY FINISHED WITH A DESIGN TO SAVE IT!!!

This is particularly important if your computer meets only the minimum system requirements to run the program.
Simply opening a scanned or clipart graphic uses significant computer resources, in addition to the sophisticated processing UltraPunch performs to convert the graphic to embroidery. Computer with only the minimum resources may process more slowly and experience system crashes.

When you use Save Design As, you can change the design name and directory location, basically creating a copy of the design. It is recommended that before modifying a design, you save a copy under a new name, in case you want to return to the original version.
As an added precaution, UltraPunch can save your design periodically while you working. In the Interface Preference dialog box you can choose to save your design automatically at regular intervals as a backup file. This can protect you from losing work in the event of a hardware or software failure. Click on **View**, then select **Interface Preference**. A preference dialog box will appear to make your selection on how often to save your design.
Backup files are for emergency use. It is still a good idea to save your design periodically with the Save Design or Save Design As command from the File menu.
Otherwise, assign a protective password, which prevents unauthorized users from loading the design. You can use this function by choosing the Password Protect in the Save As dialog box.

To save a design

1. Click the **File** menu, scroll to **Save Design** and click it. Alternatively click the **Save Design button** on the toolbar.
   If you are saving the design first time, UltraPunch will open the **Save As dialog box**.
2. Change the location and enter a new name for the design. Don't worry about the file extension, it is added automatically.
3. Click **Save**.

To protect a design

1. Click the **File** menu, scroll to **Save Design AS** and click it.

2. Choose the **Password Protect**, enter a password in the Enter box and re-enter the same password in the Confirm box.
3. Click **OK** and click **Save**

✓ **Change or delete a password**

You must know and enter the correct password to load the design. Click the File menu, scroll to Save Design As and click it. Choose the Password Protect, enter a new password in the Enter box and re-enter the same password in the Confirm box. To delete a password, make sure those un-choose the Password Protect.

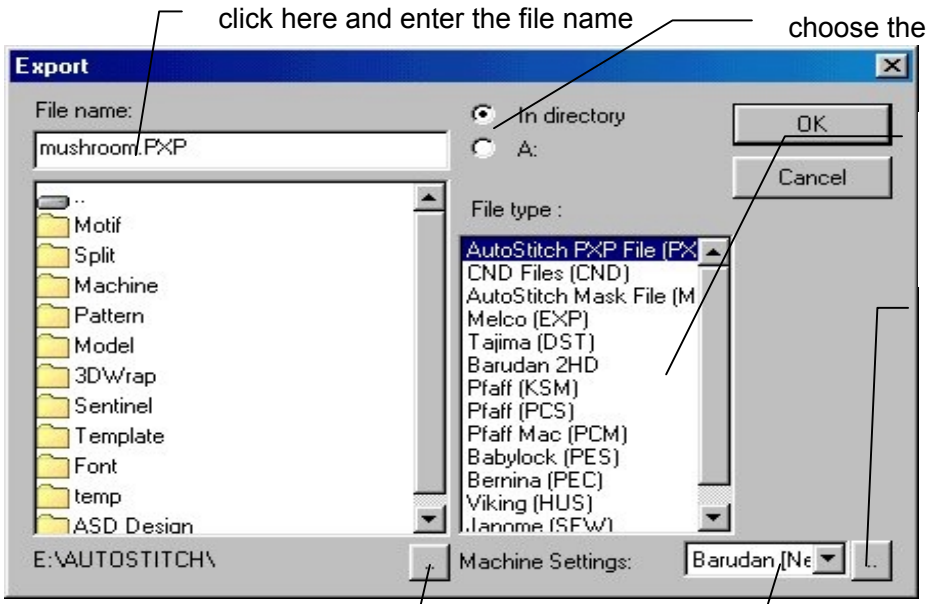
If you assign password protection to the design and then forget the password, you can't load the design, remove protection from it, or recover data from it, it is a good idea to keep a list of your passwords and their corresponding file names in a safe place.

Export Design

In order to sew a design, you must export it to an embroidery machine format.

Exporting a design

1. Click the **File** menu, scroll to **Export** and click it. The Export dialog box displays.
2. Click on the appropriate circle for where you want to export.
   - Click the circle **A:** for saving to the floppy disk.
   - Click the circle **In Directory**, to save the design to the hard drive. If you need to select the drive and directory to export the design, click on the **Change Directory button** (icon with two dots, next to current directory), then select the drive and folder.
3. In the **Format Type list,** click on the desired **machine format**, Tajima is the most universal.

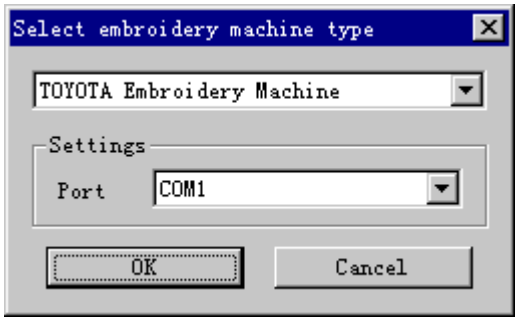


4. Click on the arrow for the **Machine Settings** list, and select the setting that matches the file format selected in Step 3.
5. The name of the current design is located in the filename box, along with the extension for the selected machine format. If you did not remember to save the design before, click into the Filename box and type a name.
6. Click on the **OK button** to transfer the file to disk.

Exporting a design to Embroidery Machine

Click the File menu, scroll to Export to Embroidery Machine and click it. The **Select embroidery machine type** dialog pop up box.

Click the drop down arrow to chose the embroidery machine type and export port.



Printing a design

Using the Print function, you can obtain a sample picture of the design, useful as a reference for the size and color sequence.

There are two menu commands that can be used to print the design. When you use either command, the UltraPunch print out provides information on the design size and color sequence.

- **Print Sample** shows the design in the "true view" stitch simulation view. It may take slightly longer to print the page using this view.
- **Print Stitch** shows the standard design view in the print-out. It is the quicker way to print the design.

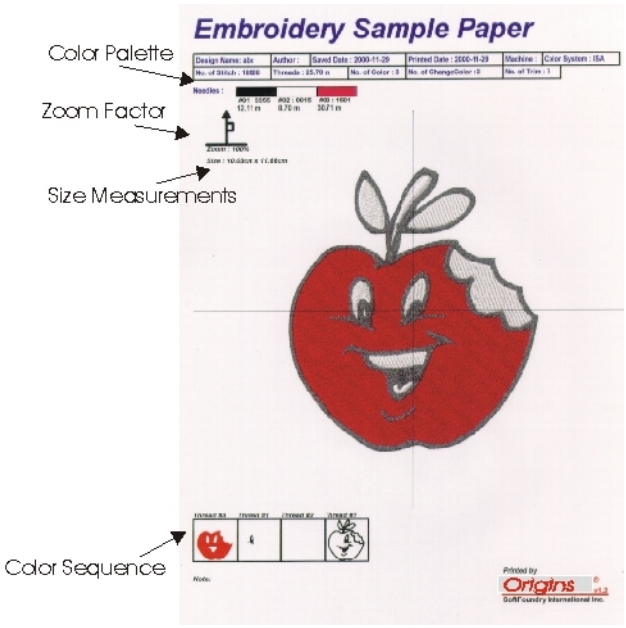
Checking the Print Setup

Print Setup settings determine the paper source, size, and other properties. You should check that these settings are the way you want them before making your first print sample.

1. Click the **File** menu, scroll to **Print Setup** and click it.
2. Your current printer selection is shown in the **Printer Name** box. Click on the arrow to view the list of available printers on your system and change if necessary. To set printer-specific options, as explained in your printer's user manual, click on the Properties button.
3. The current paper size and source are shown in the "**Paper**" box. Click on the arrows for the drop down lists to change if necessary.
4. The "**Orientation**" section shows the two page orientations, **portrait** and **landscape**. Printing in portrait orientation places the top of the design against one of the page's narrow sides. Printing in landscape orientation places the top of the design against one of the page's wide side. Just click on the circle for the desired orientation.
5. Click **OK** to close the Print Setup dialog box and save the new settings.

Making a Print Sample

1. Click **File** menu, scroll to **Print Sample** and click it. Alternatively, click on **File**, then **Print Stitch** to produce a simplified stitch view print-out.
2. Use the **Printer drop down box** to change the printer, if necessary.
3. Click the **Properties button** to change the selected printer's properties, if you want.
4. The **Print to File** checkbox determines if the output is sent to the selected printer or to a printer file. If you want to send the output to the selected printer, make sure that the checkbox is empty. If you want to send the output to a print file, choose the checkbox. You will be prompted for the filename later. You can then print the design at a later time.
5. If your printer supports multiple **copies**, you can print more than one copy of a design at a time. You can enter the number of copies into the spin control, or you can use arrow buttons to set the value. To scroll to a higher or lower value, point at the appropriate button and press and hold the primary mouse button.
6. Click **OK.** The design will begin printing.
   - The row of boxes labeled "**Needles**" in the upper portion of the page tells you the palette of colors used in the design. It is ***not*** the actual sewing sequence. The numbers under each box identify it - for example #1:0015 indicates that it is thread number 1 in the palette, represented by pantone color 0015. Below that, is a number (2.42m, for example) estimating the amount of thread (in meters) that will be used by that color.



- The color sequence boxes in the lower left corner of the page show the actual sewing sequence of the design. The numbers above each box (Thread #x) refer to the palette numbers from the "Needles" section. In the sample above, the body of the apple sews out first (in red), corresponding to thread #3 in the palette.
- The **Zoom factor** indicates the print size in relation to the actual sewing size. **100%** means the print-out is **actual size**. A smaller zoom factor tells you that the actual size of the design is larger than the print-out. A larger zoom factor tells you that the actual size is smaller than the print-out.

Getting a design from recent files list

The most Recent Files list contains the names of the files that have been loaded most recently by UltraPunch. The list appears at the bottom of the File menu, just above the Exit command. A number of files appear under the Recent Files sub-menu. You can select a design file from the list by clicking it.
If you have just installed UltraPunch, the list will be empty.

Topic Three
Creating own Design

About this Topic

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Chapter 4.

Creating lettering

UltraPunch creates lettering using the True Type Fonts on your computer. Unlike other embroidery software programs that must use a pre-digitized alphabet available only from the software vendor, UltraPunch uses the same fonts that are available to you in your other software programs (word processing, desktop publishing, graphics, etc). These are called "True Type" fonts. UltraPunch will automatically create stitches based on the True Type font outlines.

If your computer has only a small number of fonts, you can purchase additional fonts anywhere that sells computer software, for very little cost. They are often packaged with clipart graphics collections. You install these fonts via the Windows Control Panel, not within UltraPunch.

Typing and formatting letters

1. Click the **Insert** menu, scroll to **True Type Font** and click it. Alternatively click the **Insert Font button** on the toolbar.
2. In the white "Content" box in the lower left part of the dialog box, type in the letter you need.

You can use any combinations of letters, symbols, foreign characters, etc., so long as your computer supports them.

The **maximum** numbers of letters or symbols that are allowed to be entering are **one hundred**.

The letters can be upper case letters, lower case letters, or a mixture of the two.

3. Using the **left mouse button, drag across the text** you typed so it is selected.
4. **Double click** to select the letters in the **Content box**. Click on the drop down box of the **Style** option. Scroll to your desired style and click it. If the desired style is not

visible, use the scrollbar to move through the list.

5. Click on the drop down box of the **Size** option. Scroll to your desired size and click it. If the size is not visible, use the scrollbar to move through the list. You can only select sizes, which appear in the list. You can't change or enter the size value manually.

You can enlarge or reduces the lettering manually after creating. Click to select the object and then you will see the cursor become double-head arrow. If you drag any one of the eight point toward the direction which the arrow outside the frame points to, both the frame and the object will become larger. If you drag any one of the eight point toward the direction which the arrow inside the frame points to, both the frame and the object will become smaller.

6. Click the **Color button**, and select a different color for the lettering. The basic 48 color selections appear in a new dialog box. Select one, then click **OK.**

If you are not satisfied with the basic 48 colors, which are offered to you, click the Define Custom Colors button. Click a desired color on a palette. In the same column, drag the right arrow to alter the shades of available colors. If you are familiar with mixing colors, enter the proper matching value in the columns of Hue, Sat, Lum, Red, Green, and Blue. Color/Solid display the final color. You can choose one of them or double click the Solid to gain the same color as the Color area. Click the Add to Custom Color button. The selected color will now be filled into one of the custom color columns automatically. Click the custom color column with the color you defined, and then click OK.

7. If desired, use the **Bold** and **Italic** buttons to add these effects. A check mark in the box means that the effect is active. If you have selected a very narrow font style, it is recommended that you use the Bold option to get better sewing quality.

Selecting a baseline of letters

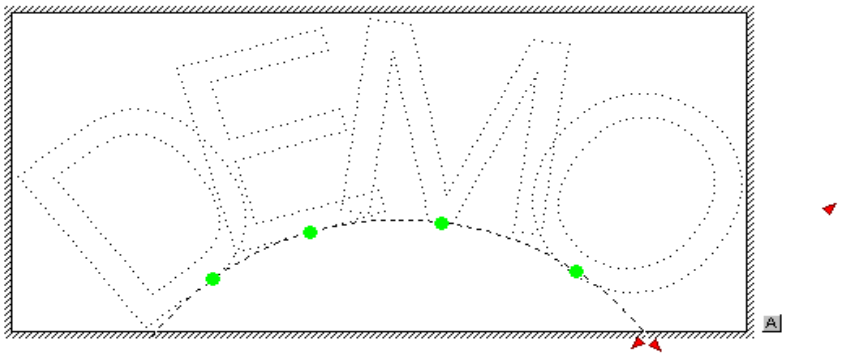
There is an option in the "Insert Text" dialog box that allows you to choose a path other than a straight line for your text. If you ignore the "baseline" option, leaving it blank, UltraPunch will automatically use a straight line. It is only when you want to create different effects that you need to use this option.

Click on the drop down box of the Baseline option. Scroll to your desired baseline and click it. If you want to choose one baseline outside Any Shape, you need to offer length, angle or radius and etc. according to the different baseline.

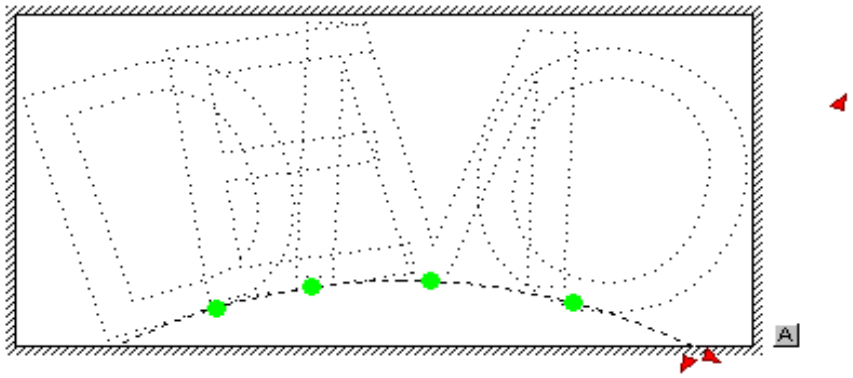
After selecting Any Shape in the Baseline drop down box and clicking OK, you need to define the shape of the baseline by themselves. Clicking creates the corner point and right clicking creates the smooth point of the baseline. Press the Enter key to finish defining baseline. Press Esc key to exit the state of defining baseline.

Placing Text on an Arc

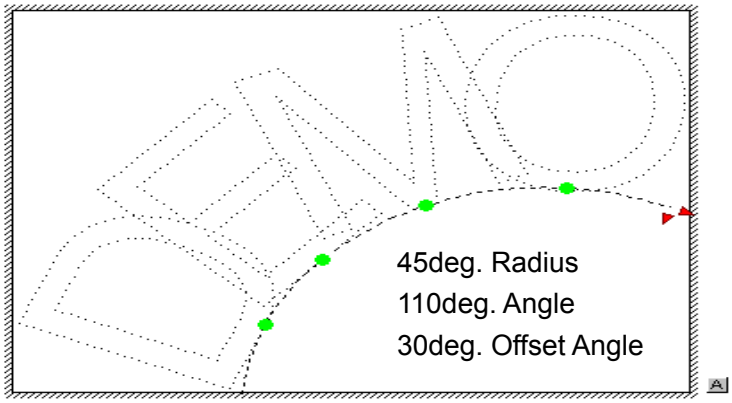
1. In the "**Insert Text" dialog box**, select the font and size and type the text as you normally would.
2. Click on the arrow for the **Baseline drop down box** and select one of the arc options. Click on **Arc CW** (clockwise) for an **upward** arc, or **Arc CCW** (counter-clockwise) for a **downward** arc.
3. UltraPunch will automatically assign values for the arc radius, angle, and offset. Use these values to change the arc shape to get the effect you need.



50deg. Radius
108deg. Angle
0deg. Offset Angle



75deg. Radius
57deg. Angle
0deg. Offset Angle



Arc Radius determines how **steep** the arc is. A **smaller** value gives you a **tighter** arc, a **large**r value gives a **wider** arc.

Angle controls how the characters are spread out along the arc path. A smaller value moves **the letters closer together**, while a **larger** value moves them **farther apart**.

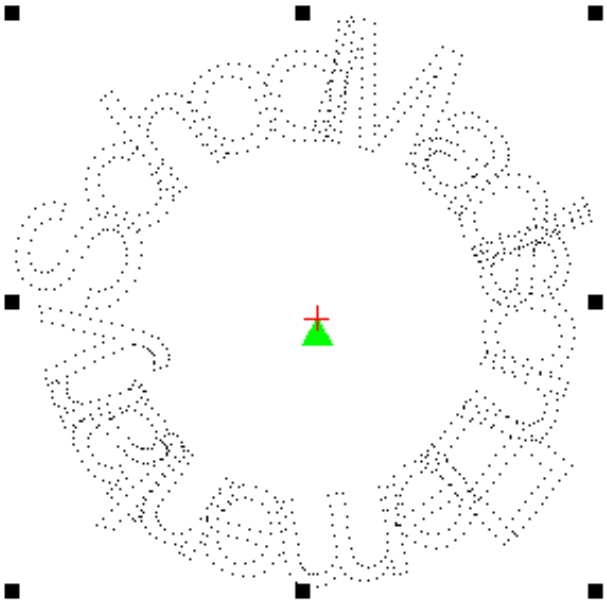
Offset Angle controls where the text is placed along the radius path. The normal value of 0 places your letters at the top of the arc. Changing the number for Offset Angle will move the entire word that number of degree along the arc path, basically placing the text on an angle.

4. Remember that if the initial values for radius and angle do not produce the effect you need, you can **return** to the "**Insert Text" dialog box** by clicking on the **small A** in the gray box, and make additional changes to the values.
5. When you are happy with the effect, click on the **Generate button** to produce the stitches.

Text around a Circle or Ellipse

You also have the option to place text completely around a circular or oval shape, by selecting "Circle" or "Ellipse" in the baseline menu. The procedure and values for these options are the same as explained above for place text on an arc.

Note than using Circle or Ellipse places the text completely around the shape, the characters on the lower half will be upside down. Many times when people say that they want text around a circle, it is really not what they mean.



For example, if someone tells you that they want the text "Southside High School" to be place in a circle around the design, it is most likely that what they really want is "Southside" placed on an arc above the design and "High School" placed on an arc below the design.

Placing Text on a User Defined Baseline (Any Shape)

In UltraPunch it is also possible to place lettering along a custom baseline. To do this, you will need to draw the baseline the lettering will follow.

1. In the "Insert Text" dialog box, select the font and size and type the text as you normally would.
2. Click on the **arrow** for the **Baseline drop down box**, select "**Any Shape**" from the list, and then click on **OK**.
3. The text you typed will not be displayed on the screen. If you look at the bottom of the screen, the information line prompts you to draw the path for the text to follow. Click with the mouse to create the baseline.
   - A **left click** makes a **straight** (**corner**) **point**.
   - A **right click** makes a **smooth** (**curve**) **point**.

   If you make a mistake, you can press the **Backspace key** on the keyboard to remove the last point.

4. Press the **Enter key** on the keyboard to complete the baseline. The text outlines will display following the path that you drew.

5. Make any further adjustments to kerning, size, etc., as explained in the previous sections.
6. Click on the Generate button to produce the stitches.

Choosing a direction of letters

Click anyone button under Direction to ensure the letters to be arranged along the baseline according to the choosing direction.

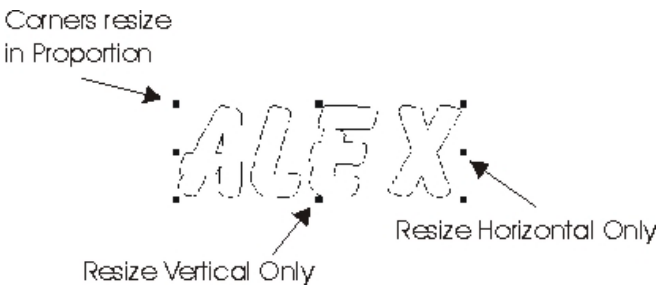
Editing letters in the Object View window

The outline of the text you typed displays in the Object View window. It should be selected, with small black squares around the edges.

You can use some signs to edit the letters directly in the Object View window. Such as resize the object, rotate the object, resize the letters, extend/shrink the baseline, rotate the baseline and re-obtain the Insert Text dialog box.

To resize the object

To resize, use the black squares around the text.

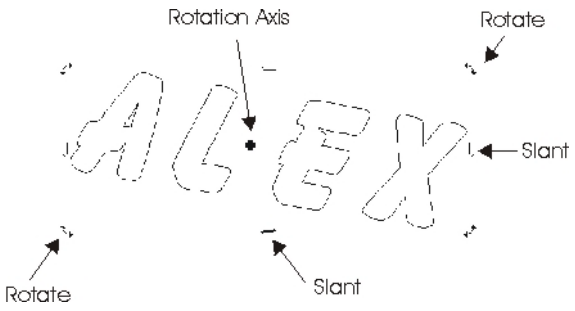


Corner squares scale in proportion, **middle squares** scale in **one direction only**.
Put the mouse pointer on one of the squares, **hold down** the **left mouse button** and **drag** to make the text larger or smaller. Drag outward to increase. Drag inward to decrease

the size.

To rotate/slant the object

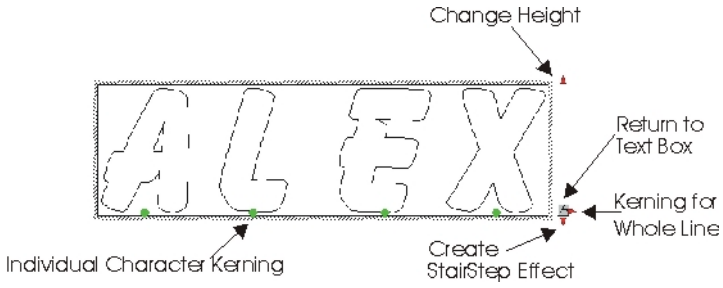
To rotate or slant the text, place the pointer **inside** the text outline and **click the left mouse button again**.
The symbols around the outline change to circles in the corner and bars in the middle.



Use the **corner circles** to **rotate** the text - the axis of rotation is the black circle inside the outline. You may change the axis of rotation by placing the mouse cursor over it, holding down the left mouse button, and dragging to a new location.
The **bars** are used to **slant** - top and bottom slant horizontally, left and right slant vertically.

To adjust inter-character spacing or create a stair-step effect

To adjust inter-character spacing or create a stair-step effect, place the mouse pointer inside the text outline and click the left mouse button.
The black squares disappear. You'll see an outline around the text with red arrows and a small gray text icon in the lower right corner, and green circles below each character.



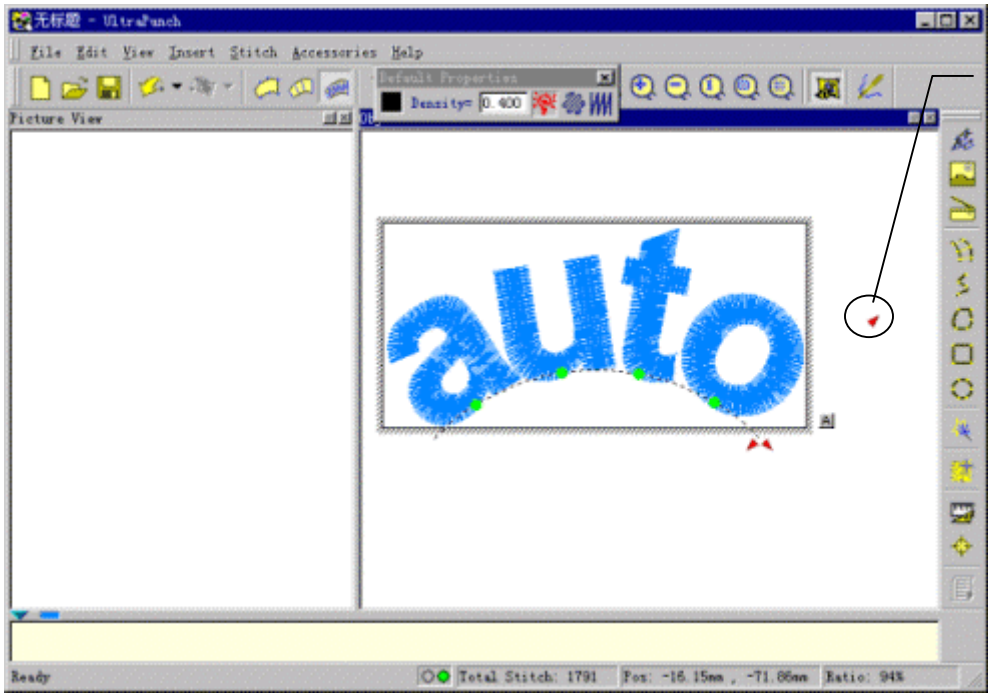
Use the **red arrow** that **points to the right** to adjust **inter-character space** (Kerning). Place the pointer over the arrow, hold down the left mouse button and drag to the right to increase space, or to the left to decrease space.
To adjust the position of an **individual character**, use the **green circle**. Click on the circle for the character you need to move, it will **change color to red**. Now drag with the mouse to the desired location.
Use the **red arrow that points down** to create a **stair-step effect**. Place the pointer over

the arrow, hold down the left mouse button and drag up or down until the text is at the desired height.

A **small A in the gray box** at lower right will re-open the "Insert Text" dialog box, allowing you to make any necessary changes.

To resize the letters

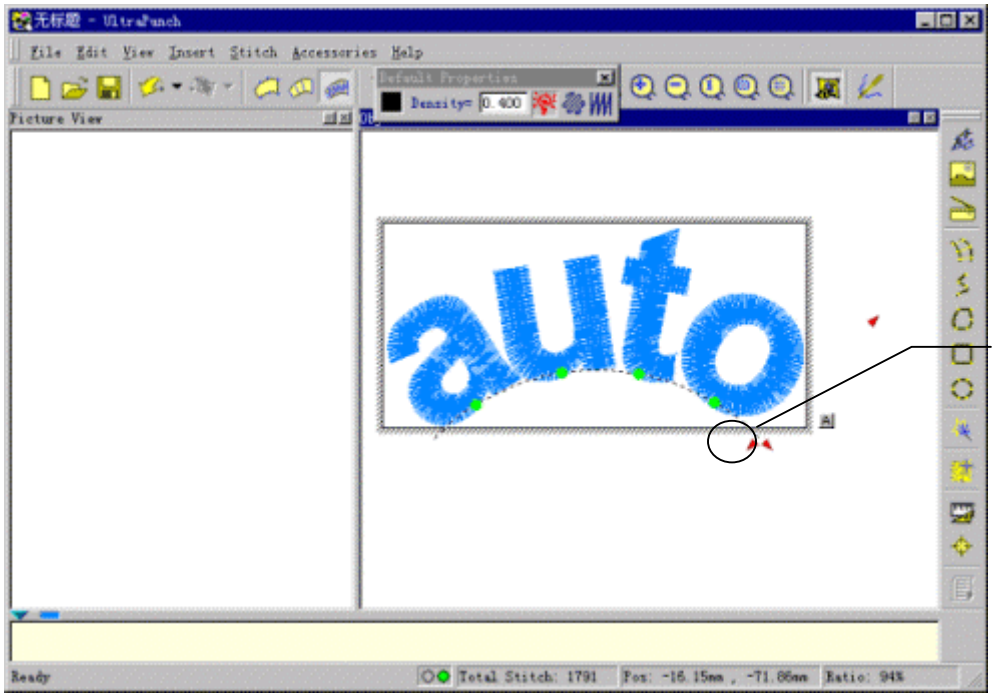
1. Click the letters to select the object.
2. Click the object again. Point the cursor to the **red arrow** beside the letters. Now the cursor will become a four double-headed arrows.
3. Drag the cursor according to the arrow direction to resize the current letters.
   To reduce the letters, drag the cursor toward the down-arrow direction.
   To enlarge the letters, drag the cursor toward the up-arrow direction.
4. Click the **Generate button** on the toolbar.



point the cursor to this red arrow and drag the cursor to resize

To extend/shrink the baseline

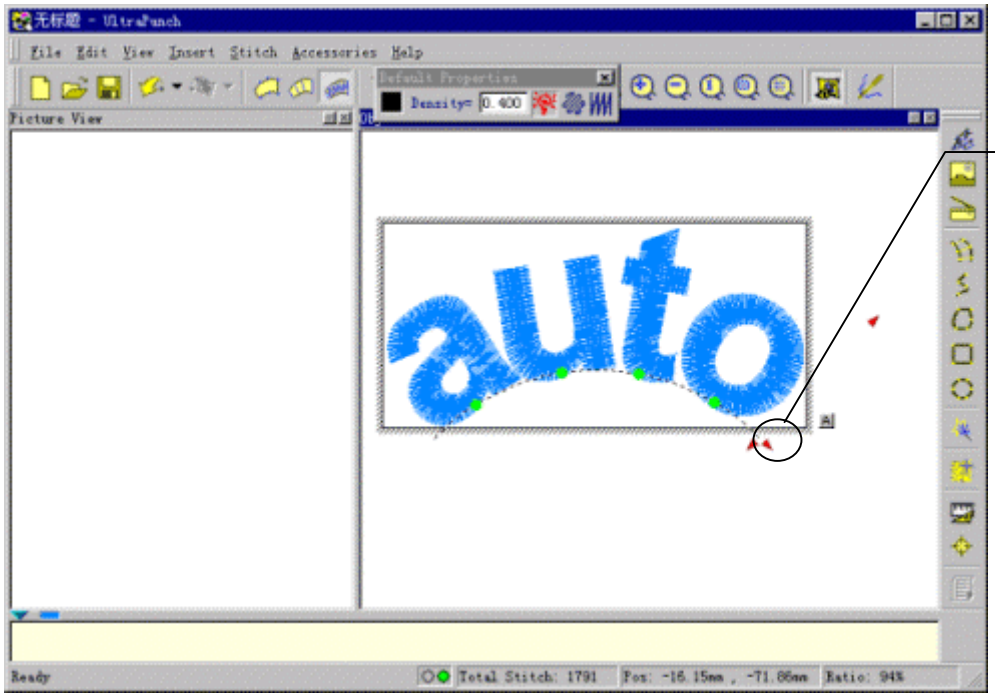
1. Click the letters to select the object.
2. Click the object again. Point the cursor to the **red arrow** beside the baseline. Now the cursor will become a four double-headed arrows.
3. Drag the cursor according to the arrow direction to extend/shrink the baseline.
   To shrink the baseline, drag the cursor toward the inside-arrow direction.
   To extend the baseline, drag the cursor toward the outside-arrow direction.
4. Click the **Generate button** on the toolbar.



point the cursor to this red arrow and drag the cursor to extend or shrink the baseline

To rotate the baseline

1. Click the letters to select the object.
2. Click the object again. Point the cursor to the **red arrow** beside the baseline. Now the cursor will become a four double-headed arrows.
3. Drag the cursor according to the arrow direction to rotate the baseline.

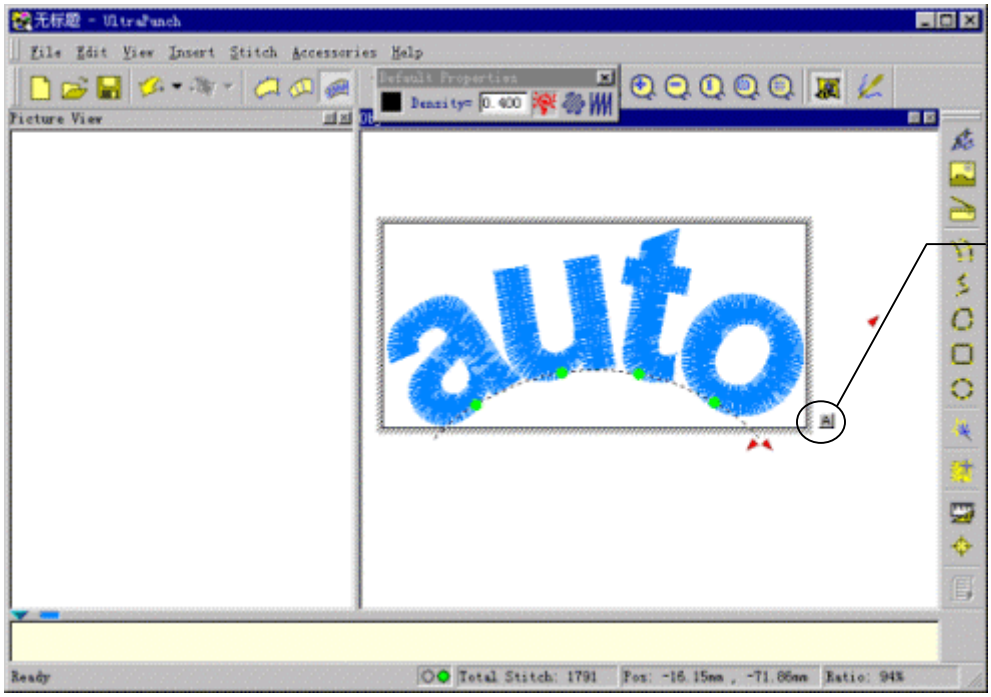


point the cursor to this red arrow and drag the cursor to rotate the

4. Click the **Generate button** on the toolbar.

To re-open the Insert Text dialog box

1. Click the letters to select the object.
2. Click the object again. Click the **button A** beside the object. Now the Insert Text dialog box pop up.
3. You can change the settings in the Insert Text dialog box.
4. Click **OK**.

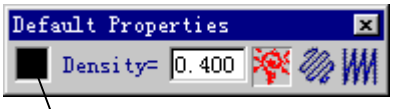


click here to re-obtain the Insert Text dialog box

Re-coloring individual letters

You can re-color the individual letters directly in the Object View window.

1. **Right click** to activate one unit of the letters or **hold down** the **Ctrl key** and **right click** to activate several units of the letters.
2. **Double click** the **Color frame** on the **Quick Properties toolbar** to obtain the Color window.



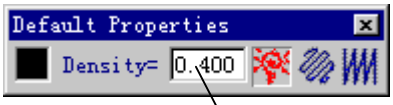
double click here to obtain the Color window

3. Select or define the new color for the activated units.
4. Click **OK.**

Changing the density of letters

You can change the density of the activated units directly in the Object View window.

1. **Right click** to activate one unit of the letters or **hold down** the **Ctrl key** and **right click** to activate several units of the letters.
2. **Double click** the **Density box** on the **Quick Properties toolbar** and enter the new density of the units.



double click here to enter the new density

3. Click the **Generate button** on the toolbar.

Changing the stitch type of letters

You can change the stitch type of the activated units directly in the Object View window.

1. **Right click** to activate one unit of the letters or **hold down** the **Ctrl key** and **right click** to activate several units of the letters.
2. Click either of the three stitch types button on the toolbar.

click either of them to change the stitch type

3. Click the **Generate button** on the toolbar.

Stitch Values for Lettering

UltraPunch generates text using the system default values for column fill stitches (Accessories/Area Properties Master Sheet).

There are many variables in embroidery which can affect the quality of your design - size of the letters, the fabric you're sewing on, the type and amount of backing used, how tight are the machine tensions, etc. Changing some of the properties or values used to generate the stitches will be necessary to account for these variables.

You will need to experiment to find the best choices for your most frequent applications.

Changing the Stitch Values for Lettering

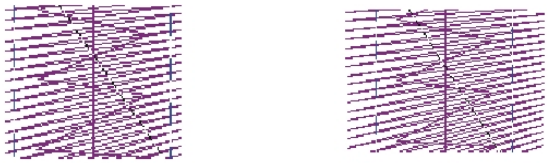
1. After generating stitches, use the **right mouse button** to activate the text. You can **right click** inside each character, while **holding down** the **Ctrl key** on the keyboard. Alternatively, "**marquee**" the text: place the mouse pointer slightly outside one corner of the text, **hold down the right mouse button** and **drag towards the opposite corner**, **covering the entire word**. When you release the mouse button, everything inside that area will be selected.
2. Press the **spacebar** or access stitch properties. Alternatively, click on the **Properties button**. Each of the tabs in the dialog box lets you control various aspects of the stitching.

- ***General***

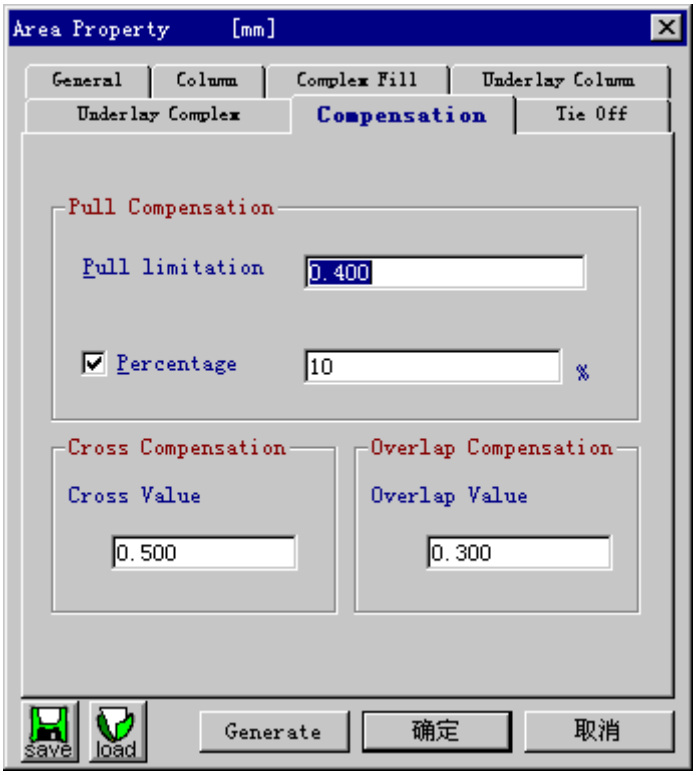
Make sure that the boxes for **Enable Jagged Edge**, **Split**, **Underlay**, **Pull Compensation** and **Tie Off** are **checked**, meaning they are activate. If these are not checked, you cannot access and change the necessary value.

◆ ***Compensation***

If your letters need to look fatter, this is the value to change. It lets you set how far beyond the actual font outline you want the stitches to extend. The values here help compensate for the fact that stitches sink into the fabric when sewn. This is why the text that looks great on your screen can sometimes look terrible after it is sewn.



Compensation 0.4mm Compensation 1.5mm

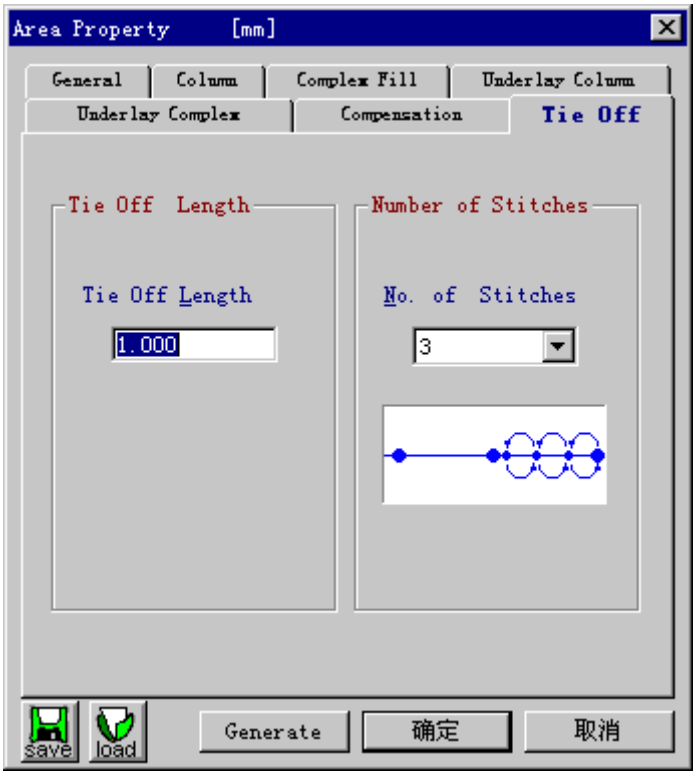


In the "**Pull Compensation**" box, you control **how the compensation is measured**, as an exact value or as a percentage of the original stitch length - both have the same effect, just different ways of measuring it.

If the **Percentage box** is **NOT checked**, the number in "**pull limitation**" is being used, adding that **exact amount** to every stitch. A value of 0.5mm works well for average size letters. If you check the box for **Percentage**, **a certain percentage of the original stitch length** is added - so longer stitches have more added to them than short stitches. Try using a value of 10% to 20%.

◆ ***Tie Off***

This value lets you make sure that a tie down stitch is place before and after a trim or thread change, preventing the thread from pulling out.



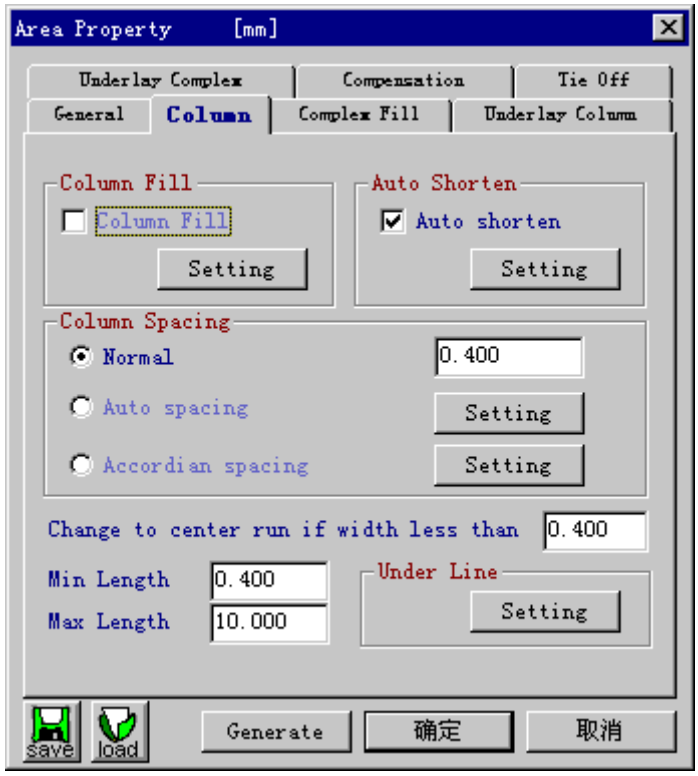
The value for "**Tie Off Length**" determines how long the lock stitches are. You want to make sure this value is long enough to secure the thread, but not so long in proportion to the font size that the lock stitches stick out from the letters. Try using a value of 1.0mm for average size letters (12-15mm), change the value to 0.5mm for smaller letters (below 10mm).

The value for "**Number of Stitches**" sets how many lock stitches are placed. A value of 2 or 3 is normal, and more than sufficient to secure the thread.

◆ ***Column***

The settings in this tab control the appearance of the top stitching.

For text, we are usually only concerned with the value for "**Column Spacing**", which should have a black dot in "**Normal**".



This value determines **how close together the stitches are placed**. A **smaller number** gives you **more stitches**. A **larger number** places the stitches farther apart, giving you l**ess stitches**. The default value of 0.4mm should give good results in most situations, but you will need to adjust for different letter sizes, fabrics and thread thicknesses. For very small lettering (below 6mm height) try increasing the spacing to 0.5mm to prevent thread and needle breaks.

3. After making changes, click **OK** to exit the "Area Property" dialog box.
4. It is very important that you re-generate the sections after making changes to these values. **Changes do not take effect until you re-generate**. Select **Accessories**, then click **Generate**. Alternatively, press the function key **F9** on the keyboard or click the **Generate button**.

Chapter 5.

Creating image

You can use the different insert image function to create design in the Object View window.

Inserting several kinds of images

You can create designs by inserting image file, inserting picture from scanner or inserting CAD DXF file.

To create design by Inserting Image File

Images are the starting point for the designs you can create in Ultrapunch. Use the "Insert Image" command if you have an image already stored on the computer, a CD or floppy disk.

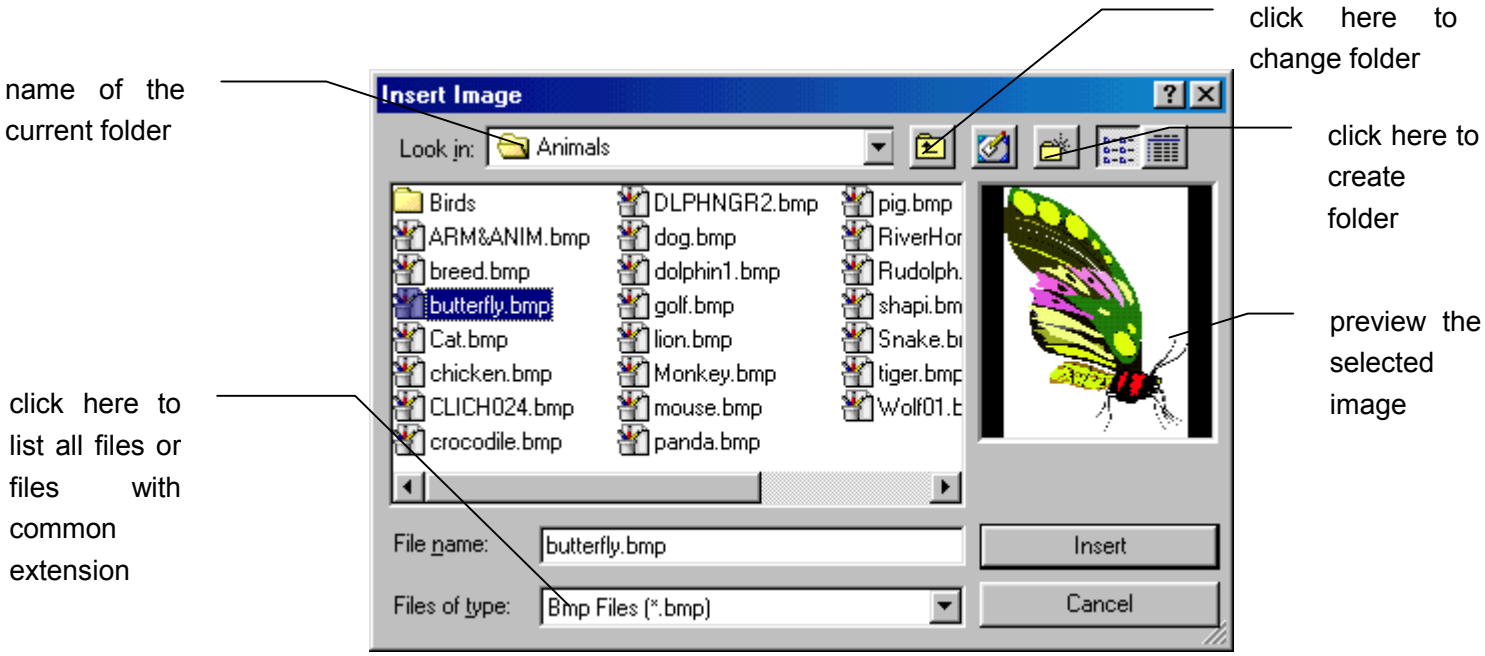
Ultrapunch can import four different types of images:

.bmp (Windows bitmap)
.wmf (Windows metafile)
.jpg (JPEG bitmap)
.gif (CompuServe bitmap)

Only color .bmp images can be generated in Ultrapunch. If your original artwork is black & white, it must be saved as a color bitmap. Any of the color bitmap formats (16 color, Paletted 8-bit, or RGB color 24-bit) should function properly. Which color format you can open may display on the capabilities of your computer. If you experience difficulty, try using **16 color bitmap format**, which is the simplest.

1. Click the **Insert** menu, scroll to **Image File** and click it. Alternatively click the **Insert Image button** on the toolbar.

2. Change to the appropriate **drive and directory** where the image is stored.



3. Change to the **file type** that the image is stored in.
4. Select the **image** you want from the list of files in the directory.
   The image will appear at the right in the preview box.
   Then click on **Insert**.
5. The "Image Processing" dialog box displays, ready to begin converting the image to outlines and stitches.

Note:

Make sure that the image is not too small, otherwise Ultrapunch will offer you a warning message "The image is too small to generate outline." Images stored in the .gif format (used on many web pages) are frequently very small. You will need to get this image in a larger size or open it into a graphics software program (such as Paint, Corel DRAW or Adobe Illustrator) and increase the size.

To create design by Inserting Picture from Scanner

If your computer is equipped with a scanner and you wish to insert the newly scanned picture into the Object View window, you can use the Insert Picture from Scanner function.

When you use Insert Picture from Scanner, Ultrapunch opens the default TWAIN device setup on your computer - the scanner manufacturer's software that came with the scanner. Ultrapunch does not have a built-in scanning program, it just automatically accesses the manufacturer's program.

It is not possible for us to precisely explain all steps involved in scanning, since these will vary depending on the scanner that you have. We will try to explain the general process, but please refer to your scanner manufacturer's user manual for specific question.

1. Place the picture that you want to scan face down on the scanner bed.
2. Click the **Insert** menu, scroll to **Picture from Scanne**r and click it. Alternatively click the **Insert from Scanner button** on the toolbar. Ultrapunch now opens the scanner manufacturer's software program.
3. Click on the icon for a **Preview** or **Prejudge** of the image.
   The Scanner will operate and shortly thereafter display a preview of the entire page.
4. Use the tools provided on the scanning program to select only the parts of the picture that you actually need. You do not want to scan the whole page - you should try to crop out any unnecessary areas.
5. Adjust the default values of the application in order to get the final desired effect of scanning.
6. Drag the mouse to select your desired parts of the picture or the whole picture and click on the appropriate icon to produce the final scan (usually **Scan** or **OK**). Your scanner should scan the image, which will then appear in the "Image Processing" dialog box. The scanner window will automatically close.

Continue reading in this chapter for instructions on how to proceed from this point.

Notes:

1. You can select Insert Picture from Scanner repeatedly.
2. Once finished scanning, the scanner window will be closed automatically. Meanwhile, Ultrapunch will be reactivated. The scanned picture will now be inserted and displayed.
3. Make sure that the picture is large enough to generate stitches. The picture should not be greatly enlarged after scanning, it will produce a very poor quality effect.
   The **image width** should not be **less than 4cm**.
   The **image height** should not be **less than 3cm**.
   Otherwise Ultrapunch will give you the warning message "The image is too small to generate outline".
4. The warning message " A Twain error occurred" and "error in scanning file" will display on the screen if your scanner is not properly connected to your computer or not properly working. Click OK to cancel the operation. After that, you should connect your scanner to your computer or re-install the scanner's device driver.
5. If your scanner is properly installed, the scanner is activated automatically. The Ultrapunch title bar will dim and can not be activated until scanning is completed.
6. If you want to exit the application without scanning, the warning message "Error in Scanning file" will be displayed on the screen. Click OK to cancel the operation.
7. If the scanning effect is satisfactory, click Save button, and this file will be saved. If not, click New button and click No or Close the Ultrapunch window.

Editing objects in the Object View window

Once the image outline is shown on screed, there are graphical tools available for you to resize and/or rotate it.

To resize the object

1. After inserting an image and setting its size, it should be displayed on screen with eight small squares around the outside edges. If you do not see these squares, click with the **left mouse button** on the image to select it.
2. These squares can be used to resize the image. Corner squares scale in proportion, middle squares scale in one direction only.

   Put the mouse pointer on one of the squares, **hold down** the **left mouse button** and **drag** to make the image larger or smaller. Drag outward to increase the size. Drag inward to decrease the size.
3. Click the Generate button on the toolbar.

Note:

Only the outlines generated from the image will be resized, it is not possible for Ultrapunch to change the actual image you see behind your work. Therefore, while you can adjust the outlines, it is better to place the artwork straight on the scanner.

To rotate or slant the object

1. After inserting an image and setting its size, it should be displayed on screen with eight small squares around the outside edges. If you do not see these squares, click with the **left mouse button** on the image to select it.
2. Place the pointer inside the image outline and click the **left mouse button** again. The symbols around the outline change to circles in the corner and bars in the middle.

   Use the **corner circles** to **rotate** the image. Place the mouse pointer over one of the circles, **hold down** the **left mouse button** and **drag** until the image is at the desired angle.

   The axis of rotation is the black circle inside the outline. You may change the axis of rotation by placing the mouse cursor over it, holding down the **left mouse button**, and

dragging to a new location. The **bars** are used to **slant** - top and bottom slant horizontally, left and right slant vertically.

Note:

Only the outlines generated from the image will be resized, it is not possible for Ultrapunch to change the actual image you see behind your work. Therefore, while you can adjust the outlines, it is better to place the artwork straight on the scanner.

Image Processing

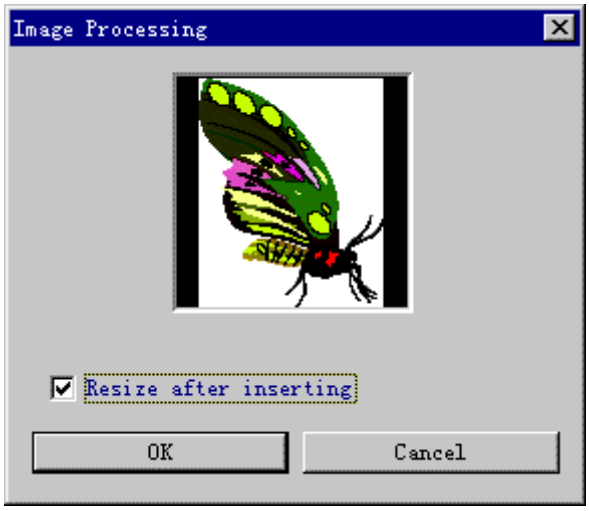
Once you have acquired the image from a file or the scanner, the Image Processing window displays.

Selecting Image Processing Options

Following the instructions in the previous sections, insert the image from a clipart file or the scanner.

The **Image Processing window** will display.

You will see a preview of the selected image in the top of the window.



- The option to "**resize after inserting** " is **checked** by **default**. This will allow you to change the size before generating the stitches - a box asking the new image size will automatically pop up on screen. Most users prefer that this option is always enabled.

Click on **OK** in the lower left corner to complete Image Processing. Ultrapunch will begin converting the image to outlines.

Chapter 6.

Creating freewill image

You can use the different insert freewill image function to create some freewill designs in the Object View window.

Drawing freewill images by yourself

You can create some freewill designs by inserting Column Area, inserting Line, inserting Area, inserting Rectangle and inserting Ellipse.

To create freewill design by Inserting Column Area

1. Click the **Insert** menu, scroll to **Column Area** and click it. Alternatively click the **Insert a column area button** on the toolbar.
2. The cursor becomes a cross. Move the cursor to desire position, and then click or right click to determine the starting point of the inserting column area. Again move the cursor to proper position and then right click or click to define the broken points or consecutive points of this column area. Click repeatedly until you press the Enter key to stop the operation.
3. Click the **Generate button** on the toolbar.

Notes:

1. Press the Backspace key to delete the previous defined point(s).
2. Once you click the Insert a column area button, the insert operation will be started and last until you press the Enter key. However, you can cancel the operation at anytime by pressing the Esc key.
3. If the inserted column area is unsatisfactory, click to select it and press the Del key to delete it. Also, you can right click to activate it and modify its properties in many ways.
4. While inserting a column area, if the middle points are all determined by right clicking, these points are broken points. If they are all determined by clicking, they are

consecutive points. Of course, you can determine these middle points by partially click and partially right click, thus they will form a column area, which is partially smooth and partially un-smooth.

5. While inserting a column area, self-crossing area is an invalid area. At this time Ultrapunch will give you a warning message and you should press the Esc key and then insert another column area again.
6. While using this function, you are not allowed to press the Enter key to conclude the operation if you have defined only one to three points. I.e. the starting point, a middle point and the ending point. If you did so, the insert column area will not appear. For four points at least are needed to define a column area.

To create freewill design by Inserting Line

You can use Insert Line to insert a broken line, smooth curve, line segment of a blend of the two and regional boundary lines.

1. Click the **Insert** menu, scroll to **Line** and click it. Alternatively click the **Insert Line button** on the toolbar.
2. The cursor becomes a cross. Move the cursor to your desired position, right click or click to determine the starting point of the inserting line. Again move the cursor to the proper position and right click or click to determine the broken points or consecutive points of the line segment or the regional boundary line. Click repeatedly until you press the Enter key to stop the insert operation.
3. Click the **Generate button** on the toolbar.

Notes:

1. Once you click the Insert Line button, the insert operation will be started, and will last until you press the Enter key. However, you can cancel the operation at any time by pressing the Esc key.
2. If the inserted line segment or regional boundary line is unsatisfactory, click to select it and press the Del key to delete it. Also, you can right click to select it and modify it in many ways.
3. You can use Insert a Line to draw a regional boundary of an area as long as you link the start point and the end point. But, this operation is different from Insert Area.
4. While inserting line segments or regional boundary lines, if the middle point of these lines are all created by right clicking, they are called turning point. If all created by clicking, they are consecutive ones. Of course, you can create these points sometimes by clicking and sometimes by right clicking, and the line segments or boundary lines will be a mixture of broken lines and smooth curves.
5. While inserting a line segment, clicking or right clicking to determine the start point and the end point does not make any difference to a line segment. As to a regional boundary, however, it determines the smoothness of this point.

To create freewill design by Inserting Area

You can use Insert Area to insert smooth or un-smooth areas.

1. Click the **Insert** menu, scroll to **Area** and click it. Alternatively click the **Insert Area button** on the toolbar.
2. The cursor becomes a cross. Move the cursor to the desired position, and then click or right click to determine the starting point of the inserting area. Again move the cursor to proper position and then right click or click to determine the broken points or consecutive points of this area. Click repeatedly until you press Enter key to stop the operation.
3. Before finishing inserting area, you need not to link the starting point and the ending point manually. Once you press the Enter key, Ultrapunch will judge if they are broken points or consecutive points automatically and link the starting point and the ending point together to form a complete closed area.
4. Click the **Generate button** on the toolbar.

Notes:

1. Once click the Insert Area button, the insert operation will be started and will last until you press the Enter key. However, you can cancel the operation at any time by pressing the Esc key.

2. If the inserted area is unsatisfactory, click to select it and press the Del key to delete it. Also, you can right click to select it and modify it in many ways.

3. While inserting area, if the middle points are all determined by right clicking, these points are broken points. If they are all determined by clicking, they are consecutive points. Of course, you can determine these middle points by partially clicking and partially right clicking, thus they will form an area which is partially smooth and partially un-smooth.

4. While using this function, the user is not allowed to press the Enter key to conclude the operation if the user has determined only two points. I.e. a starting point and ending point. If you did so, the inserted area will not appear. After all, at least three points are needed to define an area.

To create freewill design by Inserting Rectangle

1. Click the **Insert** menu, scroll to **Rectangle** and click it. Alternatively click the **Insert Rectangle button** on the toolbar.
2. Now the cursor will become a cross. Click to define any one corner of the rectangle, drag the mouse and hold down the Ctrl key without releasing it. When you think the size of the inserting rectangle is Ok, click to finish this operation.
3. Click the **Generate button** on the toolbar.

Notes:

1. To insert Solid Square, drag the mouse without holding down the Ctrl key.
2. Right click or press the Esc key to cancel the operation.

To create freewill design by Inserting Ellipse

1. Click the **Insert** menu, scroll to **Ellipse** and click it. Alternatively click the **Insert Circle (Ellipse) button** on the toolbar.
2. Now the cursor will become a cross. Click to define any one point of the circumference, drag the mouse and hold down the Ctrl key without releasing it. When you think the size of the ellipse Is OK, click to finish this operation.
3. Click the **Generate button** on the toolbar.

Notes:

1. To insert Solid Circle, drag the mouse without holding down the Ctrl key.
2. Right click or press the Esc key to cancel this operation.

Editing objects in the Object View window

You can use some signs to edit the objects directly in the Object View window. Such as resize the object and rotate the object.

To resize the object

4. Click the inserted freewill image to select the object.
5. Eight black points will appear outside the object, move the cursor to any one of them, the cursor will become a double-head arrow; one points inside and another outside.
6. Drag the cursor according to the arrow direction to resize the current object.
   To **reduce** the object, drag the cursor toward the inside-arrow direction.
   To **enlarge** the object, drag the cursor toward the outside-arrow direction.
   To **change** the **width** and **height** of the current object, drag any one of the four points in the four corners.
   To **enlarge** or **reduce** the **height** of the object, drag any one of the two points lying on the horizontal line.
   To **enlarge** or **reduce** the **width** of the object, drag any one of the two points lying on the vertical lines.
7. Click the **Generate button** on the toolbar.

To rotate the object

3. Click the inserted freewill image to select the object.
4. Click the object and click it one again. Four double-headed curve arrows will appear in the four corners of the object's outer frame. Also, a black point with a white cross in the center will appear in a certain position. You can use them to rotate the object.
5. Place the cursor on the one of the arrows. Now, the cursor will become a cursor with a steering wheel. Click and hold down the left mouse button to drag the cursor in one of the directions that the double-head arrow points to. The object will rotate with it.

You can alter the position of the Center Mark for rotating: Place the cursor on the center mark, and now the cursor will become a four-headed arrow. Click it and hold down the left mouse button to drag the cursor, now the center mark will move with the cursor. If you rotate the object under this state, the object will rotate with the new position of the center mark as the center.

Note:

While rotating in the above-mentioned way, the selected object is rotating with the center. You can alter the position of the center mark, but the new position is valid only when you have not clicked the blank space to give up the current selection; otherwise, the center mark will resume its original position.

Re-coloring individual units

You can re-color the individual units directly in the Object View window.

5. **Right click** to activate one unit of the object or **hold down** the **Ctrl** key and **right click** to activate several units of the object.
6. **Double click** the Color frame on the Quick Properties toolbar to obtain the Color window.

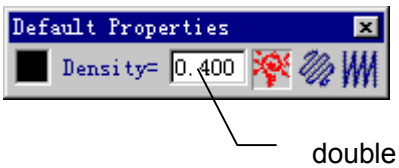
double click here to obtain the Color window

7. Select or define the new color for the activated units.
8. Click **Ok**.

Changing the density of units

You can change the density of the activated units directly in the Object View window.

4. **Right click** to activate one unit of the objects or **hold down** the **Ctrl** key and **right click** to activate several units of the objects.
5. **Double click** the Density box on the Quick Properties toolbar and enter the new density of the units.



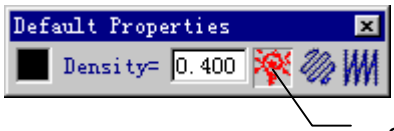
double click here to enter the new density

6. Click the **Generate button** on the toolbar.

Changing the stitch type of units

You can change the stitch type of the activated units directly in the Object View window.

4. **Right click** to activate one unit of the objects or **hold down** the **Ctrl** key and **right click** to activate several units of the objects.
5. Click either of the six stitch types button on the toolbar.



click either of them to change the stitch type

6. Click the **Generate button** on the toolbar.

Chapter 7.

Creating freewill stitches

You can insert some freewill stitches to create a new design, insert some freewill stitches after the activated stitch or insert some freewill stitches before the first stitch of the activated area by using the Manual Stitches function.

Drawing freewill stitches by yourself

You can insert the stitches more conveniently by using the Manual Stitches function. To create a new design by using this function, click the Manual Stitches button first. To insert some stitches after one stitch by using this function, chose the Stitch and the Edit mode, and then appoint the needlepoint first. To insert some stitches before one area by using this function, choose the Stitch and the Edit mode and then right click to activate the area first.

To create freewill design by Inserting Manual Stitches

1. Click the **Insert** menu, scroll to **Manual Stitches** and click it.
2. The cursor becomes a cross with a plus. Move the cursor to desire position, and then click to determine the starting point of the inserting stitches' needlepoint. Again move the cursor to proper position and then click to define the next needlepoint. Click repeatedly until you press the Enter key or right click to stop the operation.
3. Click the **Generate button** on the toolbar.

Notes:

1. You can use the Up/Down key to move the Red Cross sign so as to know the direction of the running stitches in a certain region.

2. You can use the Ctrl + Home/End key to move the Red Cross sign to the head or tail of stitches of the whole design, use the Home/End key to move the red cross sign to the

head or tail of the stitches of the current unit, and use the Page Up/Page Down key to move the Red Cross sign 100 stitches up or down.

3. Press the Esc key to cancel the operation.

To insert stitches after one stitch by Inserting Manual Stitches

1. Click the **Stitch View button** and the **Edit Mode button** on the toolbar to change the status into stitch edit mode.
2. You can click the **Display Stitch Position button** on the toolbar to see the needlepoint more clearly.
3. Click the **Insert** menu, scroll to **Manual Stitches** and click it.
4. The cursor becomes a cross with a plus. Once you move the cursor it becomes a cursor with a black stitch, which comes from the two needle points. You can move the cursor along this stitch to alter the length, direction or width of the newly created stitches. Without any clicking at this time, you will find the screen moved with the movement of the cursor. If you do not want to finish inserting, click and then move the cursor again and again to create the needle points, which are between these two needle points we just mentioned. You will find the inserting stitch before clicking is black and the inserting stitch will become the same color with the other stitches.
5. **Right click** or press the **Enter key** to finish inserting, the needlepoint which you have right click will be connected with the next needlepoint.
6. Click the **Generate button** on the toolbar.

Notes:

1. You can use the Up/Down key to move the Red Cross sign so as to know the direction of the running stitches in a certain region.

2. You can use the Ctrl + Home/End key to move the Red Cross sign to the head or tail of stitches of the whole design, use the Home/End key to move the red cross sign to the head or tail of the stitches of the current unit, and use the Page Up/Page Down key to move the Red Cross sign 100 stitches up or down.

3. Press the Esc key to cancel the operation.

To insert stitches before one area by Inserting Manual Stitches

1. Click the **Stitch View button** and the **Edit Mode button** on the toolbar to change the status into stitch edit mode.
2. You can click the **Display Stitch Position button** on the toolbar to see the needlepoint more clearly.
3. **Right click** to activate the area, which you want to insert stitches before.
4. Click the **Insert** menu, scroll to **Manual Stitches** and click it. Alternatively click the **Manual Stitches button** on the toolbar.
5. The cursor becomes a cross with a plus. Once you move the cursor it becomes a cursor with a black stitch, which comes from the two needle points. You can move the

cursor along this stitch to alter the length, direction or width of the newly created stitches. Without any clicking at this time, you will find the screen moved with the movement of the cursor. If you do not want to finish inserting, click and then move the cursor again and again to create the needle points, which are between these two needle points we just mentioned. You will find the inserting stitch before clicking is black and the inserting stitch will become the same color with the other stitches.

6. **Right click** or press the **Enter key** to finish inserting, the needlepoint which you have right click will be connected with first needlepoint of the activated area.
7. Click the **Generate button** on the toolbar.

Notes:

1. You can use the Up/Down key to move the Red Cross sign so as to know the direction of the running stitches in a certain region.
2. You can use the Ctrl + Home/End key to move the Red Cross sign to the head or tail of stitches of the whole design, use the Home/End key to move the red cross sign to the head or tail of the stitches of the current unit, and use the Page Up/Page Down key to move the Red Cross sign 100 stitches up or down.
3. Press the Esc key to cancel the operation.

Editing objects in the Object View window

You can use some signs to edit the objects directly in the Object View window. Such as resize the object and rotate the object.

To resize the object

8. Click the inserted freewill image to select the object.
9. Eight black points will appear outside the object, move the cursor to any one of them, the cursor will become a double-head arrow; one points inside and another outside.
10. Drag the cursor according to the arrow direction to resize the current object.
    To **reduce** the object, drag the cursor toward the inside-arrow direction.
    To **enlarge** the object, drag the cursor toward the outside-arrow direction.
    To **change** the **width** and **height** of the current object, drag any one of the four points in the four corners.
    To **enlarge** or **reduce** the **height** of the object, drag any one of the two points lying on the horizontal line.
    To **enlarge** or **reduce** the **width** of the object, drag any one of the two points lying on the vertical lines.
11. Click the **Generate button** on the toolbar.

To rotate the object

6. Click the inserted freewill image to select the object.
7. Click the object and click it one again. Four double-headed curve arrows will appear in the four corners of the object's outer frame. Also, a black point with a white cross in the center will appear in a certain position. You can use them to rotate the object.
8. Place the cursor on the one of the arrows. Now, the cursor will become a cursor with a steering wheel. Click and hold down the left mouse button to drag the cursor in one of the directions that the double-head arrow points to. The object will rotate with it.

You can alter the position of the Center Mark for rotating: Place the cursor on the center mark, and now the cursor will become a four-headed arrow. Click it and hold down the left mouse button to drag the cursor, now the center mark will move with the cursor. If you rotate the object under this state, the object will rotate with the new position of the center mark as the center.

Note:

While rotating in the above-mentioned way, the selected object is rotating with the center. You can alter the position of the center mark, but the new position is valid only when you have not clicked the blank space to give up the current selection; otherwise, the center mark will resume its original position.

Topic Four
Viewing Design

About this Topic

Chapter 8. Choosing interface settings
- Changing the interface settings

Chapter 9. Changing the method of viewing design
- Viewing designs under the outline state
- Viewing designs under the block state
- Viewing designs under the stitch state

Chapter 10. Changing the state of viewing design
- Panning designs
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- Displaying designs in simulative view
- Refreshing designs

Chapter 11. Processing the information of design
- Getting the information of design
- Remarking the note of design
- Measuring a distance or length of design
- Filming design
- Viewing the quick property of unit

Chapter 8.

Choosing Interface settings

In this chapter we will introduce how to set the interface of the Ultrapunch and how to enter the different mode according to your need.

Changing the interface settings

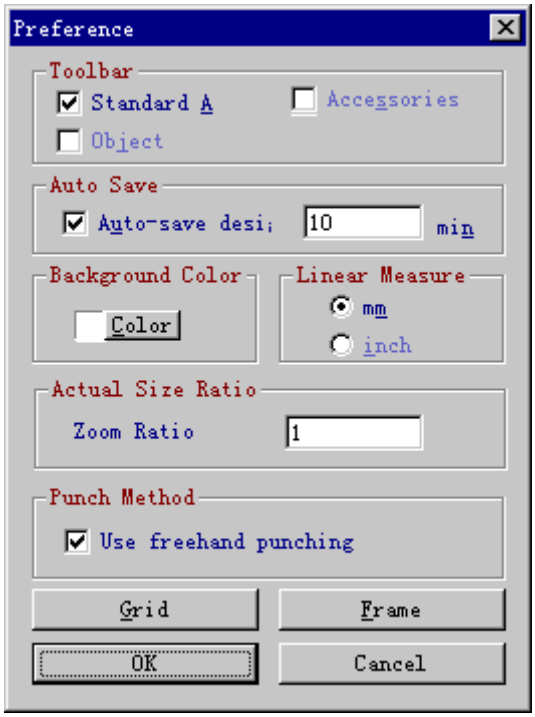
Ultrapunch has various options for how the "user interface" is setup. You can access and change these settings to reflect your personal preferences for:

- AutoSave Settings
- Background screen color
- Measurement System
- Grid View
- Frame View

Changing the Interface Preferences

1. Click the **View** menu, scroll to **Interface Preference** and click it. If the Accessories toolbar is visible, click the **Preference button** on the toolbar.
2. Under the **Toolbar title**, the dialog box provides you with three checkboxes to check or uncheck five kinds of toolbar.
   Checking the **Standard A** checkbox makes the Main toolbar visible on its default location, otherwise it will be invisible.
   Checking the **Object** checkbox makes the Object toolbar visible on its default location, otherwise it will be invisible.

Checking the **Accessories** checkbox makes the Accessories toolbar visible on its default location, otherwise it will be invisible.



To **change** the **position** of the toolbar, double click the blank space on the toolbar, so that the toolbar becomes an independent window. Click the blue title bar, hold down the left mouse button and release it until you drag the dotted frame to a proper position. In addition, the shape and size of the toolbar window can be changed in order to fit special requirement. Move the cursor to the border of the window, the cursor will become a double-direction arrow. According to your desired, drag it toward one of the two directions. Double click any toolbar window in the suspended Ultrapunch window to make resume its original position.

To **move** toolbar window, you can also double click the blank space of the toolbar and then right click the blue title bar. Select Move, a dotted frame of the window will appear. Use the direction keys to move it and press the Enter key to make sure.

To make the toolbar invisible, double click the blank space of the toolbar and the click the close button on the upper right corner or right click the blue title bar in the current toolbar window and select Property. To select Property is equal to uncheck the toolbar checkbox in the Preference dialog box.

3. The second option, **Auto-Save Design**, enables automatic back up of your design, in case of a computer shut-down. The number in the box determines the time (in minutes) between automatic save intervals.

An auto-saved design is stored in the current working directory under the file name autosave.asd. This file is replaced when you manually give the design a name.

It is recommended that you always have this option selected.

The **default interval between auto-saves is 10 minutes**. If your computer is not very

powerful and you experience frequent processing problems, or you live in an area subject to frequent power failures, you may want to have less time between auto-saves, maybe 5 minutes.

If the computer is not shut down properly or you exit Ultrapunch improperly and do not manually save the current design the message "*Ultrapunch was not shut down properly, do you want to load the backup design*?" appears when you open Ultrapunch. Selecting **OK** in this message loads the backup design.

4. The section titled "**Background Color**" controls the screen color shown in your work area. The default color is a **dark gray**.

   If you experience difficulty seeing the stitches or outlines in the Ultrapunch window (color qualities can vary with different brands and models of computer monitors), you should try changing the background color. Many people who have difficulty with the dark gray color, find that a light gray color works better for them.

   To change the color, just **click** on the "**Color**" **icon**, click on a new color in the color palette window, then click on **OK**.

5. The section titled "**Linear Measure**", lets you change the system's measurement unit between **millimeters** and **inches**. Once the unit of measurement is changed, all values in the system will be measured in that unit.

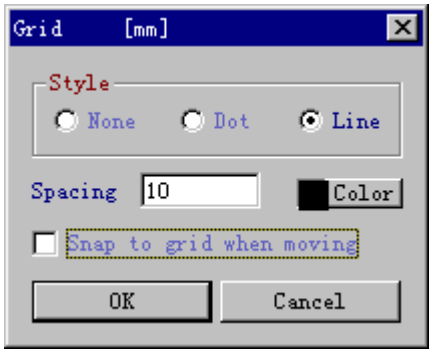
Note:

While many new users in the U.S.A. are more comfortable working in inches, there is a reason that the metric system is usually used in embroidery.

It is much easier to work with and understand stitch values (densities, stitch lengths, underlay values, etc) when working in millimeters, If you use inches, the several decimal places required for these measurements can become quite confusing.

If you would like to try working with millimeters, it is easy to do the conversions for design size, just multiply by 25. There are 25.4mm in 1 inch. So if you need a 3 inch design, that's around 75mm.

6. The section titled "**Punch Method**" has to do with using the manual punching tools. When this option is selected, you can draw on screen by holding down the mouse button and simply dragging to mark the line, you do not have to click the individual points for an outline.
7. Clicking on the **Grid icon** opens the Grid dialog box. Displaying a grid on the screen is frequently useful when trying to measure or line up different elements in the embroidery. Use this dialog box to configure the grid to your preferences.



The "**Style**" option controls the type of grid: None, Dots or Lines. Dots displays only small dots at the intersecting grid lines. Line displays a conventional grid, composed of dashed lines.

The "**Spacing**" value controls the distance between grid lines. If using metric measurement, a value of 10 is recommended. If using inches, a value of 0.5 is recommended.

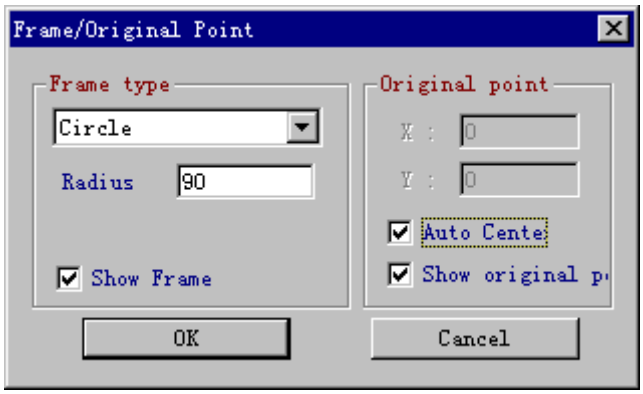
The **Color** button lets you change the grid color. Most people prefer the default color - black. If you want to change it, click on the Color button, click on a new color, then click OK.

The option "**Snap to grid when moving**" is usually left off. If activated, this means that when you move an object, it can only be placed exactly on a grid line. Most users do not prefer movement to be limited in this way, but it can be useful in specific situations.

Click on the **OK icon** accept the changes made in the Grid box and return to the Interface Preference box.

8. Clicking on the **Frame icon** opens the frame dialog box.

A frame is usually required in embroidery to hold the garment in place. The user must be careful that the design fits into the frame. Ultrapunch lets you select and display a representation of the frame on-screen, to remind you of this limitation.



In the "**Frame Type**" section, you must choose the style of frame from the drop down menu. Click on the arrow to display the choices: square, rectangle, circle or ellipse. Click on the frame shape you use.

Once the shape is selected, you must enter the measurements.

Square:	Width
Rectangle:	Width and Height
Circle:	Radius
Ellipse:	Radius X and Radius Y

Clicking so that there is a check in the box for "**Show Frame**" will display a **red outline representing the frame** on your Ultrapunch work screen. (If you turn on this option and cannot see the frame after exiting the preferences menu, you are probably zoomed in too close for it to be displayed. Do a negative zoom a couple of times, so there is more empty space around the design, and you will probably see the red frame).

The section titled "**Original Point**" controls where stitching starts and ends for the design.

When the box for "**Auto Center**" is checked, Ultrapunch automatically identifies the center of the design and makes stitching start and stop at this point, making it easy for you to correctly position the hoop on your machine. It is recommended that you always use this option. In special situation, un checking the box allows access to the values for X and Y position of the origin point, so you can enter whatever values you like for the design origin.

If you check the box for "**Show Original Point**" two markers will display on your design, indicating the origin - a green triangle represents the start position, a red plus represents the end position.

Note:

If you turn of AutoCenter, and turn on Show Original Point, you can also **move the origin graphically** in the design window. Just place the mouse pointer over the symbols representing the origin, hold down the left mouse button, and drag to the desired position.

When the Frame settings have been changed to your preference, click on **OK** to return to the Interface Preference dialog box.

9. Click on **OK** to close the Interface Preference dialog box, saving the new settings.
The new settings will be used every time you are in the Ultrapunch program, until additional changes are made.
To exit without making any changes, click on Cancel.

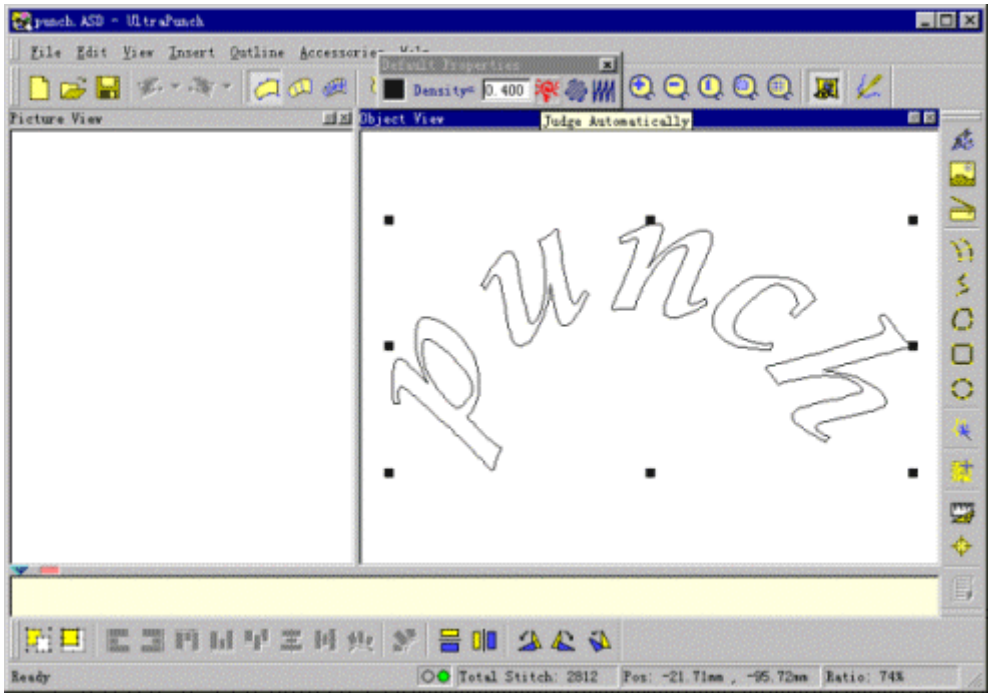
Chapter 9.

Changing the method of viewing design

You can choose either of the three view states according to your requirement. You can choose the Outline View state when you modify the outline of the current design. You can choose the Block View state when you modify the block of the current design. You can choose the Stitch View state when you modify the stitches of the current design. These three view states provide you more conveniently to operation the designs in the Object View window. You can switch among these three, but only one is possible at a time.

Viewing designs under the outline state

Outline View is the initial view you receive of the design after inserting an image or font, it is simply the vector outlines based upon which Ultrapunch generates the stitches. Click the **View** menu, scroll to **Outline View** and click it. Alternatively click the **Outline View button** on the toolbar or press the **F6** function key on the keyboard. If this state has been chosen, the design will be displayed in the form of a real outline. You will see only the black vector outlines of the design on the screens. If any sections had been selected, they will be filled in with a gray color.

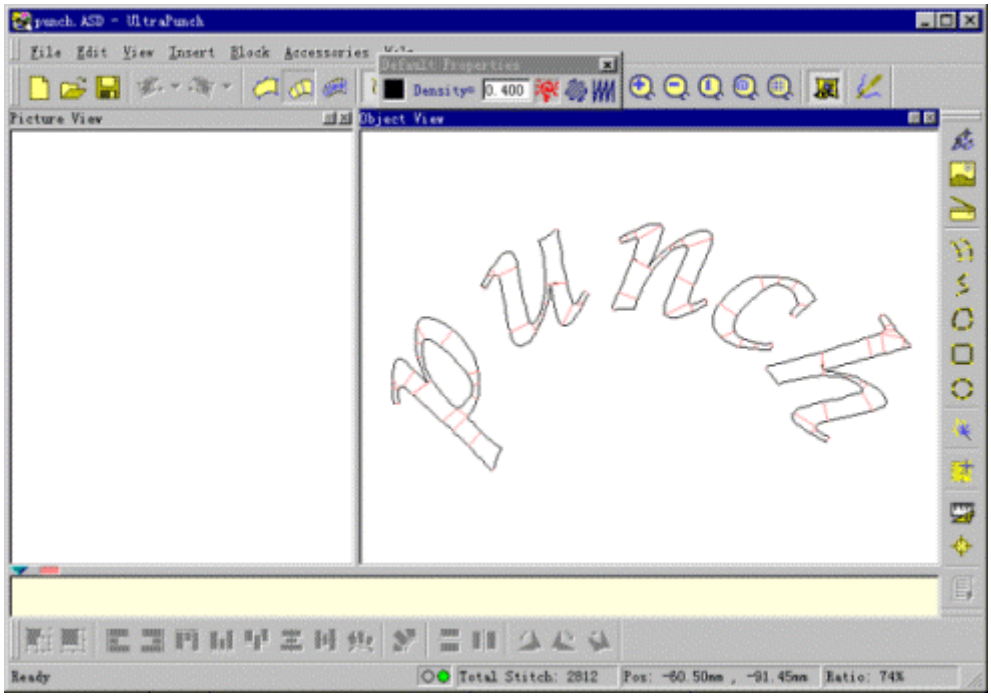


Notes:

1. When you first launch Ultrapunch, the Outline View is on by default.
2. You can switch among Outline View, Block View, and Stitch View, but only one of the three views can be activated at a particular time.
3. You can switch among the three views before doing my operations.

Viewing designs under the block state

Block view is used to enable or disable the view of blocks which are inside the generated column fill area of the design in the Object View window, usually for one color geometry entity with large border to area ratio. Block view shows the stitch angles for sections done in a satin column stitch (where the stitch angle follows the shape of the area, not using all one angle like a complex fill). Click the **View** menu, scroll to **Block View** and click it. Alternatively click the **Block View button** on the toolbar or press the **F7** function key on the keyboard. You will see only a black outline of the design on the screen, with lines indicating the stitch angles in any sections of satin column stitches.

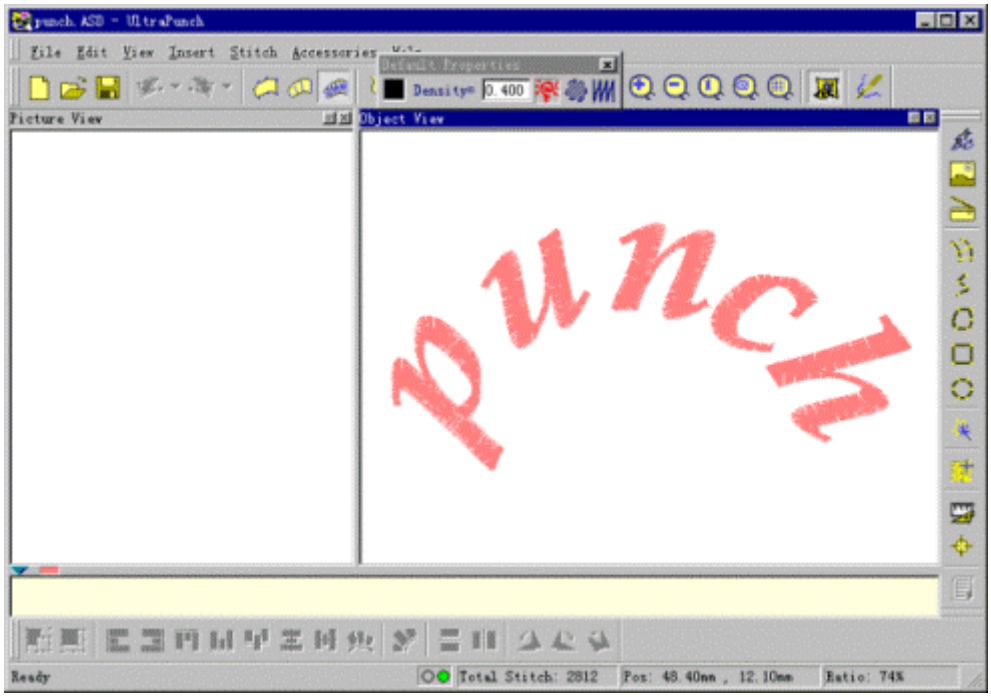


Notes:

1. When you first launch the Ultrapunch, the Outline View is the default state. Even if you choose the Block View, the design will continue to show the red outline until you generate and choose it again.
2. Only geometry entity (area) for column stitch generation will show blocks.
3. You can switch among Outline View, Block View, and Stitch View, but only one of the three views can exist at one time.
4. Column and complex fill are different stitch types, the block view status will display to you which area would be filled by column and which area would be filled by complex fill. If some area of the object is cut into several blocks with a red line, it means that this area will be filled by column and at the same time without underlay. Those areas that have not been cut into blocks by red line will be filled by complex.

   To embroider according to the outline, if you use column, the direction of the stitch will surely change. Cutting it into blocks, the stitches with the same direction will be grouped into one block. Therefore, the directions of stitches of the adjacent blocks are different.

Viewing designs under the stitch state



Stitches View is used to enable or disable to view the object's stitches as thin lines in the Object View window. Stitch view shows the actual stitches in the design. It is the view that you see every time you generate stitches. If you try to switch to Stitch View before you have generated stitches, you will see the dotted outlines, but no stitches. Click the **View** menu, scroll to **Stitches View** and click it. Alternatively click the **Stitches View button** on the toolbar or press the **F8** function key on the keyboard.

Notes:

1. When you first lunch Ultrapunch, Outline View is the default status. If you select Stitches View without generating, the program will show you the dotted outline without any stitches inside. But if you select generate first, then the Stitches View will be used after generating automatically, and this view will last until switched to one of the other two view types.
2. You can switch among Outline View, Block View and Stitches View, but only one of the three views can exist at one time.
3. The stitch type filling the object depends on whether the object is cut into blocks or not. This is the best embroidering effect that Ultrapunch can provide you. Of course, this may not be the final effect, and you can modify it according to you r requirements to get the desired effect.

Chapter 10.

Changing the state of viewing design

Panning designs

Pan gives you a way to change the position of the view. When you are looking at a view of the entire design on screen, there is really no need to change the position.
Pan is most frequently used when zoomed in on one area of the design, and you would like to move the display to nearby area outside of the current view.

Using Pan to Move the Display

1. Click the **View** menu, scroll to **Pan** and click it. Alternatively click the **Pan button** on the toolbar or press the letter **P** on the keyboard (for **Pan**).
2. The cursor turns into a panning cursor that looks like a circle with a crosshair in the middle, identifying that you are in pan mode.
3. Place the cursor to place in the Object View window where you want to reposition the view, then **click** the **left mouse button** one time.
   The display will change, using the place where you clicked as the new center of the window.

Note:

If you have difficulty using the Pan command, just imagine that you are trying to move the view in the direction that you click.
So, if you need to see the area just above what you currently see on the screen, active Pan, place the cursor in the top center of the window and click the left mouse button.

4. Each time you click, the view changes again.
   The Pan tool stays active until another tool is selected, or the tool is cancelled. It is not necessary to select the tool again if you need to move the display further.
5. To de-select the tool, you can click on the **Pan button** on the toolbar or click the **right mouse button** anywhere on the design to cancel the tool.

Notes:

1. When you drag the object and hold down the left mouse button, you will find that the whole object or part of it will be displayed in the Object View window and can not be moved out of the window no matter how you drag the object. (The premise is to drag the object without releasing the left button)
2. If you insist on moving the object out of the window, you need to drag them individually, and you should not hold down the left mouse button at the moment. In addition, when you want to select a partially displayed object by dragging a rectangular frame, you will find that the object will move up and down or left and right so that you can finally enclose the object. It will be more convenient than using Zoom All and then dragging a frame to select the object.

   The above-mentioned conditions are due to the fact that Ultrapunch imperceptibly provides the user with an Auto-Pan, which can move the screen automatically with object.

Zooming designs

There are six zoom tools available in Ultrapunch, to allow you to clearly view any area of the design:

- Zoom In
- Zoom Out
- Natural Size
- Zoom Object
- Zoom All
- Last Zoom

Tips:

1. If you want to operate the entire design in the Object /view window, Last Zoom, Natural Size and Zoom All can be performed by clicking in the command. To perform Zoom In and Zoom Out, you need to click not only the command but also any one position in the Object View window. If you want to operate part of a design in the Object View window, only Zoom In and Zoom Out will work. Click the command and drag a rectangular frame to enclose the operative object, the selected object will be zoomed in or zoomed out and placed in the center of the window.
2. The difference between these two ways: the former can use any one of the five ways and zoom in or out proportionally; the later can only use Zoom In or Zoom Out and the object

always lies in the center of the Object View window, but the change is not proportional. The smaller the rectangular frame you drag is, the bigger the multiple of zoom in or out; on the other hand, the larger the rectangular frame you draw is, the small the multiple of zoom.

Notes:

1. You should select the command before selecting the objects, which you want to zoom.
2. Zoom All, Zoom In and Last Zoom are likely to make the size of the designs to go beyond the limit of the Object View window.

Zoom In

Zoom In is used to magnify an object or even a part of an object to ease the editing process and see more clearly.
Remember that the Zoom tool only affects how you are seeing the design on the screen, it does not change the actual size of the design.

There are two ways to use Zoom In, by clicking with the mouse, or by drawing a box. If you just want a larger view of an area, just click with the mouse. When you want control over the exact area that will be zoomed, draw a box.

Tip:

You can right click any place in the Object View window to cancel the working state of Zoom In.

Notes:

1. The effect of Zoom In will last until you click Zoom In button again or switch to Zoom Out button .
2. Zoom In can be used together with Zoom All, Last Zoom and Natural Size at the same time.
3. This effects the window only and does not change the size of the object.

Zoom In by Clicking

1. Click the **View** menu, scroll to **Zoom** sub-menu and click **Zoom In**. Alternatively click the **Zoom In button** on the toolbar or press the letter **I** on the keyboard (for **In**). The cursor will change to a magnifying glass with a plus sign to identify Zoom In.

2. **Click** the **left mouse button** or **repeatedly click** the Object View window The designs will be enlarged by approximately 20% from the previous size.
3. Each time you click, the design will again be enlarged.
   The Zoom In tool stays active until another tool is selected, or the tool is cancelled. It is not necessary to select the tool again.
4. To de-select the tool, you can click on the **Zoom In button** in the toolbar. Alternatively, **click** the **right mouse button** anywhere on the design to cancel the tool/

Notes:

1. It affects all the designs in the Object in the Object View window.
2. Each click will enlarge the designs by 20% from the previous size, but the maximum enlargement scale is 3200%. If the maximum value is reached, the function will no longer work.

Zoom In by Drawing a Box

1. Click the **View** menu, scroll to **Zoom** sub-menu and click **Zoom In**. Alternatively click the **Zoom In button** on the toolbar or press the letter **I** on the keyboard (for **In**). The cursor will change to a **magnifying glass with a plus sign** to identify Zoom In.
2. Place the mouse cursor slightly outside one corner of the area you want to zoom.
   Hold down the left mouse button and **drag towards the opposite corner**. A rectangle should be drawn on the screen, showing the area that you want to zoom.
   When you **let go of the mouse button**, the area covered by the box will be zoomed in on the screen.
3. The Zoom In tool stays active until another tool is selected, or the tool is cancelled. It is not necessary to select the tool again.
   So, if necessary you can draw another box to further enlarge the area.
4. To de-select the tool, you can click on the Zoom In button in the toolbar or click the right mouse button anywhere on the design to cancel the tool.

Notes:

1. All the designs in the Object View window will be enlarged, but the selected object(s) will be displayed in the center of the Object View window.
2. Each enlargement has no proportional association, but the smaller the rectangular frame you drag is, the bigger the multiple of zoom in is.

Zoom Out

Zoom Out is used to reduce the view of an object or a portion of an object, so that you can see more of the area around it.

Remember that the Zoom tool only affects how you are seeing in the design in the Object View window, **it does not change the actual size of the design**.

Tip:

You can right click any place in the Object View window to cancel the working state of Zoom Out.

Notes:

1. The effect of zoom out will last until you click the Zoom Out button again or switch to the Zoom In button.
2. Zoom Out can be used together with Zoom All, Last Zoom and Natural Size at the same time.
3. This affects the window only, it does not change the size of the object.

Zoom Out by Clicking

1. Click the **View** menu, scroll to **Zoom** sub-menu and click **Zoom Out**. Alternatively click the **Zoom Out button** on the toolbar or press the letter **O** on the keyboard (for Out). The cursor will change to **a magnifying glass with a minus sign** to identify Zoom In.
2. **Click** the **left mouse button** on a place in the design.
   The design will be reduced by approximately 20% from the previous size.
3. Each time you click, the design will again be reduced.
   The Zoom Out tool stays active until another tool is selected, or the tool is cancelled. It is not necessary to select the tool again.
4. To de-select the tool, you can click the **Zoom Out button** in the toolbar or **click** the **right mouse button** anywhere on the design to cancel the tool.

Notes:

1. It functions on all the designs in the Object View window.
2. Each click will reduce the designs by 20% from the previous size, but the minimum shrinkage scale is 10%. If the minimum value is reached, it will stop reducing.

Zoom Out by Drawing a Box

1. Click on **View**, scroll to **Zoom** sub-menu and click **Zoom out**. Alternatively, click **Zoom Out button** on the toolbar or press the letter **O** on the keyboard (for **Out**).
   The cursor will change to a **magnifying glass with a minus sign** to identify Zoom Out.

2. Place the mouse cursor slightly outside one corner of the area you want to zoom.
   Hold down the **left mouse button** and **drag towards the opposite corner**. A rectangle should be drawn on the screen, showing the area what you want to zoom.
   When you **let go of the mouse button**, the area covered by the box will be zoomed out on the screen.
3. The Zoom Out tool stays active until another tool is selected, or the tool is cancelled. It is not necessary to select the tool again.
   So, if necessary you can draw another box to further enlarge the area.
4. To de-select the tool, you can click on the **Zoom Out button** on the toolbar or **click** the **right mouse button** anywhere on the design to cancel the tool.

Natural Size

Natural Size is used to show the design in the Object View window at the actual sew-out size.

Showing the Design at Natural Size

Click on **View**, scroll to **Zoom** sub-menu and click **Natural Size**. Alternatively, click the **Natural Size button** on the toolbar or press the letter **N** on the keyboard (for **Natural**).

Natural Zoom acts instantly, showing your design at the actual sew-out size. It is a one-time command, there is no need to de-activate the tool.

Note:

If you do not notice a change, it is possible that the design was already displayed at natural size (100%).
The Natural Size command will only function properly if the computer monitor is correctly configured.

Zoom Object

Zoom Object is used to show a selected area at the maximum possible zoom size, making it easy for you to edit that area.

Using Zoom Object

1. Place the mouse cursor over the area that you want to zoom, and **click the right mouse button** to select it. The area will be shown with a dashed blue and white line flashing around it.
2. Click on **View,** scroll to **Zoom** sub-menu and click **Zoom Object**. Alternatively, click the **Zoom Object button** on the toolbar.
   The area selected in step 1 is now shown at the maximum possible magnification.
3. Zoom Object is a one-time command, there is no need to de-activate the tool. When you are ready for a different view of the design, use one of the other Zoom tools.

Zoom All

Zoom All is used to show the entire design at the maximum possible zoom size that will fit on the screen.

Using Zoom All

1. Click on **View**, scroll to **Zoom** sub-menu and click **Zoom All**. Alternatively, click the **Zoom All button** on the toolbar or press the letter **A** on the keyboard (for **All**).
   The whole design is shown in the Object View window. For a small size design, it may be at a large zoom factor, for example 200%. For large size design, it may be smaller than the actual size, for example 90%.
2. Zoom All is a one-time command, there is no need to de-activate the tool. When you are ready for a different view of the design, use one of the other Zoom tools.

Last Zoom

Last Zoom will take you back to the previous view of the design, after using one of the other zoom tools. It is similar to an Undo/Redo command.

Using Last Zoom

Click on **View**, scroll to **Zoom** sub-menu and click **Last Zoom**. Alternatively, click the **Last Zoom button** on the toolbar or press the letter **L** on the keyboard (for **Last**).
The display will return to the previous view.

Notes:

1. The effect is just like zoom undo/zoom redo, but takes only one step.
2. It affects all the designs in the Object View window.
3. It can be used together with Zoom In and Zoom Out.

Display designs in Simulate View

Ultrapunch gives you a way to quickly preview the sewn design right on your computer screen.
There are two types of simulated view, Quick View, and True 3D View. They are quite similar - both simulate the appearance of the sewn stitches, True 3D View adds dimension while Quick View just shows texture.

Using Quick View

1. After inserting an image and generating stitches, your design will be shown in **Stitch View**.
2. Select **View**, scroll to **Simulate View** sub-menu and click **Quick View**. Alternatively, click the **Quick View button** on the toolbar or press the function key **F11** on the keyboard.
   The design is shown in the simulated stitch view.
3. To return to the normal stitch view, select **View**, then **Simulate View** sub-menu, click **Quick View**. Alternatively, click the **Quick View button** on the toolbar or press the function key **F11** on the keyboard.

Using True 3D View

1. After inserting an image and generating stitches, your design will be shown in **Stitch View**.
2. Select **View**, scroll to **Simulate View** sub-menu and click **True 3D View**. Alternatively press the letter **T** on the keyboard.
   The design is shown in the dimensional simulated stitch view.

3. To return to the normal stitch view, press the **Esc** key on the keyboard or click on the **Stitch View button** on the toolbar.

Refreshing Design

Refresh is a useful function of Ultrapunch.
When there is an object in the Object View window, the **Refresh** under the **View** menu will be available. If the changes of the object are not displayed out after a series of editing operations, it is most likely that the machine has not gotten the chance to refresh the object or sometimes Windows can't find enough time to do it. Now you can refresh it through selecting Refresh from the View menu or pressing the function key **F15** on the keyboard to refresh it manually. You will now find the object in the window twinkling, indicating a "refresh" is occurring, and the editing effect at present will be displayed on the screen.

Tip:

While deleting stitches, dotted lines may appear in the places of the original stitches. However, if you press the function key F15 on the keyboard, the dotted lines will disappear at once.

Note:

Ultrapunch provides the user with a way to automatically refresh an object without pressing the function key F15, but sometimes in certain cases you may also have to press F15 to finish refreshing of the object.

Chapter 11.

Processing the information of design

Getting the information of design

Design Information provides the user with the latest information about the design. After selecting **Design Information** from the **View** menu or click the **Design Information button** on the toolbar, the Design Information dialog box will pop up and display some basic information about the design. There are some settings that the user can't change; but others can be modified or chosen freely by the user. In addition, Ultrapunch provides the user with some buttons that will display the detailed information as long as you click them.

In this dialog box:

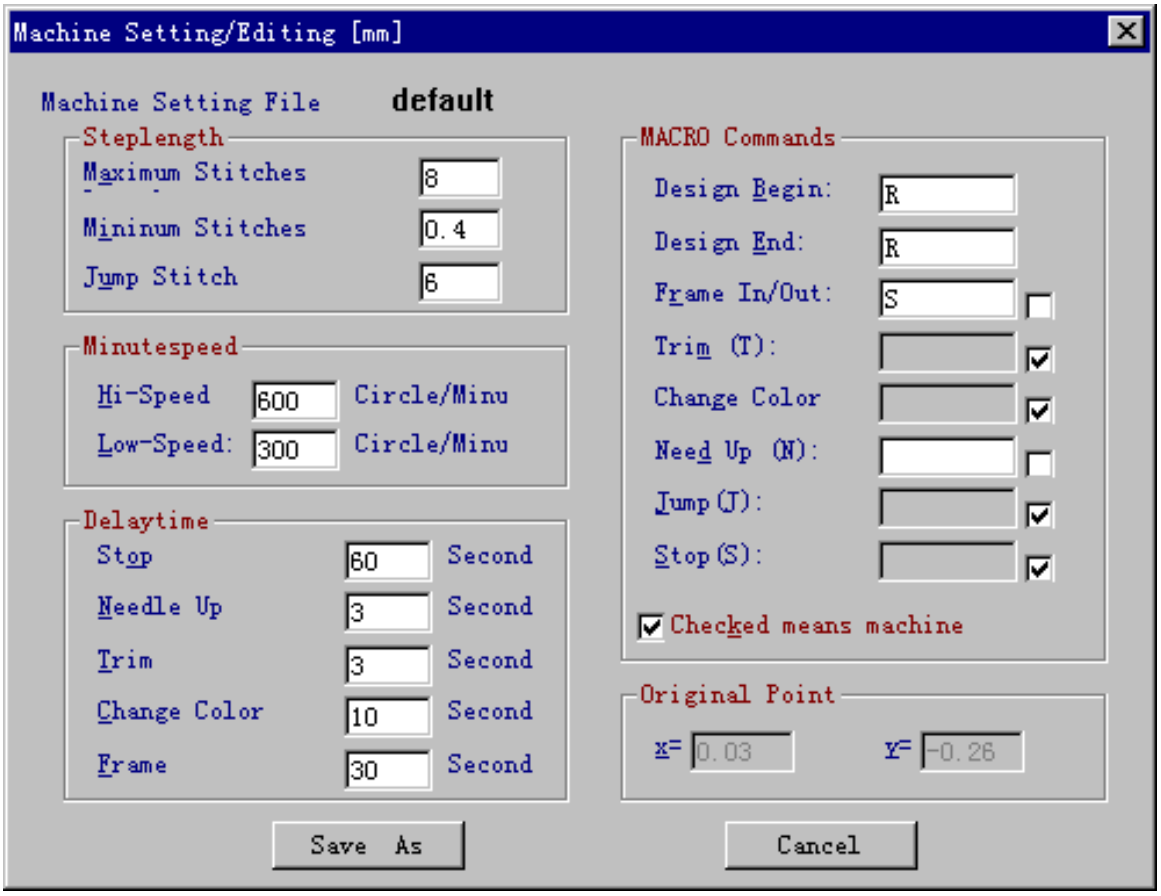
- If you have saved the current design, the name of the design will be recorded in **Design Name** and the **date** that you last saved it will be registered in **Last Saving**; otherwise the design is Untitled and Unsaved.
- In the **Output Stitch drop down box**, the user can choose the **stitch types** of the output stitches.
- In **Design Repeat**, you can click the two small buttons indicating more or less behind

the input box, or double-click the input box and type your desired value, to define the number of times that you want to repeat the design. Usually the default is 1.

- In **Author Name**, the user can double-click the input box and type the user's name.
- Under **Machine Set drop down box**, the user can choose the type of machine that you want to use.

Machine Set

The type of machine that you have chosen is the name following Machine Setting File in the pop up Machine Setting/Editing dialog box.



- The values offered in **Steplength**, **Minutespeed**, **Delaytime**, are the default settings of the specified machine. Generally speaking, **different machines has different default settings**. You can use the default settings or you can modify them. To do so, double-click the relevant input box and type your desired value.
- In **Macro Command**, there is also a checkbox beside the input box. If it is checked, the input box will be dimmed, and the machine will embroider according to the natural macro command of the machine. If it is not checked, the input box will become highlighted, and you can type a macro command by yourself. As a result, the machine

will embroider according to your input value instead of the macro command of the machine.

- The **Original Point** option is used to define the original point at the beginning of embroidery.

Tip:

The commands that you can type:

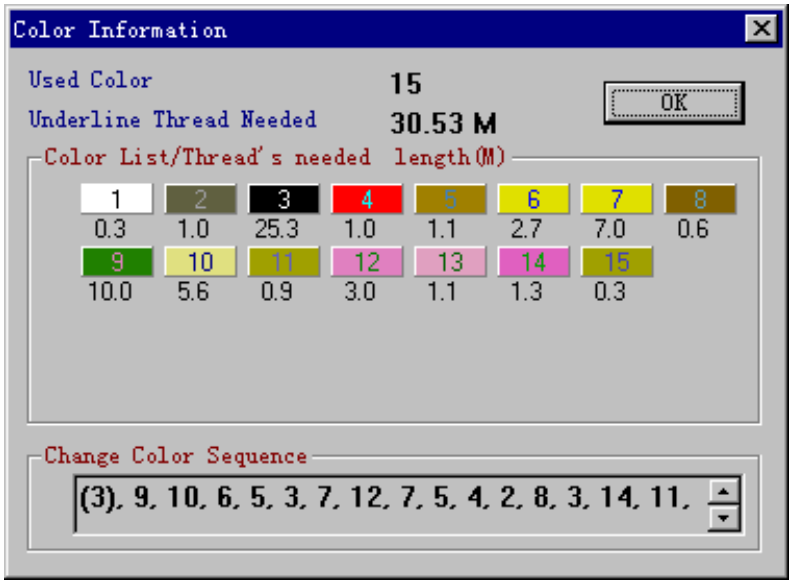
Return	(R): return to the original point
Stop	(S)
Jump	(J)
Trim	(T)
Needle Up	(N)

Notes:

1. If the checkbox is not checked and you have not typed the defined macro command either, the command will be regarded as empty while embroidering.
2. If you want to modify parameters of the original machine, click Save As when you finish modifying and then click OK in the pop up dialog box directly. You should not type or modify the name of the original Machine Setting File. If you want to add a machine type, click Save As when you finish typing the defined parameters. In the pop up dialog box, type the name of the machine in the box following the Machine Setting File, and then click OK. Generally speaking, this name is different from that in the Machine Setting drop down box; otherwise it will cover the file of the original machine setting.

Color Information

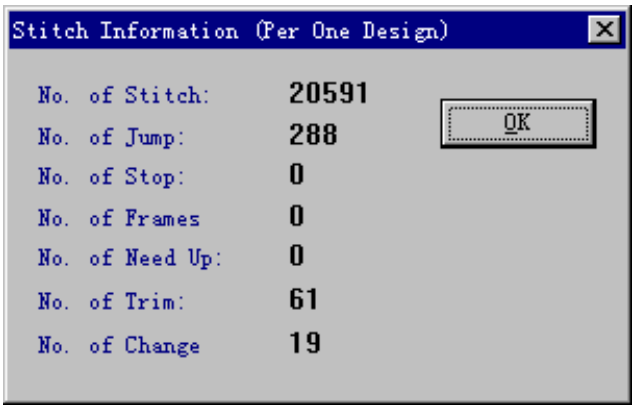
The pop up Color Information window will display:



- The number of colors that the design is using.
- The length (M) that the bobbin thread requires.
- The length (M) of the thread of every color.
- The sequence of changing color of the current design, i.e. the serial number of the color list.

Stitch Information

The pop up Stitch Information window will display the information about the current design such as **Stitch Number**, **Jump**, **Times**, **Stop Times**, **Frame**, **Needle Up Times**, **Trim Times** and **Change Color Times**.



Working Times

The pop up Working Time window will display such information about the current design as the time it needs and the percentage of embroidery efficiency.

Stitch List

The pop up Stitch List window will display such information about the current design as **Design Name**, **Author**, **Create Date**, **Format**, and **Total Stitch Number**. In addition, it will list the **positions** (X,Y) of each stitch throughout the design, including the new positions that are defined after using some command, for instance, Jump.
Click **Save** and type the filename. You can save the Stitch List of the design as a TXT file.

Remarking the note of design

Notes allow you to add notes to any ASD design file. These notes can be business-oriented, personal or on any subject that you choose.

Click the **View** menu, scroll to **Notes** and click it. The notes editor will appear. Add whatever notes you feel appropriate, then choose one of the following options:

- **OK**: will save your notes with the design file.
- **CLEAR**: will erase any existing notes associated with that file.

The following Clipboard functions work with the Windows Clipboard:

- **CUT**: allows you to highlight part of your notes and send it to the Clipboard
- **COPY**: allows you to highlight part of your notes and copy it to the Clipboard
- **PASTE**: allows you to copy notes from the Clipboard and duplicate it in a different design.

Note:

If some designs have used Notes, i.e. type some notes in Notepad about this design and save it, the notepad will be opened automatically and display the relevant information of the previous operation about the design while loading the design next time.

Measuring a distance or length of design

The Ruler can be used to determine the width and height of your design, the size of a particular area in the design, or the length of individual stitches in the design. You can also determine the diagonal measurements of your design.

Using the Ruler to Measure an Area

1. Click the **View** menu, scroll to **Ruler** and click it. Alternatively click **the Ruler button** on the toolbar or press **R** on the keyboard (for **Ruler**).
2. Place the cursor (the cursor changes to a ruler with a plus) at the point on screen that you want to start measuring from.
3. **Click** and **hold down** the **left mouse button**, and **drag** the cursor to the end point of the area you want to measure. The **Status Bar** at the bottom of the screen displays the measurements in both the X (horizontal) and Y (vertical) directions in the Pos frame of the Status Bar, and measurements are shown in inches or mm on the left side of the

Status Bar.

4. When you let go of the mouse button, the measurement value disappears, however the Ruler tool is still active, and you can continue to measure other areas of the design.
5. To de-select the tool, you can click the **Ruler button** on the toolbar or **click** the **right mouse button** anywhere on the design to cancel the tool.

Note:

If the Status Bar is disabled, the Ruler is still available but there is no place for measurements to be displayed.

Filming design

In Ultrapunch, we provide another useful way to view a design is by using the Filmstrip. The film gives a section by section view of the entire design, with each section having its own identifying number.
Using the Film View, you can conveniently change the sequence, color, add or delete machine functions and etc. You can edit each area of the present design in the Film window, the way of operation and the final effect are the same with that of the Object View window.

The Film window offers you a series of buttons. On the left side of every “film” there are Visible /Invisible and Lock /Unlock two kinds of button. The default state is and . You can get the contrary state of the two buttons by left clicking. Except the first “film”’ every “film” has four buttons: Needle up /, Change Color /, Trim / and Stop Machine /.
When we feel that it is necessary to use Needle up, Trim, Stop Machine and find that an area and the following area have different color, the default states, also called suggestive state, will appear. In other words, if the operation is necessary the relevant button becomes highlighted, otherwise these buttons are dimmed. Of course, you can alter the default state by left-clicking each button.

Click the **View** menu, scroll to **Film** and click it. Alternatively click the **Film button** on the toolbar.

Tips:

1. You can also change the stitch sequence of units. First, click to select an unit, suppose it is No.15, which you want to change sequence, and then click to select your desired position and drag No. 15 there without releasing the left mouse button, suppose it is No. 5. At this moment, you will find the "films" in the Film window will move upward and downward correspondingly. Then you will find the serial number on the left corner of this unit's "film" has been changed from the original No. 15 to the current No. 5 and the original No.5

becomes No. 6. The rest will rearrange accordingly and automatically. (The serial number indicates the stitch sequence while embroidering.) And the embroidery machine will generate stitches according to the new sequence. In this way, You can change stitch sequence, reduce the times of trimming lines and changing color.

2. You can hold down the Ctrl key and click several inconsecutive units to change the sequence constantly, and finally make these units become a batch of consecutive units in their new positions.
3. You can hold down the Shift key and click several consecutive units to change the sequence.
4. Click any unit in Film window, and a menu will appear on the screen. To click Move to Top can move an appointed unit from its present position to that of the first area in the Whole Film window. To click Move to Bottom can move an appointed unit from its present position to that of the last area in the whole Film window. Click Properties and to check visible/lock and commands in the pop up properties dialog box is equal to check the relevant buttons of the current unit.

Notes:

1. Only after generating can units be displayed in the Film window.
2. To click a unit's "film" is equal to right click the unit in the Object View window. Whichever way you choose, the unit will be displayed prominently an in & Out points will be marked. Want to reselect a new unit in Film, click that unit. Want to deselect all the units in Film, right click the blank space in the Object View window.

Marking “In” & “Out”

The “In” & “OUT" points will be marked automatically if you right-click a unit or left-click a unit’s “film” in the Film window. In a unit, “IN” indicate the In point, and “OUT” indicate the Out point. As for two adjacent units in Film the distance between the Out point of a unit and the In point of the following one is the shortest stitching distance. Of course, you can also change the “IN” and “OUT” points manually.

Point the cursor to the “IN” or the “OUT” point, and then the original single-head arrow cursor will become four-heads arrow “move” mark. Left-click and hold down the left button, you will find the cursor becomes the original single-head arrow with “move” mark. Use the mouse to drag “IN” or “OUT” or both of them to your desired position, and then release the left button. But your operation will be valid only after you generate it; otherwise the “IN” & “OUT” points are changed seemingly and they remain in it’s original position virtually.

3. The series of changes in the Film window expect Stop machine will affect the display in the Object View window.
4. The linking line will be displayed with dotted line if there is no trim but needle up at the same time. However, the linking line will be displayed as long as there is no trim.

Visible /Invisible

When the stitches that you want to modify are in the overlapping area and perhaps every area has different colors, you can make the irrelevant areas invisible. In Film window, left-clicking buttons of some unit's "film", and it will become . Thus, the relevant unit will become invisible in the Object View window. (but it will still be reserved in the relevant film) In this way, you can clearly view the area, which you want to modify stitches. After finishing modifying stitches, left-click of those invisible units to make it become . Thus, those units will again appear in the Object View window.

Note:

You can not work on a unit if it is invisible by left clicking . But if you left-click the unit firstly and then make it invisible, you can still move or resize the unit.

Lock /Unlock

If the unit is locked, you can not modify its stitches any more. For instance, if you do some special operations which are related to stitches such as resizing, Ultrapunch will give you a warning message "One or more area is locked, do you still want to continue". The default choice is "No" to cancel this operation, but you can also click "Yes" to do this operation by force.

Needle up /

Click a Needle up button of a unit in Film in which you feel necessary to use needle up. When it becomes highlighted , it shows that another needle up command is added before embroidering an area. In the process of embroidery, the thread between this area and previous one is lifted up. Although it is not trimmed, you can trim it manually. When this button becomes dimmed, it shows that the command is canceled. Thus the thread between the two adjacent units is embroidered stitch by stitch instead of being lifted up (Jump Stitch), and you can not trim it manually. (The thread between the two adjacent units refers to the thread from the out point of the previous unit and the in point of the next one.)

Change Color /

The default state of Change Color in the Film: if the color of a unit is different from that of the previous one, the Change Color button of it will become highlighted automatically. If the color of a unit is different from that of the following batch of units (these units are all consecutive) the Change Color button of the first unit among them will become highlighted automatically. It shows that one Change color command is

here. Now if you click Change Color button, it will become dimmed . This shows that the change color command is canceled, and meanwhile the color of the following one or a batch of units will be the same.
Now if you left-click Change Color button of some unit, you can modify its color in the pop-up Color window. Click “Cancel” to exit this window and cancel the operation as well. Click “OK” to exit the window.

A batch of units

Here the so-called a batch of units refers to several consecutive ones under some unit. If they have the same color, they will become a batch of units and the Change Color button on their own “film” will be dimmed expect the first “film”. This shows there is no change color command and they have the same color with the one ahead of it.

Note:

To add or delete the number of colors in Film will directly affect the color list in the status bar. And the color changing in Film will also directly affect the Object View window.

Trim /

Click a Trim button of an unit in Film in which you feel necessary to use trim. Becoming highlighted shows that the thread will be trimmed automatically and disappear. Becoming dimmed shows the trim command is canceled and the thread between two consecutive Film windows will not be trimmed.

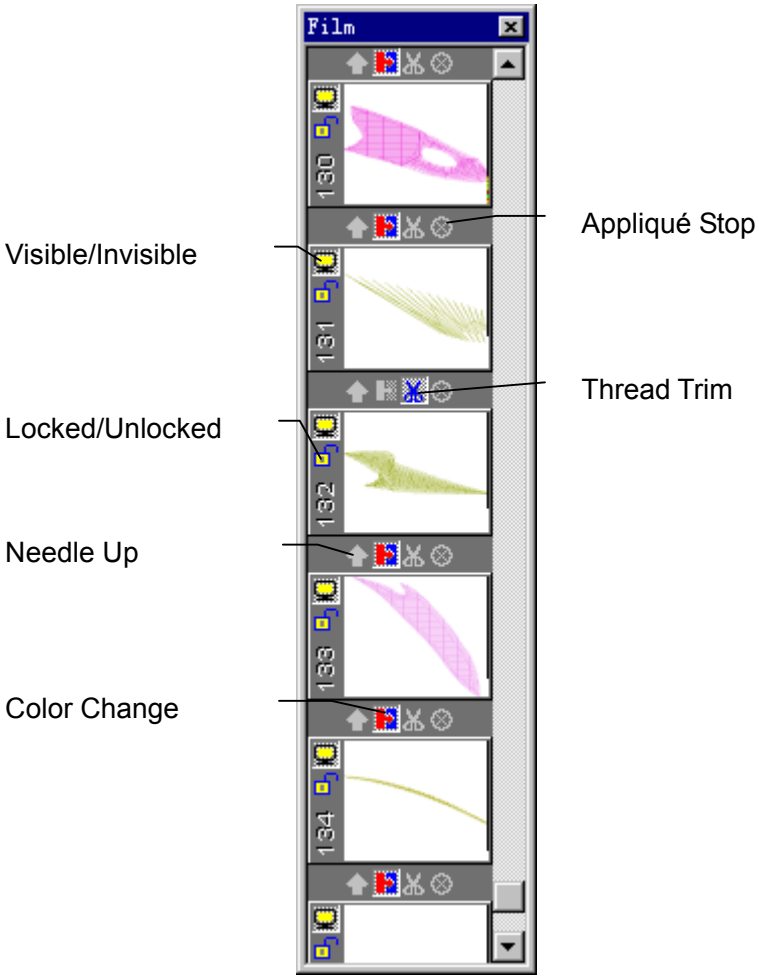
Stop Machine /

Click Stop Machine button in the “film” of the unit that you want to stop the embroidery. Becoming highlighted shows that a Stop machine command is added and you can do some operations on the embroidering machine after embroidering this unit and before embroidering the next one.
If want to cancel this command, you only need to left-click this button to make it dimmed.

Opening the Film View of a Design

1. After inserting an image and generating stitches, your design will be shown in **Stitch View**.
2. Click on **View**, then scroll to **Film** and click on it. Alternatively, click the **Film button** on the toolbar or press the function key **F2** on the keyboard.

3. The Film window opens somewhere on top of your design window. You can **move it to a new position** by placing the mouse pointer inside the "film" title bar at the top, **holding down the left mouse button**, and **dragging** the film to a new location. While moving, a gray outline of the film represents the new location. When you let go of the mouse button, the actual film moves to that place.
   You'll see a box in the film for each section in the design.
   You can use the scroll bar at the right side of the boxes to view sections father down in the file.
4. When you are finished using the filmstrip, you can **close** it by **clicking** the **left mouse button** on the **small x** in the top corner of the film window. Alternatively you can close it by clicking again on the **Film button** on the toolbar.



Viewing the quick property of unit

For quickness and convenience, some frequently changed values are displayed in the Quick Properties Toolbox, eliminating the need to open additional dialog boxes and search for values each time. The Quick Properties Toolbox floats over the design on screen, and can be easily moved out of the way in the same manner as any other Windows dialog box.

The Quick Properties Toolbox is active by default when you first install and begin using the software. It can be activated or de-activated according to your preference.

Activating the Quick Properties Toolbox

1. After inserting an image and generating stitches, your design will be shown in **Stitch View**.
   You will see the Quick Properties toolbox displayed on the screen with your design.

2. As you select various sections in the design, the appropriate values for color, density and stitch type will be shown in the box, and can easily be changed. (Refer to later sections in this manual for detailed explanations of these values).
3. To **Close** the Quick Properties toolbox, just click on the **small x** in the top right corner of the box.
4. To activate the toolbox again, click on **View**, then scroll to **Quick Properties** and click it. Alternatively, click the **Quick Properties button** on the toolbar.

Tips:

1. Quick Property toolbar is the same with other toolbars in usage, left-click the title to activate it; left-click the title and hold down the left key to drag it freely within Ultrapunch window; left-click the upper-right corner “close” button in this toolbar to shut down the current toolbar.
2. Any operations in the Quick Property equal to use the relevant selections in Properties dialog box.
3. Quick Property toolbar is valid only after right-clicking to activate it and this toolbar is invalid to the activated single thread.

Notes:

1. Under the default state, Quick Property will pop out with the start of Ultrapunch, but it is

not activated.

2. During the process of operation, Quick Property can be hidden or displayed as you like it. To display it, select Quick Property from View menu or check the Quick Property button. Once Quick Property button is checked it will appear on the screen.
3. Right-click to activate an area that you're going to modify property, generated or not, and then click Quick Property and the relevant properties will be displayed. Moreover, all the selections are activated and the users can modify the property according to the requirement.

Topic Five
Processing design & object/unit

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Chapter 12.

Processing design & object/unit with common functions

Ultrapunch provides the users some common functions to processing designs. Some processes need to select the object first before choosing the function. Some processes need to activate the unit first before choosing the function. In this chapter we will guide you how to use these functions in detail.

Undo a command

There may be times when you are working on a design, that you realize the changes just made did not improve upon the stitches, and you wish to return the design to its condition before that change.
Ultrapunch provides you with the ability to Undo edit commands all the way back to the original generate command.

- If you find your operation is wrong, click the **Edit** menu, scroll to **Undo** and click it. Alternatively click the **Undo button** on the toolbar or press the **Ctrl** key and **Z** key.
- You can undo several previous operations by repeatedly clicking this Undo button.

Tips:

1. In this version you can undo several actions at one time: Click the arrow next to the undo button to view a list of the most recent actions you can undo. Select the action you want to undo. If you do not see the action, scroll through the list. Drag the mouse to include all the actions you want to undo or click the last action of the series actions you want to undo. When you undo the last action, you also undo all actions above it in the list.
2. If you later decide you didn't want to undo an action click the Redo button on the toolbar.

Note:

The Undo command becomes dimmed when they are unable to be run.

Redo a command

The Redo command allows the user to easily recover from undo during editing.
Redo command reserves the last undo to the select object or the active unit. It can restore the last steps of previous undo operations.

- If you find your undo operation is wrong, click the **Edit** menu, scroll to **Redo** and click it. Alternatively click the **Redo button** on the toolbar or press the **Ctrl** key and **Y** key.
- You can redo several previous undo operations by repeatedly clicking this Redo button.

Tips:

1. In this version you can redo actions at one time: click the arrow next to the redo button to view a list of the most recent actions you can redo. Select the action you want to redo. If you do not see the action, scroll through the list. Drag the mouse include all the actions you want to redo or click the last action of the series actions you want to redo. When you redo the last action, you also redo all actions above it in the list.
2. If you later decide you didn't want to undo an undo, click.

Note:

The Redo function becomes dimmed when they are unable to be run.

Cutting design or object

Cut command is available only when the selected object contains a selection. The Cut command places the section into the clipboard, but also deletes the original section.
To use Cut command, you can:

1. **Click** on the object or right click to activate the unit in the Object View window you wish to remove.

2. Click the **Edit** menu, scroll to **Cut** and click it. Or press the **Ctrl** key and **X** key.
3. The object is removed from the window and placed in the Clipboard.

Copying design or object/unit

There may be times when you wish to exactly duplicate an existing area in the design. The Copy and Paste commands make it easy to do so.
The Copy command makes a temporary copy of the selected section, placing it in the clipboard and leaving the original section intact. For embroidery purposes, copy is more frequently used.
To use Copy command, you can:

1. Click on the object in the Object View window you wish to copy
2. Click the **Edit** menu, scroll to **Copy** and click it. Or press the **Ctrl** key and the **C** key. The object is copied onto the Clipboard.
3. The original object remains in the window.

Pasting design or object/unit

Retrieves Clipboard contents that have been cut or copied. Places the contents into the current window. To use Paste command, you can:

1. Click the **Edit** menu, scroll to **Paste** and click it. Or press the **Ctrl** key and the **V** key.
2. The contents of the Clipboard are placed into the Object View window, with the center point as the object origin. The contents of the clipboard become an object in the window.
   The new section is placed exactly on top of the place it was copied from - but it is selected with the eight manipulation squares around the edges.
3. To Move the section, place the mouse pointer inside the eight squares, **hold down** the **left mouse button** and **drag** to a new location.
   You can use the squares to change the size of the new section (the same way you manipulate text).
4. All pasted sections are **placed last in the sewing sequence** of the design. Use the film to properly place the new section with the other areas in the same thread color, for an efficient sewing design.

Tip:

Having finished Paste command, the new object will appear in the Object View window.

1. Click it.
2. Drag it to any position within the window by holding down the left mouse button.

Deleting design or object/unit

Delete command removes the currently selected objects or activated areas from the Object View window. The Delete command does not send data to the Window Clipboard. To use the command you can:

1. Click to select an object or right click to activate an area in the Object View window. Alternatively you can click the area item in Film to activate an area.
2. Click the **Edit** menu, scroll to **Delete** and click it. Alternatively press the **Del** key on the keyboard.

Notes:

1. The <Del> key is a shortcut to this Delete function.
2. Using **Ctrl + Del** key, instead of just **Del** key removes both the stitches and the outline upon which that area was based.

Grouping/Ungrouping designs or objects

Group/Ungroup command can group or ungroup the design(s) or object(s) you have previously selected.

1. Click one or several design(s) or object(s). You will see them enclosed by eight points.
2. Click the **Edit** menu, scroll to **Group/Ungroup** and click it. Alternatively click the **Group/Ungroup button** on the toolbar.

Tips:

1. If you want to select several design(s)/object(s) consecutively, use the mouse to drag a rectangular frame to enclose all the design(s)/object(s). If you want to select several design(s)/object(s) simultaneously other than consecutively, click the first design/object and

then hold down the Ctrl key to click every desired design(s)/object(s). (To hold down the Ctrl key and click means to add new design(s)/object(s) and to reserve the previously selected design(s)/object(s).

2. If you want to cancel all the selected design(s)/object(s), click the blank space outside these objects. If you want to select a new design/object, click it.
3. If you want to select one group, click any elements of the group. It will not work if you click the blank space among these elements. If you want to select one ungrouped element, click the element itself. Once several elements are selected at the same time, all the operations you do afterward will function to them all.

Notes:

1. Group/Ungroup command can only function when the selected designs/objects are enclosed by eight points, otherwise the command will be dimmed.
2. The effect of Group/Ungroup relies on the state of the selected designs/objects. If they are already grouped, click the command to eliminate the grouping so that the object explodes into many individual objects. If they are ungrouped, clicking the command so that the selected objects are grouped together.
3. The scope of validity of Group/Ungroup depends on the numbers of the selected designs/objects. To group or ungroup one design or object is to group or ungroup every element of this design or object. To group or ungroup several designs or objects is to group them into a bigger one or ungroup them into several smaller objects.

Selecting designs or objects/units

Selecting an object or even selecting several areas is the first step in a variety of editing tasks. You can move, copy, delete, flip, rotate and object or rotate several objects, which are selected, and more.

Add To/Subtracting From

To **add** an object or an area to an existing selection, press and **hold down** the **Ctrl** key while selecting the new object or area.

To **remove** an object or an area from an exiting selection, press and **hold down** the **Ctr**l key while selecting the object or area, which has already been selected.

In Ultrapunch, **click** to **select** an object, and **right click** to **activate** an area.

Select an entire object

To select the entire objects, click the **Edit** menu, scroll to **Select** sub-menu and click **Select All**. You will find all the objects in the Object View window will be selected automatically.

Select All Areas

To select all areas of the objects in the current Object View window, click the **Edit** menu, scroll to **Select** sub-menu and click **Select All Areas**. You will find all the areas of objects will be activated automatically.

Note:

To succeed this operation, the premise of it is there must have one area in the current Object View window at least.

Select All Lines

To select all lines of the objects in the current Object View window, click the **Edit** menu, scroll to the **Select** sub-menu and click **Select All Lines**. You will find all the lines of objects will be activated automatically.

Note:

To succeed this operation, the premise of it is there must have one line in the current Object View window at least.

Select By Color

The user can use Select By Color to quickly activate the area which has the same color with the selected one.

1. Generate the object(s) in the Object View window, the Color List bar will display all the color blocks.
2. **Click** one **color block** in the **Color List bar**, all the areas which is the same color with the color block will be activated in the Object View window. If only one area is the same color with the color block, only this area is activated. If many, many are activated at the same time.
3. Click another color block in the Color List bar, another one or group of areas will be activated.

Tip:

If the users have activated only one or several areas which have the same color instead of all the areas, click Edit menu, scroll to Select sub-menu and click Select By Color to activate all the areas of the same color within this object.

Notes:

1. The Select By Color in the Select sub-menu under the Edit menu is valid only when you activate one or several areas with the same color by right-clicking.
2. Select By Color can help you to activate one or several areas which have the same color with the selected color block at one time, but it can not select areas with different colors at the same time.

Removing a selection

To remove a selection from the activated object(s):

- Click the **Edit** menu, scroll to **Select** sub-menu and click **Select None**.

- You can remove a selection by **left-clicking** the **blank space** outside the object in the Object View window.

Inverting a selection

To swap a selected area and a non-selected area, click **Edit** menu, scroll to **Selec**t sub-menu and click **Invert Selection**.

Aligning designs or objects

Align can arrange several selected objects according to certain requirements. Usually for align a string of alphabets. In this case, you should use the group/ungroup operation to treat this string. There are eight ways to align in Ultrapunch.

Tip:

You can align after selecting several objects. In addition, you can also align after ungrouping an object and selecting several elements of it.

Notes:

1. When you have not selected any objects/sections or have only selected one, the previous seven ways can't be used.
2. In the process of Align, the newly selected objects/sections will be aligned by the first selected one.

Align by Top

Can align selected objects by the top line.

1. Select several objects.

2. Click the **Edit** menu, scroll to the **Align** sub-menu and click **Align By Top.** Alternatively click the **Align Top button** on the toolbar.

Notes:

1. The selected objects are aligned by the top line in which the upper three points of the eight ones around the first selected object locate, but their x-coordinates remain unchanged.
2. When several objects are selected simultaneously, this operation will affect all of them. If you want to cancel this select, click the blank space of the Object View window.

Align by Bottom

Can align selected objects by the bottom line.

1. Select several objects.
2. Click the **Edit** menu, scroll to the **Align** sub-menu and click **Align By Bottom**. Alternatively click the **Align Bottom button** on the toolbar.

Notes:

1. The selected objects are aligned by the bottom line in which the bottom three points of the eight ones around the first selected object locate, but their x-coordinates remain unchanged.
2. When several objects are selected simultaneously, this operation will affect all of them. If you want to cancel this select, click the blank space of the Object View window.

Align by Left

Can align the selected objects by the left line.

1. Select several object.
2. Click the **Edit** menu, scroll to the **Align** sub-menu and click **Align By Left**. Alternatively click the **Align Left button** on the toolbar.

Notes:

1. The selected objects are aligned by the left line in which the left three points of the eight ones around the first selected object locate, but their y-coordinates remain unchanged.
2. When several objects are selected simultaneously, this operation will affect all of them. If you want to cancel this selection, click the blank space of the Object View window.

Align by Right

Can align the selected objects by the right line.

1. Select several objects.
2. Click the **Edit** menu, scroll to the **Align** sub-menu and click **Align By Right**. Alternatively click the **Align Right button** on the toolbar.

Notes:

1. The selected objects are aligned by the right line in which the right three points of the eight ones around the first selected object locate, but their y-coordinates remain unchanged.
2. When several objects are selected simultaneously, this operation will affect all of them. If you want to cancel this selection, click the blank space of the Object View window.

Align by Baseline

Can align the selected objects by the baseline.

1. Select several objects.
2. Click the **Edit** menu, scroll to the **Align** sun-menu and click **Align By Baseline**. Alternatively click the **Align Baseline button** on the toolbar.

Notes:

1. The selected objects are aligned by the baseline of the first selected object.
2. When several objects are selected simultaneously, this operation will affect all of them. If you want to cancel this selection, click the blank space of the Object View window.

Align by Horizontally Center

Can align the selected objects by the horizontally center line.

1. Select several objects.
2. Click the **Edit** menu, scroll to the **Align** sub-menu and click **Align BY Horizontally Center**. Alternatively click the **Align Horizontally Center button** on the toolbar.

Notes:

1. The selected objects are aligned by the horizontally center line in which the two horizontal middle points of the eight ones around the first selected object locate. But their x-coordinates remain unchanged.
2. When several objects are selected simultaneously, this operation will affect all of them. If you want to cancel this selection, click the blank space of the Object View window.

Align by Vertically Center

Can align the selected objects by the vertically center line.

1. Select several objects.
2. Click the **Edit** menu, scroll to the **Align** sub-menu and click **Align By Vertically Center**. Alternatively click the **Align Vertically Center button** on the toolbar.

Notes:

1. The selected objects are aligned by the vertically center line in which the two vertical middle points of the eight ones around the first selected object locate. But their y-coordinates remain unchanged.

2. When several objects are selected simultaneously, this operation will affect all of them. If you want to cancel this selection, click the blank space of the Object View window.

Align by Curve

Can align the selected objects by the given curve.

1. Select several objects.
2. Click the **Edit** menu, scroll to the **Align** sub-menu and click **Align By Curve**. Alternatively click the **Align Curve button** on the toolbar.
3. Now the original cursor will become the shape of a pen. To draw a curve, click any place you want in the Object View window to define the start point of the curve. Move the cursor with mouse to any place in the Object View window and click to define the middle point of the curve. Move the cursor and right click to end this curve. At this time, right click a spot as the end point of the curve. The selected objects will align by this curve.

Notes:

1. The select objects are aligned by the self-drawn curve and both their x/y-coordinates will change a little bit. Sometimes objects will convert according to certain requirements.

2. When several objects are selected simultaneously, this operation will affect all of them. If you want to cancel this selection, click the blank space of the Object View window.

Align by Arc

Can align the selected objects by the given Arc.

1. Select several object.
2. Click the **Edit** menu, scroll to the **Align** sub-menu and click **Align By Arc**. Alternatively click the **Align Arc button** on the toolbar.
3. Now the original cursor will become a pen. To **draw an Arc**, **click** any place you want in the Object View window to **define the starting point** of the Arc. Move the cursor with mouse to any place in the Object View window and then **click** to **define the ending point** of the Arc.
4. Now part of an arc line will appear between the two points. Point the cursor to the arc line and move up-and-down, you'll find the direction and radian measure of the arc line altered with the movement of the cursor.
5. **Click** to **define the final direction** and the **radian measure** of the arc line.

Tip:

You can right click before defining this arc decisively or press the Esc key to cancel the align by arc operation.

Notes:

1. The selected objects are aligned by the self-drawn arc and both their x/y-coordinates will change a little bit. Sometimes objects will convert according to certain requirements.
2. When several objects are selected simultaneously, this operation will affect all of them. If you want to cancel this selection, click the blank space of the Object View window.

Rotating designs or objects

The rotate command allows you to rotate a design or an object by a specified number of degrees.

1. Click to select a design or an object.
2. Click the **Edit** menu, scroll to **Rotate** sub-menu and click the proper item. Alternatively click the proper button on the toolbar.

There are several ways to rotate a design or an object in Ultrapunch. **Left 90 Degrees**, **Right 90 Degrees** and **Manually**.

Left 90 Degrees is a counter-clockwise 90 degree revolution accomplished by clicking the **Left 90 Degree button**.
Right 90 Degrees is a clockwise 90 degree revolution accomplished by clicking the **Right 90 Degree button**
A specified rotation: **Manually rotate**. **Enter** your **desired** number of **degrees** in the pop-up Free Rotate dialog box, and then click **OK**. The object which you selected will rotate the specified number of degrees. The default number of degrees is 0.

Tips:

1. If you wish the object to rotate clockwise, the number of degrees should be positive. If you wish the object to rotate counter-clockwise, the number of degrees should be negative.
2. The number of degrees entered may be an integer, decimal or fraction. You can rotate the object by using the mouse to drag and set the degrees of rotation.
3. Ultrapunch also provides the user with a convenient and auto-visual way of rotating. You do not have to select Rotate from the Edit menu, instead one can do it directly in the Object View window.

A convenient and auto-visual way of rotating

Ultrapunch also provides you with a convenient and auto-visual way of rotating. You do not have to select Rotate from the Edit menu, and can do it directly in Object View.

1. Click to select an object in the Object View window.
2. Click the selected object again. Four double-headed curve arrows will appear in the four corners of the object's outer frame. Also, a black point with a white cross in the center will appear in a certain position. You can use them to rotate the object.
3. Place the cursor on one of the arrows. Now the cursor will become a cursor with a steering wheel. Click and hold down the left mouse button to drag the cursor in one of the directions that the double-headed arrow points to. The object will rotate with it.

Tip:

You can alter the position of the Center Mark for rotating: Place the cursor on the center mark, and now the cursor will become a four-headed arrow. Click it and hold down the left mouse button to drag the cursor, now the center mark will move with the cursor. If you rotate the object under this state, the object will rotate with the new position of the center mark as the center.

Note:

While rotating in the above-mentioned way, the selected object is rotating with the center mark as the center. You can alter the position of the center mark, but the new position is valid only

when you have not clicked the blank space to give up the current selection; otherwise, the center mark will resume its original position.

Flipping designs or objects

Flip can turn one or several selected objects according to certain requirements. There are two ways to Flip in Ultrapunch. The Flip command reverses an object or selection's orientation along the vertical and horizontal axes.

Note:

This operation functions only on the selected object.

Vertical Command

Can flip one or several selected objects vertically.

1. Select one or several objects that you want to flip.
2. Click the **Edit** menu, scroll to the **Flip** sub-menu and click **Flip Vertically**. Alternatively click the **Flip Vertically button** on the toolbar. Thus the selected objects will flip 180 degree vertically.

Notes:

1. The Vertically command reverses the design or selection vertically so that what was on the top becomes the bottom, and vice-versa. To use the command, click the Edit menu, scroll to the Flip sub-menu and click Flip Vertically.
2. If you selected several objects, every object will flip 180 degree vertically and independently; if you select one object, the whole object will flip 180 degree.
3. If you flip an object two times on the same axis, the object will resume its original state.

Horizontal Command

Can flip one or several selected objects horizontally.

1. Select one or several designs or objects that you want to flip.
2. Click the **Edit** menu, scroll to the **Flip** sub-menu and click **Flip Horizontally**. Alternatively click the **Flip Horizontally button** on the toolbar. Thus, the selected objects will flip 180 degree horizontally.

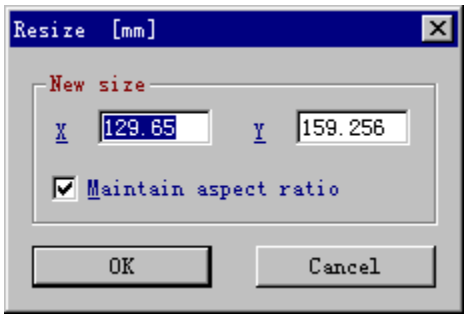
Notes:

1. The Horizontal command reverses the design or selection horizontally so that what was on the left side becomes the right side, and vice-versa. To use this command, click the Edit menu, scroll to the Flip sub-menu and click Flip Horizontally.
2. If you selected several objects, every object will flip 180 degree horizontally and independently; if you select one object, the whole object will flip 180 degree.
3. If you flip an object two times on the same axis, the object will resume its original state.

Resizing design or object

After you insert an object, its size may need to be modified. Use Resize to fulfill this operation.

1. Click to select a design or an object that you'd like to resize.
2. Click the **Edit** menu, scroll to **Resize** and click it. Alternatively click the **Resize button** on the toolbar.
3. In the pop-up Resize dialog box, double-click the width and height enter box under the New Size option and enter your desired value. Once you have checked the Maintain aspect ratio checkbox, enter your desired value in one enter box. Now click another enters box, the calculated width or height will appear automatically by a certain proportion and in response to the height or width you entered. Thus, you don't need to enter the height and width value independently.



4. Click **OK**.
5. Click the **Generate button** on the toolbar.

Tips:

1. Ultrapunch also provides you with a convenient and auto-visual way of resizing. You don't have to select Resize command form the Edit menu, instead one can do it directly in the Object View window.

2. To resize several objects at the same time and to the same relative proportions, group these objects first and select them as a whole to resize. After this operation, ungroup them. Considering the accuracy of ungrouping, this method is often applied to characters.

Note:

While using resizing, you must click to select a design or an object and you can only click to select one design or one object to participate in the operation at one time.

A convenient and auto-visual way of resizing

Ultrapunch also provides you with a convenient and auto-visual way of resizing. You don't have to select Resize from the Edit menu, and can do it directly in the Object View window.

1. Click to select a design or an object in the Object View window.
2. Eight black points will appear outside the object, move the cursor to any one of them, the cursor will become a double-head arrow; one points inside and another outside.
3. Drag the cursor according to the arrow direction to resize the current design or object.
   - To **reduce** the design or object, drag the cursor toward the inside-arrow direction.
   - To **enlarge** the design or object, drag the cursor toward the outside-arrow direction.
   - To **change** the **width** and **height** of the current design or object, drag any one of the four points on the four corners.
   - To **enlarge** or **reduce** the **height** of the design or the object, drag any one of the two points lying on the horizontal lines.
   - To **enlarge** or **reduce** the **width** of the design or the object, drag any one of the two points lying on the vertical lines.
4. Click the **Generate button** on the toolbar.

Tip:

To resize some designs or objects by X or Y direction, if you hold down the Ctrl key and then drag the mouse to resize, the size of these objects will not be changed, instead, what is changed is the distance between these objects in X or Y direction. However, the spacing problem in X or Y direction should be existing when you perform this operation, otherwise the operation is meaningless. In addition, holding down the Ctrl key and then dragging the mouse can only change the distance between these designs or objects in X or Y direction. This function is valid only when you drag them by X or Y direction. It is invalid if you drag them in a diagonal line.

Moving designs or objects

- *Move by mouse*
  1. **Click** to select the design(s) or object(s)
  2. Move the cursor **without releasing** the **left mouse button** so as to move the design(s) or object(s) to the desired position.
  3. **Release** the **left mouse button**.

- *Move by keyboard*
  1. **Click** to select the design(s) or object(s).
  2. **Press** anyone of the four **direction keys** (Cursor Control Keys) to activate the keyboard of movement.
  3. To satisfy the need of moving object(s), press the relevant direction keys to move objects up-and-down or left-and-right. To cancel the present move operation, press the **Esc key** or **right click** to cancel it.
  4. Press the **Enter key** or click to finish this operation.

Tip:

To move design(s)precisely by X or Y direction, hold down the Ctrl key until you make sure the position while moving design(s) or object(s).

Processing design & object/unit under the outline state

Editing the outlines of units

If you want to edit the outline of the design & object/unit, you can:

1. Check the **Outline View button** on the toolbar, and then click **Outline** menu, scroll to **Edit Outline Mode** and click it. Alternatively click the **Edit Mode button** on the toolbar. Now the Outline View and the Edit Mode button are both checked, which means you can edit the outline now.
2. **Right click** to **activate** one or two units (units here means area or line) in the Object View window. Now many editing points will appear on the outline of these activated areas/lines, and you can use these points to edit the outline step by step.
3. Position your cursor in any point of the spline, the tangent of this point and the outline, which it lies on, will appear, and a green arrow implies the direction of the tangent. In additional, the other two editing points which lie in the right and left side of the current activated spline will also display the tangents and their direction.
4. In the pop-up **right clicking shortcut menu**, choose **Delete** Point, and then the editing points of the activated spline will be delete. When there are many editing points in an area and some of them are unnecessary, you can use this way to delete those unnecessary ones. This will not affect the final effect and it helpful for the following operations. Nonetheless. An area must have at least three editing points for the spline.
5. In the pop-up **right clicking shortcut menu**, choose **Smooth**, and then the outline formed by the three editing points will become a smooth outline.
6. After editing, you can click **Generate button** to view the effect you have created. Ultrapunch changes to Stitch View and sets Edit Mode unchecked automatically.

Tip:

When point the cursor to the green arrow, which implies the direction of a tangent, a shape-changing mark will appear under the lower left corner of the cursor. Now you can move the cursor to change the shape of the outlines formed by those editing points of the activated spline. If the outline that you are modifying intersected with other outlines, the warning message "Self-cross outline!" will appear on the screen.

Notes:

1. If Edit Mode and Outline View are both checked, clicking will no longer work to select an object.
2. While running Edit Mode, you can select two units at most. If two units have been selected, you can edit the shared border of them.
3. If you do not want to select any units, right click the blank space. If you want to select a new unit, right click it.
4. Do not make the current intersect with the same activated entity, otherwise Ultrapunch will give you a warning message.

Adjust the unit

Adjust with a Curve

Adjust Outline with a Curve is to convert a certain part of the outline into a curve.

1. **Right click** to **activate** one or several areas.
2. Click **Outline** menu, scroll to **Geometry Process** sub-menu and click **Adjust with a Curve**. Alternatively click the **Adjust the Outline with a Curve button** on the toolbar.
3. Now the cursor will become a pen with a plus. Move the cursor to the part of the outline that you want to adjust and click to create two green points, which will define the part of the outline and divide the outline into two parts. Move the cursor to point to either of them, you'll find a part highlighted with red showing you that this part can be adjusted. Now you can click or press the **Esc key** to cancel the operation.
4. Move the cursor to the part of the outline that you want to adjust so that it is highlighted with red. **Click** and **hold down** the **left mouse button** to **drag** the part of the outline to get your desired curve. Click it and then you'll find the part of the outline becomes a curve.
5. If you have already finished adjusting the outline of all the areas, **right click** or press the **Esc key** to finish the operation.

Note:

If you drag certain parts of the outline so that they intersect with the originally activated area, the warning message "Self-cross Outline" will appear. Click OK to neglect the warning.

Adjust with a Line

Convert part of the outline of the presently activated area(s) into a straight line.

1. **Right click** to **activate** one or several area(s).
2. Click the **Edit** menu, scroll to **Geometry Process** sub-menu and click **Adjust Outline with a Line**. Alternatively click the **Adjust the Outline with a Line button** on the toolbar.
3. Now the cursor will become a pen with a plus. Move the cursor to part of the outline that you want to adjust and click to create two green points, which will define the part of the outline and divide the outline into two parts. Move the cursor to point to either of them, you'll find that part highlighted with red color, and this shows you can adjust this part. Now, you can click or press the **Esc key** to cancel the operation.
4. Move the cursor to the part of the outline that you want to adjust so that it is highlighted with red. Click this part, you'll find it becomes a straight line.
5. If you have finished adjusting the outline of all the areas, **right click** or press the **Esc key** to finish the operation.
6. Click the **Generate button** on the toolbar.

Adjust with an Arc

Adjust Outline with an Arc is to convert part of the outline of the presently activated areas into an arc.

1. **Right click** to **activate** one or several areas.
2. Click the **Outline** menu, scroll to the **Geometry Process** sub-menu and click **Adjust with an Arc**. Alternatively click the **Adjust the Outline with an Arc button** on the toolbar.
3. Now the cursor will become a pen with a plus. Move the cursor to the part of the outline that you want to adjust, and click to create two green points, which will define the part of the outline and divide the outline into two parts. Move the cursor to point to either of them, you'll find that part is highlighted with red and it shows you can adjust this part. Now right click or press the **Esc key** to cancel the operation.
4. Move the cursor to the part of the outline that you want to adjust so that it is highlighted with red. Click it and hold down the left mouse button to drag the part of the outline to your desired extent, click it and then you'll find part of the outline become an Arc.
5. If you have finished adjusting the outline of all the areas, **right click** or press the **Esc key** to finish the operation.
6. Click **Generate button** on the toolbar.

Note:

If you drag a certain part of the outline so that it intersects with the originally activated area, the

warning message "Self-cross Outline" will appear. Click OK to neglect the warning.

Creating a new outline from the existing outline

Ultrapunch provides you with many ways to convert lines, line like areas or an area's border.

Notes:

1. If you activate an area, the Line from Area(s)'s Border(s) and Lines from Area(s) commands are available to you. If you activate a line, the Line like Area(s) from Line(s) and Area's Border from Lines commands are available to you.
2. The similarities and differences of Convert and Create function is the former can create satisfactory areas or lines, but can't reserve the original one, the latter can't only create satisfactory areas or lines but also reserve the original one. Convert and Create function are the same in operating and the final effect.

Create Line from Area(s)'s Border(s)

Can create the outside border, inside border or all borders of the activated area.

1. **Right click** an area or **hold down** the **Ctrl** key and **right click** the areas, and **release** the **Ctrl** key when you finish activating. Activate the whole units by right clicking and dragging the mouse without releasing the right button. If you only want to cancel one unit, **hold down** the **Ctrl** key and **right click** it. You will see all the activated units filled with a gray color.
2. Click the **Outline** menu, scroll to the **Create** sub-menu and click **Create Line from Area(s)'s Border(s)**.
3. Ultrapunch provides you with three options. Click any of these three options which are under Apply.
4. Enter the desired value into the **Offset box**.
5. Click **OK**. The outside border, inside border or all the borders of those activated areas will now be displayed in the Object View window.

Tip:

Under the default state, the measure is mm and the offset value is 1. Offset refers to the

vertical distance from every point of the border to the original outline of the activated area.

Note:

Under the default state all the inside and outside closed borders are independent and they become new units. In other words, border(s) created under the default state and the originally activated units are not grouped. This means that you can activate unit(s) or border(s) individually, therefore Generate at this time only affects all the borders of the activated units instead of the unit themselves.

Create Line like Area(s) from Line(s)

Line like Area(s) from Line(s) enables you to create a relatively closed line like an area through one or several defined lines.

1. **Right click** or **drag** with the **right button** to select one or several line.
2. Click the **Outline** menu, scroll to the **Create** sub-menu and click **Create Line like Area(s) from Line(s)**.
3. Enter the width of the would-be line like area into Area Width in the pop-up Convert Line to linear area window. The default value is 2 mm, i.e. the distance between the activated line and the border of the created line like area is 2 mm. Thus, the width of the whole line like area is 4 mm.

Notes:

1. You can perform this operation only when you right click to activate line(s) and the menu becomes highlighted.
2. You can perform this operation on one of several lines at the same time.
3. Having finished this operation, the created line like area will be activated automatically, and becomes an independent area. The originally activated line and the created line like area belong to different groups.

Merging several units to one unit

Ultrapunch provides you with merge according to your different requirements, which can merge not only several areas of the same of different colors into a new area but also several lines of the same of different colors into a new object.

Merge Areas

Merge Area enables you to merge two adjacent colored entities (areas) into one area and the outline of the overlapped edges will disappear.

1. **Click** and then **hold down** the **left mouse button** to **drag** an area and make it overlap with another area.
2. **Right click** and then **hold down** the **right mouse button** to **drag** a frame to enclose the two areas. Now you will see them overlapped together and the outline of them will be saved and visible, but the outline of the overlapping part will disappear.
3. Click the **Outline** menu, scroll to the **Merge** sub-menu and click **Merge Areas to an Area**. Then you will see these two areas merged together and the outline in which the two areas overlap each other will disappear. Thus, the original two areas will merge into one area.

Notes:

1. When you have not activated any areas or the number of the activated areas are not two, the Merge Areas command will become dimmed and can't be used. In addition, you can only use the right button to activate area(s). (If you use the left button to do it, the command will also become dimmed.)

2. The areas, which participate in merging, must be two. Merge will not work if the areas are more than or less than two. To merge several areas, you must merge them by two step by step. For instance, activate area 1 and area 2, and then merge them into a new area. After that, activate area 3 and the one you have just created by merging and then merge them into another one. In this way, all the areas can be merged together.

Merge Lines

You can use Merge Lines to merge two or more lines into a new unit according to different requirements.

1. Click to select one unit and then move it to intersect with another unit without releasing the left button. (Here the unit refers to those lines, which you are going to merge.)
2. **Right click** to activate two or more lines, which you want to merge into one unit.

3. Click the **Outline** menu, scroll to the **Merge** sub-menu and click **Merge Lines to a Line**. Now you will find that all the lines participating in merging become a new unit.

Notes:

1. Merge Lines will not be available if you do not right click to activate the lines that you want to merge, and the lines must be at least two.
2. To or not to carry out the operation step with * is both ok. In other words, both intersecting and unintersecting lines can be merged together and can not be ungrouped as well.
3. Merge Lines can merge several lines not only of the same color but also of different color. For lines of the same color, the color after merging is their original one; for lines of different color, the color of the newly merged unit is the same as the first line activated.

Filling an existing hole in area

Ultrapunch provides you with Fill a Hole, which enables you to delete the inner contour of an area.

1. **Right click** or **drag** with the **right button** to activate one area.
2. Click the **Outline** menu, scroll to **Fill a Hole** and click it. Then you will find the cursor becomes a hand. Point the cursor to the activated area. If an area has inner contour and the inner contour is highlighted with red, delete an inner contour is valid in this area.
3. Click this highlighted area, you will find the inner contour, which you deleted, disappears.

Tip:

When using Fill a Hole, it is valid only when then inner contour is highlighted with red.

Notes:

1. When using Fill a Hole, only one area can participate in the operation at one time, and you must right click to activate it. During the process of deleting, right clicking will cancel this operation.
2. Press the Esc key to escape this operation.
3. When clicking to determine the inner contour that you want to delete, the inner contour must be highlighted with red when the cursor points to the inner contour; otherwise the operation is invalid.

Digging a hole in area by drawing yourself

Dig a Hole enables you to dig hole(s) in the currently activated area(s) with self-drawn areas of various shapes.

1. Check the **Outline View button** and activate area(s) by right clicking.
2. Click the **Outline** menu, scroll to **Dig a Hole** and click it. Now you'll find that the cursor becomes a pen with a plus. Move the pen to a proper position and click to define the starting point of the digging area. Now you can click or right click to define the middle points and then press the Enter key to conclude drawing.
3. If the digging area is not closed, Ultrapunch will link the starting point and the ending point of the area automatically after pressing the Enter key. The part in which the digging area and the dug one overlap will be deleted out of the dug one. If the digging area is closed and it has an intersecting point after pressing the Enter key, Ultrapunch will regard the firstly formed area as the digging area and the part in which the digging area and the dug one overlaps will be deleted. At the same time, the secondly formed one becomes invalid automatically.
4. Click the **Generate button** on the toolbar.

Notes:

1. In using this function, you must right click to activate an area as the dug area; click or right click to define the digging area. Of course you can define these middle points by partially clicking and partially right clicking, thus they will form an area which is partially smooth and partially un-smooth.
2. Press the Esc key to cancel this operation.
3. In defining the digging area, if all middle points are defined by right clicking, these points are corner points; if all the middle points are defined by clicking, these points are smooth ones.
4. After this operation, you must generate it, or no stitches will be created.

Splitting the outline of a design or object/unit with a drawing line

Split with a Line enables you to use the self-defined split line to split one or several areas into two or more areas.

1. **Right click** or **drag** the **right button** to activate one or several areas.
2. Click the **Outline** menu, scroll to **Split with a Line** and click it. Now you will find the cursor becomes a needle with scissors.
3. Click to define the starting point of the split line, and then drag the mouse to position, lengthen or shorten, the split line, and click again to define its ending point. This line will split the area(s) into several parts.
4. Click one part of them, you will find the area split into two or more parts according to the split line, and these parts are independent.

Tips:

1. You can perform this operation on several areas of an object at the same time, and you can also do it on additional areas from different objects.
2. Click to select an object, you can use this function to split the whole object into two. However, the split line must run across the whole object. Right click to activate an area, you can use this function to split the area into two. However, the split line must run across this area.
3. You can click or right click to select every part of the split area.

Notes:

1. When using this function, you must right click to select one or more areas, and click to define the spline line.
2. Press the Esc key to cancel this operation.
3. At least two points in the split line must intersect with the selected area.
4. A split line can be used to split several activated areas at the same time.

Chapter 14.

Processing design & object/unit under the block state

Editing the blocks of units

Block Mode is used to view and modify the angle of column (or Satin) stitches. It is never used to make a change to a complex fill area, since the stitches in a complex fill all go in the same direction.

As a column fill curves and turns around a shape, the stitch angle follows this path. In most cases, Ultrapunches will properly calculate the best stitch angle. However there may be times when you want to make some changes.

The lines that indicate the stitch angles are called "dividing lines".

1. Generate those units, which you want to edit blocks if they are not generated.
2. Click on the **Block View button** and then click the **Edit Mode button** (or click the Block menu, scroll to Edit Block Mode and click it) on the toolbar, and now both buttons are checked.
3. **Right click** to activate one or several generated area(s). You will see them filled with gray color and red lines. These red lines are called dividing lines.
4. Click on one of the dividing lines of the area you want to edit. You will see two green edge points of that dividing line highlighted. You can drag either one green point to move the position of this dividing line or use the Del key to delete this dividing line. In addition, you can also add dividing lines manually. All these operations aim to change the original shape of the blocks.
5. After editing, you can click the **Generate button** on the toolbar to view the effect of your operations and then you will find Ultrapunch changed to Stitch View and set Edit Mode unchecked automatically.

Warning:

Ultrapunch provides you with many ways to edit blocks, but the following operations are invalid and not allowed.

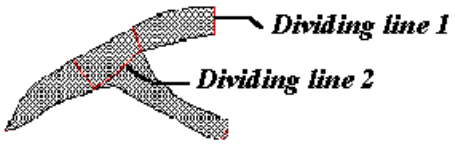
- *Move Dividing Line warning*

If the dividing line that you are moving intersects with another dividing line, the edge point that you are moving will stop in the point of intersection even if you can continue moving the mouse in this direction. Of course, if you move the mouse in the opposite direction, the operation is valid as long as the dividing line does not intersect with another adjacent one. (You can move only one edge point at one time.)

◆ *Delete Dividing Line warning*

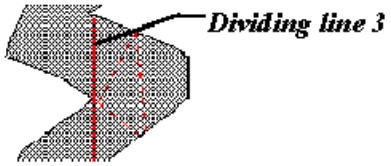
Once a dividing line is deleted, the newly formed block becomes an unreasonable one (the block contains more than two dividing lines). The warning message "Failed to delete dividing line" will appear on the screen, which means the operation, is invalid. For example:

(1)* Dividing line 1, *which lies in the boundary of an area, can not be deleted.



(2)* Dividing line 2, *which lies in the common boundary of areas, can not be deleted.

(3) D*ividing line 3, *shared by three blocks (i.e. three dividing lines look like one dividing line in special cases), can not be deleted. (dividing line 3 is shared from the three red broken lines)



◆ *Add Dividing Line warning*

If the dividing line that you are adding intersects with another existing dividing line, the warning message "Failed to add dividing line" will appear on the screen, which means the operation is invalid. In other words, while adding a dividing line, the two edge points of the adding dividing line must lie within the same block. Usually the line you draw often creates one dividing line but sometimes it is possible that two or more dividing lines are created while drawing a line. Remember every pair of edge points must stay in the same block at the same time.

Notes:

1. You can edit only one dividing line in one area.
2. If Edit Mode and Block View are both checked, click will no longer used to select object(s) until you cancel Edit mode.
3. It will be fulfilled only after generating.

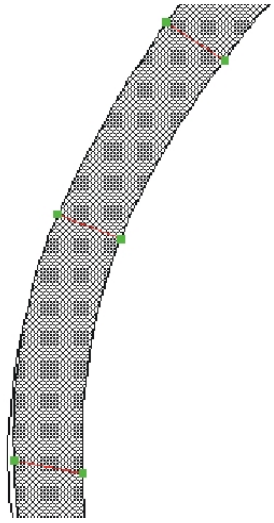
Moving a Dividing Line

1. Place the mouse cursor over the area that you want to select and **click** the **right mouse button**.

Note:

To better view the area, use the Zoom In tool to enlarge the area to be edited.

2. Select **View**, scroll to **Block View** and click it. Alternatively, click the **Block View button** on the toolbar or press the function key **F7** on the keyboard.
3. The selected area will be shown in gray, with a series of red lines.
   There are the **dividing lines**. The stitches at that point in the selected area follow the angle of the dividing line.
4. To **change the angle**, place the mouse pointer over the green box on one side of the dividing line, until the cursor changes to the four-headed arrow. **Hold down** the **left mouse button** and **drag** the box to a new position.
   Do the same on the other side of the dividing line, until it is in the position you want.
5. Repeat on other dividing lines in the section as necessary.
   When you are satisfied with the stitch angles in the selected section, you must **re-generate** for the changes to take effect.
6. Select **Accessories** scroll to **Generate** and click it. Alternatively, click the **Generate button** on the toolbar or press the function key **F9** on the keyboard.



Tip:

It is best to work with the dividing lines in one area and then generate before making changes to

dividing lines in any other area.

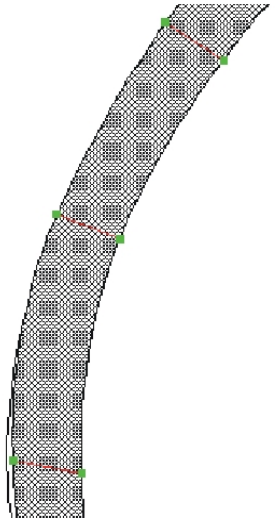
Deleting a Dividing Line

1. Place the mouse cursor over the area that you want to select and **click** the **right mouse button**.

Note:

To better view the area, use **Zoom In** tool to enlarge the area to be edited.

2. Select **View**, scroll to **Block View** and click it. Alternatively, click the **Block View button** on the toolbar or press the function key **F7** on the keyboard.
   The selected area will be shown in gray, with a series of red lines.
   There are the **dividing lines**. The stitches at that point in the selected area follow the angle of the dividing line.
3. Place the mouse pointer over the dividing line and **click** the **left mouse button**.
   The line will be shown entirely in red, without the green squares on either end.
4. Press the **Delete/Del** key on the keyboard.
   The dividing line will be removed . When finished making changes in this area, you must re-generate for them to take effect.
5. Select **Accessories**, scroll to **Generate** and click it. Alternatively, click the **Generate button** on the toolbar or press the function key **F9** on the keyboard.



Adding a dividing in a block area

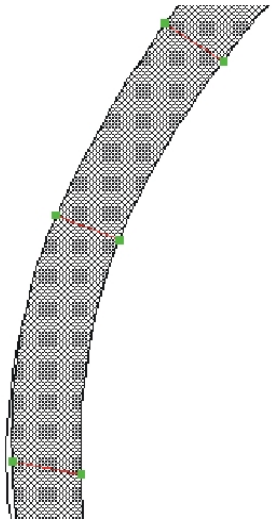
After generating objects, you will see the blocks, which Ultrapunch provides in the Block View. Generally speaking, it is only a recommendation. Of course, you can use Edit Block to move, add or delete the dividing lines of the object manually. The function of Add a Dividing Lines is to allow you to draw a new dividing line in a block so as to change the shape of the original block as well as the direction of the local stitches.

1. Place the mouse cursor over the area that you want to select and **click** the **right mouse button**.

Note:

To better view the area, use the Zoom In tool to enlarge the area to be edited.

2. Select **View**, scroll to **Block View** and click it. Alternatively, click the **Block View button** on the toolbar or press the function key **F7** on the keyboard.
   The selected area will be shown in gray, with a series of red lines.
   There are the **dividing lines**. The stitches at that point in the selected area follow the angle of the dividing line.



3. Click the **Block** menu, scroll to **Add a Dividing Line** and click it. Alternatively click the **Add Dividing Line button** on the toolbar.
4. Place the mouse pointer to one side of the area and **click** the **left mouse button**.
5. Move the mouse pointer across the selected area to the **opposite side** (a black line will show on the screen). When it is at the angle you want, **click** the **left mouse button**.

Note:

The new dividing line must **go all the way across the section**.
The new dividing line also must not intersect with another existing line. Otherwise, you will receive the message "Failed to Add a Dividing Line.".

6. Repeat steps 3 to 5 to add as many new dividing lines as is necessary.
   When finished making changes in this area, you must re-generate for them to take effect.
7. Select **Accessories** scroll to **Generate** and click it. Alternatively, click the **Generate button** on the toolbar or press the function key **F9** on the keyboard.

Tip:

You can delete the newly created dividing line so as to recover the original state, or move the newly created dividing line so as to change the shape of the two new blocks.

Note:

You can only right click to activate one unit at a time and do the operation of adding a dividing line, otherwise the Add a Dividing Line command will become dimmed.

Warning:

In the following cases, you cannot add a dividing line: If the dividing line you are adding intersects with another existing dividing line, the warning message "Failed to add dividing line" will appear on the screen, which means the operation is invalid. In other words, while adding a dividing line, the two edge points of the adding dividing line must lie within the same block. Usually the line you draw often creates one dividing line but sometimes it is possible that two or more dividing lines are created while drawing a line. Remember every pair of edge points must stay in the same block at the same time.

Changing the direction of block by using the guide line

The function of Set Block Direction enables you to define the direction of intersection of some overlapping area, i.e. the order of priority of the two direction stitches while embroidering. In the Set Block Direction sub-menu, Ultrapunch provides you with Add guide line and Delete guide line two functions.

Note:

Set Block Direction usually applies to these intersecting areas.

Add guide line

Add guide line is used to add a guide line to the intersecting area so as to change the stitch direction.

1. Click the **Generate button** and click the **Block View button** on the toolbar.
2. **Right click** to activate the whole area, which contains the intersecting area.
3. Click the **Block** menu, scroll to the **Set Block Direction** sub-menu and click **Add guide line**. Now the cursor will become a needle with a plus.
4. Move the cursor to the intersecting area. **Click** to **draw** a guide line and **right click** to **end** this operation.
5. Click **Generate**, the stitches which have been defined by the created guide line will be re-created in the intersecting area.
6. Click the **Play Stitches button** on the toolbar to view the final effect.

Notes:

1. Having not finished drawing a guide line, you can right click or press Esc key to cancel this operation.
2. In order to define the order of strokes of the stitches in those intersecting areas, you'd better define one guide line in each intersecting area.

Delete guide line

Delete guide line is used to delete the guide line that you have added to the intersecting area so as to recover the original state, and you can also define another guide line.

1. Click the **Block View button** on the toolbar.
2. **Right click** to activate an intersecting area, which contains the define guide line.
3. Click the **Block** menu, scroll to the **Set Block Direction** sub-menu and click **Delete guide line**. Now the cursor will become a hand.
4. Move the cursor to point to the guide line, which is now highlighted in blue. **Click** to **delete** this guide line and then **right click** to **end** this operation.
5. Click **Generate button** directly or click Generate button after using Add guide line, you will see the new order of strokes in the intersecting area.
6. Click the **Play Stitches button** on the toolbar to view the final effect.

Note:

Having not finished deleting the guide line, you can right click or press the Esc key to cancel this operation.

Changing Corner Type in a block area

1. Insert an object.
2. Click **Generate button** and click the **Block View button** on the toolbar.
3. **Right click** to activate the area you wanted to modify.
4. Click the **Block** menu then select **Change Corner Type** and click it.
5. **Click** and **drag** the mouse to select the **corner** of the area you wanted to modify.
6. Choose the type in the Corner Type dialog box and click OK.
7. Generate the object again.

Chapter 16.

Processing design & object/unit under the stitch state

Editing the stitch of units

If you want to edit stitches, you can:

1. **Generate** the object if you have not.
2. Click the **Display Stitch Position button** on the toolbar to view each needlepoint for the sake of convenience.
3. Click the **Stitch** menu, scroll to **Edit Stitch Mode** and click it or click the **Edit Mode button** on the toolbar. Then you can use **Zoom In** or **Pan** command to view the region of the stitches, which you want to edit more clearly. Now the Stitch View and Edit Mode buttons are both checked, which means that you can edit stitches now.
4. Point the cursor to the needlepoint where you want to move, add or delete stitches close to it. Click it, and a red cross sign appears. The core of it is the point of stitches that you just click.

Note:

Once using Edit Mode, the image in the Picture View window will disappear.

Move Stitches

Click the **red cross sign** (the cursor becomes a cursor with a move sign) and **move** the **curso**r to every place you want **without releasing** the **left button** to reposition the point or to shorten/lengthen the two stitches which include this needle point. Release the left button after reposition.

Tips:

1. You can use the Up or the Down key on the keyboard to move the red cross sign so as to

know the direction of the running stitches in a certain region.

2. You can use the Ctrl + Home or End key to move the red cross sign to the head or tail of stitches of the whole design, use the Home or the End key on the keyboard to move the red cross sign to the head or tail of the stitches of the current unit, and use the Page Up or the Page Down key on the keyboard to move the red cross sign 100 stitches up or down.
3. Use Pan or Zoom command to help you position the point and view the stitches more clearly.

Delete Stitches

To delete stitches, it often **starts from the needlepoint**, which the red cross sign located and **deletes the stitches following this needle point**. So before deleting, you should click the needlepoint of the stitches (it should be the relevant starting needlepoint of the next following needle points) which you want to delete one or several stitches following it. Press **Del key**. Beware, **press Del key one time only delete two stitches** in which the point is located, and the two needle points which are before and after this point will be connected automatically so that all the stitches remain continuous. **Click** the **blank space** or **stitches without needle point on it** to **cancel** the **red cross sign.** Click another needlepoint to reselect the edit point.

Tips:

1. You can use the Up or the Down key on the keyboard to move the red cross sign so as to know the direction of the running stitches in a certain region.
2. You can use the Ctrl + Home or End key to move the red cross sign to the head or tail of stitches of the whole design, use the Home or the End key on the keyboard to move the red cross sign to the head or tail of the stitches of the current unit, and use the Page Up or the Page Down key on the keyboard to move the red cross sign 100 stitches up or down.
3. Use Pan or Zoom command to help you position the point and view the stitches more clearly.

Note:

If you click a needle point, what is deleted are the stitches after this needlepoint according to the stitch sequence.

Insert Stitches

You can Click the **Stitch** menu, scroll to **Insert Stitches** and click it to add one or several stitches.

Insert some irregular stitches

1. Click the needlepoint, which you want to insert one or several stitches around it.
2. Click the **Stitch** menu, scroll to I**nsert Stitches** and click it. Once you move the cursor it becomes a cursor with a black stitch, which comes from the two points. (the point you clicked and the precious one) You can move the cursor along this stitch to alter the length, direction or width of the newly created stitches. Without any clicking at this time, you will find the screen moved with the movement of the cursor. If you do not want to finish inserting, click and then move the cursor again and again to create the needle points, which are between these two points we just mentioned. You will find the inserting stitch before clicking is black and the inserting stitch will become the same color with the area in which you are inserting.
3. **Right click** to **finish** inserting, the point which you have right clicked will be connected with the next point, so the region will be filled with consecutive stitches.
4. After inserting, you can click the **Generate button** and the **Play Stitches** button on the toolbar to view the effect of your operation.

Tips:

1. You can use the Up or the Down key on the keyboard to move the red cross sign so as to know the direction of the running stitches in a certain region.
2. You can use the Ctrl + Home or End key to move the red cross sign to the head or tail of stitches of the whole design, use the Home or the End key on the keyboard to move the red cross sign to the head or tail of the stitches of the current unit, and use the Page Up or the Page Down key on the keyboard to move the red cross sign 100 stitches up or down.
3. Use Pan or Zoom command to help you position the point and view the stitches more clearly.

Notes:

1. To insert some regular stitches, you should click the point, which will be the next point after inserting. (That is to say the stitches you insert are before the current red cross sign)
2. During inserting, to press the Esc key can cancel this process and recover to the normal state.

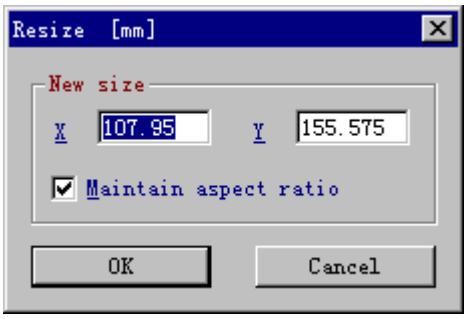
Generate Stitches

Generate is the most important command in the Ultrapunch. When you insert an image, Ultrapunch works by analyzing the outlines and using them as the basis for the stitches.

Any time you make a change to the values for a section, the outlines of a section, the size - any change at all, you must **ALWAYS re-generate** the stitches to reflect the changes made.

Generating the Stitches for a New Design

1. After selecting an image to insert, the Resize dialog box displays, which allows you to specify the sew-out size of your design.



2. Click the left mouse button in either the **X** (**horizontal**) or **Y** (**vertical**) **size** box and type a new value. It is best to try to make this size somewhat close to the size that you actually want the design to be sewn at.
   If the box next to **Maintain aspect ratio** show a check mark, when you change one of the values, the other will automatically be changed - keeping the image in the correct proportion.
   Click on the **OK button** to accept the new size.
3. Now only the image is displayed in the Object View window, with a wire frame box around it. You can use the wire frame to make further adjustments to the size or angle of the image file.

4. Select **Accessories** scroll to **Generate** and click it. Alternatively, click the **Generate button** on the toolbar or press the function key **F9** on the keyboard.
   If you watch the status bar in the lower left corner of the screen, you will see the calculations in process:
   Generating…(35%) 01:26 remaining
   Optimizing Trims… (70%) 00:08 remaining
   When the calculations are finished, the embroidery stitches display on the screen.
   You can now check the color sequence and make any changes to the stitch values, stitch angles, or outlines.

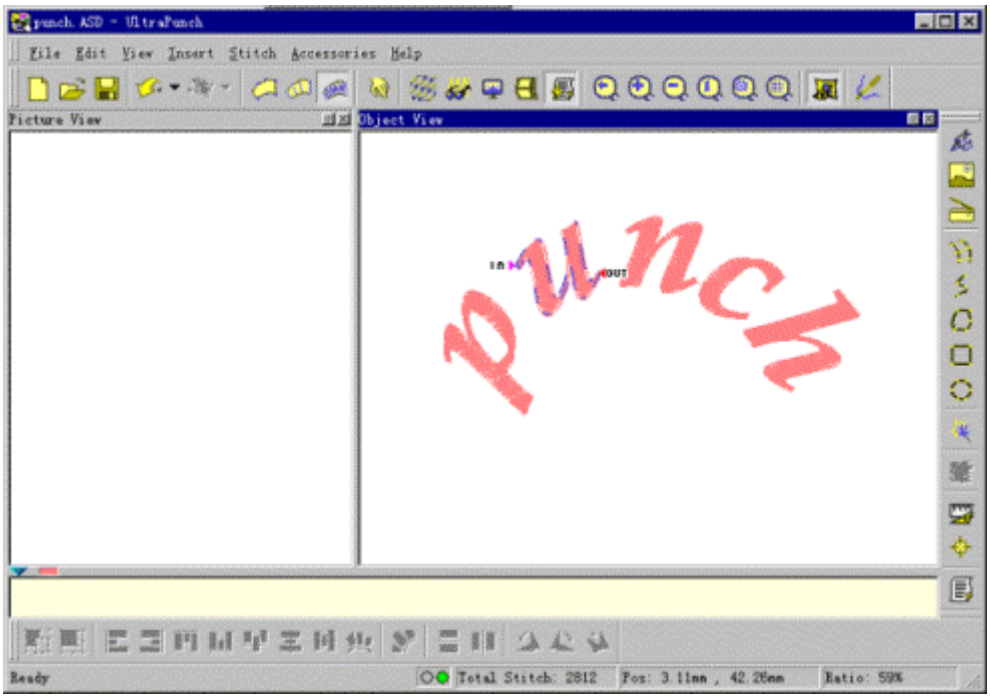
   Remember that any time you make a change to a section of the design, **ALWAYS Generate the section again**, so that the stitches reflect the changes you made.

Area Selection

Each section in the embroidery design is called an Area (or sometimes an Object, or an Entity). There can be many areas within each needle color - an area is any section that is not connected to a section in the same color.
In order to change the stitch values or outlines, you must select the area you want to change.

Selecting an Area in Stitch View

1. Make sure that you are looking at the design in **Stitch View**.
2. Place the mouse cursor over the area that you want to select and **click** the **right mouse button**.



You will see a **blue and white flashing line** going all the way around the area you clicked on. This blue and white line indicates that the object is selected.

Now you are ready to make changes to that object - explained in the following

sections.

Adding to Selected Areas

Sometimes, you will want to make the same changes to more than one section. Instead of selecting one area, making changes, generating, then selecting another, you can select all of the areas and make changes all at once.

This is useful when areas of the same thing are separated from each other, and you wish to apply the same effect to all the separated areas.

Selecting More than One Area at a Time

1. Following the instructions above, select the first area so that you see the blue and white flashing line around it.
2. Hold down the **Ctrl key** on the keyboard, place the mouse pointer over the second area and click the **right mouse button**. Now you will see that both areas have the blue and white flashing line around them.
3. Repeat Step 2 to select as many sections as you need.

Select by Color

Sometimes you may want to make a change to all of the areas in a certain needle color. There is a quick way to select these all at once.

Selecting All Areas of the Same Color

In the lower left corner of the Ultrapunch screen, there are small colored boxes representing each of the needle colors in the design.

Place the mouse pointer over the color you need, and **click the left mouse button**.

All of the areas in that color will be selected, with the flashing blue and white line around

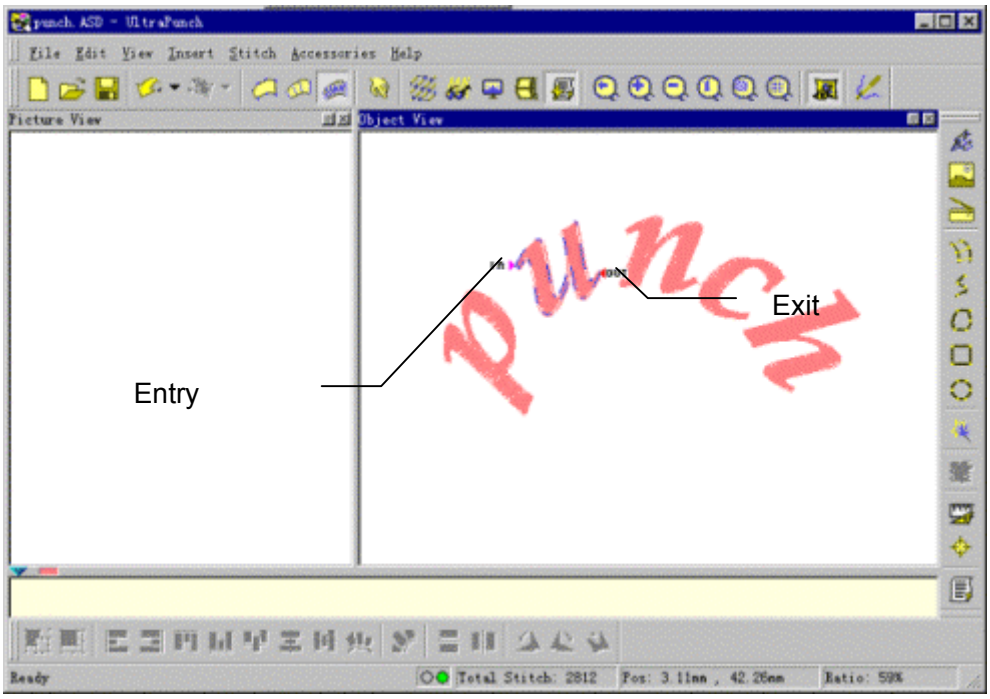
them.

Area In and Out Points

When you select an area of the design, you will notice two small boxes with the words IN and OUT. These indicate where the stitching will enter and exit that area.
For good sewing efficiency, it is important that the exit point of one area be near to the entry point of the next area in the sewing sequence. When a design is first generated, Ultrapunch will always place the entry and exit points in the best possible locations for sewing efficiency.
However, after you make changes to a design, such as changing the sewing sequence, splitting an area into two colors, etc. you may need to go back and check the In and Out points of each area to make sure the design will still sew efficiently.

Changing the In and Out Point of an Area

1. Place the mouse pointer over the area and click the **right mouse button** to select it. You will see the blue and white flashing line around it, and the two **small boxes** indicating the **IN** and **OUT** points of the area.



2. Place the mouse pointer exactly over the **IN box**. The white mouse pointer changes to black arrows pointing in four directions.

3. **Hold down** the **left mouse button** and drag the box to the desired place then **let go** of the mouse button.
4. Repeat steps 2 and 3, working with the **OUT box**, to change that point, if necessary.
5. It is very important that you regenerate the section after changing the IN or OUT point.

   Changes do not take effect until you re-generate.
6. Select **Accessories** scroll to **Generate** and click it. Alternatively, click the **Generate button** on the toolbar or press the function key **F9** on the keyboard.

The Design Film

The film is a convenient tool that shows you the sewing sequence of each separate area in the design.
It can be used to change the sewing order, to easily select a particular area, and to insert machine codes.

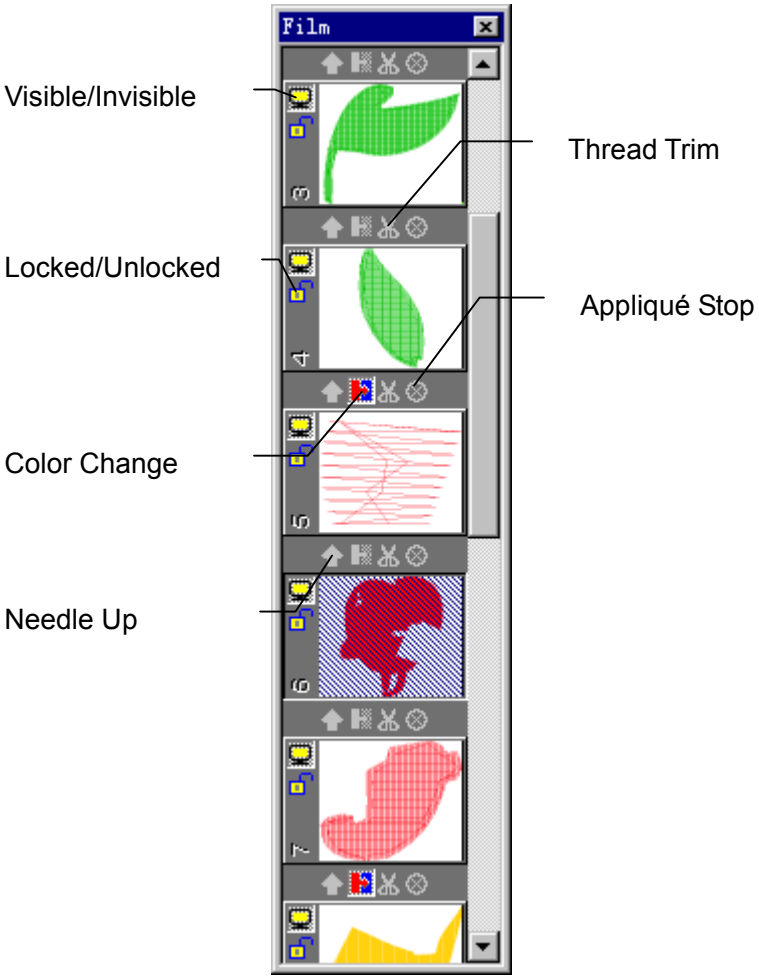
Opening the Design Film

1. After generating the stitches, Select **View,** then click **Film**. Alternatively, click the **Film button** on the toolbar or press the function key **F2** on the keyboard.
   The film will open in a toolbox somewhere on top of your embroidery design.

   As with any other window, you can **move the film** by placing the mouse pointer over the title bar, **holding down the left mouse button** and **dragging** it to a better location.

2. To **select** a particular area using the film, just place the mouse pointer over the box and click the left mouse button. For **multiple areas**, **hold down** the **Ctrl key** on the keyboard as you click each required area.
3. Each area in the design has a separate, numbered box in the film. (Identifying numbers are in the lower left corner of each box).

   There are buttons located above and to the left of each box in the film.
   - **Visible/Invisible:** Sometimes, stitches that you need to change overlap an area of another color, making it difficult to see what you are doing. Using Visible/Invisible you can temporarily hide a section. By default, all areas of the design will be visible after generating.



To **hide** an area from view, just **click** on the **Visible/Invisible button**. A **red X** appears over the button, and that area disappears from view on the screen. Clicking the button again will restore the area.

- **Locked/Unlocked:** Sometimes you may want to prevent a section from being changed accidentally. Locking an area prevents changes from being made.

  After first generating stitches, all areas in the design will be unlocked. Clicking on the Locked/Unlocked button toggles between the two modes. The button looks like an open key lock when the area is unlocked, closed when locked.

> When importing a file worked on previously or imported from embroidery disk, all areas in the design will be locked. You must unlock them before any changes can be made.

- **Needle Up:** Normally, Ultrapunch will place connecting stitches between each area for a smooth sewing design (as long as the connecting stitches get covered by later sections). Sometimes you may not want these connecting stitches, but want the thread to be cut between the two areas. Activating the

Needle Up button inserts this jump between two areas.

- **Color Change:** You will see this button activated any time there is a color change between two areas. Clicking on the button removes the code, making the later area part of the same color as the previous areas.
- **Thread Trim:** When the button is highlighted, it indicates that the thread is cut between those two areas in a design. If it is dimmed, the thread is not cut. **To remove or insert a trim, just click on the button.** Ultrapunch inserts trims automatically when it can't find a way to travel between two adjacent sections in the film, and the distance between them is greater than 3.0mm. If you properly manage the design sequence and In and OUT points for each section, Ultrapunch will efficiently manage thread trims on its own.
  If you are manually inserting thread trims, make sure that this the last thing you do before exporting the design, and that you do not re-generate the design after inserting trims.
- **Machine Stop:** This is a machine command designed for use in producing appliqués. When creating an **appliqué design**, inserting a machine stop after an area physically stops that machine, so that the operator can place the appliqué fabric. Simply **click on the button to activate it**.

Any changes that you make using the buttons in the film will immediately be reflected on the design in the work area.

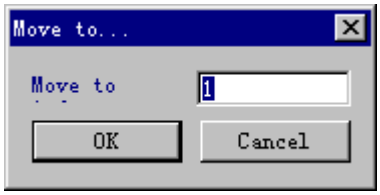
Using the Film to Change the Sewing Sequence

1. After generating the stitches, select **View**, scroll to **Film** and click it. Alternatively, click the **Film button** on the toolbar or press the function key **F2** on the keyboard.
   The film will open in a toolbox somewhere on top of your embroidery design.

   > As with any other window, you can **move the film** by placing the mouse pointer over the title bar, **holding down** the **left mouse button** and **dragging** it to a better location.

   Each area in the design has a separate, numbered box in the film. (Identifying numbers are in the lower left corner of each box).
2. Place the mouse pointer over the area you want to move and click the l**eft mouse button** to select it.
3. Keep the pointer over the box for the selected area, and click the r**ight mouse button**. A menu displays with three choices:
   - **Move to Top** makes the selected area the first to be sewn in the design (moving it to #1 in the film).
   - **Move to Bottom** makes the selected area the last to be sewn in the design.
   - **Move To…** lets you specify a particular number in the film where the selected area will be moved. Clicking on this option displays a dialog box.

Type in the **new index number**, then click **OK**.



Area Properties

Ultrapunch generates stitches using the system default values for column, fill, or line stitches (set in Accessories/Area Properties Master Sheet).
There are many variables in embroidery which can affect the quality of the design - size of the section, the fabric you're sewing on, the type and amount of backing used, how tight are the machine tensions, etc. Often, you will want to change some of the properties used to generate the stitches to account for these variables, or for artistic effect.
We offer some suggestions, but you will need to experiment to find the best choices for your most frequent applications.

Changing the Properties of an Object

1. Following the steps above, select the object that you want to change. You should see the blue and white flashing line around the object.
2. Click on **Stitch**, scroll to **Properties** and click it. Alternatively, click the **Properties button** on the toolbar or press the **Spacebar** on the keyboard.
   The "**Area Property**" dialog box will display. Each of the tabs in the dialog box lets you control various aspects of the stitches.

3. When the box opens, the **General tab** will always be selected.
4. Several pictures in the frame window control the type of stitching that is used in that section.

   For example:

   - **Judge Automatically** will always be high lighted, since that is how the system created the stitches when you first used the generate button.

   If the stitches the Ultrapunch generated are not the kind of stitching you want in that section, you will select either Complex Fill or Column or etc. to make that kind of stitching be used in the section.

   - **Complex Fill** stitches are generally used for large sections in the design. The large area is broken into stitches of the same length, all going in the same direction. Other names you may have heard for this type of stitch are "tatami", "ceeding" or just "fill" stitches. The particular values that control this stitch effect are found in the "Complex Fill" tab.
   - **Column** stitches are normally found in the smaller areas of a design. The stitches in a column section go completely across the section in 1 step, without being broken into smaller stitches. Other names for this type of stitch are "satin", "zig-zag" or "jump" stitches. The values controlling this stitch effect are found in the "Column" tab.

   The five boxes in the "**Options**" section enable the use of **Jagged Edge**, **Split Tie Off**, **Underlay** and **Pull Compensation**. If the boxes are checked, those options are in use and you will see the appropriate tabs at the tab of the dialog box. When unchecked, the options are disabled.

   The "**Color**" box indicates the needle color that this section will be sewn in. To change the needle color, click on the button with the two small dots that is next to

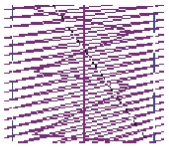
the color box. The Windows color palette will display, allowing you to select a new color.

Note:

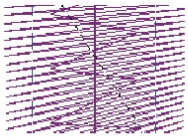
The colors shown in the "Custom Color" section are those already in use in this design.

The values of **Max Stitch** and **Min Stitch** control the longest (Max Stitch) and shortest (Min Stitch) stitch that can be created. It is recommended that you leave these at the default setting. Stitches longer than the 10.0mm default value would be easily snagged or pulled out of the fabric, while stitches smaller than the 0.4mm default are barely visible and would cause thread or needle breaks.

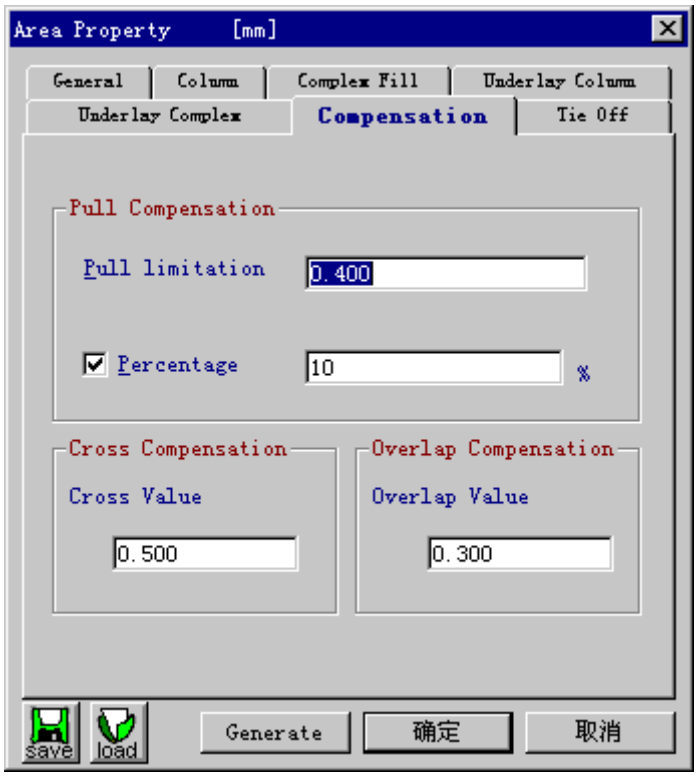
5. Click on the tab labeled **Compensation**, to move to the next group of settings. Compensation determines how far beyond the actual outline of the section the stitches will extend. These values help compensate for the fact that stitches sink into the fabric when sewn. That is why the design that lines up great on the screen sometimes has gaps when it is sewn.



Compensation 0.4mm



Compensation 1.5mm



- In the "**Pull Compensation**" box, you control **how the compensation is measured**, as an exact value or as a percentage of the original stitch length -

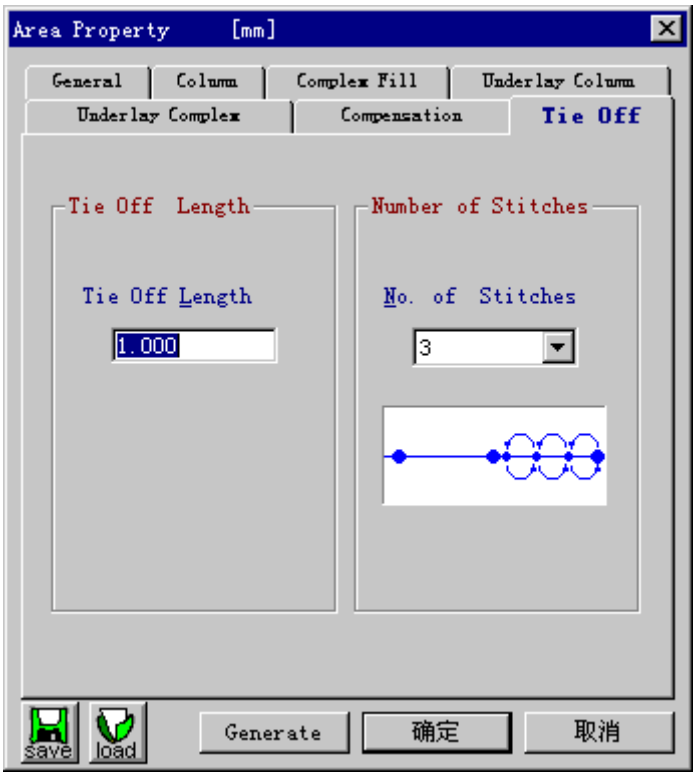
both have the same effect, just different ways of measuring it.

If the Percentage box is NOT checked, the number in "pull limitation" is being used, adding that exact amount to every stitch. In most cases, the default value of 0.4mm adds sufficient length to prevent gaps.

If you **check** the box for **Percentage**, **a certain percentage of the original stitch length** is added - longer stitches have more added to them than short stitches. In most cases, between 10% and 20%, adds enough length for good coverage, although with very small sections you may need to use a much higher percentage value.

- The value for "**Cross Compensation**" controls the amount of overlap within a section where the stitches meet and change directions - usually in a column outline. The default value of 0.5mm generally works well.
- The value for "**Overlap Compensation**" controls how many stitches (or rows of stitches in a complex fill) will be over sewn inside the section. In a large size complex fill section, a value of 1.0mm will usually prevent gaps between rows in the fill.

6. Click on the tab labeled **Tie Off**, to move to the next group of settings.



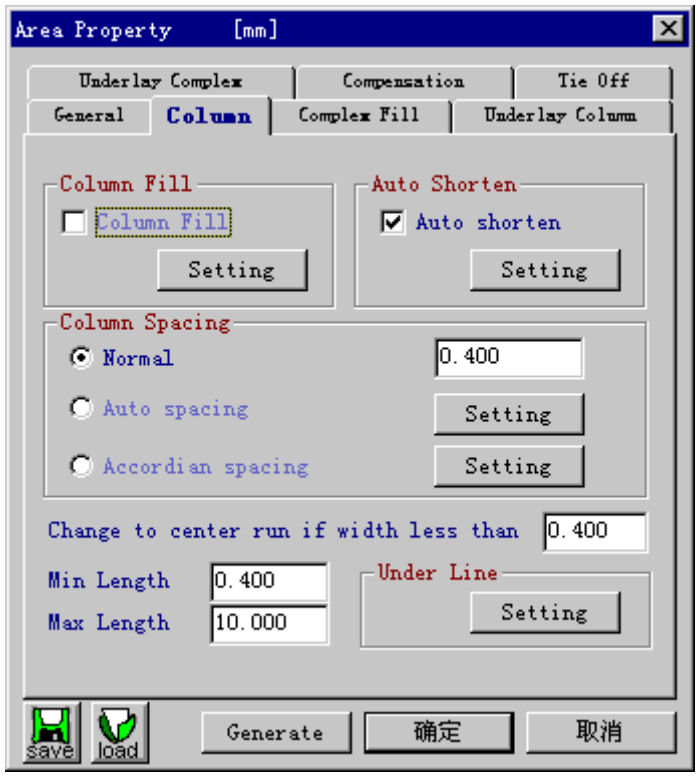
This value lets you make sure that a tie down stitch is placed before and after a trim or needle change, preventing the thread from pulling out.

- The value for "**Tie Off Length**" determines how long the lock stitches are. You want to make sure that this value is long enough to secure the thread, but not so long in proportion to the size of the stitches that the lock stitches stick out from the area.

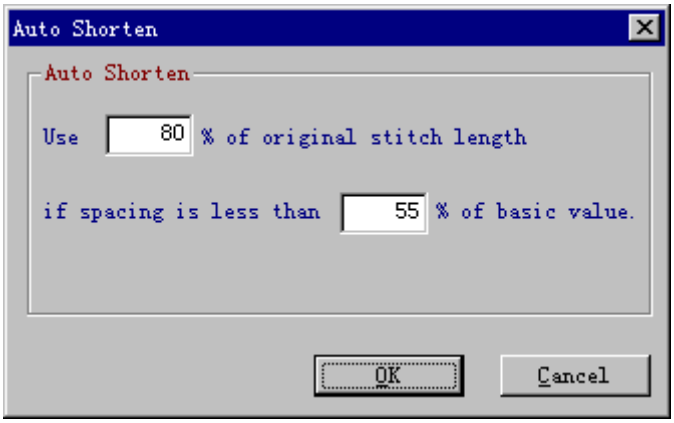
The default value of 1.0mm is appropriate for most sections. You may want to change it to a smaller value (try 0.5mm) if the tie off stitch is at the end of a very narrow area.

- The value for "**Number of Stitches**" sets how many lock stitches are placed. A value of 2 or 3 stitches is normal, and usually sufficient to secure the thread.

7. Click on the tab labeled "**Column**" to move to the next group of settings.
These settings control the appearance of any column (or satin) stitches used in the section.



- The "**Column Fill**" option and related settings are a special effect, not generally used for normal column areas. If you check the box to activate, and click on the **Setting button**, a second dialog box displays that contains the complex fill settings (the same as in the "Complex Fill" tab explained in step 8). This allows you to create a section with turning stitch angles like a column, but filled in a complex fill stitch (complex fill stitches normally all go in the same direction.)
- The "**Auto Shortening**" option should generally **always be activated** (checked). This allows the software to automatically shorten some stitches when there is a tight curve or corner, preventing too many stitches from sewing in the same spot, causing a hole in the fabric. Clicking on the **Setting button** opens a box containing the values for Auto Shortening.



In most cases, the **defaults** - use **80% of original length when spacing gets to 55% of the basic spacing value** - provide good stitch shortening and prevent problems.

If you want the stitches to be shorter, decrease the %of original length value.

If you want shortening to occur sooner, increase the % of basic value.

- The section headed "**Column Spacing**" controls how much space is between each stitch. This is also sometimes called the **density** of the stitches.

In most cases, the "Normal" spacing option should be used.

Using the "**Normal**" value means that the amount of space between each stitch is exactly the same. The value is an exact millimeter measurement.

The **default** value of **0.4mm** means that there is exactly this much space between each of the points in a column stitch.

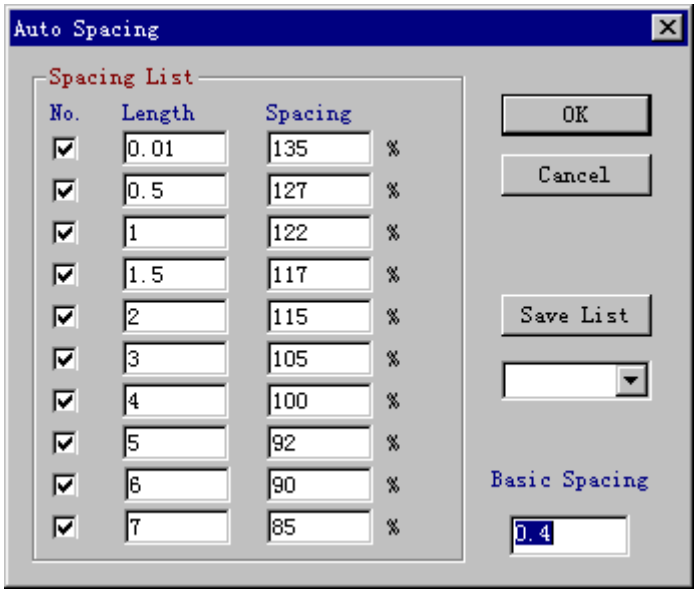
A **smaller** value (0.35mm) puts **less space** between each stitch, giving you **more stitches**.

A **larger** value (0.5mm) plus **more space** between each stitch, giving you **less stitches**.

The **normal range of values** for stitch spacing is between **0.3mm** and **0.6mm**.

The "**Auto Spacing**" option should only be used if the selected section is very narrow at some points, and gets much wider at another point. To use Auto Spacing, click in the box next to it, so that you see a check mark there.

When you click on the **Setting button**, a box containing the Auto Spacing settings displays.



This table determines how the stitches are shortened. Following the table - when stitches are very tiny (0.01mm length), 135% or the basic spacing is used, putting more space between small stitches to prevent thread breaks. As the stitch length gets longer, the spacing value decreases.
In most cases, the default table of spacing values will give good results.

The "**Accordion Spacing**" option produces a special effect where the spacing goes from tight to loose in a specific pattern. It can be used to create a blended color effect.

- The next setting "**Change to center run if width less than xx " converts the column stitch to a run stitch** if the distance between the two sides of the outline is smaller than the value (0.4mm is the default). It is because of this setting that you will sometimes see running stitches within a larger column stitch areas - to be sewn, so Ultrapunch has substituted a running stitch. This setting prevents too many small stitches from being created.

Notes:

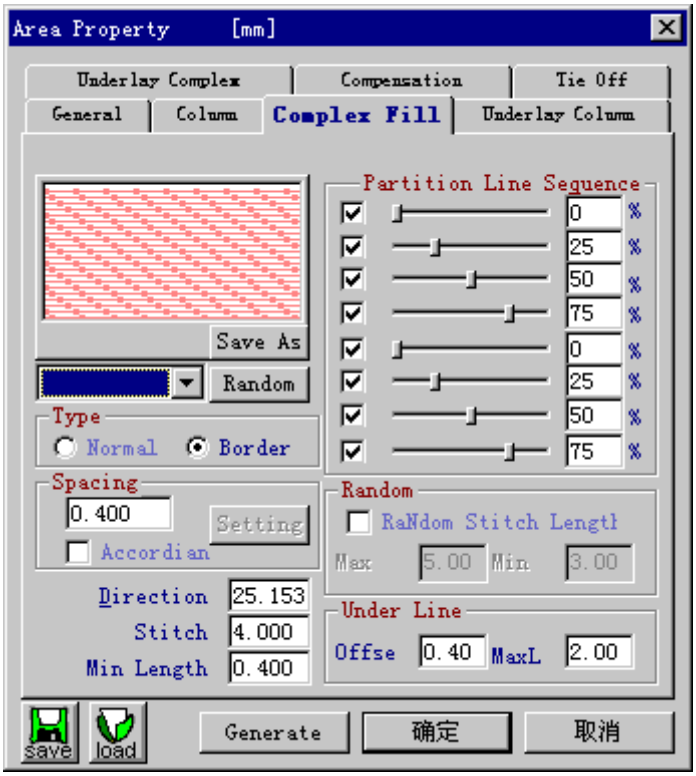
1. If you want the running stitches to be changed to column stitches, you must edit the original outlines, using b.
2. If you want to convert an entire column to a running stitch (frequently done with outlines), increase the value so that it is greater than the width of the widest point of the column section.

- The values for "**Min Length**" and "**Max Length**" control the smallest and largest stitch that will be created within the section.
- The section headed "**Underline**" controls the length of any connecting (or "traveling") stitches that are used within the section. Clicking on the **Setting**

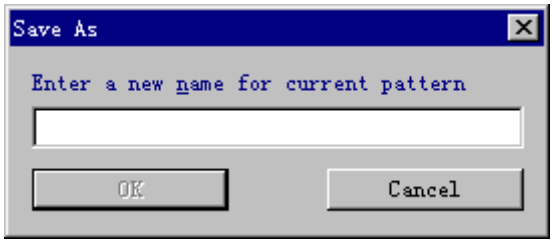
button accesses the value. In most cases, the default values of 2.0mm will work perfectly.

8. Click on the tab labeled "Complex Fill" to move to the next group of settings.

These settings control the appearance of any fill (also called tatami or ceeding) stitches used in the section.



- The section in the top left corner with the **sample picture** controls the pattern used for the fill stitches. Click on the arrow to select from the list of pre-programmed fill stitch patterns.
- When you select a new pattern, you'll notice that the values in the top right section, headed "**Partition Line Sequence**" also change. The different fill stitch patterns are created by controlling how the rows of stitches are staggered. The Partition Line Sequence values and bar graphs illustrate this.
  You can change the fill effect by changing some of the values in the table, by sliding the square on the graph or typing a different number. If there is a check mark in the box on the left side, then that value is being used.
- If you would like to be able to use a fill pattern you've created yourself in other designs, **click** the **Save button** (below the pattern illustration) after making changes in the Partition Line Sequence table.



A dialog box will prompt you to give the new pattern a name. Type in a name, then click on **OK** to save it to the fill pattern list.

- Clicking on the **Random button** (below the pattern illustration) will randomly set the Partition Line Sequence values. A random effect is sometimes used when you do not want a regimented fill pattern - it is often used in areas that are supposed to look like animal fur or leaves on a tree.
- The section headed "**Type**" controls what type of complex fill border effect is used.

  A **normal** fill turns sharply at the end of each row in the fill - the edges of a section using this fill can look slightly ragged, but if there is a border around the fill, this does not matter.

  A **border** fill places an extra stitch at the end of each row of the fill, making a smoother edge. This will look better if the section does not have a border.

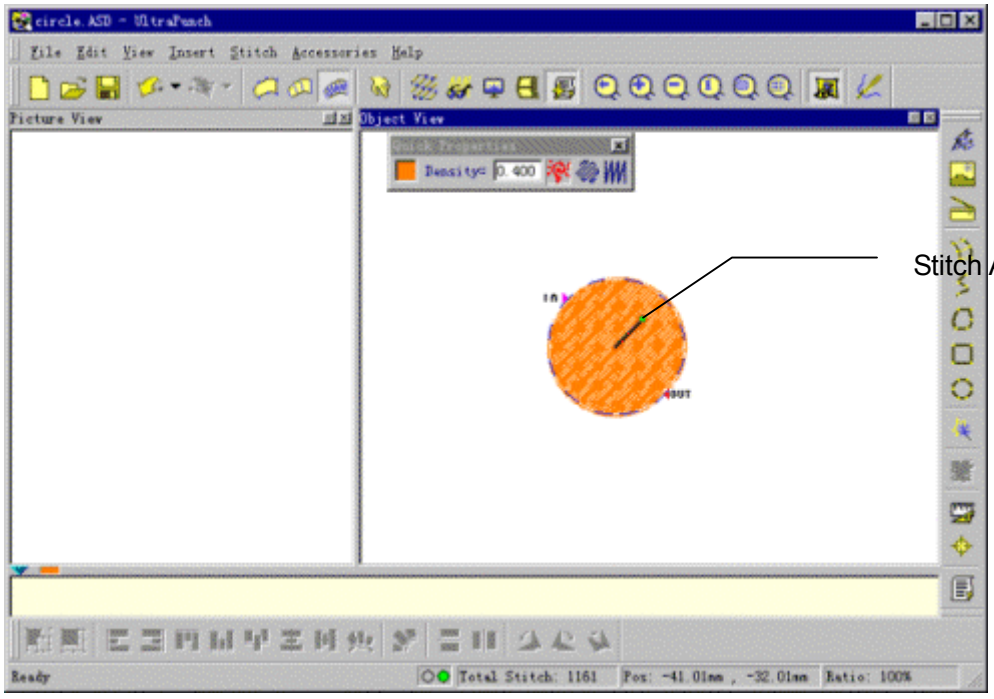
  Border fills will have **more stitches** than **normal** fills, so the normal fill is recommended whenever a border will cover up the edges of a fill section.
- The section headed "S**pacing**" controls the amount of space between each row of stitches in the complex fill. In most cases, the **normal** value is used, to produce an evenly spaced fill.

  Just as with a column stitch, the **normal range of values** is **between 0.3mm** and **0.6mm**. A **lower number** means less space between the rows, and **more stitches**. A **bigger** number means more space between the rows, and **fewer stitches**.

  The "**Accordion Spacing**" option produces a special effect where the spacing goes from tight to loose in a specific pattern. It can be used to create a blended color effect.
- In the lower left corner of the dialog box are three important values:

  Direction controls the angle of the fill pattern. (as shown by the stitch angle indicator in the Object View window)

  You can change the angle by typing a new value in the direction box, or by using the green handle on the stitch angle indicator to drag it into a new direction.



Stitch Length controls the length of each individual stitch in the complex fill area. The default value of 4.0mm is generally fine. If you are trying to reduce the stitch count in a design, you can try making this value slightly larger.

Min Length controls the smallest stitch that can be made in the fill, preventing too many tiny stitches that can cause thread or needle breaks. The default value of 0.4mm is recommended.

- The section headed "**Random**" creates a random, varied stitch length, instead of the same value for every stitch. This special effect is generally used together with a Random fill pattern when the section represents something like animal fur or leaves on a tree.

  To use this value, click in the box for "**Random Stitch Length**" so that it is checked, indicating the value will be used. Now you can set the values for **Max** and **Min** - the longest and shortest stitch lengths that will be used in the random pattern. The greater the difference in these two numbers (although larger than 7.0mm and smaller than 0.4mm are not recommended) the more random the fill will look.
- The section headed "**Underline**" simply controls any connecting (or traveling) stitches used within the fill. The **Offset** value indicates the distance from the edge of the section outlines. The **MaxL** value controls the stitch length.

9. After adjusting the values within the various tabbed sections, click on **OK** to exit the dialog box and make the changes take effect. If you click **Cancel** to exit, the changed values will not be saved.

10. It is very important that you re-generate the section after making any changes to these values.

Changes do not take effect until you re-generate.

Select **Accessories** scroll to **Generate** and click it. Alternatively, click the **Generate button** on the toolbar or press the function key **F9** on the keyboard.

Splitting the stitch of an unit with the needle point

Split Stitches enables you to split a string of stitches into two strings of stitches, which a defined needlepoint lines in. The string of stitches before and after this point form two areas respectively, so split stitches can split not only a string of stitches but also an area.

1. Generate the object.
2. Click the **Edit Mode button** and the **Display Stitch Position button** on the toolbar.
3. Click the needlepoint at which you want to split the string of stitches, and then you will see a red cross cursor located at this point.
4. Click the **Stitch** menu, scroll to **Split Stitches** and click it. Now the stitches are split.

Tip:

You can only split a string of stitches one area at a time. If you want to split a string of stitches into several strings of stitches, you must repeat the operation.

Notes:

1. The select area must have been generated, and the operation should be under Edit Mode.
2. After Split Stitches, the running direction of the stitches is not changed, though the string of stitches is split into two strings of stitches.
3. After Split Stitches, the string of stitches before and after the split point form two new areas respectively, and the stitches within the two areas are consecutive.

Inserting trim between units

Insert Trim Between Units enables the user to trim the linking threads among units manually which haven't been trimmed while generating, in other words, some times have been inserted in some areas, and accordingly the number of trim in the whole design has increased.

1. **Hold down** the **Ctrl** key and **right click** to activate those units, which have been linked adjacently one by one.
2. Select **Insert Trim Between Units** from the **Stitch** menu.
3. Now the cursor becomes a hand. Move the cursor so that it points to the dotted thread, which becomes highlighted with red color at the moment. Click to make it disappear, thus the linking thread is trimmed and meanwhile the number of trim increased one.
4. **Right click** to conclude the operation.

Tip:

Click to carry out Insert Trim Between Units operation, and right click or press the Esc key to cancel this operation.

Notes:

1. Insert Trim Between Units will work only when you have activated these units that you want to insert trim by right clicking.
2. The number of trim that you have added manually will disappear if you generate the units after this operation. Therefore, we advise you to generate it after this operation.

Insert trim in unit

Insert Trim in Unit enables you to trim the linking threads manually which haven't been automatically judged to be trimmed while generating or to insert extra trims in a unit. This function will increase the trim number of the whole design.

1. **Right click** to activate a unit of a design or right click to activate several units while **holding down** the **Ctrl** key.
2. Click the **Display Stitch Position button** and the **Edit Mode button** on the toolbar.
3. Move the cursor to point to the stitch point before which you're going to insert trim and then click, and then you will find this point marked with red cross.
4. Click the **Stitch** menu, scroll to **Insert Trim in Unit** and click it. Now you'll find the stitch before the marked stitch point trimmed.
5. **Right click** to conclude this operation.

Notes:

1. Having activated unit(s), you can apply this function to several units at the same time under Edit Mode.
2. Each time after you have trimmed the stitch before the marked stitch point, you'd better reposition the stitch point. Though you can reuse Insert Trim In Unit to increase Trim without reposition it, there is no conspicuous effect created.

Changing stitch settings with the stitch processor

In Stitch Processing, Ultrapunch provides the user with three ways. Namely, change the size of the whole Design, but the density of the stitches remain unchanged; change the density, but the size of the whole design remains unchanged; both the size and the density change.

1. **Click** or click to **draw** a frame to select a design or an object.

2. Select **Stitch Processing** under **Stitch** menu, and the **reset New Size** and **New Spacing** in the pop-out **Stitch Process** dialog box according to your desire.

◆ With the density of the stitches unchanged, change the size of the design or object
(1) Check Maintain Aspect ratio multi-option frame.
(2) Double-click X input column under New Size and input new value.
(3) Check up the percentage is 100 percentage under New Spacing, i.e. the density of the original stitches.
(4) Click Generate.

◆ With the size of the design or object unchanged, change the density of the stitches
(1) Keep the New Size value unchanged.
(2) Double-click the Percentage input column under New Spacing and input new value. If the new value is 50, the density of the currently selected object or design is 50%, which means that the stitches become denser. If the new value is 200, the density will become 200%, which indicates the stitches become sparser.
(3) Click Generate.

◆ Chang both the density and the size of the design or object
(1) Check Maintain aspect ration multi-option frame.
(2) Double-click X input column under New Size and input new value.
(3) Double-click the Percentage input column under New Spacing and input new value. If

the new value is 50, the density of the currently selected object or design is 50%, which means that the stitches become denser. If the new value is 200, the density will become 200%, which indicates the stitches become sparser.
So the density of the stitches will change according to the setting when the size of the design or object is changed.
(4) Click Generate.

Notes:

1. Before carrying out the operation, you can select only one design or object and process its stitches and size.
2. Stitch Processing is a very useful function. If the user found that the current design or object is too big, you can use the Resize function. If the stitches become too dense while reducing, use the Stitch processing function.

Displaying the position of all the needle points

Display stitch will display all the stitches of the generated areas. This operation enables you to position the cursor accurately in the desired point on the basis that all the stitches are displayed. This is not only auto-visual but also convenient.

1. Click the **Stitch View button** on the toolbar.
2. Click the **Stitch** menu, scroll to **Display Stitch Position** and click it. Alternatively click the **Display Stitch Position button** on the toolbar.

Playing stitches according to your request

Offers a simulated display of all the generated objects' stitches step by step and from the beginning to the end in the order sequence show in film during mock-up embroidery.

1. **Generate** the object if you have not already done so.
2. Click the **Stitch** menu, scroll to **Play Stitches** and click it. Alternatively click the **Play Stitches button** on the toolbar. You will find play stitches appears with some familiar and new button compared to the previous window.

Notes:

1. Zoom, Pan, Ruler, and Draw Stitches, buttons in the new window will affect not only the display of the object(s) in this window, but also affect the display of the object in the original window, and vice versa.
2. Generally, Play Stitches displays the object(s) from the starting stitch. But if you are in Stitch Edit, and position the red cross cursor at some needle point, the stitches before the red cross cursor will appear automatically and initially in the Play Stitches window. If you click now, the stitches behind the red cross cursor will be displayed. However, the stitches will be displayed in the ordinary way as if you had not positioned the red cross cursor on the needle point of the object(s).
3. In this window, you can use F5 to refresh the stitches.

New buttons in play stitches window

Add guide line is used to add a guide line to the intersecting area so as to

Clicking this button causes the needlepoint to travel one stitch towards the ending point.

Clicking this button causes the needlepoint to travel one stitch towards the starting point.

Besides the above-mentioned two functions, it also combines the function of pause. If you hold down one of them, continuous display stitches going forward or going backward will be available to you until you release the button. When you hold down the button again, it will resume the state in which you stopped the last time.

To exit the Play Stitches window and to go back to the original one. Equivalent to clicking on the upper right corner of this window.

To skip the whole process of display and to directly finish displaying all the stitches of the object(s) from the starting stitch to the ending stitch. At this moment, is invalid.

To skip the whole process of display and to directly finish displaying all the stitches of the object(s) from the ending stitch to the starting stitch, i.e. to return to the starting state. At this moment, is invalid.

Quick forward and Quick backward are two special buttons and must be used with at least one of the following five buttons: 10 stitches , 100 stitches , 1000 stitches , next color and next unit .

Click the 10 stitches button and then click the Quick forward button individually and you'll find the stitches displayed forward by 10 stitches at a time.
Click the 10 stitches button and then click the Quick backward button individually and you'll find the stitches displayed backward by 10 stitches at a time.

Click the Next color button and then click the Quick forward button individually and you'll find the whole design displayed forward according to color list. (If the adjacent two areas are the same in color, they'll be displayed at the same time, if not they'll be displayed one after another according to color list.)

Click the Next unit button and then click the Quick forward button individually and you'll find the whole design displayed forward by units.

If you hold down or it will not work, click it singly.

Removing small stitches according to the stitch number

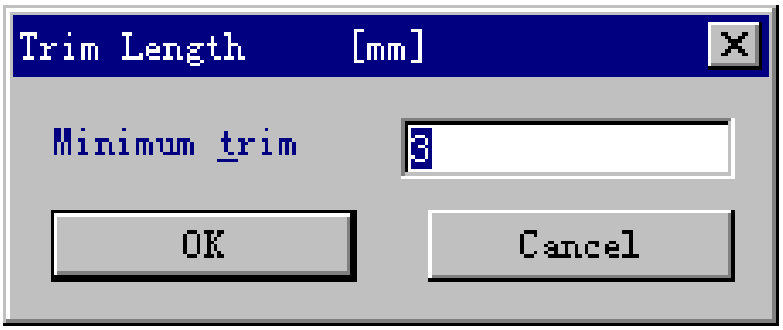
In some designs, there are some areas, which are composed by few stitches. Sometimes the number of trim and change color will be increased while embroidering their areas. The user can use Remove Unit's Stitches by Stitch Number and neglect these areas so as to reduce the number of trim and change color.

1. Click the **Generate button** on the toolbar.
2. Click the **Stitch** menu, scroll to **Remove Unit's Stitches by Stitch Number** and click it.
3. In the pop-up Delete unit by stitch number dialog box, double-click **Minimum Stitch** enter box and enter a value in it. This value indicates that an area will be neglected if the stitches it contains are less than this value. For instance, suppose the entered value is 10 and the areas, which contain less than 10 stitches will be neglected in the present design.
4. Click **Ok**.
5. Click the **Generate button** on the toolbar.
6. Click the **View** menu, scroll to **Design Information** and click it. Click **Stitch Info button** and view the change of the number of trim and change color before and after using Remove Unit's Stitches by Stitch Number.

Setting the minimum trim length of the design

Ultrapunch provides you with a way of controlling trim, which is called Set Minimum Trim Length. As long as the length of the linking stitch between any two adjacent areas or lines is less the defined value in the Set Minimum Trim Length dialog box, trim will not be applied; otherwise it will be trimmed.

1. Click the **Stitch** menu, scroll to **Set Minimum Trim Length** and click it.
2. **Double click** the **Minimum Trim** enter box and enter your desired value in the pop-up Trim Length dialog box, and then click **OK**. The default here is that it will be trimmed when the length of the linking stitch is longer than 3mm.



Advanced Functions

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Chapter 16.

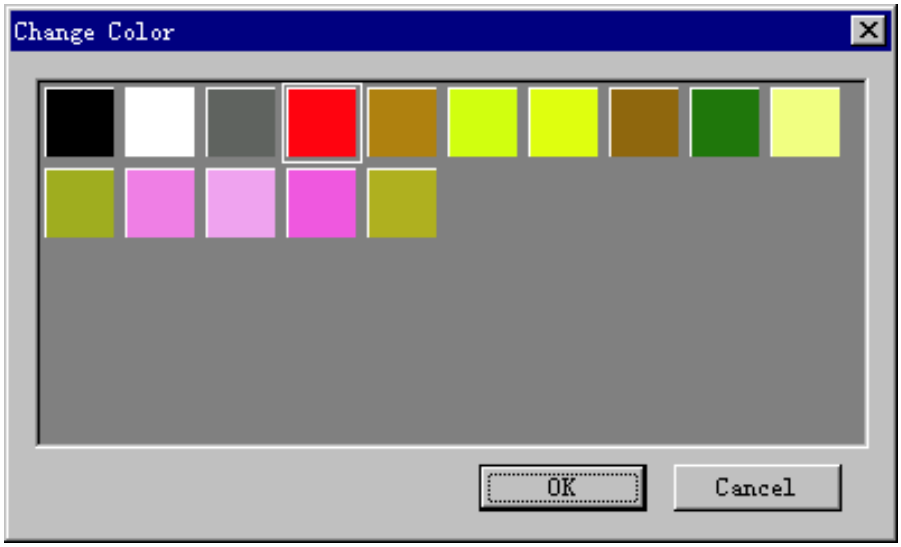
Accessories management

Managing the colors of the design

Color Manager can not only change the color of those areas, which have the same color but also reduce the colors of the present design.

1. Click the **Generate button** on the toolbar.
2. Click the **Accessories** menu, scroll to **Color Manager** and click it.
3. In the pop-up Color Manager dialog box, Auto Arrange Colors checkbox is offered you and Ultrapunch can arrange the colors automatically according to judgment.
4. To **reduce colors**, check Total Colors, enter your desired number of colors in the enter box, and this value should be large than 0 and less than the default value. Once you have reduced the colors to a smaller value, you can not enlarge it in the current dialog box again. Of course, you can also increase the number of colors by way of modifying the properties.
5. To **arrange colors manually**, check Manually Arrange Colors. The cursor will become a pen while pointing to the following color blocks. Click a color block, you can use one of the list out colors (the colors of the current design) to replace the color. Right click a color block, you can use any color to replace it.

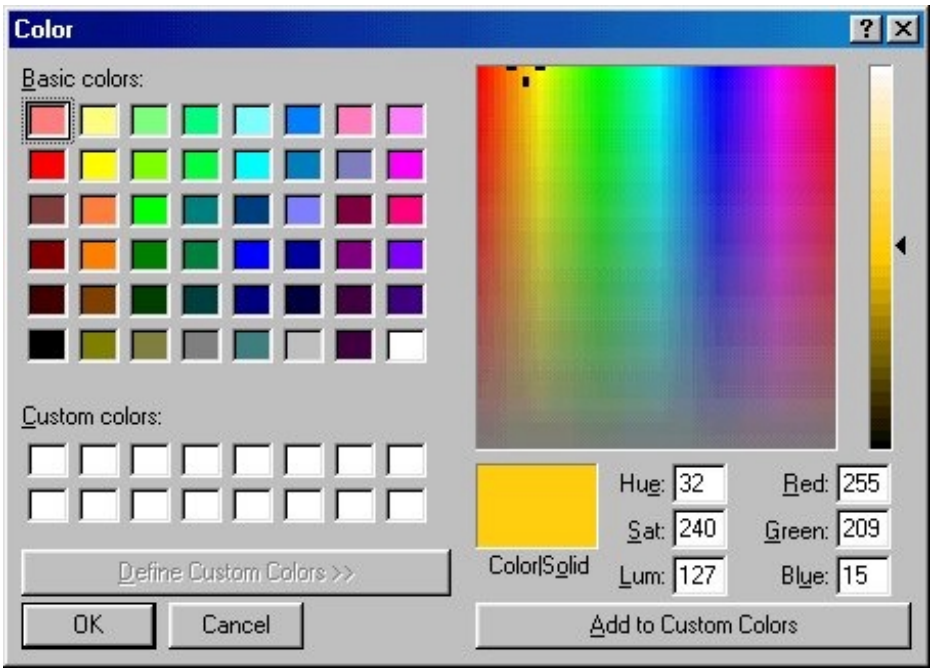
Click a color block, in the pop-up Change Color dialog box to select the color that you want to change it to and then click OK.



Right click a color block in the pop-up Color dialog box to select the color that you want to change it to, and then click OK.

After existing these dialog boxes, a double-headed arrow will appear in this color block: the

upper part is the original color and the lower part is the changed color.



6. Click **OK**. After that, the areas with the color will become the changed color at the same time.

Notes:

1. You can change the color of several areas of different colors at one time.

2. You can reduce the number of colors so that different areas may use the same color. Thus, the times of changing color will be reduced.

Chapter 17.

Improving the embroidery quality

Generating and re-generating the design or object/unit

Can generate and re-generate the stitches of newly inserted objects or update the stitches of those modified designs. (For instance, you can enlarge or reduce the design or object/unit, or alter the outline of the object manually by dragging the mouse, and then select Generate to update the stitches.)

1. Click the **Accessories** menu, scroll to **Generate** and click it. Alternatively click the **Generate button** on the toolbar or press the function key **F9** on the keyboard.
2. Now you will see the stitches inside of the object, which you have selected and the Stitch View button is checked automatically.

Tip:

After modifying objects, you should use Generate. For example, it you reduce or enlarge the object manually, the stitches will appear to be two dense or too thinly scattered you need to re-generate the design.

Notes:

1. If some units are activated (only by holding down the Ctrl key and right clicking or dragging a frame without releasing the right button and at this time it is not necessary for you to use Ungroup first) and you click Generate, Ultrapunch will only generate or update the stitches of those units and leave others unchanged.
If no units are activated (even if you used Ungroup first and then activate some units by holding down the Ctrl key and clicking or dragging a frame without releasing the left button) and you click Generate. Ultrapunch will generate or update the stitches of all the units, which you have not deleted before.

2. If you insert or move or delete individual stitches in the Stitch View window, Generate will again do nothing to these changes.

Auto-Arranging the embroidery order of the design or object/unit

This function will provide the user with the optimum embroidery order. The optimum order is defined as the least number of times for color change trims and finding out the nearest In/Out point of two adjacent areas automatically, so as to save time and reduce costs.

1. **Generate** the object in the Object View window.
2. Click the **Accessories** menu, scroll to **Auto-Arrange Embroidery Order** and click it.

Notes:

1. This function works only after using the Generate function.
2. Changing color or changing the entity sew sequence or floating an area or merging areas and other modifying operations may enhance the trims and the times of changing color and the distance between the input and output points. So Auto-Arrange Embroidery Order button will optimize these conditions.
3. If you do not want the order of the units arranged automatically by Ultrapunch, just click on Undo button and arrange the units manually.

Auto-Arranging the entry position of the design or object/unit

Auto-Arrange Entry Position will provide the user with the optimum sequence of the In/Out point. “Optimum Sequence” refers to rearrange In and Out points of two adjacent areas automatically so that the distance between the In and Out points becomes the shortest one, but it does not change the stitch sequence.

1. **Generate** the object in the Object View window.
2. Click the **Accessories** menu, scroll to **Auto-Arrange Entry Position** and click it.

Tips:

1. You can right-click to select one area of the object to see its In/Out points. If the distance between the two adjacent areas is not optimum, once you use this function, you will see their positions rearranged.
2. If the alternation of the In/Out points that you made manually is not satisfactory, you can

use this function to optimize them.

Note:

The changes will take effect only after generating, and it will affect all the objects in the Object View window.

Setting the unit order by selecting

Use this function, the user can rearrange the order of the units while stitching according to the user's own choice.

1. Click the **Accessories** menu, scroll to **Select Set Unit Order By Selecting** from and click it.
2. Now the cursor becomes a magic wand and then moves the cursor according to your desired order while stitching. Left-click to select these units one by one, you'll find these units are selected and numbered one after another according to your selecting order.

3. Having finished arranging the order, press the **Enter** key and then these units will be generated according to the new order.

Tip:

During the process of operation, you can cancel the operation by pressing Esc key or right clicking.

Note:

The Set Unit Order By Selecting will work only when you do it to at least two units of an object or two objects in the Object View window.

Chapter 18.

Modifying the settings of properties

Modifying the master setting of area properties

To change the area properties before creating a new design, use the Area Properties Master Sheet.

Click the Accessories menu, scroll to Area Properties Master Sheet and click it. In the pop-up Master Area Sheet dialog box, it offers you eight tabs. You can change several settings in each tab so as to change the area properties of all the new designs after that.

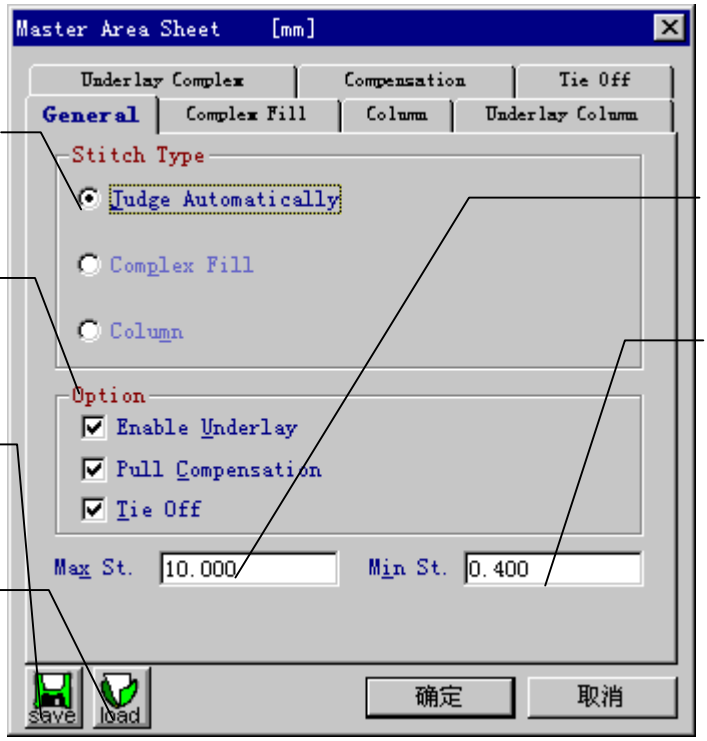
Tip:

To change the area properties of some individual new design or parts of a new design, right click to activate the area(s), and then press the Space bar or click the Properties button on the toolbar.

Note:

The Area Properties Master Sheet only affects new design(s), which are created after that.

General tab



Check to chose the stitch type and create the relevant property tab

Check the multi-option frame to create the relevant property tab

Click the button to save the current property setting

Click the button to load the existing property setting

The maximum length stitches within the area

The minimum length stitches within the area

Complex Fill tab

Click here to save the complex fill type, which you have edited

Click this button to edit the type at your random

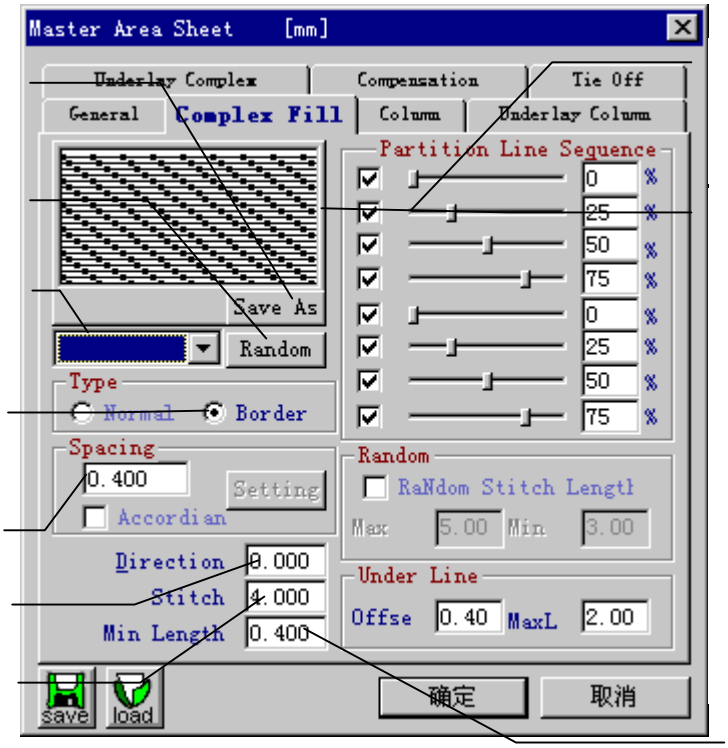
Select one of the existing patterns as the regional pattern

Check this option to run the stitch as border in edge area

The spacing of the complex fill

The direction of the complex fill

The stitch of the complex fill



Adjust the needlepoint of each line so as to adjust the complex design

To check anyone of the eight checkbox means to check all the checkboxes (including it) before this checkbox automatically. Meanwhile, all the checkboxes following it will be unchecked. Now the Tatami of each checked lines will be created and the cursor within it is used to adjust the design.

The minimum length of the complex fill

Column tab

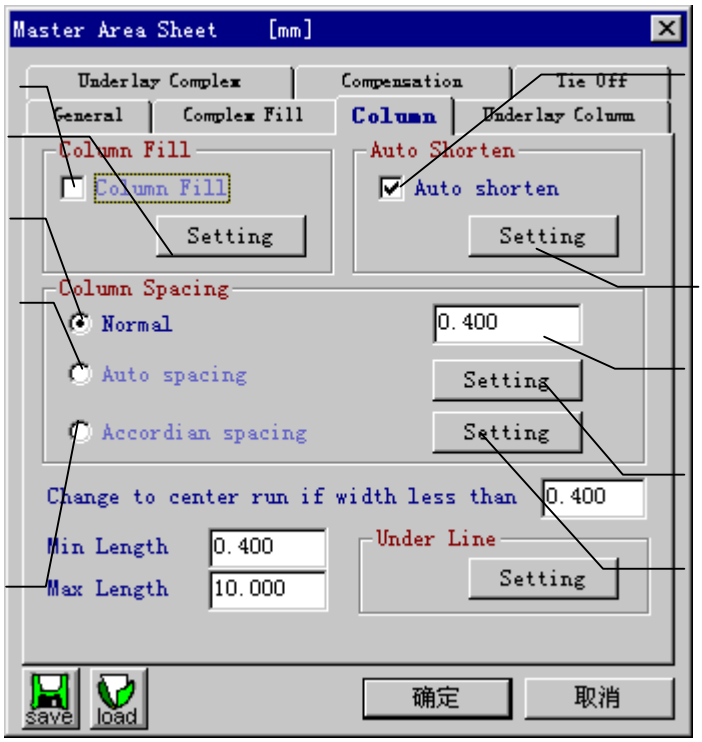
Check to use the complex fill

Click the button to set the column fill

Check to use the normal column spacing.

Check to start using the auto spacing. That column spacing has or has not something to do with above-mentioned value is judged automatically according to the setting.

Check to set the column spacing according to your requirement



Check to start using the Auto Shorten. According to the settings and the shape of the corner, the stitch will be shortening automatically.

Set the shorten in the column fill area

The normal spacing of the column fill area

Set the spacing in the column fill area

Set the spacing according to your requirement in the column fill area

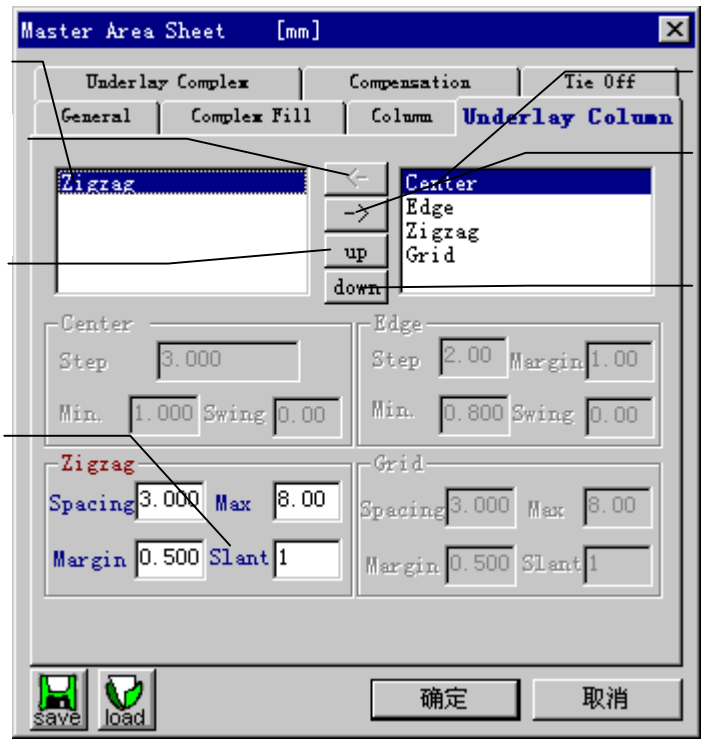
Underlay Column tab

Click to select the added underlay stitching

Click to add the selected underlay stitching to the left frame

Click to move the selected underlay stitching up one step in the left frame

Click and enter the value of each option to modify the relevant underlay stitching



Click to select the existing underlay stitching

Click to remove the selected underlay stitch from the left frame

Click to move the selected underlay stitching down one step in the left frame

Underlay Complex tab

Click to select the added underlay stitching

Click to add the selected underlay stitching to the left frame

Click to move the selected underlay stitching up one step in the left frame

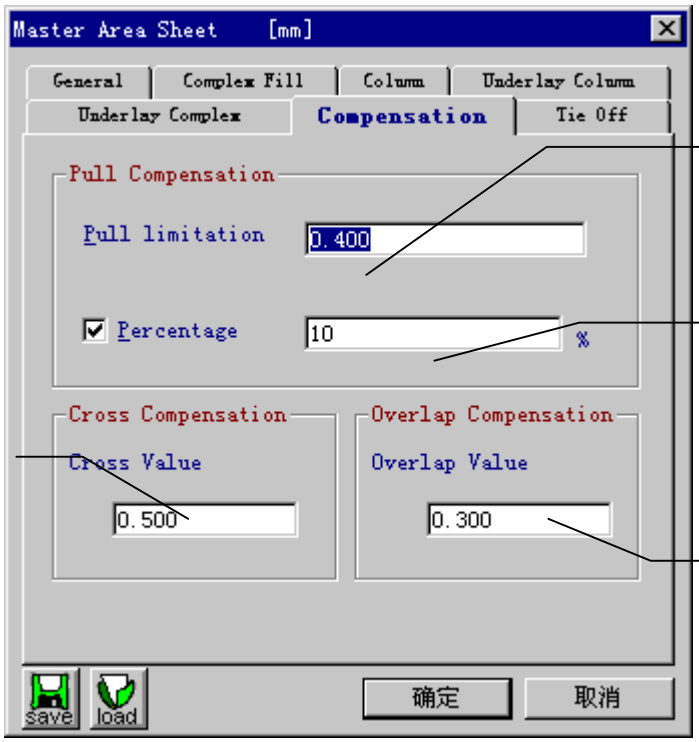
Click and enter the value of each option to modify the relevant underlay stitching

Click to select the existing underlay stitching

Click to remove the selected underlay stitch from the left frame

Click to move the selected underlay stitching down one step in the left frame

Compensation tab



Define the limit value that you will use to create pull compensation

Define the percentage that you will use to create pull compensation to the line within area

Enter the cross compensation value

Enter the overlap compensation value

Tip:

Namely, if the result of the length (of the line) multiplied by the percentage is less than the define limit value, it will choose the result automatically. If the result is more than the limit value, it will choose the limit value automatically.

Tie Off tab

The length of each tie off

The number of the tie off

Modifying the master setting of line properties

To change the line properties before creating a new design, use the Line Properties Master Sheet.

Click the Accessories menu, scroll to Line Properties Master Sheet and click it. In the pop-up Master Line Sheet dialog box, it offers you for tabs. You can change several settings in each tab so as to change the line properties of all the new design after that.

Tip:

To change the line properties of some individual new designs or parts of a new design, right click to activate the line(s), and then press the Space bar or click the Properties button on the toolbar.

Note

The Line Properties Master Sheet only affects new design(s), which are created after that.

General tab

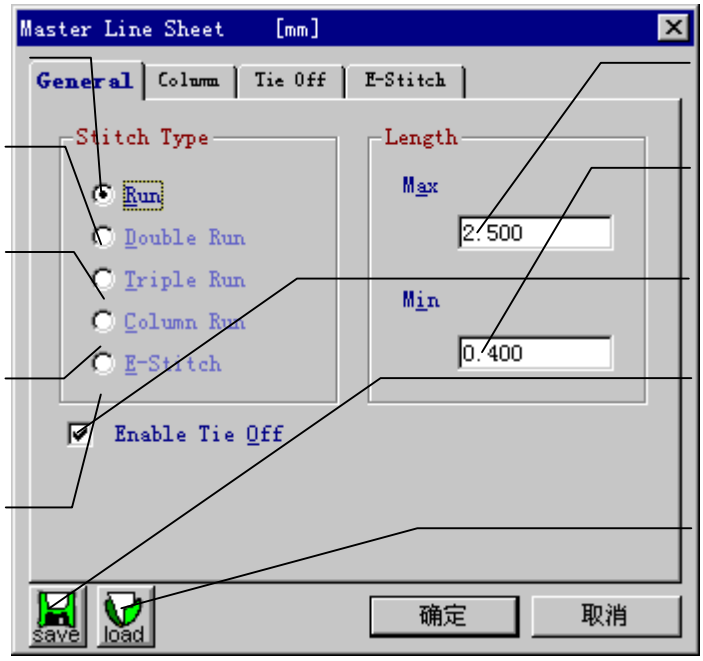
check to create the digitized line by going forward only

check to create the digitized line by going forward and backward

check to create the digitized line by going forward and backward, then forward again

check to create column property tab, stitch with column and with this line as the center

check to create E-stitch property tab



the maximum length of the stitches within the line

the minimum length of the stitches within the line

check to create tie of property tab

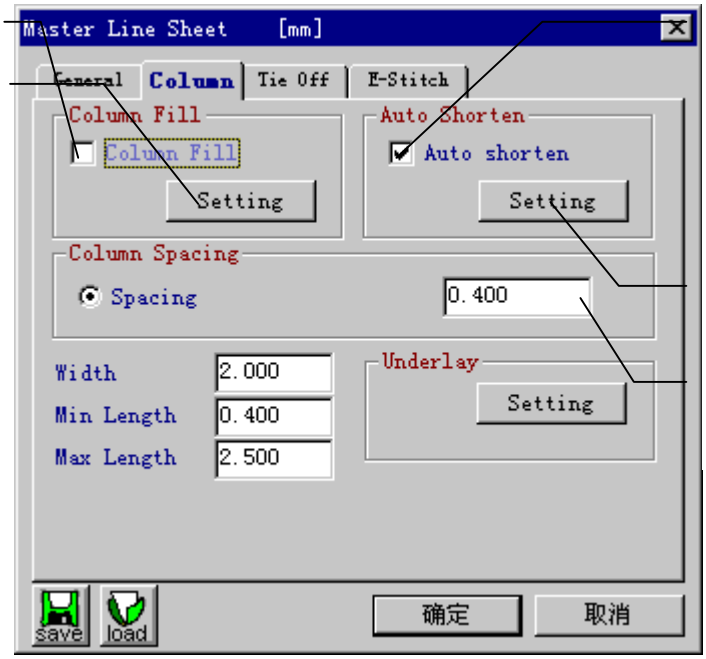
Click the button to save the current property setting

Click the button to load the existing property setting

Column tab

Check to use the column fill

Set the column fill



Check to start using the Auto Shorten. According to the settings and the shape of the corner, the stitch will be shortening automatically.

Set the shorten in the column fill area

Set the spacing in column fill area

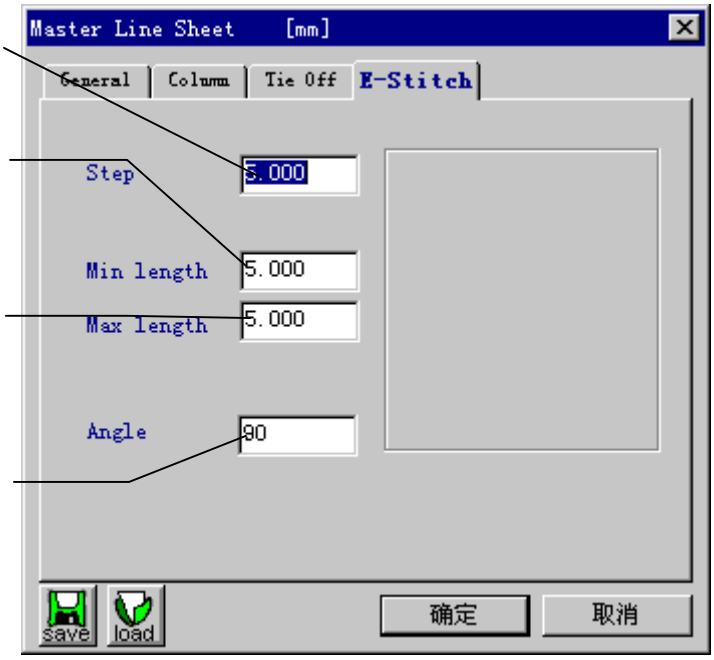
E-Stitch tab

Set the step of E-Stitch

Set the minimum length of the E-Stitch

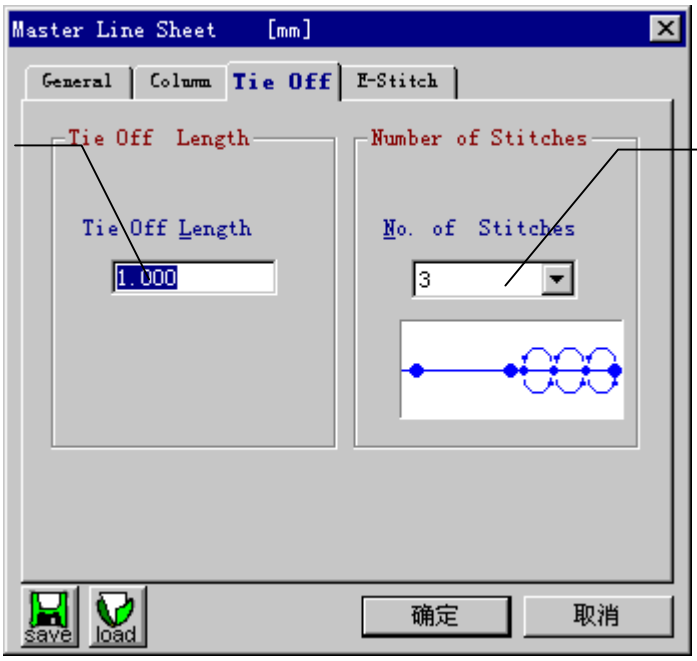
Set the maximum length of the E-Stitch

Set the angle of the E-stitch



Tie Off tab

The length of each tie off



The number of the tie of

Modifying the setting of area properties

To change the area properties after creating, loading and importing a design file or a stitch file use the Area Properties dialog box to fulfill it.

1. **Right click** to activate the area you want to change its property.
2. Press the **Space bar** or click the **Properties button** on the toolbar.
3. In the pop-up Area Property dialog box, change the desired settings in its relevant tab.
4. Click **OK**.
5. Click the **Generate button** on the toolbar.

Tips:

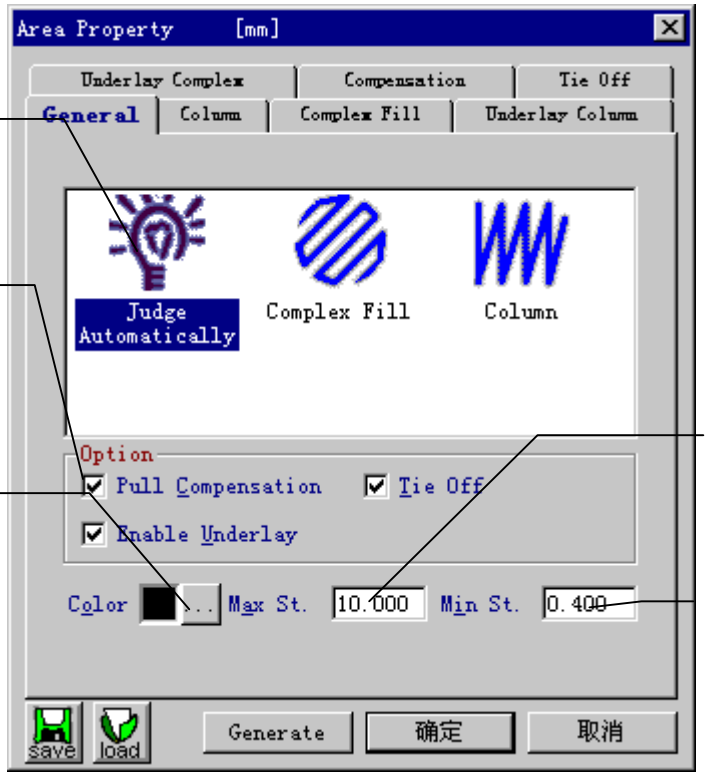
1. To change the area properties before creating a new design, use Area Properties Master Sheet.

2. Right click or drag a rectangular frame to activate one or several area(s)/line(s) and be ready for modifying their properties, a Change Property dialog box will pop-up first if you select both area and line. Among the Select Property dialog box options, you can choose to modify either area property or line property first. Click OK and then the corresponding selected Area Property dialog box or Line Property dialog box will appear. Therefore, you can not modify area property and line property at the same time, but you can modify the property of several areas or several lines at the same time.

Note:

Under the default state (the stitch type, Auto Jagged, is selected), the Line Property dialog box usually offers you two tabs in it, but if you select one of the other two stitch types it will offer you two tabs according to the respective circumstance.

General tab



Click the icon to create the corresponding property tab

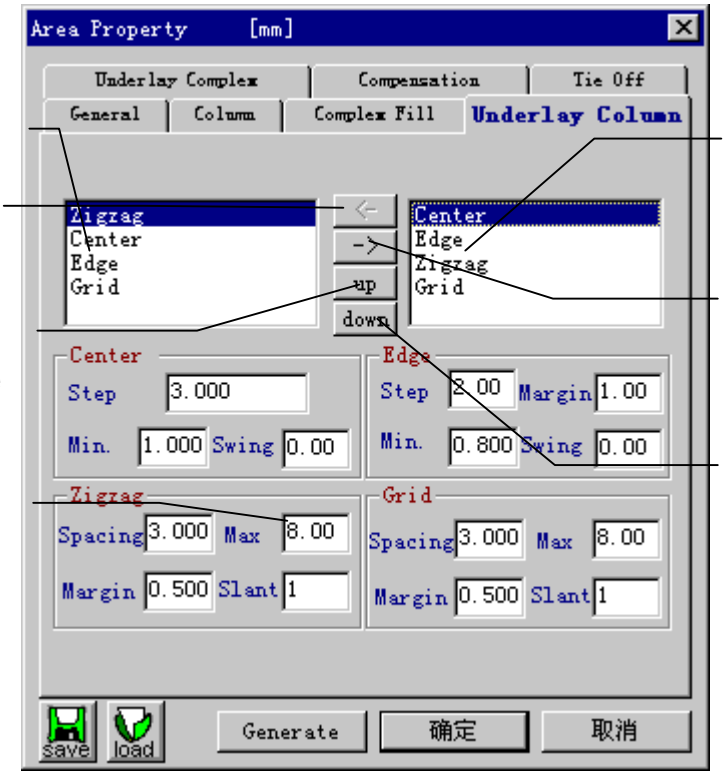
Check the multi-option frame to create the relevant property tab

Click the button to change the color of the activated area

The maximum length of the stitches within the area

The minimum length of stitches within the area

Underlay Column tab



Click to select the added underlay stitching

Click to add the selected underlay stitching to the left frame

Click to move the selected underlay stitching up one step in the left frame

Click and enter the value of each option to modify the relevant underlay stitching

Click to select the existing underlay stitching

Click to remove the selected underlay stitch from the left frame

Click to move the selected underlay stitching down one step in the left frame

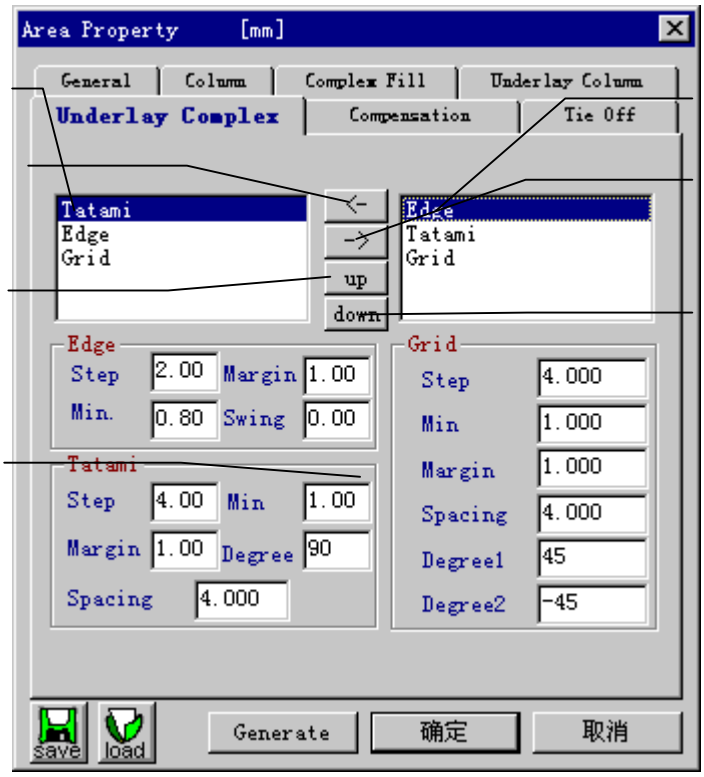
Underlay Complex tab

Click to select the added underlay stitching

Click to add the selected underlay stitching to the left frame

Click to move the selected underlay stitching up one step in the left frame

Click and enter the value of each option to modify the relevant underlay stitching



Click to select the existing underlay stitching

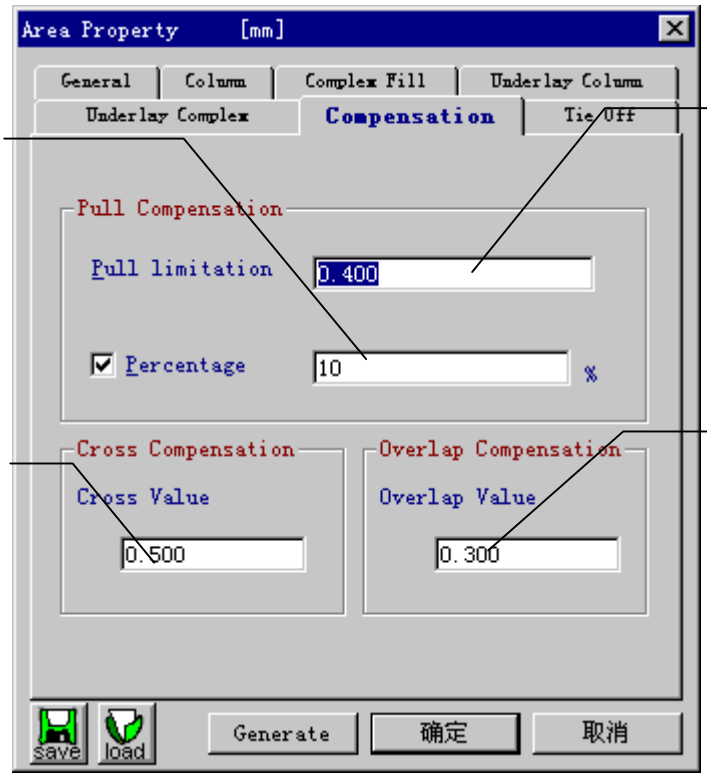
Click to remove the selected underlay stitch from the left frame

Click to move the selected underlay stitching down one step in the left frame

Compensation tab

Define the percentage that you will use to create pull compensation to the line within the area

Enter the cross pull compensation value



Define the limit value that you will use to create pull compensation

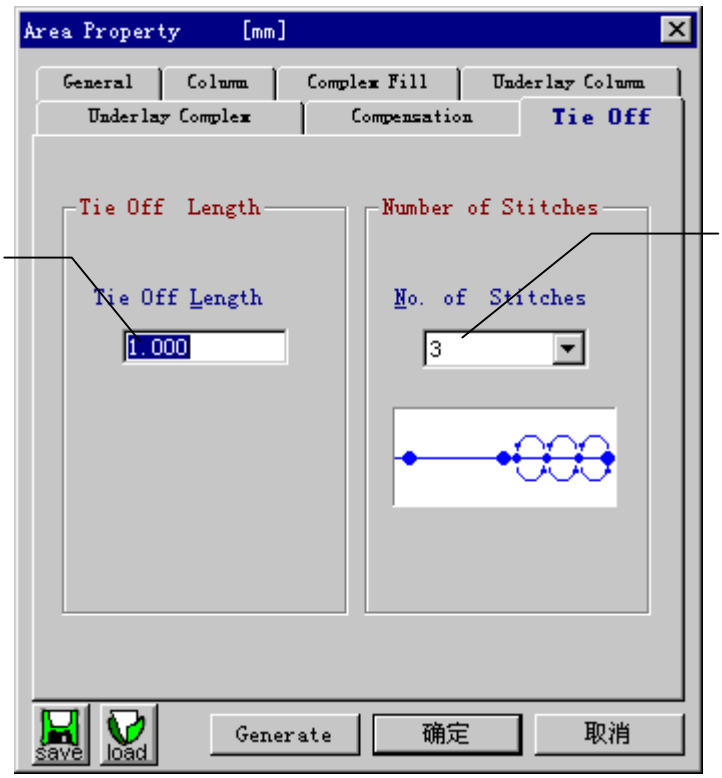
Enter the overlap pull compensation value

Tip:

Namely, if the result of the length (of the line) multiplied by the percentage is less than the defined limit value, it will choose the result automatically. If the result is more than the limit value it will choose the limit value automatically.

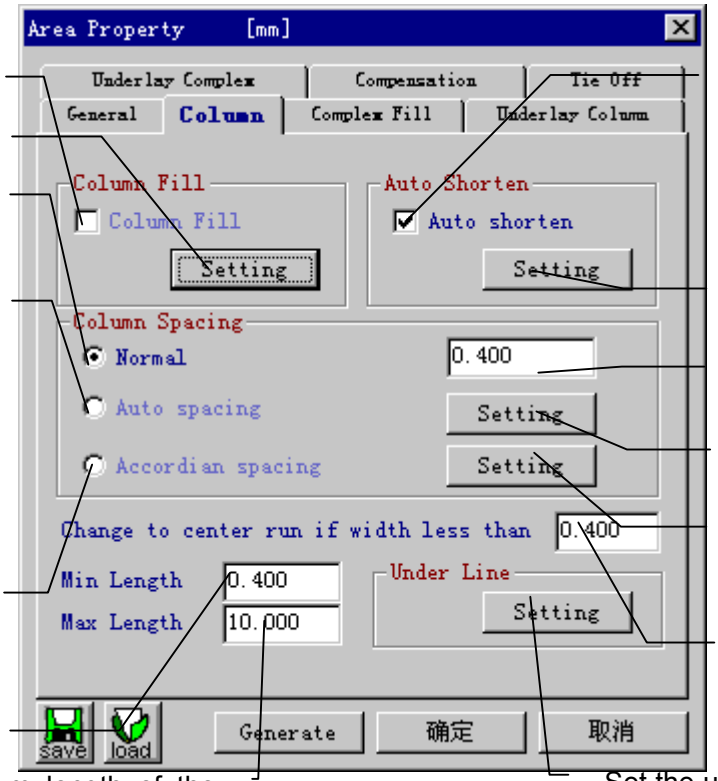
Tie Off tab

The length of each tie off



The number of tie off

Column tab



Check to use the column fill

Set the column fill

Check to use the normal column spacing

Check to start using the auto spacing. That column spacing has or hasn't something to do with above-mentioned value is judged automatically according to the setting.

Check to set the column spacing according to your requirement

The minimum length of the column fill stitch

The maximum length of the column fill stitch

Check to start using the Auto Shorten. According to the settings and the shape of the corner, the stitch will be shortening automatically.

Set the shorten in the column fill area

The normal spacing of the column fill area

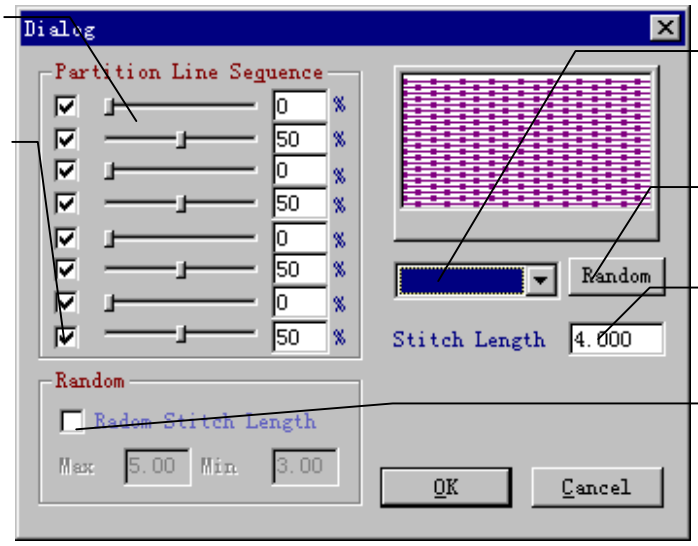
Set the spacing in the column fill area

Set the spacing according to your requirement in the column fill area

Change the column area to center run if its width is less than the defined value

Set the under line of the column fill area

Column Fill Setting



adjust the needlepoint of each line so as to adjust the column fill design

To check anyone of the eight checkbox means to check all the checkboxes (including it) before this checkbox automatically. Meanwhile, all the checkboxes following it will be unchecked. Now the Tatami of each checked lines will be created and the cursor within it is used to adjust the design

List all the existing pattern names. Select a pattern as the regional pattern.

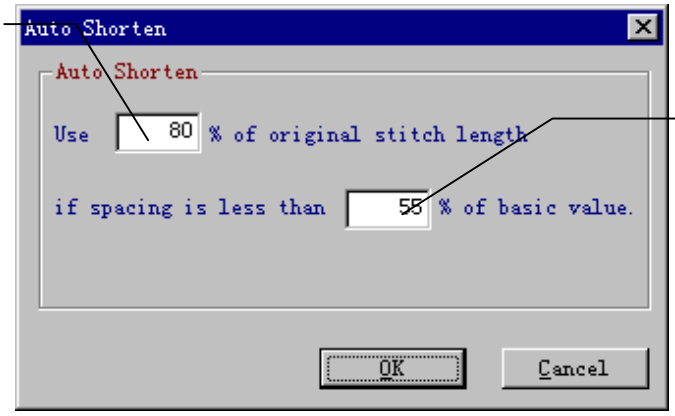
click here to create a new pattern at random

define the stitch length within the column fill area

check to define the maximum length and the minimum stitch length while creating a new pattern at

Auto Shorten Setting

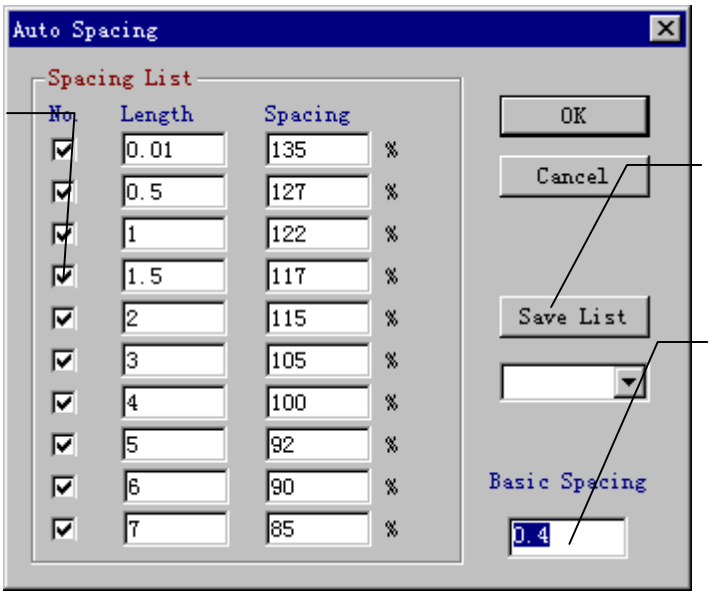
define the shorten percentage of the original stitch length



define the percentage of basic column area spacing while shortening the stitch

Auto Spacing Setting

check the No checkbox and modify the length and spacing of each stitch



Click the button to save the spacing list

define the basic spacing of column stitch

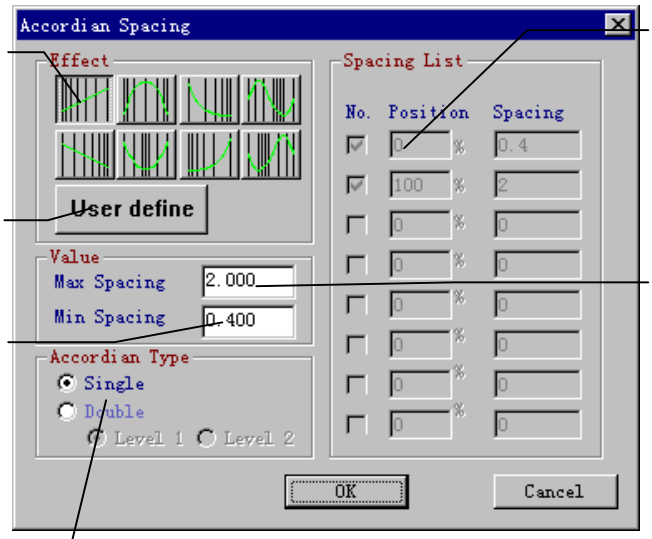
Accordion Spacing Setting

click any type of the providing blending effect according to your requirement

click here to define the blending effect by yourself

If any of providing blending effect has been checked, this option will be valid. Double click it to enter the minimum spacing of the blending.

check to select the color number

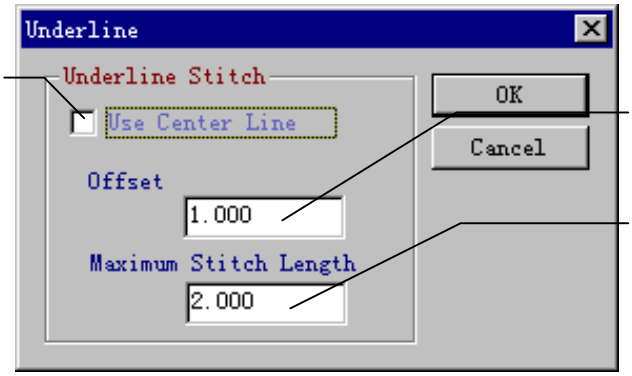


If the user define button has been checked, these options which are under the spacing list will be valid. Checkbox the No. Checkbox and enter the value of position and spacing.

If any of providing blending effect has been checked, this option will be valid. Double click it to enter the maximum spacing of the blending.

Under Line Setting

check to use center line



define the offset of the under line

define the maximum stitch length of the under line

Complex Fill tab

click here to save the complex fill type, which you have edited

click this button to edit the type at your random

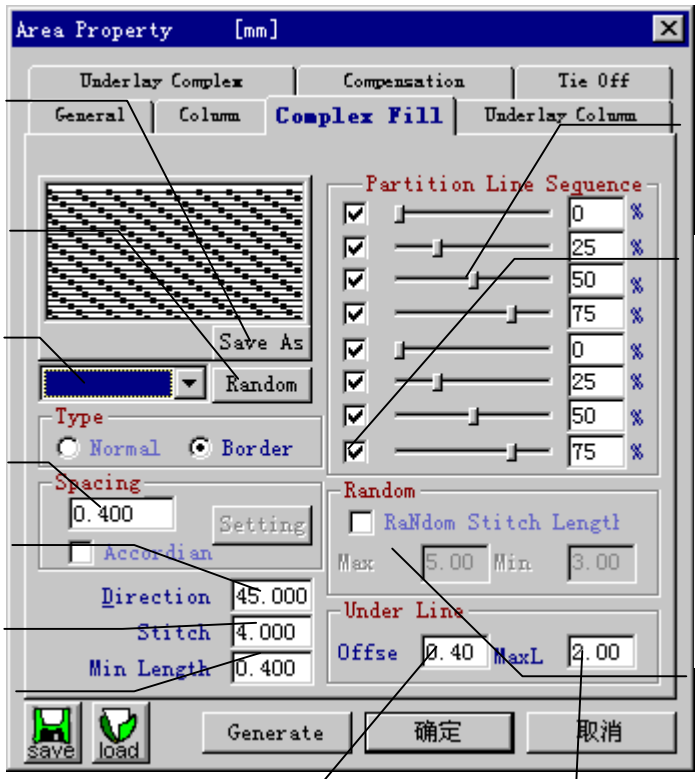
List all the existing pattern names. Select a pattern as the regional pattern.

the spacing of the complex fill

the direction of the complex fill

the stitch of the complex

the minimum length of the complex fill



adjust the needlepoint of each line so as to adjust the complex design

To check anyone of the eight checkbox means to check all the checkboxes (including it) before this checkbox automatically. Meanwhile, all the checkboxes following it will be unchecked. Now the Tatami of each checked lines will be created and the cursor within it is used to adjust the design.

define the maximum and minimum stitch length while creating complex at random

define the offset of the under line in the complex fill area

define the maximum length of the under line in the complex fill area

Tips:

1. While entering the value of the Random Factor in the input box, the higher the value is, the bigger the degree of mal-position and the more orderly the stitches are.
2. The random scale input box is valid only when you have checked Random Pattern checkbox. Now the Partition Line Sequence and its drag down box become invalid with gray color.
3. When an area is stitched with complex fill, you can use the pointer of complex fill to change its running direction.
   (1) Click the Stitch View button on the toolbar.
   (2) Right click to select the area that you want to change its running direction and then a pointer will appear in the center of this area.
   (3) Point the cursor to a green point on the head of the pointer, the cursor will become a four-direction-arrow cursor. Left-click and hold down the left button to rotate this pointer so that the green point on its head points to the direction which you are like to change to in the complex fill area.
   (4) You can rotate the pointer repeatedly until you find the satisfactory direction.

(5) Click the Generate button on the toolbar.

Notes:

1. The pointer of complex direction will appear only when you have clicked Stitch View and meanwhile right clicked to select a complex fill area.
2. Once you have modified the direction of complex pointer and generated the area, all the stitches in the area will be in the same direction with the green points on the pointer head.:

Modifying the setting of Line properties

To change the line properties after creating, loading and importing a design file or a stitch file, use the Line Properties dialog box to fulfill it.

1. **Right click** to activate the line you want to change its property.
2. Press the S**pace bar** on the keyboard and click the **Properties button** on the toolbar
3. In the pop-up Line Property dialog box, change the desired settings in its relevant tab.
4. Click **OK**.
5. Click the **Generate button** on the toolbar.

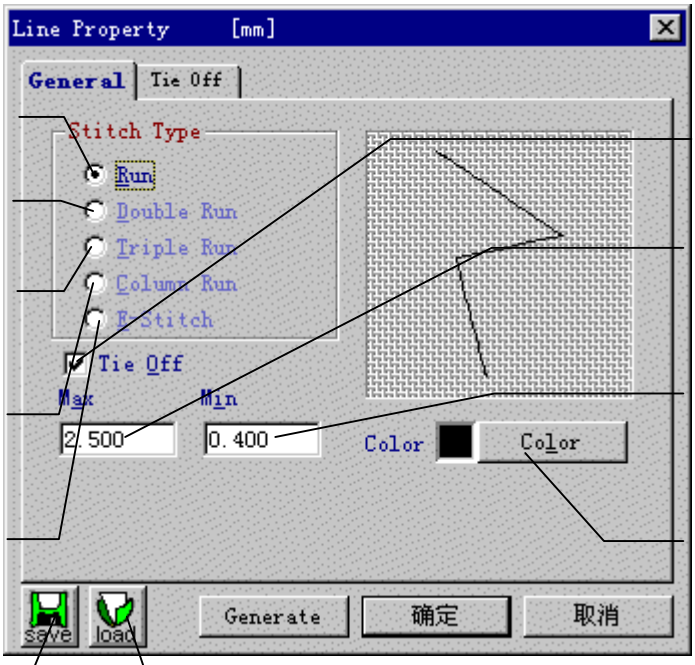
Tips:

1. To change the area properties before creating a new design, use Line Properties Master Sheet.
2. Right click or drag a rectangular frame to activate one or several area(s)/line(s) and be ready for modifying their properties, a Change Property dialog box will pop-up first if you select both area and line. Among the Select Property dialog box options, you can choose to modify either area property or line property first. Click OK and then the corresponding selected Area Property dialog box or Line Property dialog box will appear. Therefore, you can not modify area property and line property at the same time, but you can modify the property of several areas or several lines at the same time.

Note:

Under the default state (the stitch type, Run, is selected), the Line Property dialog box usually offers you two tabs in it, but if you select one of the other two stitch types it will offer you two tabs according to the respective circumstance.

General tab



check to create the digitized line by going forward

check to create the digitized line by going forward and backward

check to create the digitized line by going forward, backward, then forward again

check to create column property tab, stitch with column and with the current line as the center

check to create E-Stitch property tab

check to create the tie off property tab

define the maximum stitch length within the current line

define the minimum stitch length within the current line

click to change the color of the activated line

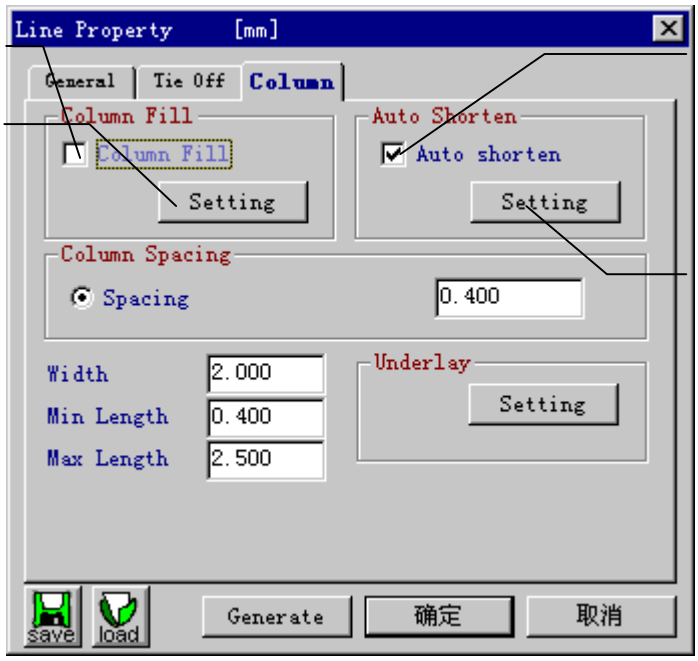
Click the button to save the current property setting.

Click the button to load the existing property setting

Column tab

Check to use the column fill

Set the column fill



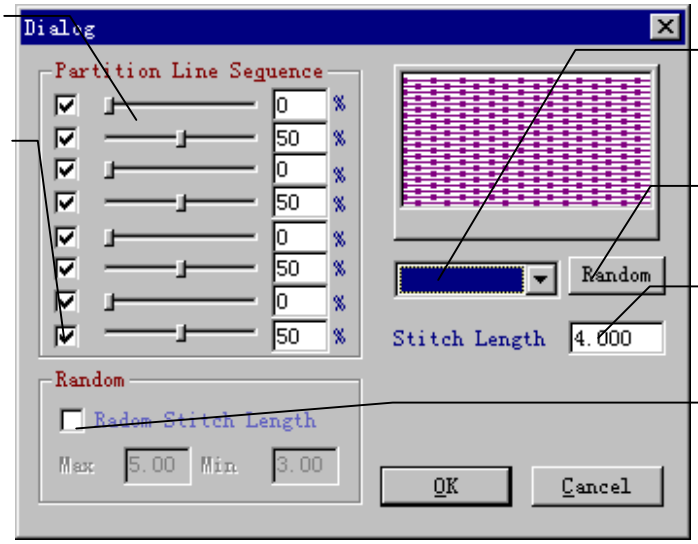
Check to start using the Auto Shorten. According to the settings and the shape of the corner, the stitch will be shortening automatically.

Set the shorten in the column fill area

Column Fill Setting

adjust the needlepoint of each line so as to adjust the column fill design

To check anyone of the eight checkbox means to check all the checkboxes (including it) before this checkbox automatically. Meanwhile, all the checkboxes following it will be unchecked. Now the Tatami of each checked lines will be created and the cursor within it is used to adjust the design



List all the existing pattern names. Select a pattern as the regional pattern.

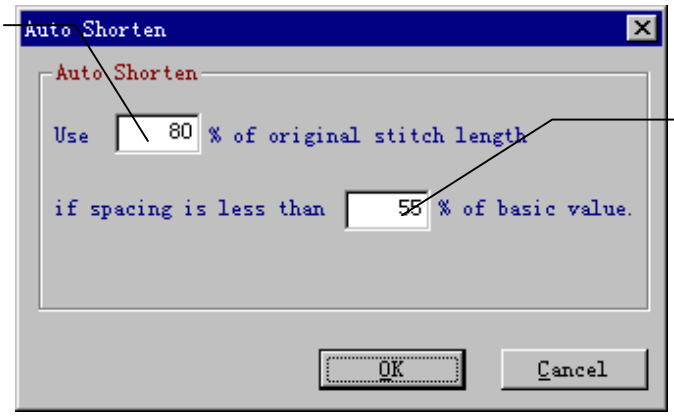
click here to create a new pattern at random

define the stitch length within the column fill area

check to define the maximum length and the minimum stitch length while creating a new pattern at

Auto Shorten Setting

define the shorten percentage of the original stitch length



define the percentage of basic column area spacing while shortening the stitch

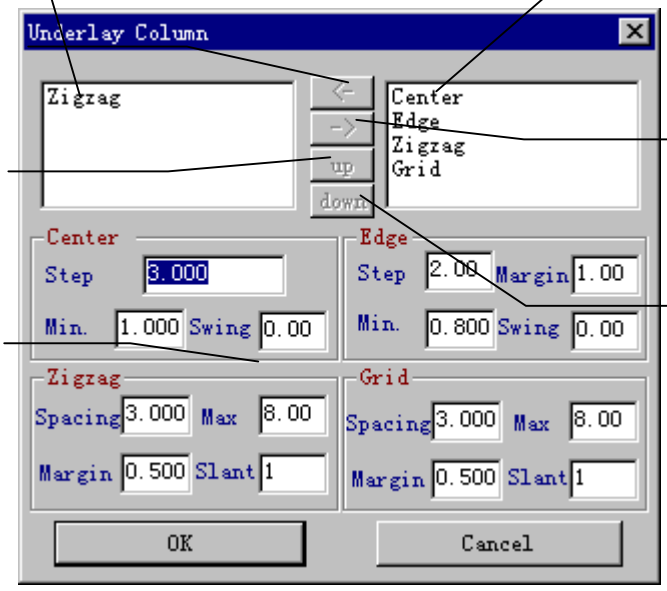
Underlay Setting

Click to select the added underlay stitching

Click to add the selected underlay stitching to the left frame

Click to move the selected underlay stitching up one step in the left frame

Click and enter the value of each option to modify the relevant underlay stitching



Click to select the existing underlay stitching

Click to remove the selected underlay stitch from the left frame

Click to move the selected underlay stitching down one step in the left frame

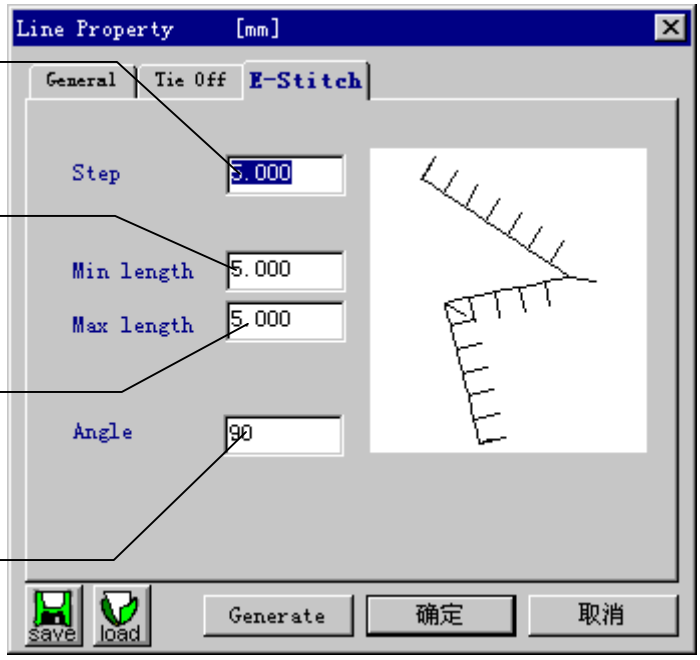
E-Stitch tab

Set the step of the E-Stitch

Set the minimum length of the E-Stitch

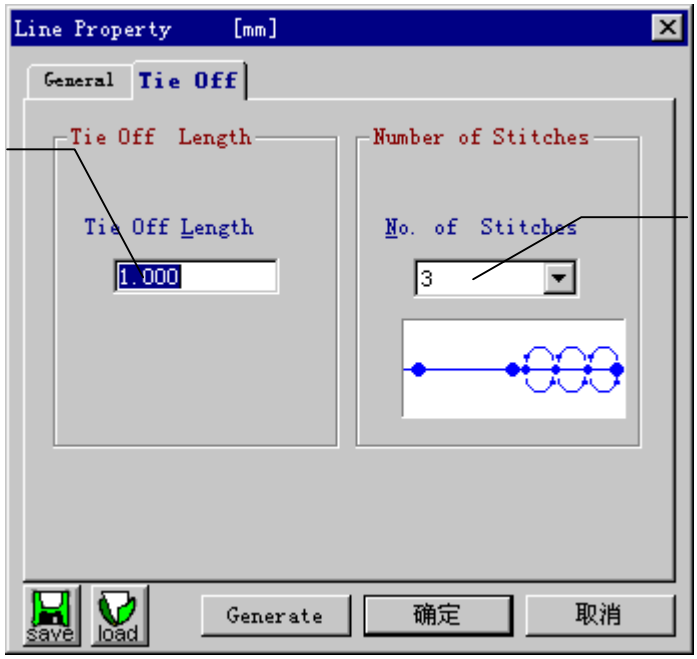
Set the maximum length of the E-Stitch

Set the angle of the E-Stitch



Tie Off tab

the length of each tie off



the number of the tie off