Founder SuperLine 4.71

User Guide

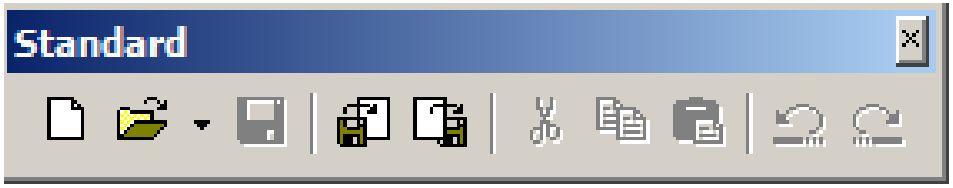
November 2018

www.foundereagle.com

Founder Information Industry is a leader in the information technology, providing comprehensive solutions, including IT services, software, hardware, and data operation.

Beijing Founder Electronics CO., Ltd.

Standard



New: To create a new document .

Open: To open an existing design document.

Save: To save a page. If the document has not been given a name (a new document) at the time of storage, the **Save As** dialog box will appear, where the user should specify the document directory, input document name, which is the same as in the procedure.

Import: To import external files.

Export: To export the page as PS, EPS, AI and BMP images.

Cut: To cut the selected objects.

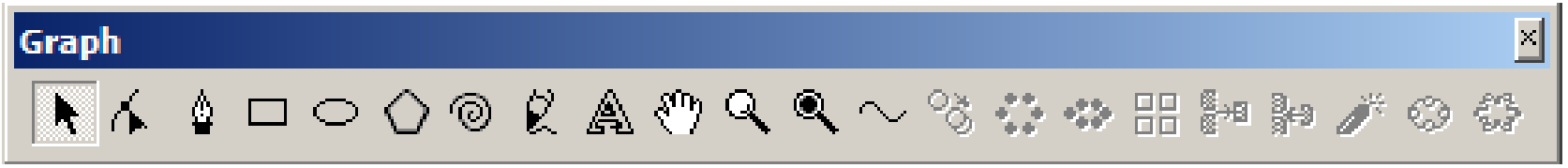
Copy: To copy the selected objects.

Paste: To paste the cut and copied objects.

Undo : To undo a recent operation.

Redo : To redo a recent operation.

Graph



Select: To select the object.

Press **Ctrl** key, the **Select** tool will appear, whichever drawing tool you currently select, while the release of the **Ctrl** key will restore the original tool.

Node Editor: To reshape an object, by way of moving the curve's nodes and control points, and enables you to reshape such graphic objects as rectangle, polygon, sine curve and any random curve.

To reshape an object, you must make it selected at first. you can only select **individual graphic objects** instead of images, text, group objects and clip objects.

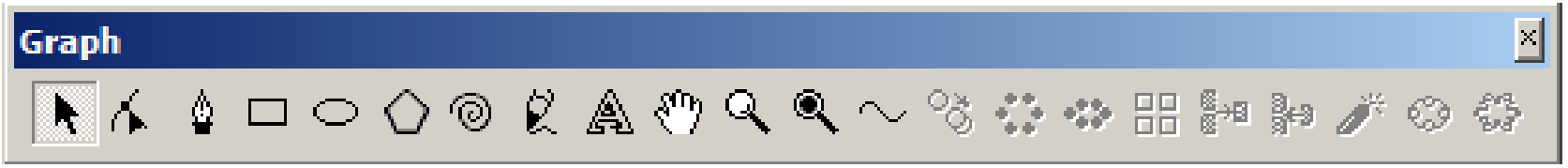
Double-click the **Node Editor** tool and the **Node Editor** window appears.

Toolbars

The following table lists the functions of various tool buttons in the **Node Editor** window:

Button	Name	Function
	Add Node	Add a node
	Delete Node	Delete a node
	Convert to Line Straight	Convert a curve into a straight line
	Convert to Curve	Convert a straight line into a curve
	Join	Join two terminal nodes
	Break	Break a curve at a node
	Connect	Connect two terminal nodes with a straight line
	Divide Curve	Separate a sub-path as a new object from a graphic that contains multiple sub-paths
	Sharp Curve	Transform a selected node to a needle node
	Smooth Curve	Transform a selected node to a smooth node
	Transform Curve	Transform a selected point to a symmetrical node
	Reduce Curve	Remove extra nodes from a curve
	Align Nodes Horizontally	
	Align Nodes Vertically	

Graph



Pen: To draw straight lines, continuous zigzags or Bezier curves.

Draw straight lines or continuous zigzags

1. Click in the page to place the beginning point of the line, move the pointer and click to place the ending point of the line. A straight-line segment joins the two points. Click continuously in different positions of the page, you will get continuous straight-line segments that form a zigzag;
2. When placed to the beginning point, the mouse will change to the **Pen** tool . Click and you will get a closed graphic;
3. Double-click or choose a tool other than the **Pen** tool to end the line drawing process;

Draw Bezier curves

1. Click in the page to place the beginning point of the Bezier curve;
2. Move the mouse to the next position and click to place the ending point of the Bezier curve. Drag the mouse to produce curve shape, and release the mouse, then you'll get a segment of Bezier curve;
3. Following the instructions give in procedure (2), you will draw an end-to-end Bezier curve;
4. When placed to the beginning point, the mouse will change to the **Pen** tool . Click and you will get a closed graphic;
5. Choose a tool other than the **Pen** tool to end the curve drawing process.
6. Generally, the Bezier curve calls for further adjustment, i. e., reshape. Reshape is completed with the **Node Editor** tool .

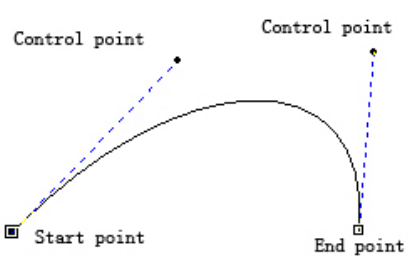
Bezier curve

The Bezier curve, a common drawing tool, can be curves of any shape. Each segment of the Bezier curve consists of four points, in which, two terminal nodes determine the curve's beginning and ending points, while the two control points determine the curve's shape, as shown in the figure below.

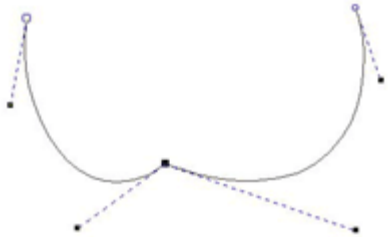
Needle node: located at the end of a straight line or curve or at the corner point of a curve. When editing the control points of a needle node, the user may change the curvature of the curve segment before them without affecting the curve segment after it.

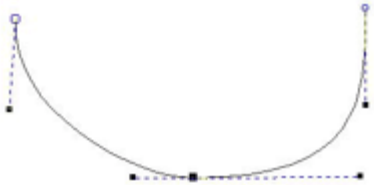
Smooth node: located at the flat portion of a curve. When editing a smooth node, the user may change the shape and direction of the two segments before and after the node. The two segments' curvature, however, will remain the same.

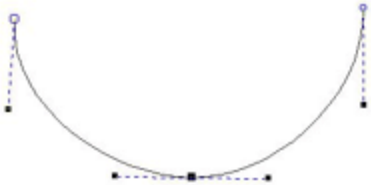
Symmetrical node: available when the two segments before and after a curve node are symmetrical. When editing a symmetrical node, the user may change the shape and direction of the two curve segments simultaneously in the same way. Symmetrical nodes are used to generate symmetrical graphics.



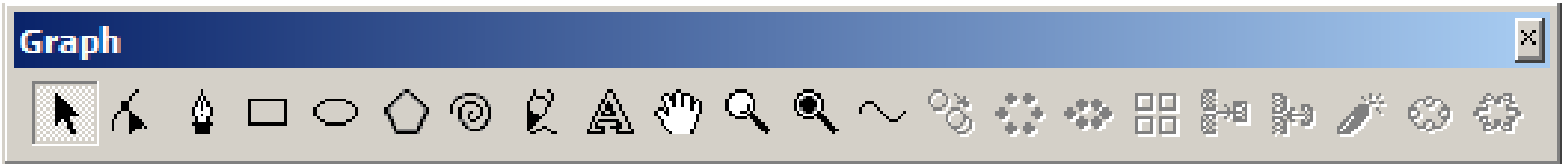
Bezier curve


Needle node


Smooth node

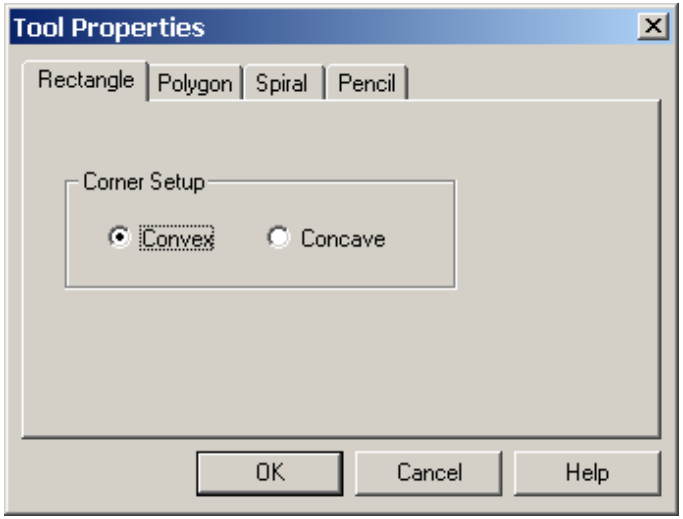

Symmetrical node

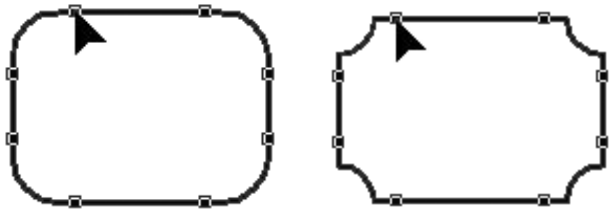
Graph



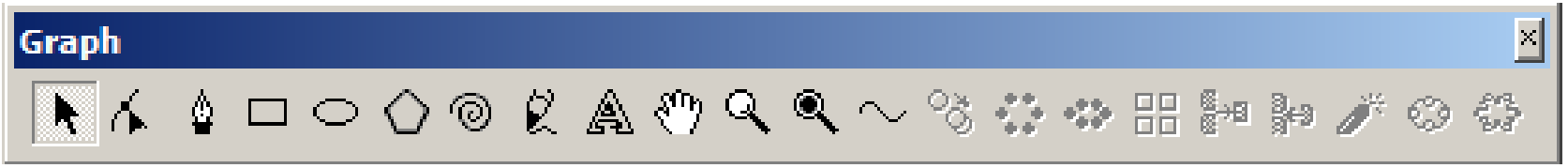
- **Rectangle:** To draw rectangles, convex and concave rectangles or squares.
  1. Draw a square: press the **Shift** key while you are dragging the mouse.
  2. Draw a rectangle which the center is the position you just clicked: press the **Ctrl** key while you are dragging the mouse.
  3. Double-click the **Rectangle** tool to open the **Tool Properties** dialog box shown as follows. And determine if the rectangle can be reshaped to convex or concave. Click **OK** to exit;
  4. use the **Node Editor** tool to adjust the convex or concave angle.

Procedures:
(1) Choose the **Node Editor** tool in the Graph toolbar;
(2) Select the rectangle; the rectangle's nodes are displayed in the form of small boxes;
(3) Click the mouse and drag a node along one side of the rectangle, you may see the rectangle's concave or convex angle changes accordingly. Release the mouse when you are satisfied.
Of course, for further reshape of the rectangle, you may first convert the rectangle into a curve (through the **Object > Convert to Curve** command) and then adjust its nodes.





Graph

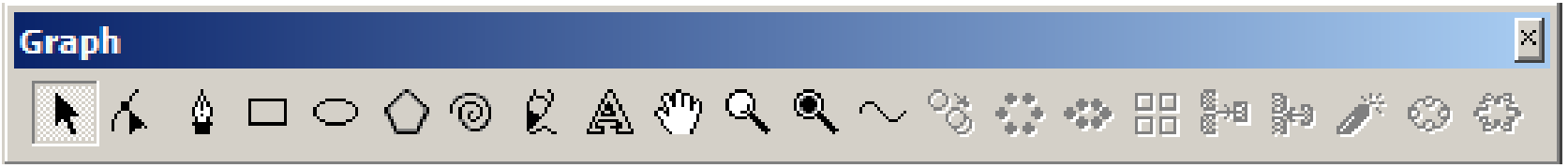


- **Circle:** To draw a circle and ellipse.
  1. Draw a circle: press the **Shift** key while you are dragging the mouse.
  2. Draw a ellipse which the center is the position you just clicked: press the **Ctrl** key while you are dragging the mouse.

Notes

1. *If you have selected **Snap to Object, Snap to Grid or Snap to Guides**, then you may snap the center and one semi-axle of the ellipse to the appropriate positions, and control the semi-axis' directions to draw regular or 45°skewed ellipses.*
2. *The ellipse can not be adjusted directly with the **Node Editor** tool. For further reshape, you may first convert the ellipse into a curve (through the **Object > Convert to Curve** command) and then adjust its nodes.*

Graph



Polygon: To draw a polygon.

1. Draw a regular polygon: press the **Shift** key while you are dragging the mouse.
2. Double-click the **Polygon** tool , define the polygon's vertex number and shape in the pop-up **Tool Properties** dialog box and then click **OK** to exit;

   Number of vertexes: determines the number of the polygon's apexes.

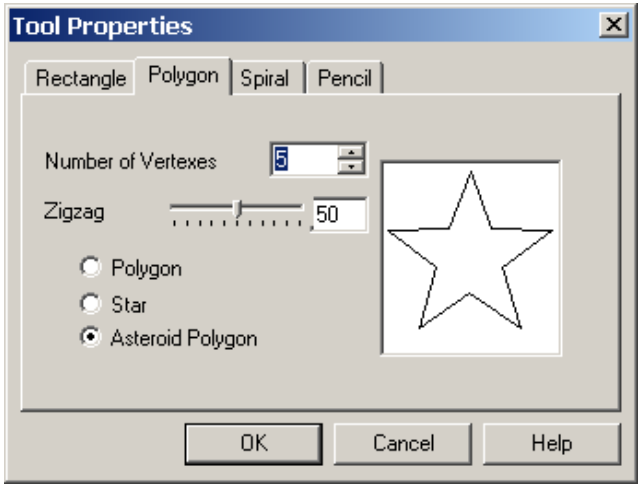
   Zigzag : change the polygon's degree of depression and projection.

   Polygon: a common polygon

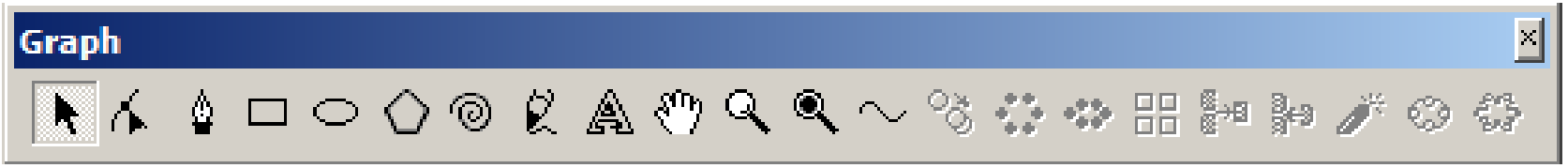
   Star: a pentagon-like polygon

   Asteroid Polygon: a concave polygon with doubled apexes.

When a polygon is produced, you may use the **Node Editor** tool to reshape the polygon appropriately, so as to get the desired graphical effects, such as change the polygon's degree of depression/projection and symmetry, and change it to flower shape.



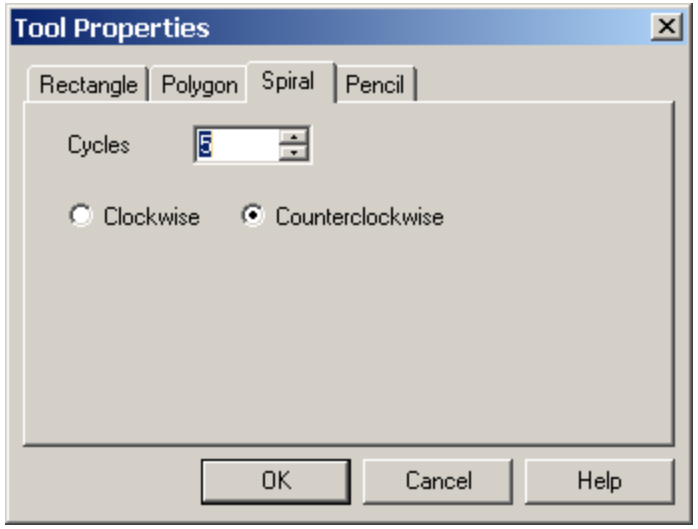
Graph



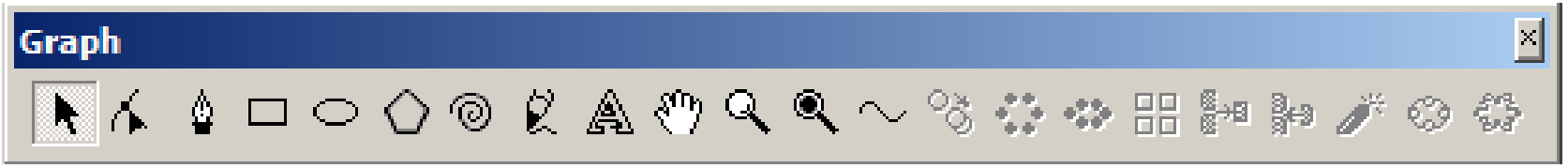
- **Spiral:** To draw spirals .
  1. Draw a square out frame containing the spiral. : press the **Shift** key while you are dragging the mouse.
  2. Double-click the **Spiral** tool , set up the circle number and direction of the spiral in the pop-up **Tool Properties** dialog box and then click **OK**;

     Cycles: determines the circle number of the spiral to be drawn.

     The selection of **Counterclockwise** and **Clockwis**e will result in a spiral that rotates anticlockwise and clockwise respectively.



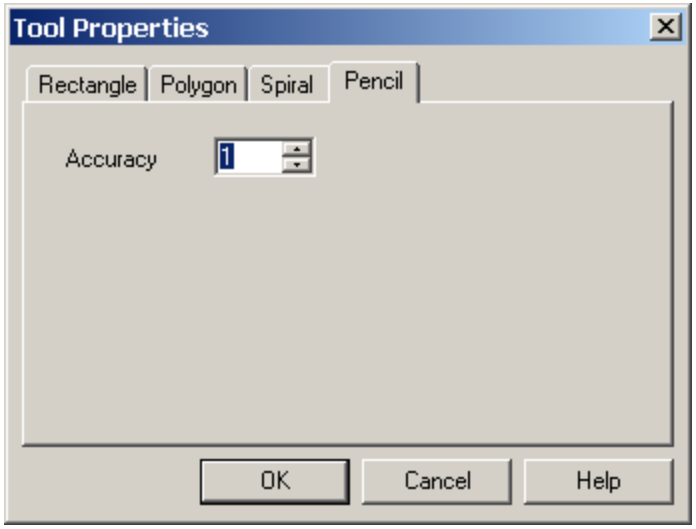
Graph



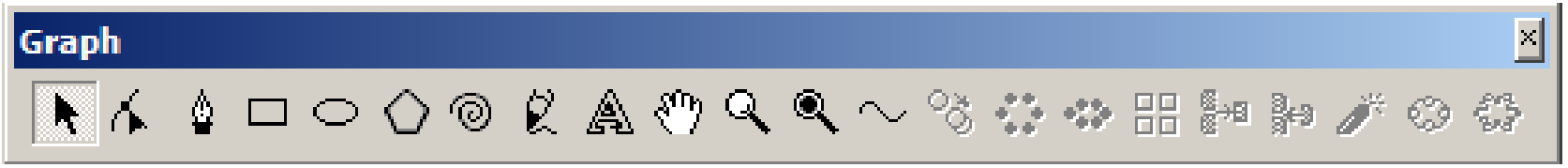
- **Pencil:** To draw graphic objects of any shape by simulating the freehand drawing with a pencil. The shapes of the graphic objects are expressed by Bezier curves.

  1. Double-click the **Pencil** tool and set up pencil drawing **Accuracy** parameter in the pop-up **Tool Properties** dialog box, then click **OK**;

     Accuracy: controls the precision (range from 0 to 10) of the system's follow-up of mouse slide. The smaller the value, the coarser the curve plotted (the closer to the actual mouse track) and vice versa (the further from the actual mouse track).

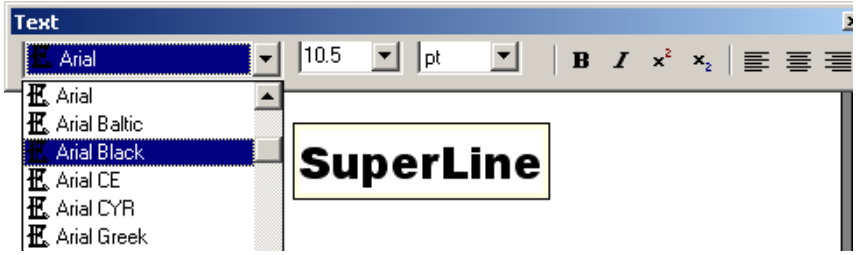


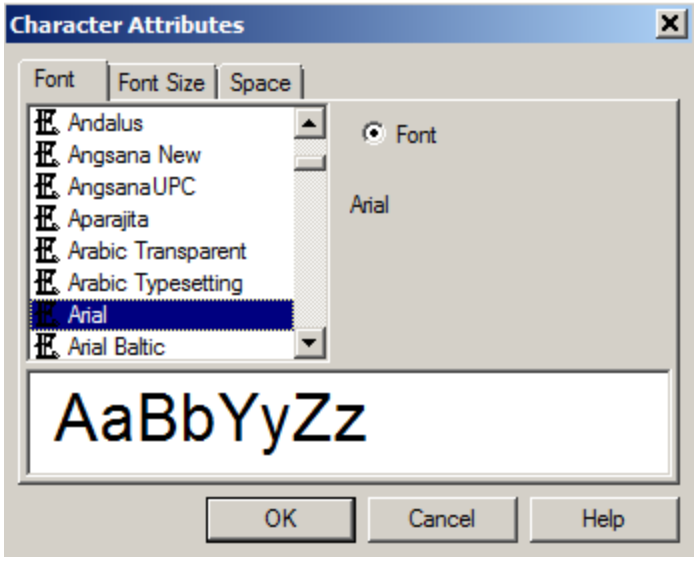
Graph



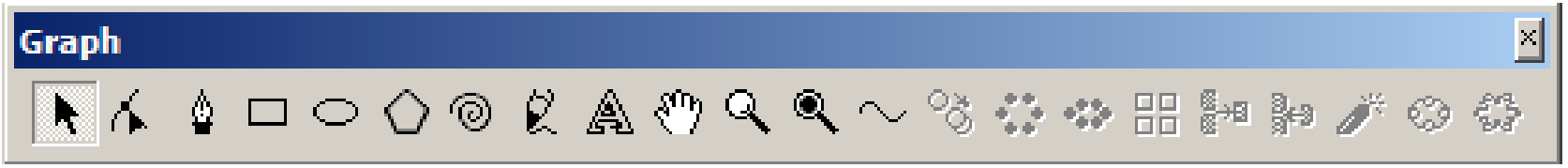
Text: To create a text object and input text.

1. In the **Text** toolbar's font list box, select the desired font, and in the font size list box, select or input the desired font size (press **Enter** after inputting the font size). And then place the mouse inside the page and the cursor becomes the text cursor.
2. Or double-click the **Text** tool to open the **Character Attributes** dialog box shown as follows.





Graph



Hand Tool: To move the page.

Zoom Tool: To realize the magnified display. Press the **Shift** key, the **Zoom out** tool will appear.

Accurate display: accurately display your selected object. With this tool, you can easily represent the original display effect. But note that this manner may result in slower display speed.

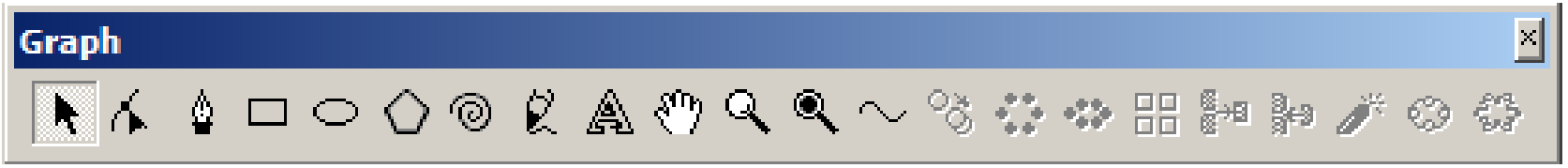
Notes:

① *Before you perform this operation, make sure that the object is selected first;*

② *This tool is only available to graphic objects, including group object, combined object and clip object.*

③ *The speed to display in this way clip objects that have objects embedded may be comparably slow.*

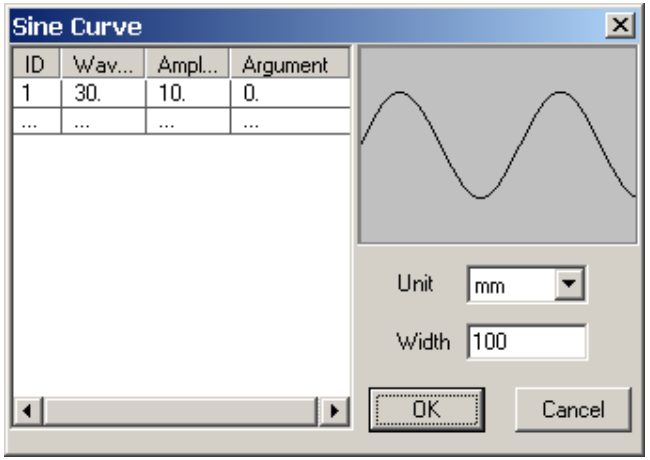
Graph



Sine Curve: To draw sine curves.

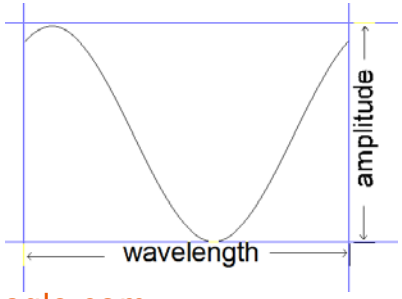
1. Click the **Sine Curve** tool , and the Sine Curve dialog box appears;
2. Set up the sine curve's wavelength, width, amplitude and argument in the dialog box. The right of the dialog box displays the sine curve's preview. Click **OK** to exit, and the cursor becomes a large black arrow;
3. Click in the page. The sine curve will be generated.

argument: input X and X*n, where, X represents an angle value and n a natural number.
Unit: define the unit for the width and length in the dropdown box.
width: decide the sine curve's width and determine its period as well. For example, specify in the list a curve's wavelength to be 30 and the number in the **Width** box to be 45, and then the curve's period will be 45/30=1.5.

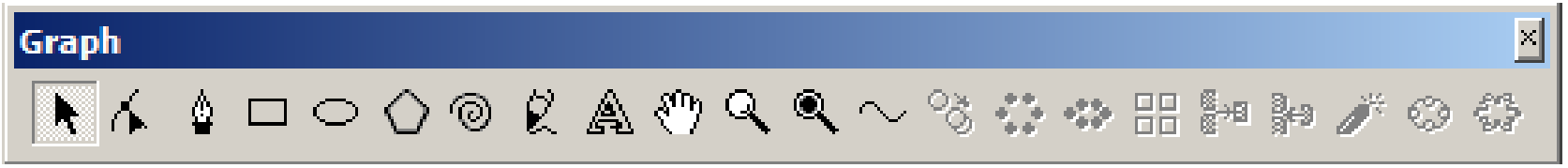


wavelength:

amplitude:



Graph



Sine Curve: To draw sine curves.

If only one sine curve is generated, you may use the **Node Editor** tool in the Graph toolbar to extend it, i.e., to increase or decrease the number of periods.

Procedures:

(1) First generate a one-period sine curve, and then choose the **Node Editor** tool .

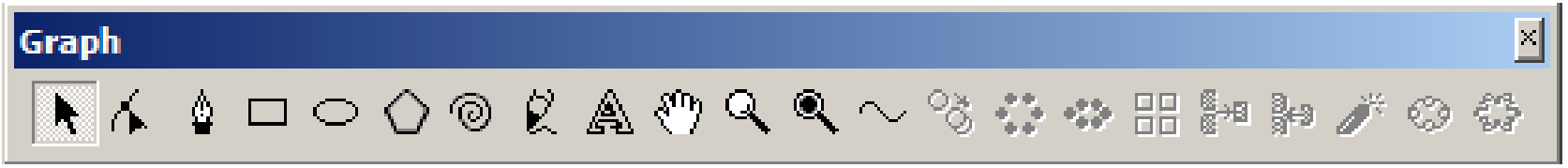
(2) Select the sine curve with the mouse. Small boxes are now available to its two terminal nodes;

(3) Drag one small box to the appropriate position and the sine curve will also extend to this position.

If multiple sine curves are generated at one time, you may first ungroup them and then extend them individually.

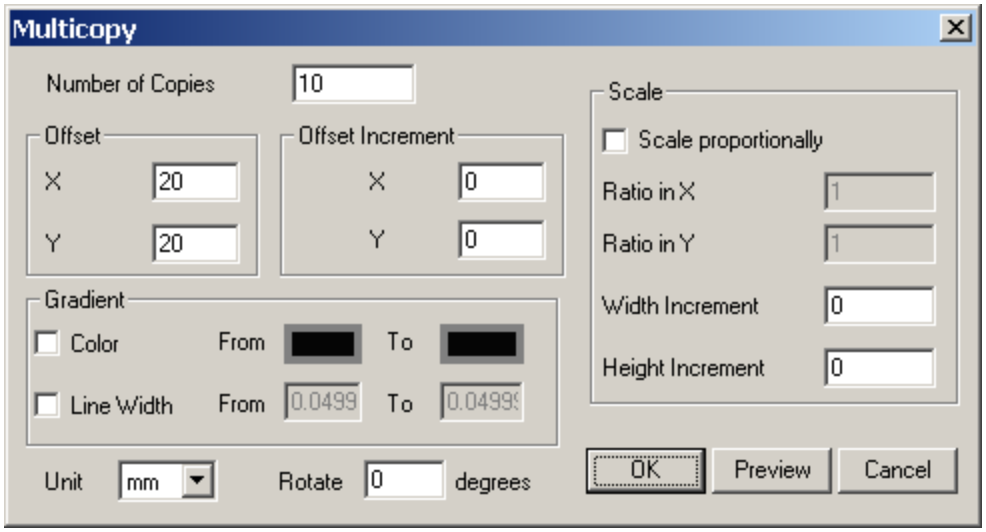
To further reshape a sine curve, you may first convert it into a curve and then use the **Node Editor tool.**

Graph



Multicopy: To copy multiple objects and allows the copied objects to vary in size, position, line width, color and direction, etc.

Click the **multicopy** tool , the **Multicopy** dialog box pops up.



Number of Copies: It means to make how many copies for the current selected object (or object group).

Offset: It is the difference of the two coordinates between two copied adjacent objects. X and Y refer to the horizontal and vertical difference respectively. Values in the two boxes can be positive or negative. When it is positive, offset to right or up. When it is negative, offset to left or down.

Unit: refers to the unit for Offset and Offset Increment values.

Rotation: It refers to the relative rotation angle between the two adjacent copied objects. It can be positive or negative. When it is positive, rotate counterclockwise. When it is negative, rotate clockwise.

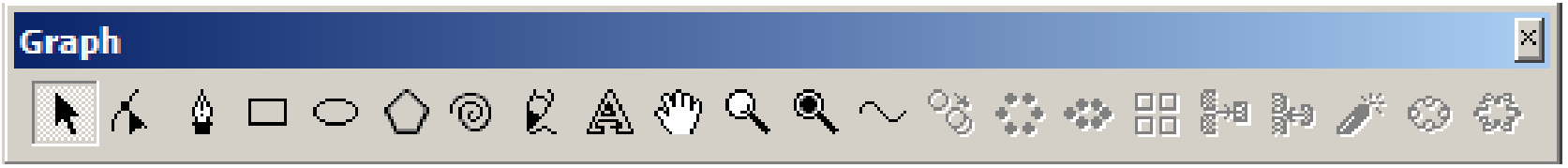
Offset Increment: It is the difference between the coordinate offset of the current copied object and the previous copied object, and that of the next copied object and the current object. X and Y refer to the horizontal and vertical difference respectively. Values in the two boxes can be positive or negative. When it is positive, the offset increases. When it is negative, the offset decreases.

For example, assume that the offset is set to dx and dy, the offset increment is set to ddx and ddy, and the coordinate of the center is (x, y). Then the coordinate of the first copied object will be (x+dx, y+dy), and that of the second is (x+dx+dx+ddx, y+dy+dy+ddy) and that of the third object is (x+dx+dx+dx+ddx+ddx+ddx, y+dy+dy+dy+ddy+ddy+ddy)

Gradient: It refers to the change of the outline color and line width of the copied object. Check the **Color** option and the outline color of the copied object may change. Click the **From** and **To** buttons respectively. The **Color** dialog box pops up. Select the outline color of the first and the last copied object. The outline colors of all other objects are the uniform change between these two colors. Select the **Line Width** check box and the outline width of the checked box may change. Input the outline width of the first and last copied object. The outline width of the all other objects is the uniform change between these two widths.

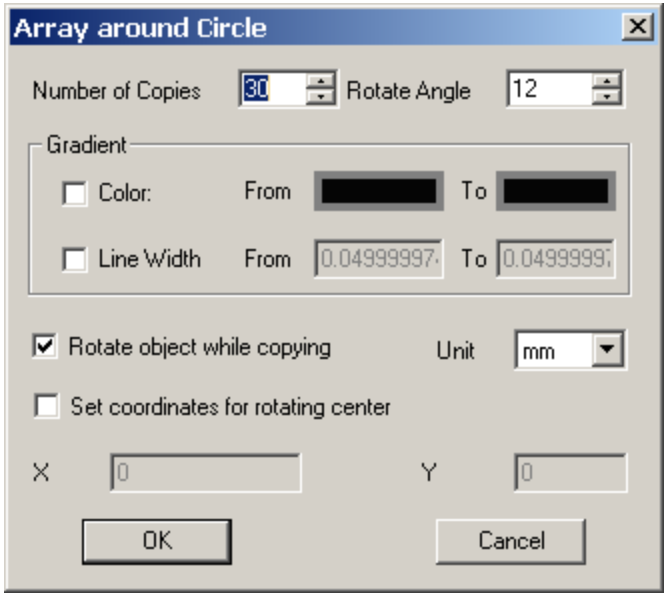
Scale: It determines the size change of the copied object. When the **Scale proportionately** option is checked, the vertical and horizontal proportions keep when the size of the object changes. The edit boxes of the **Ratio in X** and **Ratio in Y** are activated. **Ratio in X** is the horizontal proportion between the two adjacent copied objects. **Ratio in Y** is the vertical proportion. If the value is greater than 1, it refers to zoom in. **Width Increment** is the horizontal difference between the two adjacent copied objects. If it is positive, zoom in. **Height Increment** is the vertical difference between the two adjacent copied objects. If it is positive, zoom in.

Graph



- **Array around Circle:** To make the selected object array along a circle and create the pattern shown in the graphic .

Click the **Array around Circle** tool to open the **Array around Circle** dialog box.



Number of Copies: It refers how many copies for the selected object or group object.

Rotate Angle: If the Rotate object while copying option in the below is selected, it refers to the relative rotate angle between the assigned two adjacent objects. It can be positive or negative. If it is positive, it rotates counterclockwise. If it is negative, it rotates clockwise.

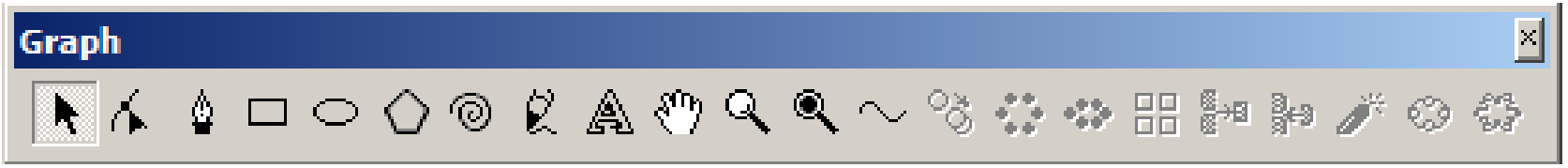
Gradient: It refers to the change of the outline color and line width of the copied object. Check the **Color** option and the outline color of the copied object may change. Click the **From** and **To** buttons respectively. The **Color** dialog box pops up. Select the outline color of the first and the last copied object. The outline colors of all other objects are the uniform change between these two colors. Select the **Line Width** check box and the outline width of the checked box may change. Input the outline width of the first and last copied object in the **From** and **To** value boxes respectively.. The outline width of the all other objects is the uniform change between these two widths.

Rotate object while copying: When this option is checked, the object rotates while it is copied.

Set coordinates for rotating center: When this option is checked, you can assign the rotate center in value boxes of the X and Y boxes. It is the center of a circle and the object is arrayed along this circle. By default, the value in the X and Y boxes is the center of the selected object. In this way, it is very convenient to design a pattern copied along its own center.

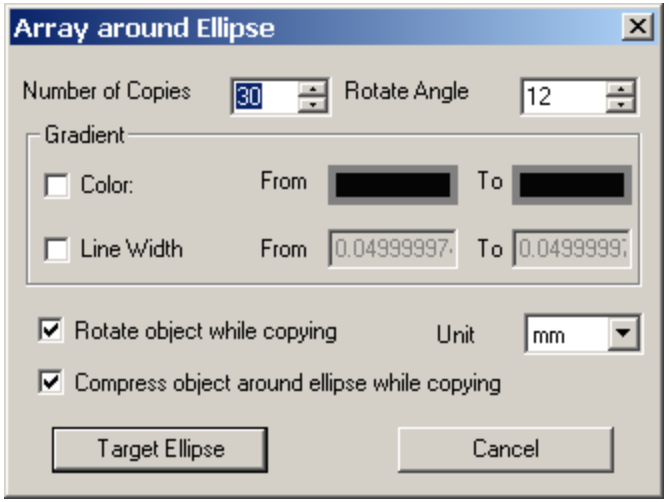
Note: *No matter how we assign the center of a circle, in the dialog box or by clicking the assigned center in the page, the radius of the circle is the linear distance from the assigned center to the left frame center of the selected object. The so-called* ***Array around Circle*** *is to array along this circle, so we need to pay attention when click using the mouse.*

Graph



- **Array around Ellipse:** To make the selected object array long an ellipse and create the pattern shown in the graphic .

Click the **Array around Ellipse** tool to open the **Array around Ellipse** dialog box.



Number of Copies: It refers how many copies for the selected object or group object.

Rotate Angle: When the **Rotate object while copying** option is selected, it is the relative rotate angle between the assigned two adjacent objects. It can be positive or negative. If it is positive, it rotates counterclockwise. If it is negative, it rotates clockwise.

Gradient: It refers to the change of the outline color and line width of the copied object. Check the **Color** option and the outline color of the copied object may change. Click the **From** and **To** buttons respectively. The **Color** dialog box pops up. Select the outline color of the first and the last copied object. The outline colors of all other objects are the uniform change between these two colors. Select the **Line Width** check box and the outline width of the checked box may change. Input the outline width of the first and last copied object in the **From** and **To** value boxes respectively. The outline width of the all other objects is the uniform change between these two widths.

Rotate object while copying: When this option is checked, the object rotates while it is copied.

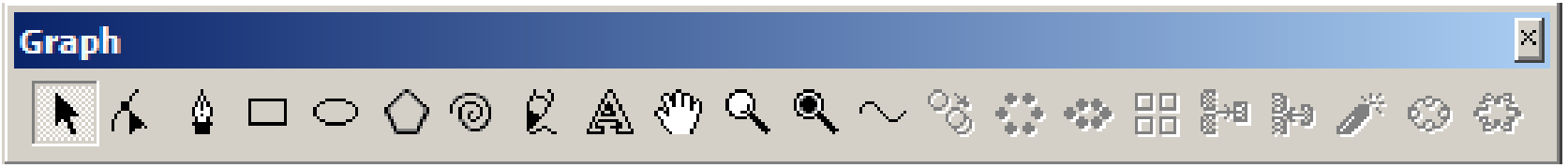
Compress object around ellipse while copying: When this option is checked, the object is compressed while it is arrayed along the ellipse.

Notes:

① *When the object arrays along the ellipse, it does not array on the assigned ellipse directly but it arrays on another virtual ellipse. This ellipse keeps the center, long and short axis, direction and proportion of the assigned ellipse and guarantees that the selected object is at the side of the ellipse. This means the array effect is not only related to the assigned ellipse but also the relative position between the selected object and assigned ellipse.*

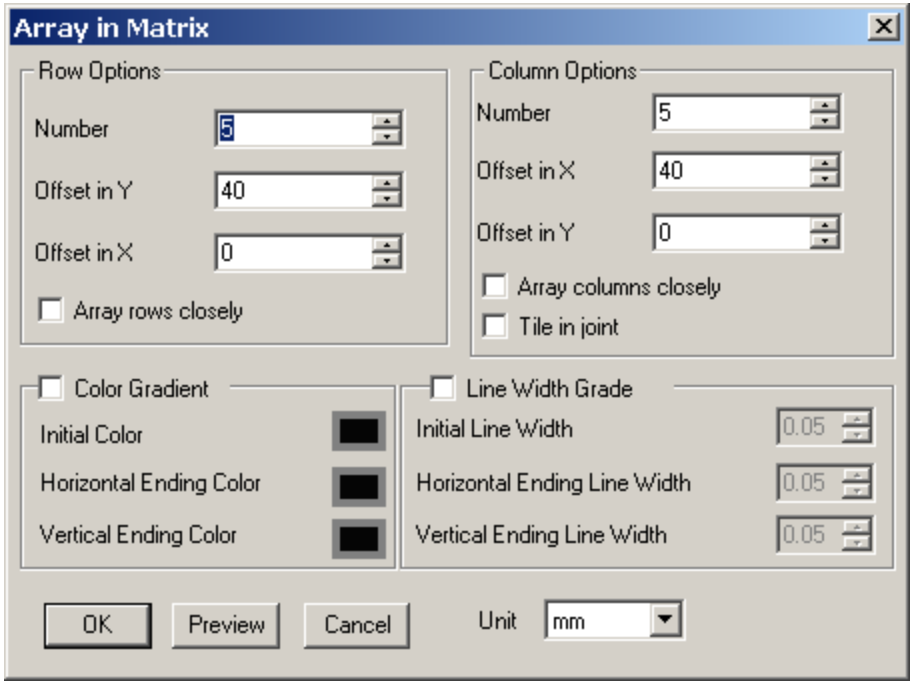
② *The **Target Ellipse** must be an ellipse object. If none of ellipse is selected, a dialog box pops up to ask the user to select Retry or Cancel.*

Graph



- **Array in Matrix :** To make multiple copies for the selected objects, and array as a matrix along the horizontal and vertical directions respectively.

Click the **Array in Matrix** tool to open the **Array in Matrix** dialog box.



Set horizontal array options in **Row Options** area:

Number: how many rows to copy.

Offset in Y: the difference of horizontal coordinates between two adjacent rows. If it is 0, all rows align to the left together. If it is positive, all rows align to the right gradually.

Offset in X: the difference of vertical coordinates between two adjacent rows. If it is positive, all lines are up. If both the **Offset in Y** and the **Offset in X** are 0, the copied rows are overlapped.

Array rows closely: When this option is selected, **Offset in Y** value box is grayed out. The distance between the two adjacent lines is 0, which means that the **Offset in Y** equals to the line height.

Set vertical array options in **Column Options** area:

Number: how many columns to copy.

Offset in Y: the difference of horizontal coordinates between two adjacent rows. If it is 0, all rows align to the left together. If it is positive, all rows align to the right gradually.

Offset in X: the difference of vertical coordinates between two adjacent rows. If it is positive, all lines are up. If both the **Offset in Y** and the **Offset in X** are 0, the copied rows are overlapped.

Array columns closely: When this option is selected, **Offset in Y** value box is grayed out. The distance between the two adjacent lines is 0, which means that the **Offset in Y** equals to the line height.

Tile in joint: When this option and the Array columns closely option are checked, Offset in X check box and Offset in Y check box are all grayed out. This means all copied rows are connected to a continuous curve.

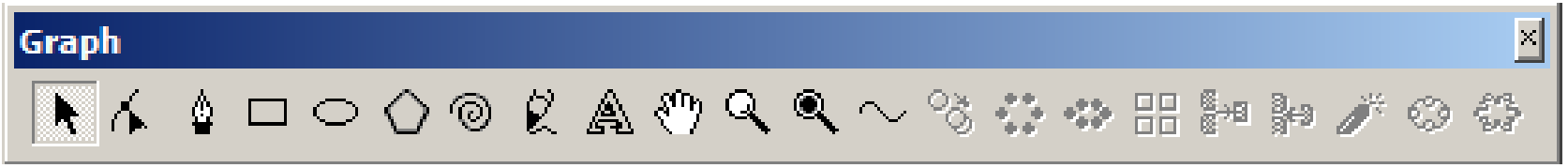
Tile in joint is to tile a section of curve continuously. At this time, the Number in the Column Options area refers to how many objects needs to be copied for each row during the process of Tile in joint. Tile in joint only fits unclosed graphic objects, but is invalid to closed graphics. It is also useless for the curve with multiple sub paths.

Color Gradient: This option allows you to select the outline color change of the copied graphic object. When this option is selected, the outline color of the copied graphic object may change. Click the **Initial Color, Horizontal Ending Color** and **Vertical Ending Color** buttons respectively, the **Color** dialog box will pop up for you to define each color. **Initial Color** refers to the outline color of the first copied graphic object. **Horizontal Ending Color** refers to the outline color of the last copied graphic object in the first row. **Vertical Ending Color** refers to the outline color of the first copied graphic object in the last row. The outline colors of all other copied objects are the uniform changes between these colors (other rows change according to the rule of the first row).

Line Width Grade: When this option is checked, the outline width of the copied graphic object may change. Input width values in the **Initial Line Width, Horizontal Ending Line Width** and **Vertical Ending Line Width** boxes respectively. **Initial Line Width** refers to the line width of the first copied graphic object. **Horizontal Ending Line Width** refers to the line width of the last copied graphic object in the first row. **Vertical Ending Line Width** refers to the line width of the first copied graphic object in the last row. The line widths of all other copied objects are the uniform changes between these line widths (other rows change according to the rule of the first row).

Note: *The **Color Gradient** and **Line Width Grade** options in the dialog box have no effect on the non-graphic objects and non-clip-mask objects.*

Graph



Group: To group refers to combine multiple objects into a group object .

(1) Select the multiple objects to be grouped;

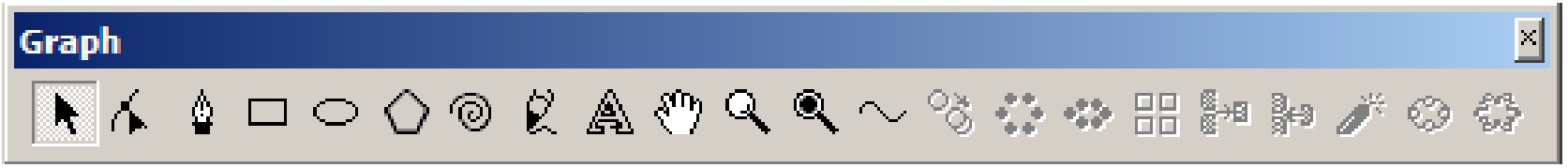
(2) Select the **Object** > **Group** command, or click the **Group** tool in the Graph toolbar, or select **Group** from the right-click pop-up menu. When objects are grouped, their respective properties remain unchanged. For example, if the fill color is red originally, then it is still red after grouping.

Ungroup: To break up the group object and restore the independent state of each object in the group .

(1) Select the group object in question;

(2) Select the **Object** > **Ungroup** command, or click the **Ungroup** tool in the **Graph** toolbar, or execute the **Ungroup** command in the right-click pop-up menu.

Graph



Disassemble : To dismantle complex graphic objects (such as those made available through complex distortions) into simple objects by ungrouping them.

Convert to Curve: To convert special graphics(rectangle, ellipse, polygon, sine curve) into common curve graphics for free adjustment.

When the text is converted to curves, each character corresponds to a graphic object and multiple graphic objects group together.

Add Contour: To generate a contour.

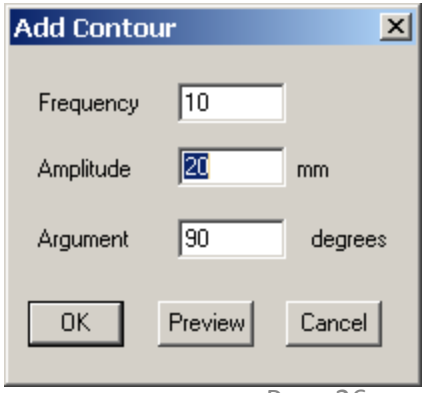
(1) Use the **Circle** tool to produce a circle or ellipse in the page, and make it selected;

(2) Click the **Add Contour** tool , shown as in the following figure.

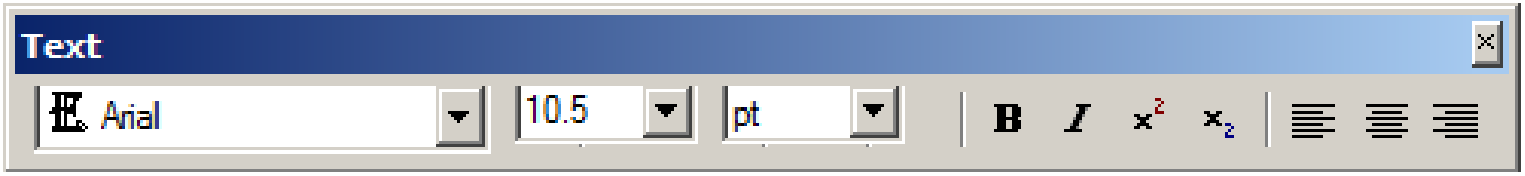
Frequency: nodes of the contour.
Amplitude: the contour's vibration amplitude.
Argument: the location of the starting node. When the argument is set to 0°, the starting nodes of both the contour and the circle or ellipse are overlapping; and when it is set to 90°, the generated contour is symmetrical about the vertical axes of the circle or ellipse.

Notes:

① *You can only add contour for circle or ellipse;*
② *Contours are usually used as the outlines of guilloches;*



Text



Alter font and **font Size**

Boldface

Italic

Superscript

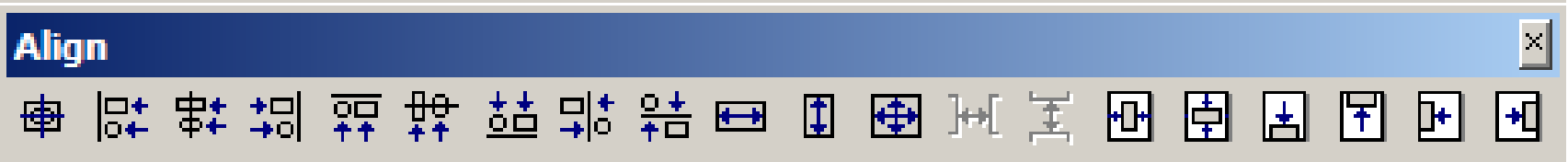
Subscript

Align Left

Center

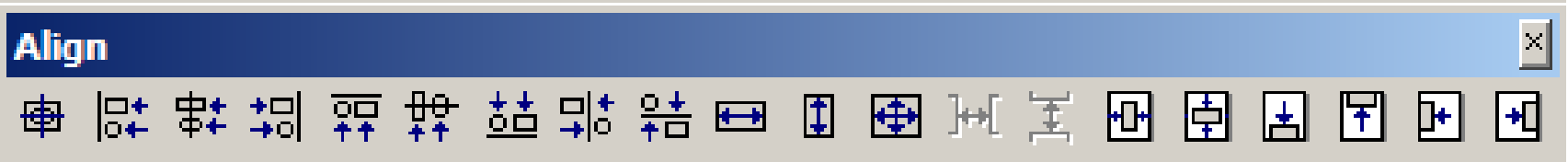
Align Right

Align



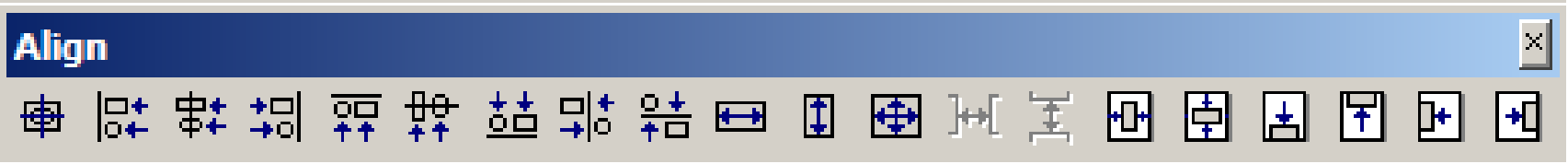
Icon	Name	Function
	Center	The centers of all objects selected are aligned with the center of the object selected last (in case of the use of marquee, aligned with the object in the uppermost layer of the arrange sequence).
	Left	The left frames of all objects selected are aligned with the left frame of the object selected last (in case of the use of marquee, aligned with the object in the uppermost layer of the arrange sequence).
	Vertical Align Center	The vertical central lines of all objects selected are aligned with the vertical central line of the object selected last (in case of the use of marquee, aligned with the object in the uppermost layer of the arrange sequence).
	Right	The right frames of all objects selected are aligned with the right frame of the object selected last (in case of the use of marquee, aligned with the object in the uppermost layer of the arrange sequence)
	Top	The top frames of all objects selected are aligned with the top frame of the object selected last (in case of the use of marquee, aligned with the object in the uppermost layer of the arrange sequence).
	Horizontal Align Center	The Horizontal central lines of all objects selected are aligned with the Horizontal central line of the object selected last (in case of the use of marquee, aligned with the object in the uppermost layer of the arrange sequence).

Align



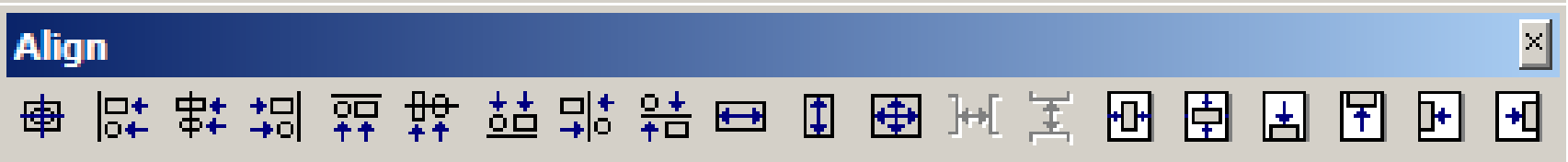
Icon	Name	Function
	Bottom	The bottom frames of all objects selected are aligned with the bottom frame of the object selected last (in case of the use of marquee, aligned with the object in the uppermost layer of the arrange sequence).
	Adjacent Horizontally	The selected objects arrange closely horizontally relative to the leftmost object with their vertical positions unchanged, i.e., the leftmost object will not move, the second object from left arranges to the right, the third object from left arranges further to the right and so on. The rightmost object arranges on the rightmost.
	Adjacent Vertically	The selected objects arrange closely vertically relative to the bottommost object with their horizontal positions unchanged, i.e., the bottommost object will not move, the second object from bottom arranges above it, the third object from bottom arranges further above it and so on. The uppermost object arranges on the uppermost.
	Identical Width	The center positions of all objects will not change, while their horizontal dimensions are the same as the horizontal dimension of the object selected last (in case of the use of marquee, as the horizontal dimension of the object in the uppermost layer of the arrange sequence. You can not equal the width of a horizontal or vertical straight line with other objects).

Align



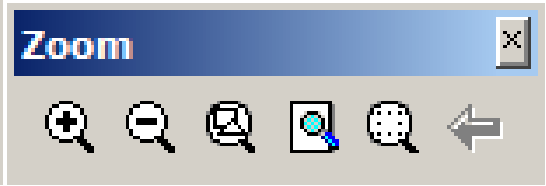
Icon	Name	Function
	Identical Height	The center positions of all objects will not change, while their vertical dimensions are the same as the vertical dimension of the object selected last (in case of the use of marquee, as the vertical dimension of the object in the uppermost layer of the arrange sequence. You cannot equal the width of a horizontal or vertical straight line with other objects).
	Identical Size	The center positions of all objects will not change, while their horizontal and vertical dimensions are the same as the dimensions of the object selected last (in case of the use of marquee, as the vertical dimension of the object in the uppermost layer of the arrange sequence. You cannot equal the width of a horizontal or vertical straight line with other objects.
	Horizontal Distribute Space	The horizontal distances of adjacent objects are the same for all objects selected. The position of an object is related only to the positions of the two objects on the leftmost and rightmost among the objects selected and independent of the sequence in which the object is selected. The positions of the objects on the leftmost and rightmost will not change.
	Vertical Distribute Space	The vertical distances of adjacent objects are the same for all objects selected. The position of an object is related only to the positions of the two objects on the uppermost and bottommost among the objects selected and independent of the sequence in which the object is selected. The positions of the objects on the uppermost and bottommost will not change.

Align



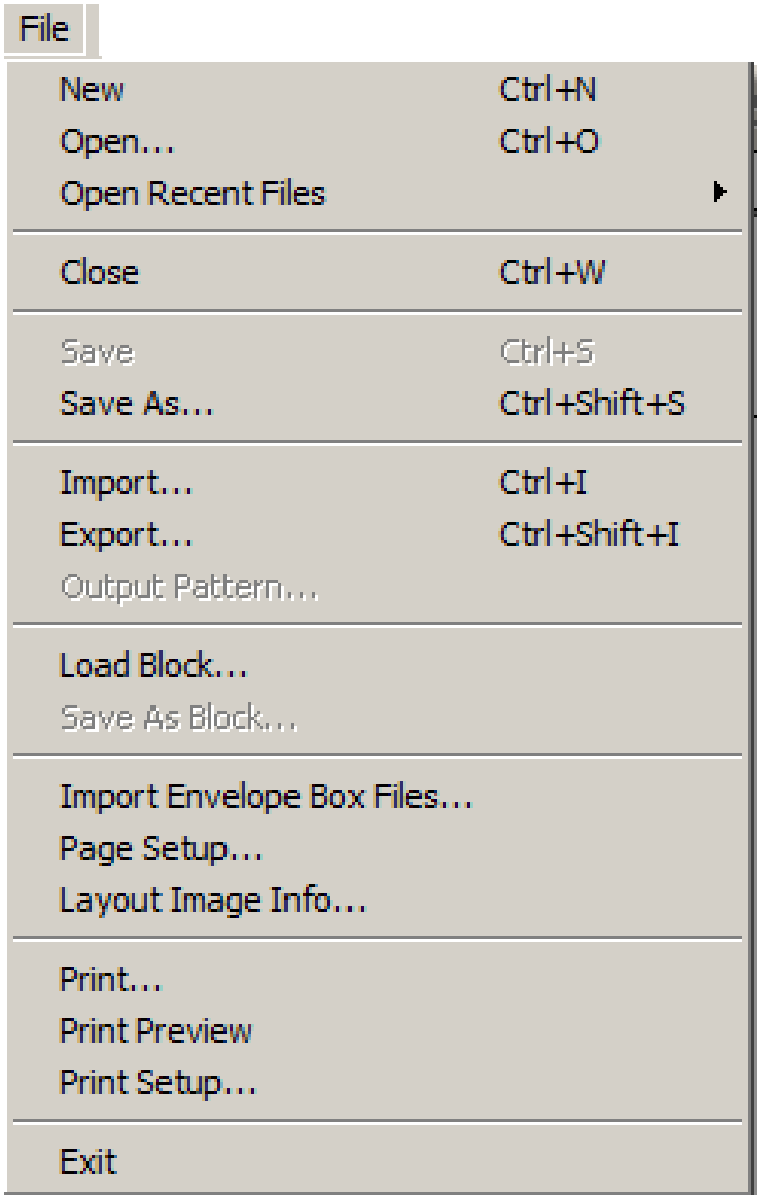
Icon	Name	Function
	Page Horizontal Center	The horizontal centers of all objects selected locate in the horizontal center of the page with their vertical positions unchanged.
	Page Vertical Center	The vertical centers of all objects selected locate in the vertical center of the page with their horizontal positions unchanged.
	Page Bottom	The bottoms of all objects selected are aligned with the page bottom with their horizontal positions unchanged.
	Page Top	The bottoms of all objects selected are aligned with the page top with their horizontal positions unchanged.
	Page Left	The left sides of all objects selected are aligned with the left side of the page with their vertical positions unchanged.
	Page Right	The right sides of all objects selected are aligned with the right side of the page with their vertical positions unchanged.

Zoom



- **Zoom In**
- **Zoom Out**
- **Fit in Window:** the screen will display objects of the current page (including inside and outside) in an appropriate proportion
- **Fit in Page :** to display all objects inside the current page fully in an appropriate proportion.
- **Selected Fit in Window:** to improve the display effect of the selected object
- **Undo Zoom:** to restore the previous display proportions.

File

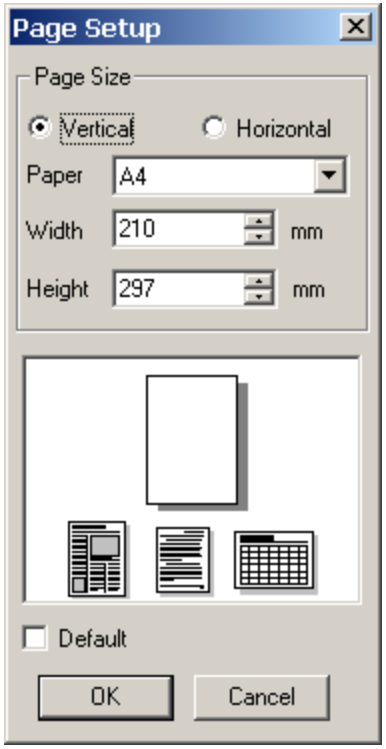

File
New Ctrl+N
Open... Ctrl+O
Open Recent Files
Close Ctrl+W
Save Ctrl+S
Save As... Ctrl+Shift+S
Import... Ctrl+I
Export... Ctrl+Shift+I
Output Pattern...
Load Block...
Save As Block...
Import Envelope Box Files...
Page Setup...
Layout Image Info...
Print...
Print Preview
Print Setup...
Exit

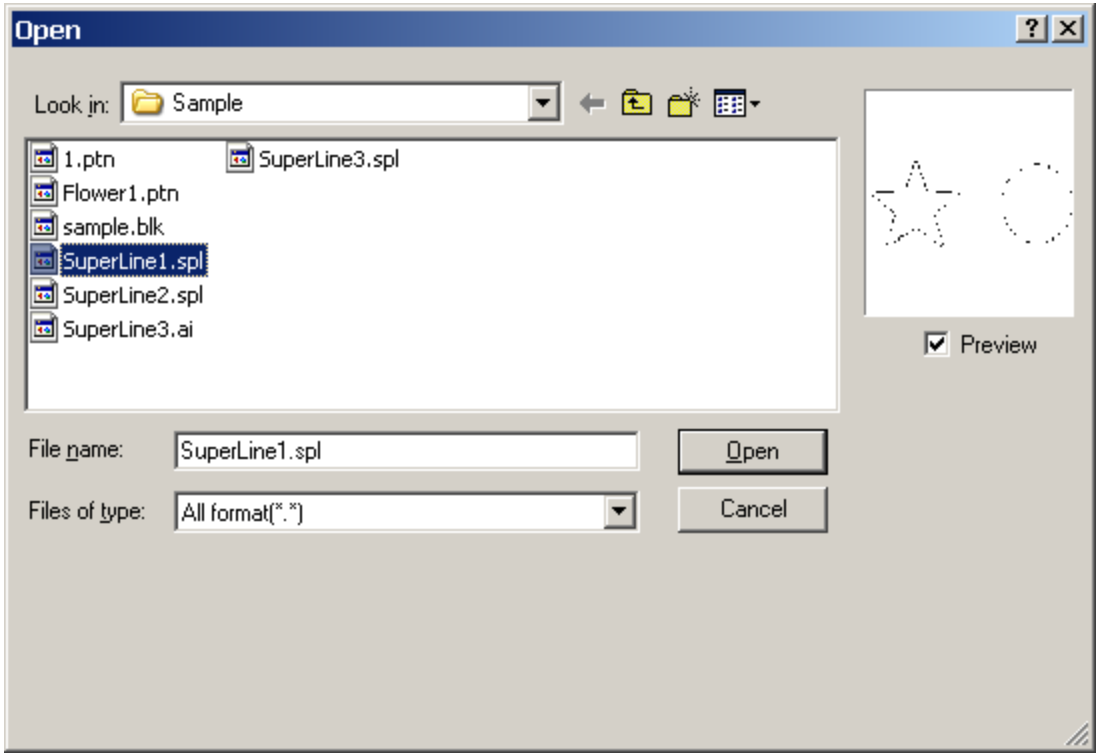
New: to create a new document, select the **New** command under the **File** menu, or click the **New** icon in the **Standard** toolbar, the following **Page Setup** dialog box will appear.

Open…: To open an existing design document, select **File > Open** or click the **Open** icon in the **Standard** toolbar, the **Open** document dialog box will pop up:

By default, the *.SPL documents, SuperLine page documents, under the current directory will be listed.

Open Recent Files: all recent files will be listed, you can choose one of them to open it.

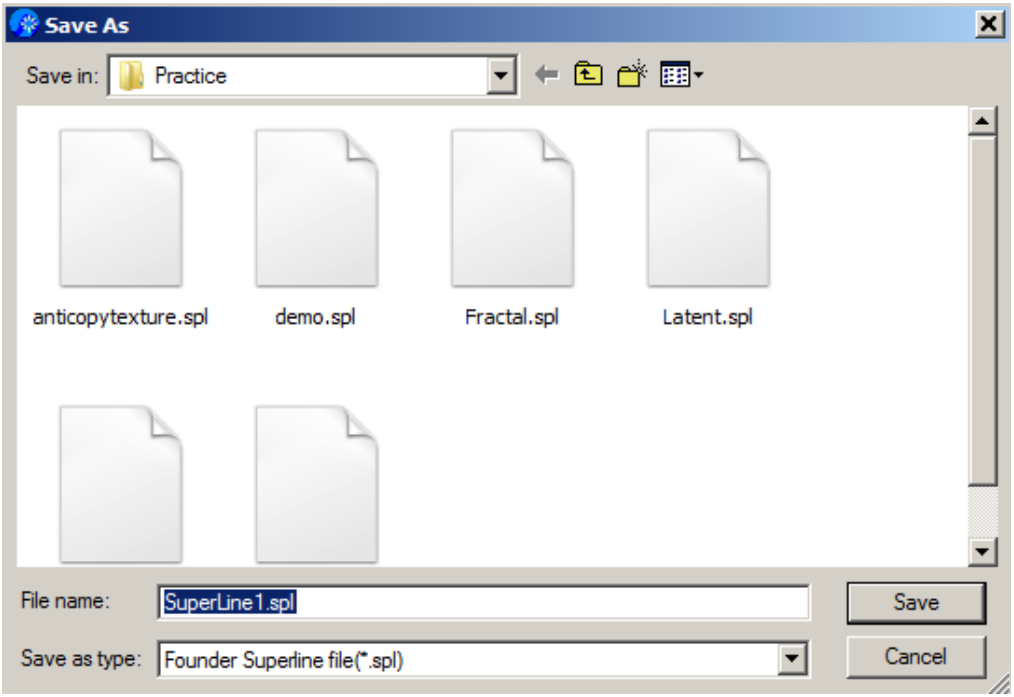




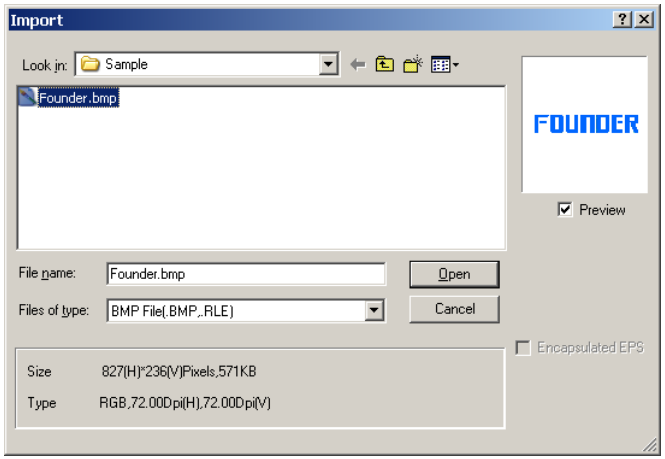
Close: to end design of the page and close the corresponding document window, select the **Close** command under the **File** menu to close the window. In case that the page has been revised without saving, SuperLine will prompt message asking you whether to save the document.

Save: You can save a page by selecting **File > Save** or click the **Save** icon in the **Standard** toolbar. If the document has not been given a name (a new document) at the time of storage, the **Save As** dialog box will appear, where the user should specify the document directory, input document name, which is the same as in the procedure. If this is not the case, the current page contents will be saved to replace the original document.

Save As...: to save a page, you can specify the path of storage and the file name, the next is the **Save As** dialog box:



Import...: To import external files, select the **Import** command under the **File** menu, or click the **Import** icon in the **Standard** toolbar, the **Import** dialog box will appear, shown as in the following figure:



Files of type: BMP, JPEG, TIFF, TGA, PS, EPS, TXT and Block File (do not support JPG of PhotoShop 6 and grayscale map, the PS/EPS only supports the path's import conversion).

An EPS file is selected, the Encapsulated EPS check box is valid. If this check box is checked, the EPS file will be embedded into the page and zoomed, moved, rotated, mirrored and skewed as a whole, but it is impossible to ungroup it for re-editing, the EPS object will be available at the lower left corner of the page. If not, the EPS file will be interpreted as separate objects and edited separately, available in the page will be a group object containing all objects of the EPS file. At the time of input, the EPS file is encapsulated, resulting in the EPS object.

If an image file is selected, an image will appear at the lower left corner of the page.

A PS file is selected, available in the page will be a group object containing objects in all pages of the PS file.

A TXT file is selected, a text object will be formed in the page.

Menu

Export...: To export the page as PS, EPS, AI, Founder Superline block files(.blk) and BMP,TIF, JPG, PCX, TGA, PNG images files, select **File > Export**, or click the **Export** files icon in the **Standard** toolbar, the **Export** dialog box will appear:

convert text to curve: to convert the text outline into curves and exported as graphics (there will be not any text information in the file).

EPS type: the **convert text to curve check** box, **Add preview head** check box, **Resolution** field and **Export range** list box will be available in the dialog box.

Add preview head : will include preview images.

Resolution: for preview(generally, 72 or less. The EPS file will swell remarkably with a high resolution)

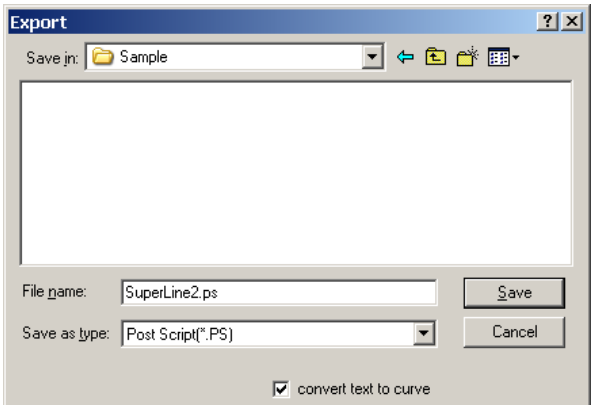
Export range : includes three options: **all objects, the whole page** and **objects selected** (the third is available only when a target/targets is/are selected). All objects inside and outside the page will be exported when the **all objects** option is selected. The objects inside the page and the selected objects will be exported when **the whole page** and **objects selected** options are selected, respectively.

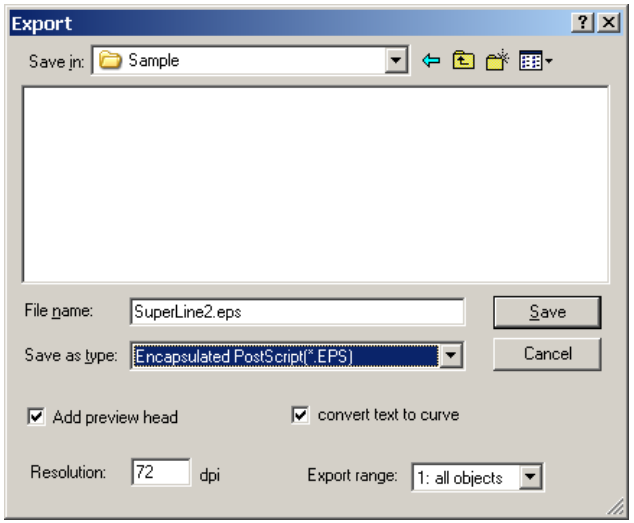
BMP type:

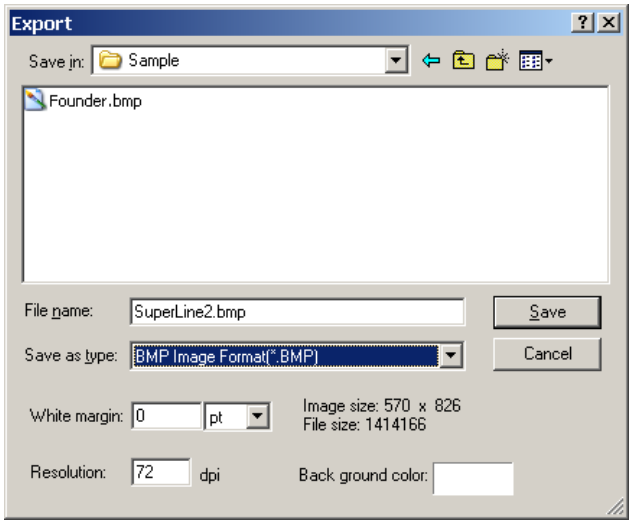
Resolution : to determine the resolution of the BMP image.

Background color : determine the background color .

White margin : determine the frame width of the BMP image .





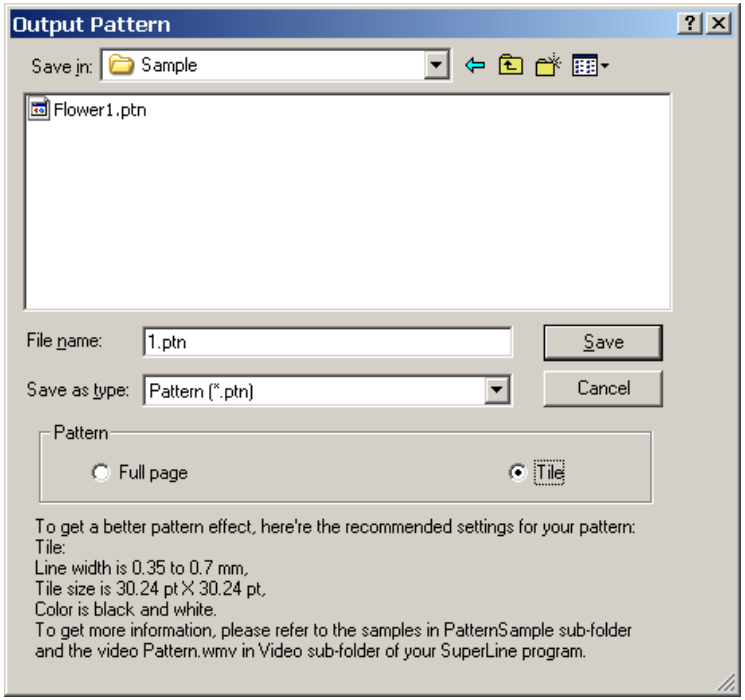


Output Pattern...: to output your elaborately designed graphic or image object in a page as a pattern file. With this capacity, you can produce three types of patterns: tile pattern, full-page pattern, and image pattern.

Tile pattern: The ideal graphic object for you to output as a tile pattern should have such characteristics:
Line width is 0.35-0.7 mm; The size is 30.24 pt x 30.24 pt; The color is black and white.

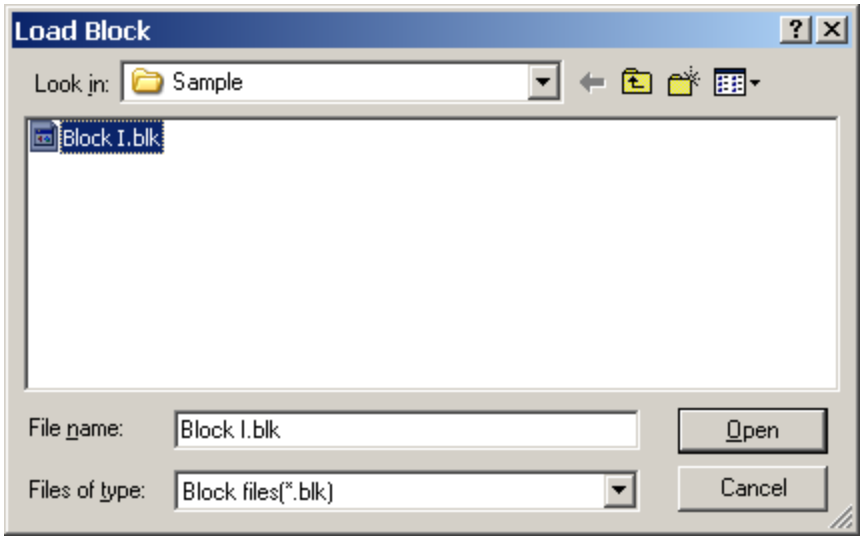
Full page pattern: The ideal graphic object for you to output as a full-page pattern should have such characteristics:
Line width is wider than 0.35 mm; The size is the same as the page size; The color is black and white.

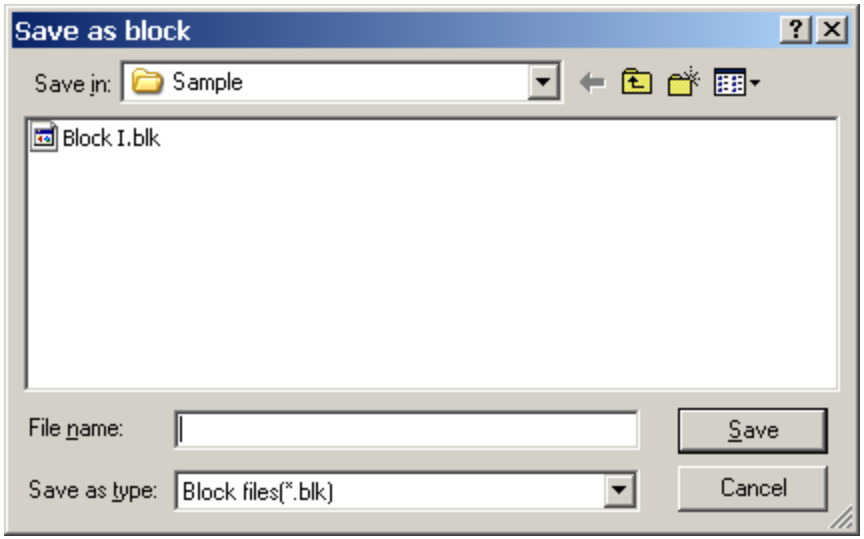
Image pattern: You can also import an image object in a SuperLine page as a pattern. Such image object should have the same characteristics as those for a tile pattern.



Load Block...: to load block is to import a block file to the current page.

Save as block...: to save some page objects as block.





Import Envelope Box Files...:

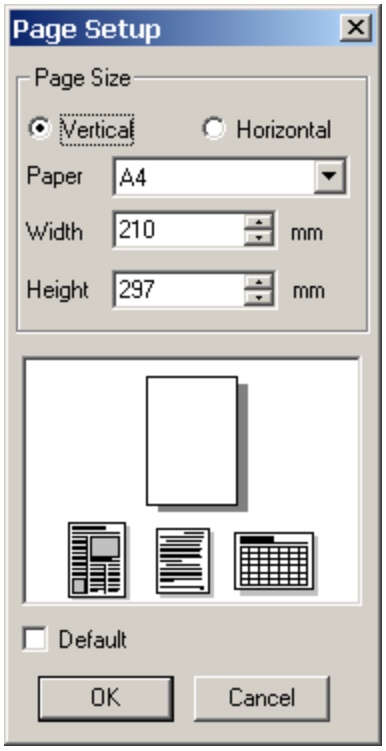
Page Setup: to configure the page properties.

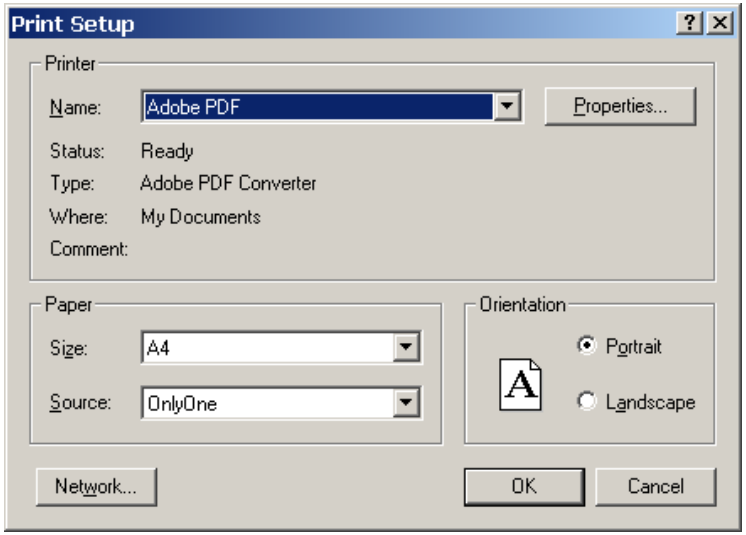
Layout Image info...: to view image information (format and file address) after an image has been imported to the page

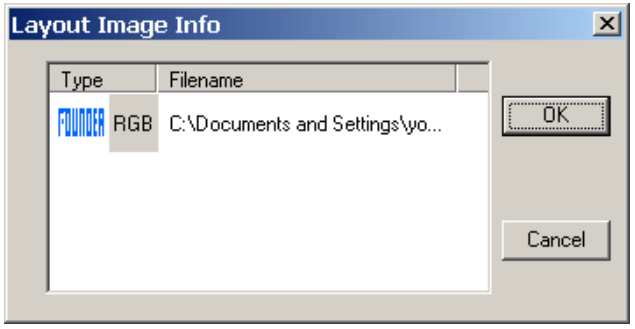
Print...: to print the designed page.

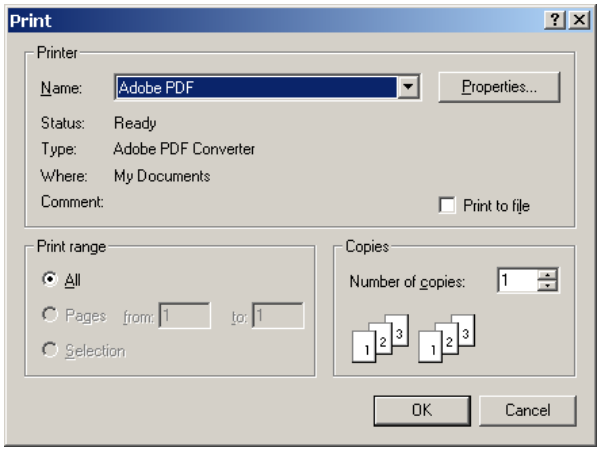
Print Preview: to preview print effects before printing .

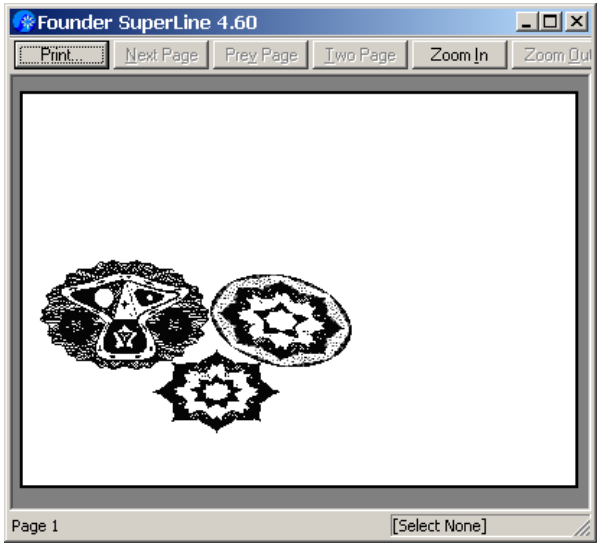
Print Setup...: to set print parameters before printing .



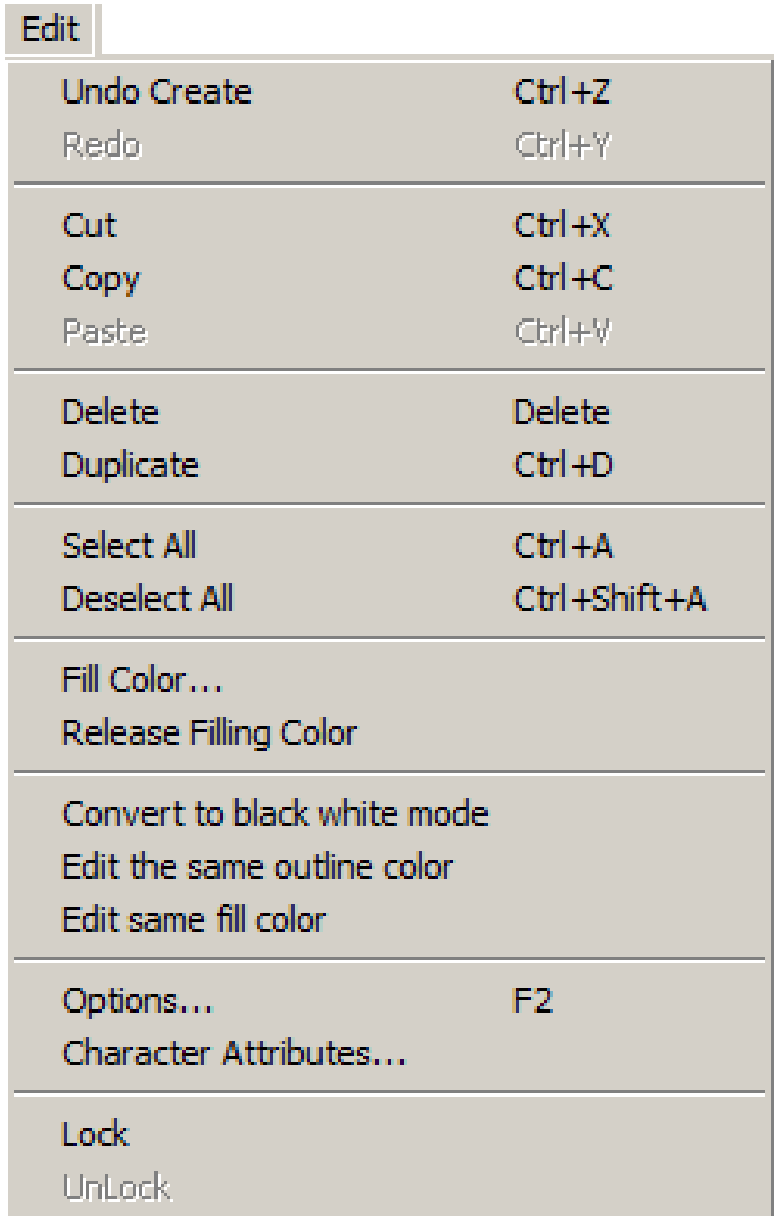




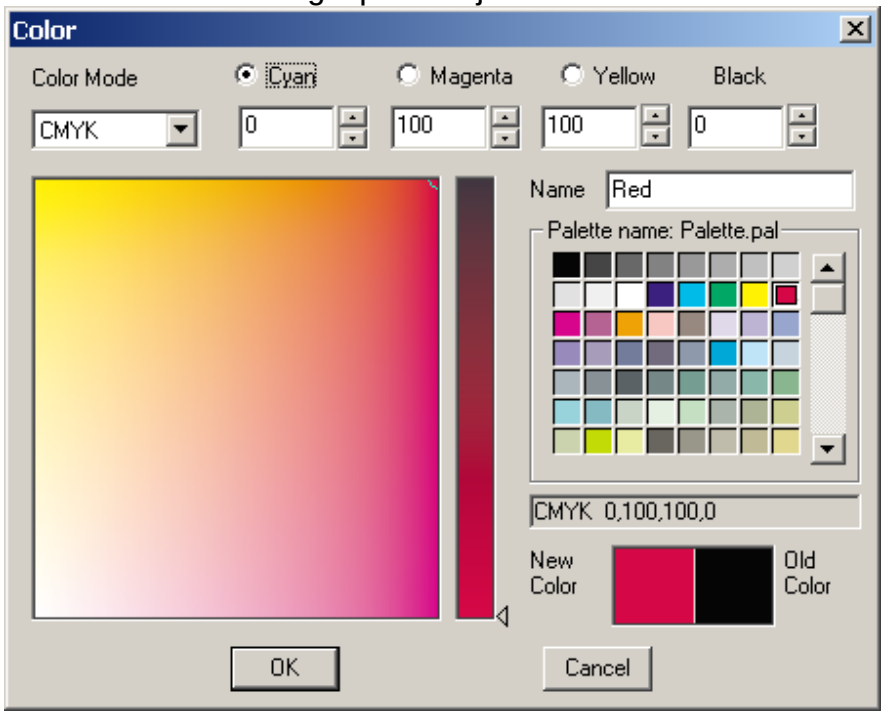




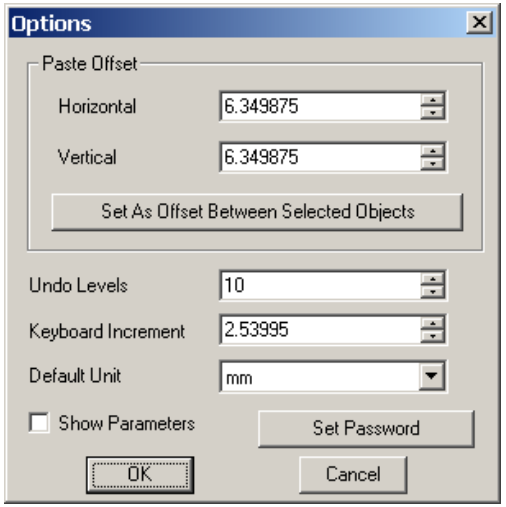
Edit


Edit
Undo Create Ctrl+Z
Redo Ctrl+Y
Cut Ctrl+X
Copy Ctrl+C
Paste Ctrl+V
Delete Delete
Duplicate Ctrl+D
Select All Ctrl+A
Deselect All Ctrl+Shift+A
Fill Color...
Release Filling Color
Convert to black white mode
Edit the same outline color
Edit same fill color
Options... F2
Character Attributes...
Lock
UnLock

Undo: to undo a recent operation.
Redo: to redo a recent operation .
Cut: to delete the object currently selected and copy them to the clipboard.
Copy: to copy the object to the clipboard .
Paste: one copy of the object is available in the original position.
Delete: to delete the selected objects.
Duplicate: to copy directly the object currently selected without using the clipboard.
Select All: to select all objects in the page.
Deselect All: to deselect all objects in the page.
Fill Color…: to open the **Color** dialog box, and set within the box the color parameters for the whole engraving, such as color mode and value. The selected graphic object is filled with the selected color.

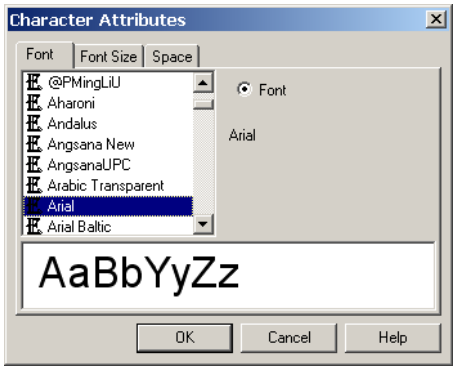


Release Filling Color: to release the filled color of selected graphic object.
Convert to black white mode: to change the outline and fill colors of an object to black. open the **Color** dialog box. And then define a black color. The change will take effect.
Edit the same outline color: to change the outline colors of all objects in the page to a single color.
Edit same fill color: to change the fill colors of all objects in the page to a single color.
Options...: to set up some global parameters for Founder SuperLine.

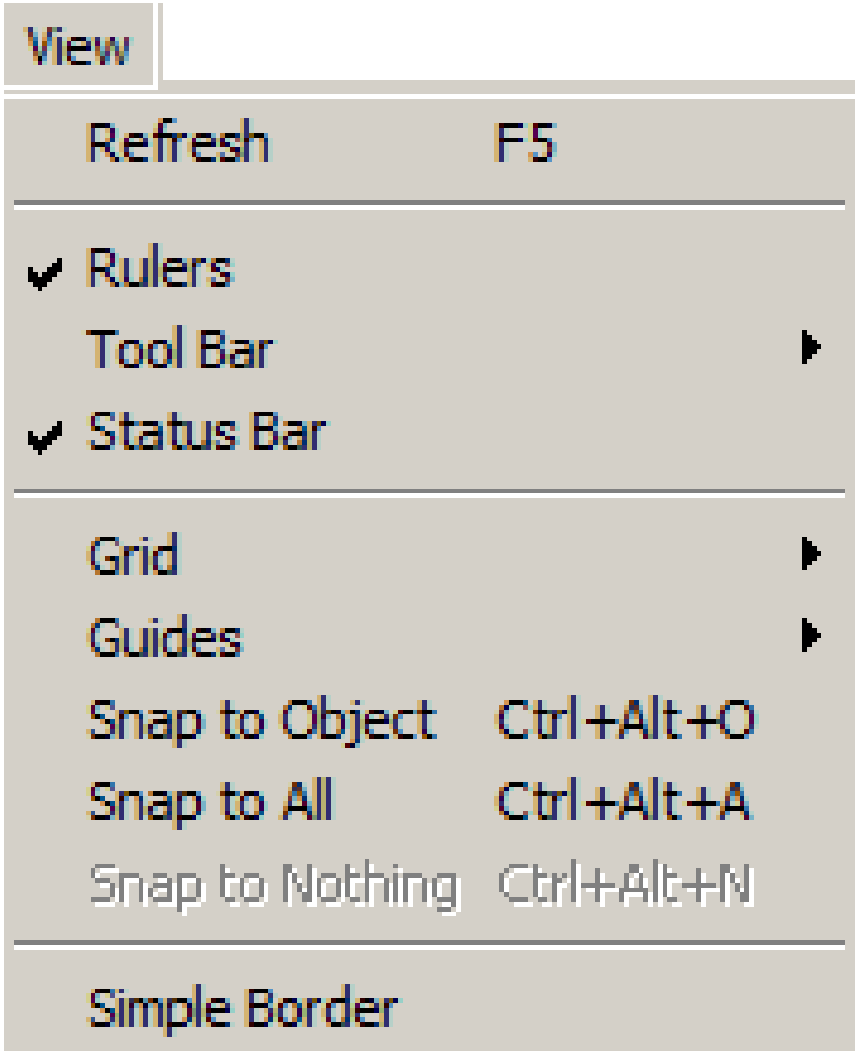


Paste Offset: determines the relative positions of the new/old objects upon object paste.
Set As Offset Between Selected Objects: set the paste offset to the relative positions of the selected two objects.
Undo Levels: means the maximum steps of undoes.
Keyboard Increment: refers to the step in which the object is moved by the direction key of the keyboard.
Default Unit: refers to the units of the values marked in the ruler.
Show Parameters: will pop up message asking you to input a password (if no password is set, it prompts that there is no password set). To better protect your setup, only after the password (if any) is correctly input, the user can then continue to view, modify and save the **Options** parameters for an object.
Set Password: to set or change your password in the **Setting user's password** dialog box

Character Attributes...: to open Character Attributes dialog box .



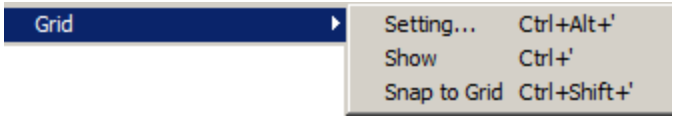
View

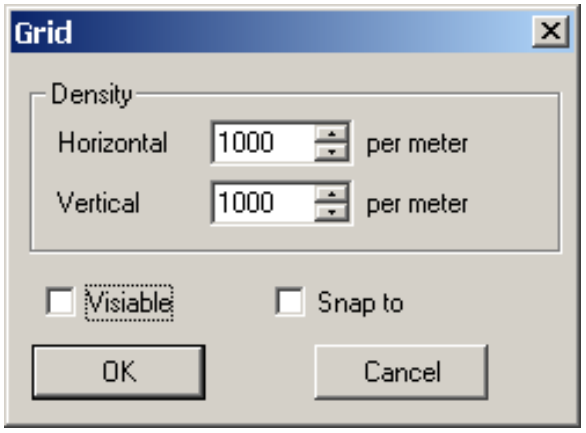

View
Refresh F5
Rulers
Tool Bar
Status Bar
Grid
Guides
Snap to Object Ctrl+Alt+O
Snap to All Ctrl+Alt+A
Snap to Nothing Ctrl+Alt+N
Simple Border

Refresh: to refresh the current window.
Rulers: to show or hide the rulers.
Tool Bar: to show or hide the tool bar, such as Standard, Graph, Text, Align and Zoom.

Status Bar: to show or hide the status bar. At the bottom of the main interface, the status bar displays status information on the current operations or progress.

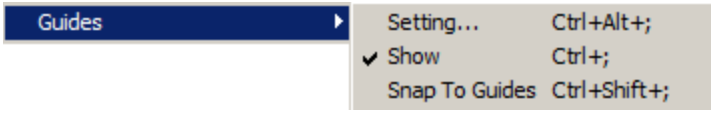
Grid:
Setting…: to control the density of the grid points.
Show: to display or hide the grids.
Snap to Grid: to determine whether to enable the **Snap to Grid** function.

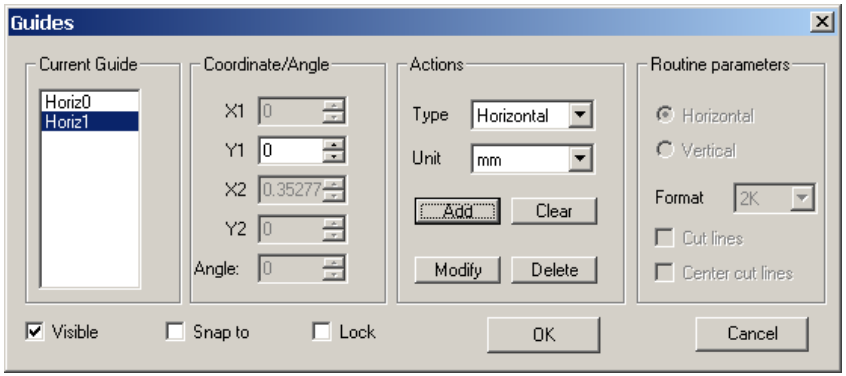




Guides:

Setting…: to open the **Guides** dialog box. The existing guides are displayed in the **Current Guide** list. You can add new guides, or delete or modify existing guides through this dialog box.





Show: : to display or hide the guide.

Snap To Guides: to determine whether to enable the **Snap to Guides** function.

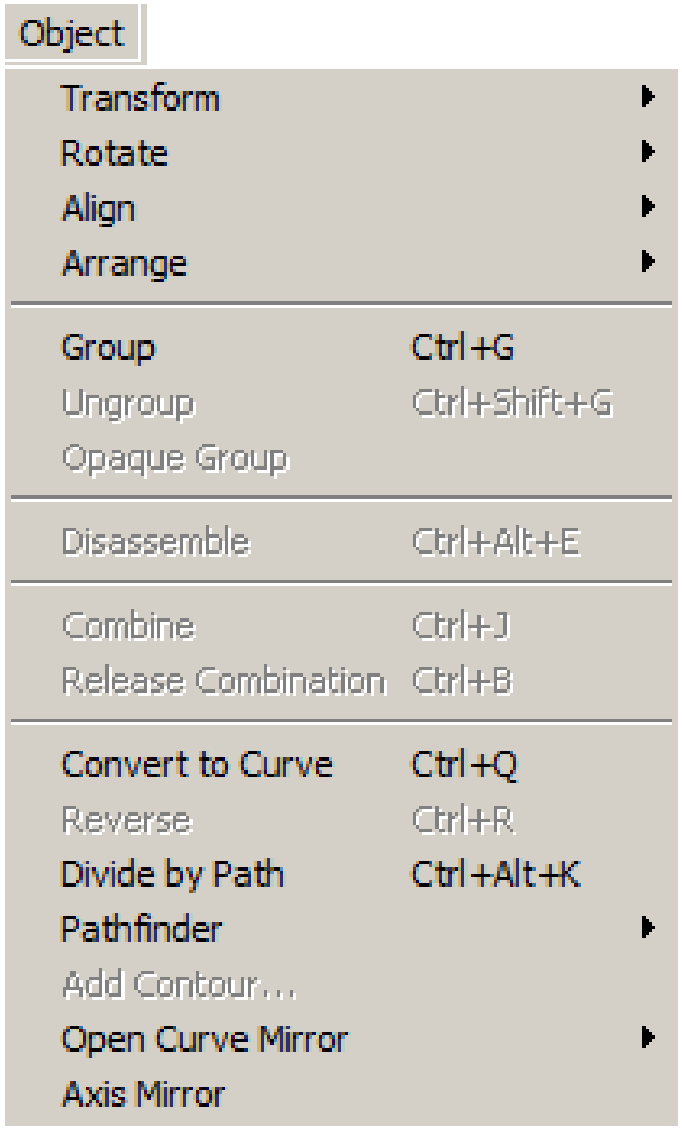
Snap to Object: snap object(s) to other object(s). That is to say, when creating/moving objects and changing object size by the mouse, the cursor will be automatically drawn to the attractive points of nearby objects.

Snap to All: combines all three snap modes. When moved, the objects will be placed in the order of snapping to object, guides and grid. In case the target object is near to another object, the two objects will get aligned. In case the target object is near to the grid, then the object will get aligned with the grid.

Snap to nothing: snapping operation will be disabled for objects being moved.

Simple Border: When this command is selected, SuperLine will display the outlines of all graphical objects in one-pixel resolution. In practice, you can make use of this command to display those objects that are not easily visible, such as objects using white borders or white fill effects.

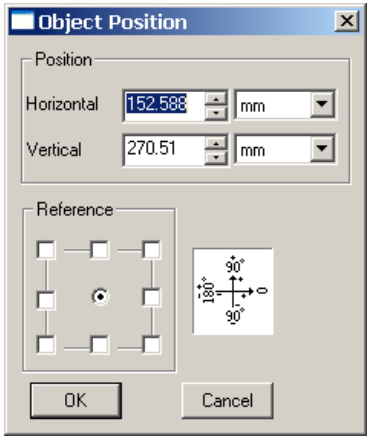
Object


Object
Transform
Rotate
Align
Arrange
Group Ctrl+G
Ungroup Ctrl+Shift+G
Opaque Group
Disassemble Ctrl+Alt+E
Combine Ctrl+J
Release Combination Ctrl+B
Convert to Curve Ctrl+Q
Reverse Ctrl+R
Divide by Path Ctrl+Alt+K
Pathfinder
Add Contour...
Open Curve Mirror
Axis Mirror

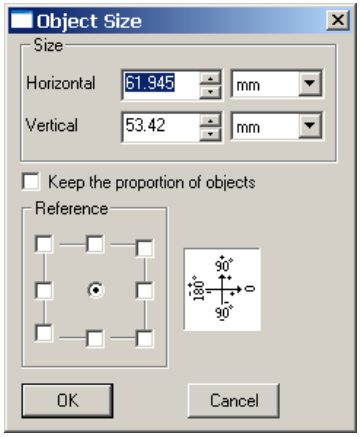
Transform:

Position…: to move the selected object.

Size…: to control the size of the current object to make it larger or smaller.

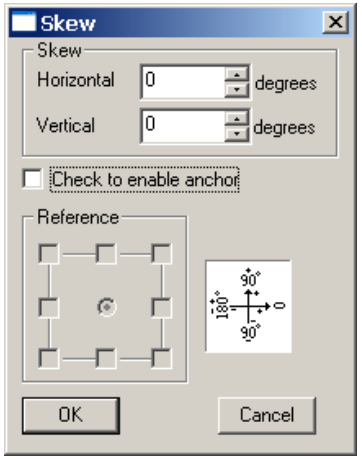


Position: determine the position of the object reference point, while the **Horizontal** and **Vertical** options determine the reference points' horizontal and vertical positions, respectively.
Reference: determine the object reference point.



Size : determine object size, where, the **Horizontal** and **Vertical** fields determine the horizontal and vertical sizes of the object, respectively.
Keep the proportion of objects: maintains the object's aspect ratio when its size is being changed.
Reference: determine the object reference point.

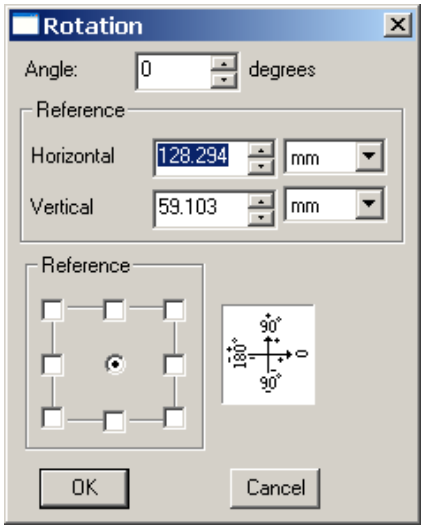
Skew…: to skew.

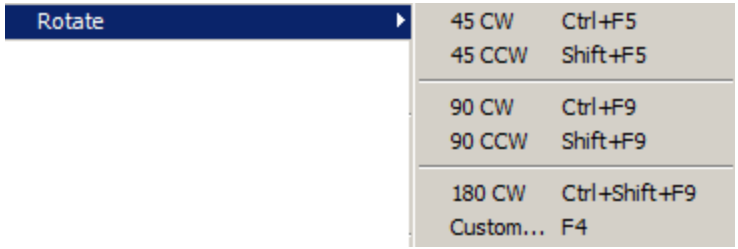


Skew: determine the object's skew angle, where, the **Horizontal** box determines the horizontal skew angle. With a positive number, the object is skewed leftward or otherwise, rightward. The **Vertical** box determines the vertical skew angle. With a positive number, the object is skewed upward or otherwise, downward.
Check to enable anchor: to skew the object with an anchor point, which is selected in the **Reference** box. If the **Check to enable anchor** check box is not selected, the object skew will be based on the center of the object.
Reference: determines the position of the anchor point for skewing the object. The selection of one corner locates the anchor point at a corner of the object frame. The selection of one side locates the anchor point in the center of a side of the object frame. The selection of the center point locates the anchor point in the center of the object.

Rotate:

Custom: to rotate angle precisely.

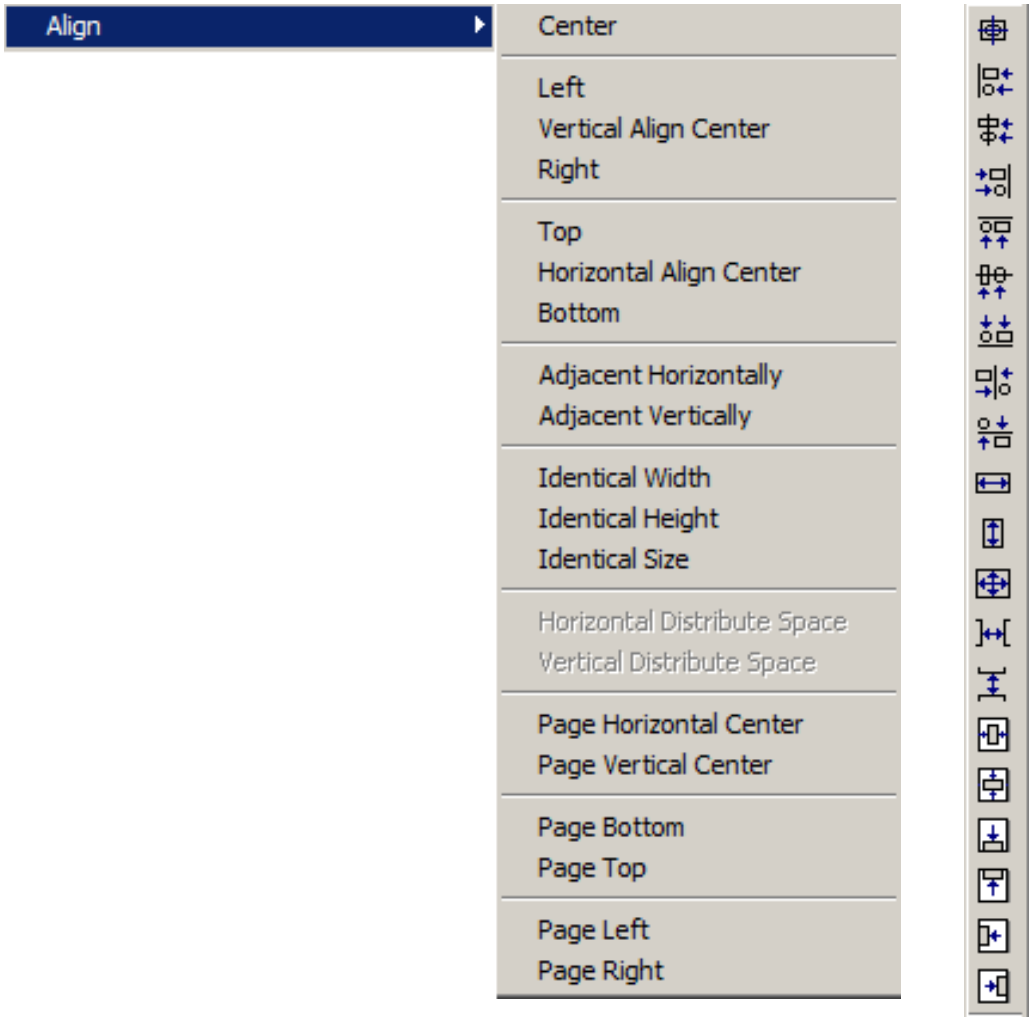




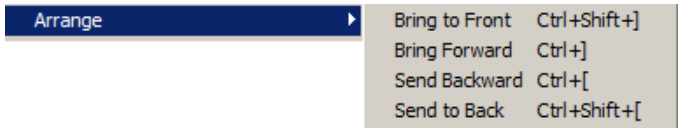
Angle: determines the object's rotation angle (unit: º).
Horizontal: display the rotation angle's horizontal coordinate.
Vertical: display the rotation angle's vertical coordinate.
Reference: determines the position of the object reference point

Align:

Align:


Align
Center
Left
Vertical Align Center
Right
Top
Horizontal Align Center
Bottom
Adjacent Horizontally
Adjacent Vertically
Identical Width
Identical Height
Identical Size
Horizontal Distribute Space
Vertical Distribute Space
Page Horizontal Center
Page Vertical Center
Page Bottom
Page Top
Page Left
Page Right

Arrange:



Bring to Front: moves an object to the front of all objects in a layer. After the operation, the object can mask all other objects in the same layer.

Bring Forward: interchanges the sequence of an object relative to the object above it.

Send Backward: interchanges the sequence of an object relative to the object behind it.

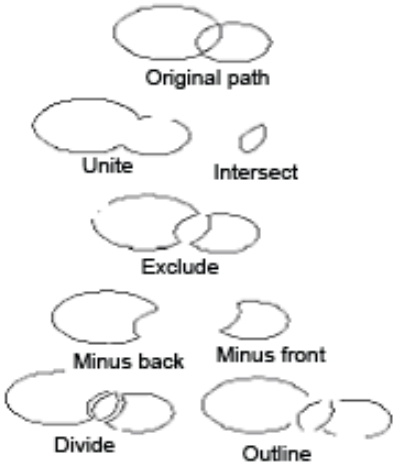
Send to Back: moves an object to the back of all objects in a layer. After the operation, other objects in the same layer will mask the object.

Group: to combine multiple objects into a group object.
Ungroup: to break up the group object and restore the independent state of each object in the group.
Opaque Group: to form a nontransparent object. Select a group object. If you want to select two or more ungrouped objects, first group them;
Notes:
① *If the selected object contains graphics or text, the fill of the graphics or text will not be affected.*
② *The nontransparent group object may also be ungrouped as the common group object.*

Disassemble: to convert complex graphic objects (such as those made available through complex distortions) into simple objects by ungrouping them.
Combine: to turn multiple graphics into one and reshape. to turn multiple graphics into a new graphic object (but not a group object), and the new graphic object has the same filling color and outline properties as the original selected one.

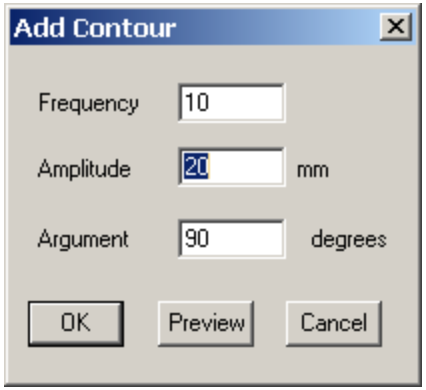
Release Combination: to divide the sub paths of the object and create new individual objects respectively. The new object has the same properties and filling color as the original one.
Note: *If select multiple objects, only those objects with sub paths can be divided. Other objects such as group object, clip-mask object and graphic object with single path and so on will not change.*

Convert to Curve: to convert the object created in SuperLine, such as, rectangle, *ellipse, straight line* and text into a curve.
Reverse: change the direction of selected object.
Divide by Path: divide the selected object with the chosen path.
Pathfinder:

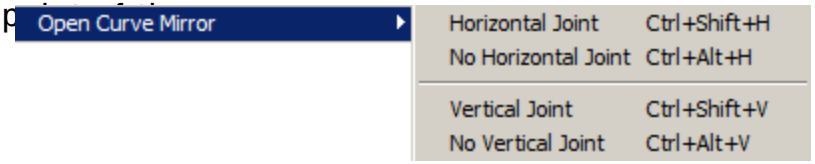


Unite: to take the periphery part of the two combined curves.
Intersect: to take the common part of the two curves and delete the non-overlapped part.
Exclude: to take the non-overlapped part of the two curves and delete the common part.
Minus Front: to use the rear curve to subtract the front curve according to the folded order
Minus Back: to use the front curve to subtract the rear curve according to the folded order
Divide: to divide the two curves into multiple curves according to the intersection of the two curves.
Break Apart: to divide the parts surrounded by the two curves into multiple closed areas.

Add Contour: to generate a contour.
Frequency: refers to nodes of the contour.
Amplitude: refers to the contour's vibration amplitude.
Argument: refers to the location of the starting node.

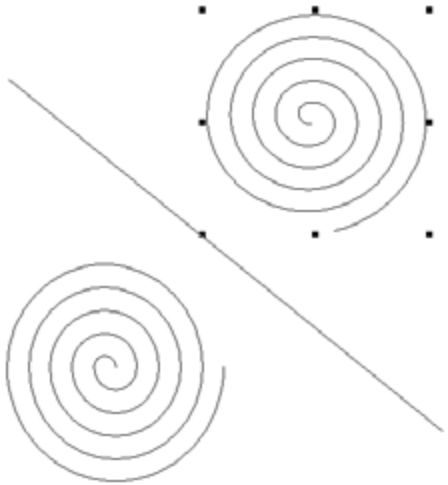


Open Curve Mirror: to make a copy of a curve as the mirror of the original curve. Moreover, the relative position between the original and the new curve are set, where the end point of the original curve is the start p

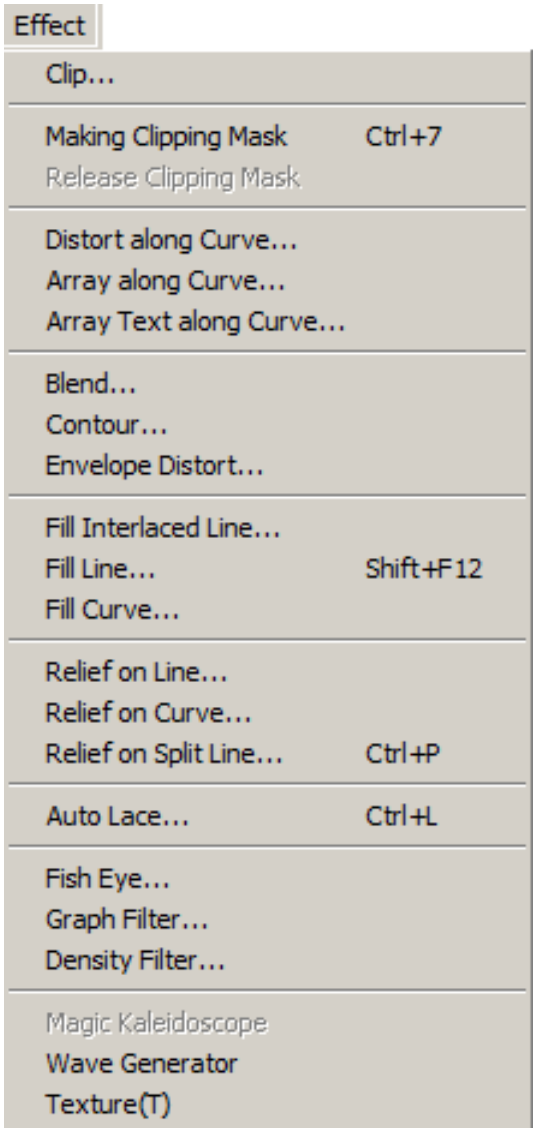


Horizontal Joint: to create the horizontal mirror for the curve and join it with the original curve to make one curve.
No Horizontal Joint: to create the horizontal mirror for the curve and but not join it with the original curve.
Vertical Joint: to create the vertical mirror for the curve and join it with the original curve to make one curve.
No Vertical Joint: to create the vertical mirror for the curve but not join it with the original curve.
Notes:
① *To make the Open Curve Mirror, it is required that there is at least one graphic or group object in the selected object (one or more) that has no less than one open path. The end point of the open path is taken as the axis of the mirror, and all other close paths or graphic objects use it as their mirror axis. If there are more than one open paths in the selected object, all other close paths or graphic objects use the right-most (up-most) end points of all open paths as the horizontal (vertical) mirror axis.*
② *If there are more than one graphic objects in the selected objects, they become group objects after being mirrored.*
③ *If there is clip-mask object in the selected objects, the clip-mask object will be mirrored and the clipped content will disappear.*
④ *The mirror effect is related to the direction of the path. Therefore, it is important to change the direction of the curve if necessary (refer to the following section).*

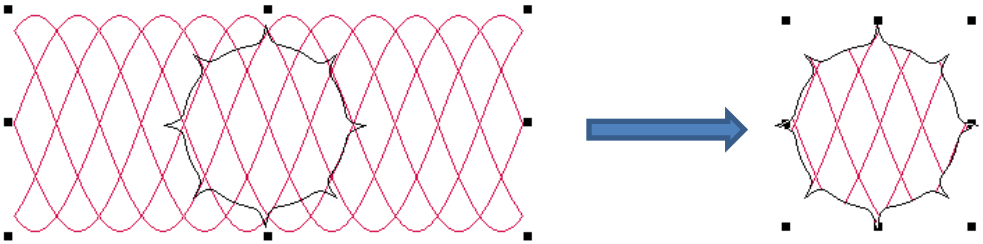
Axis Mirror: to mirror along a random axis.
(1) Select the object to be mirrored;
(2) Select the **Object > Axis Mirror** command. Place the mouse in the page and the cursor becomes a curved arrow. When you place the cursor in a straight line segment, click it (if there is not any object at the point of click or the layer containing the object is not editable or it is not a graphic object, a corresponding message box will pop up. Click **OK** in the box. The cursor is still a curved arrow and you can click the path once again. If you select **Cancel**, the cursor will restore to its normal shape, indicating that you cannot make selection any more. If the graphic object at the point of click is not a straight line segment, a message box will pop up. Click **OK** in the box. The cursor restore to its normal shape. No selection will be made any more) to make it the symmetric axis. A mirror image will be generated along this straight line.

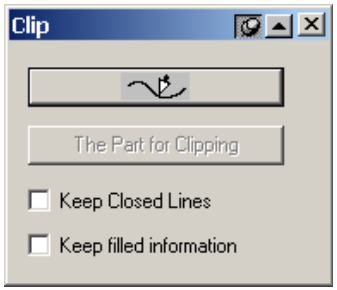


Effect


Effect
Clip...
Making Clipping Mask Ctrl+7
Release Clipping Mask
Distort along Curve...
Array along Curve...
Array Text along Curve...
Blend...
Contour...
Envelope Distort...
Fill Interlaced Line...
Fill Line... Shift+F12
Fill Curve...
Relief on Line...
Relief on Curve...
Relief on Split Line... Ctrl+P
Auto Lace... Ctrl+L
Fish Eye...
Graph Filter...
Density Filter...
Magic Kaleidoscope
Wave Generator
Texture(T)

Clip...: is mainly for graphic objects. It uses a path (Clipping Object) to cut the unnecessary part of other graphic object (Clipped Object). The effect is shown in the graphic.





Graphic objects(clipped object) is red and a path object(clipping object) is black, make the graphic objects are under on the path object. The method for clipping is as follows.

1) Select the graphic object for clip (one or more).

2) If the **Clip** dialog box has not opened yet, select **Effect > Clip** to open this dialog box.

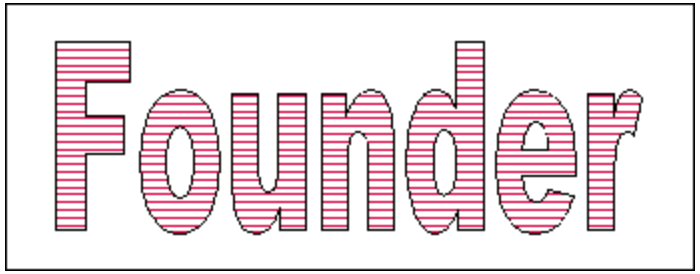
3) Click **Path** button in dialog box, and move the mouse to the page. The cursor changes to a curved arrow . When the cursor moves to the path object, click this path and select it as the clip path (If there is no valid path at the clicked place, a message box pops up. Click **OK** and the cursor is still a curved arrow. Click the path again. If choose **Cancel**, the cursor recovers to normal state which means it cannot be used for selecting path.). The **Path** button in the dialog box turns to black.

4) Click **the Path for Clipping** button in the **Clip** dialog box and move the cursor to the page. The cursor turns to a big black arrow ➡. Move the cursor to the part that needs to be cut, and click. The selected object is cut along the path. At the same time, the Clip dialog box restores.

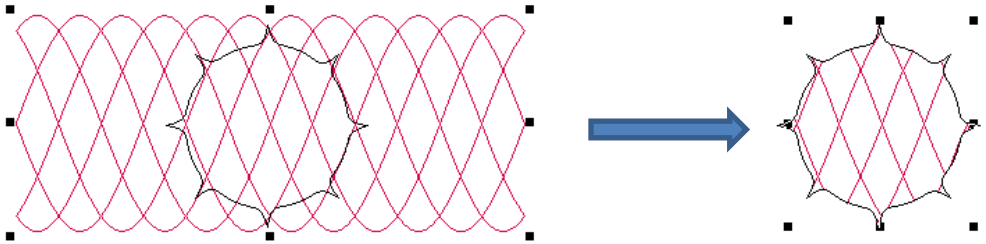
Keep Closed Line: The closed graphic keeps closed after cut and the open graphic will not be affected.

Notes:

① When selecting **the Path for Clipping**, if the Clip path is closed, select the outer or inner part of the path; If the path is open, select the right or left side of the path.
② Clip has no effect on graphics.
③ For big refraction object (especially big graphic refraction object) we need to apply Clip carefully. Because it may take a lot of time for this operation, the data can be incremented significantly, which may result in using up the system resource and system crash.
④ The selected clip object can be one or more objects, group objects or text (which needs to convert to curves first). For multiple objects, only the object being cut participates in operation. If a group object is selected, the graphic in the group cannot be cut.
⑤ Clip path object can only be a single open or closed path. If the text that has been converted to curves is a continuous graphic, it may also be a Clip path object as shown in the graphic.



Making Clipping Mask: The clip mask, a graphic object, is designed to clip other objects such as images, text and graphics to get special effects. After clipping other objects, the clip mask becomes another kind of composite object, i.e., clip mask object. The clip mask features a graphic object's properties such as outline and fill color. As a consequence, a clip object has the distinct clip edge of certain width and color. You may also fill color in the clip area not filled.



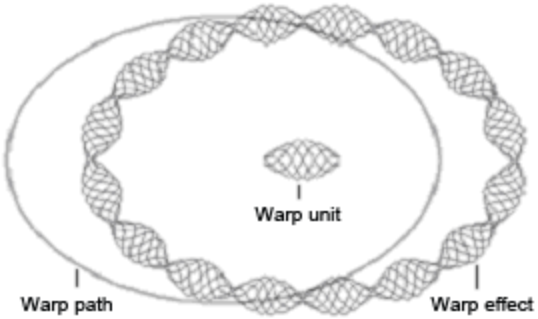
Procedures:
(1) Create a graphic object to serve as the mask object;
(2) Move the mask object or the clipped object to ensure the appropriate part to be clipped;
(3) Select the clipped object;
(4) Select the **Effect > Making Clipping Mask** command. The cursor now becomes an arrow ➡ . Use this arrow to click the mask object's edge. The content object is clipped and only the part inside the mask object is left.

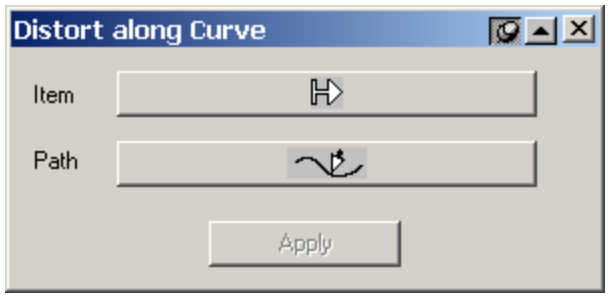
Notes:
① *If the mask object locates under the clipped object, you may make it above (sequence adjustment) to ensure the mask is selected.*
② *The clipped objects may be graphic objects, text, images, group objects or other clip mask objects.*
③ *After the clip mask object is generated, you may change the outline properties and fill color, as with the case of the graphic object.*

Release Clipping Mask: After placing the content object into the mask object, you may, if necessary, pick up the content object and restore it to the status before clipping.
Procedures:
(1) Select the clip object;
(2) Select the **Effect > Making Clipping Mask** command. The content last placed into the mask will be released and restored to its original status.
In the case of a multiple clip, repeat the procedures above to pick up all objects placed into the mask.

Adjust clip scope: If you are non satisfied after clipping, for example, some part that will be clipped is not clipped or some part that will be reserved is clipped, you have two ways to remedy.
(1) Move the clip object while keeping pressing the **Ctrl** key and you will see that it is the clip frame instead of the whole clip object that is moved. You can adjust clip scope after clipping;
(2) First pick up the clip object, adjust the position and then clip.

Distort along Curve...: to transform a graphic object (non-closed) along a curve (open or closed curve) and form a continuous graphic. The effect of Distort along Curve is shown in the graphic below.

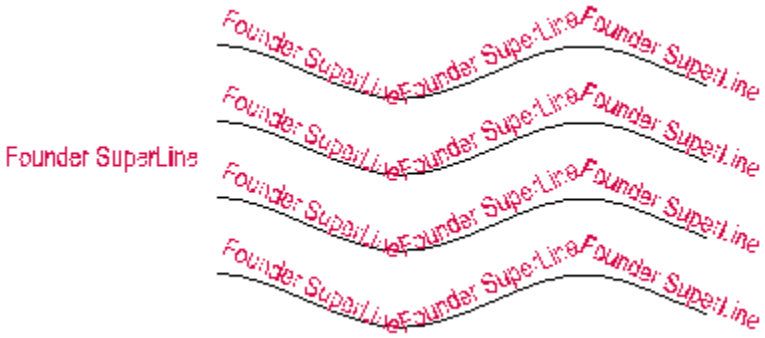


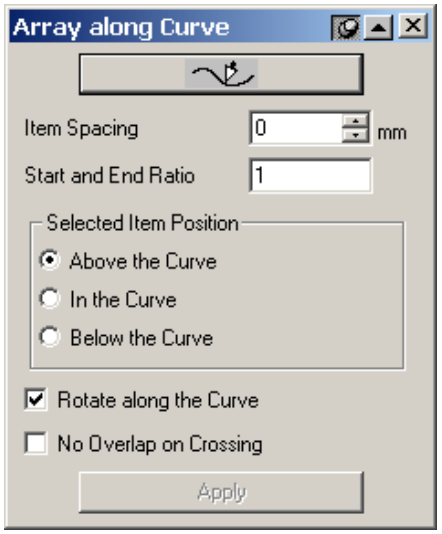


2) Click the **Item** button . The cursor turns to a horizontal arrow . Use this cursor to click the unit for Distort along Curve (Item), and the Item button turns to black in the dialog box.
3) Click **Path** button . The cursor turns to a curved arrow . Use this cursor to click the transform path, and the **Path** button turns to black in the dialog box.
4) After select item and path, **Apply** is activated. Click this button, item will be transformed along the path. When click the item and path, if no object is selected, SuperLine pops up a message box. When click the item, if the selected object is not suitable (for example, there is no open sub path), the Item button will not turn black. It is required to select other objects as the item.

Notes:
① *Path can be an ordinary graphic object, group object (with graphic object or text object inside), and text object. If there are two sub paths in the graphic, do transform respectively. If the path is text, we need to convert it to a graphic first and then use it for transform path. Although a text can be used as transform path, the transform effect is unpredictable due to the complexity of the path.*
② *The Item used as transform unit must be a graphic object with an open sub path, or a group object with an open curve. During transform, only the item with an open curve is transformed and repeated. The closed path cannot be repeated, but can be transformed.*

Array along Curve…: to make the selected objects copy and array along a curve. During the array, the objects can be zoomed in and zoomed out to design patterns like microtext. The effect of **Array along Curve** is shown in the graphic below.





1) Select the object to be copied (one or more).
2) Set the copy options in the dialog box.

➢Select a graphic object as the array path: Click the **Path** button in the dialog box and the cursor turns to a curved arrow. Move the cursor to the page. Click the graphic object as the array path (If there is no valid path at the clicked area, a message box pops up. Click **OK** in the box. The cursor is still a curved arrow, and we can click the path again. If clicking **Cancel** in the box, the cursor turns to its normal state, which means it cannot be selected.). Select it as the array path and the **Path** button graphic in the dialog box turns to full black.

3) After the options are set, click **Apply** button. The selected object arrays long the path.

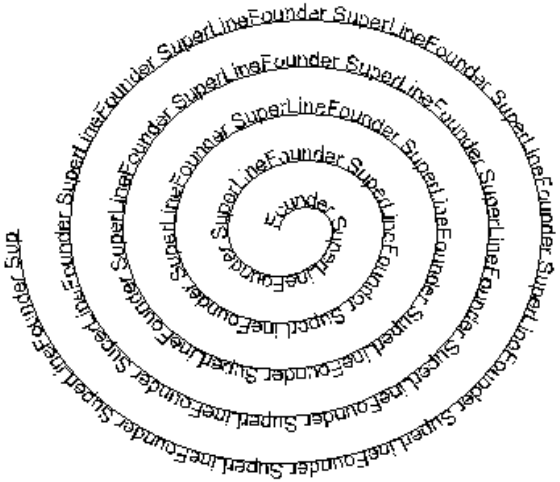
Item Spacing: Determines the space between the two adjacent graphic units for Array along Curve.
Start and End Ratio: It refers to the size ratio between the first copied object and the last object. Assume it is set to s, and the first copied object is the original size and the last object is the s times of the original size. The size of other objects in between changes uniformly. If the **Start and End Ratio** is bigger than 1, the objects get larger gradually. If it equals to 1, the object keeps its own size. If it is less than 1, the objects get smaller gradually.
Selected Item Position: Options in the **Selected Item Position** area determine the relative positions of the graphic units against the curve during the process of Array along Curve. There are three options.
Above the Curve: The graphic unit is on the top of the curve (when the curve is closed, it is outside of the curve).
In the Curve: The graphic unit is in the middle of the curve.
Below the Curve: The graphic unit is at the bottom of the curve (when the curve is closed, it is inside of the curve).
Rotate along the Curve: When this option is checked, the graphic unit rotates along the direction of the array path when the graphic unit arrays along the curve.
No Overlap on Crossing: when this option is selected, only one graphic object is arrayed at the place where curves cross.

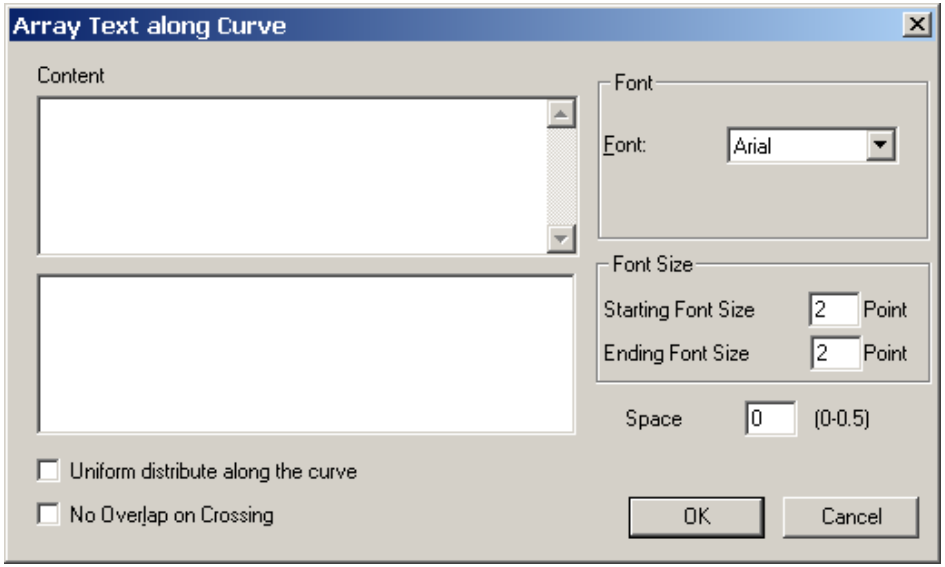
Notes:
① *The following objects can be graphic units for **Array along Curve**, such as graphic, text, image, group object, clip-mask object or multiple objects.*
② *The following objects can be paths for **Array along Curve**, such as graphic, text, and group object. If it is text object, it is equivalent to converting it to a curve and then used as an array path. If it is a group object, only the graphic and text in the group can be the array path.*
③ *When the Item Spacing is set to a negative value, you may obtain compelling effect unexpectedly.*

Array Text along Curve...: to array text object along curve. The effect of Array Text along Curve is shown in the graphic below.

The procedure for **Array Text along Curve** is as follows.

1) Select the object for array path.
2) Select **Effect > Array Text along Curve** to open the Array Text along Curve dialog box.
3) Set each option in the dialog box, and click **OK.**





Content: You can input text from the keyboard in the **Content** area as the text unit for Array along Curve.
Font: Your selected option in the **Font** dropdown list determines the font of the content you input.
Starting Front Size and **Ending Front Size**: Determine the start and end font size of the text. If the two values are set differently, we can get the gradient effect of the **Array Text along Curve**.
Space: Determines the space between the characters in the text.
Uniform distribute along the curve: Distributes the inputted words uniformly along the curve. When this option is selected, **Ending Front Size** and **Space** turn grayed out, and the **Starting Front Size** determines the size of the text.
No Overlap on Crossing: when this option is selected, only one text object is arrayed at the place where curves cross.

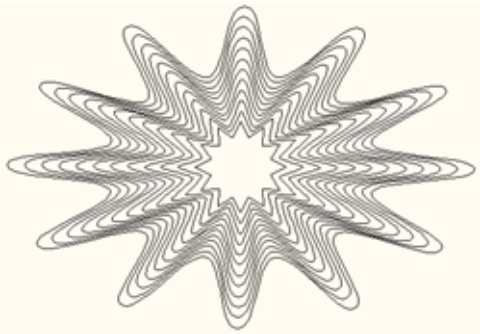
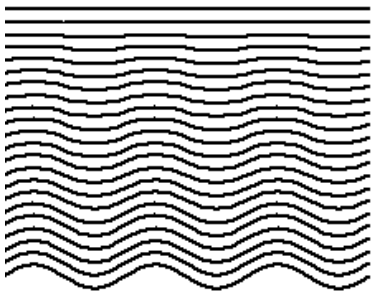
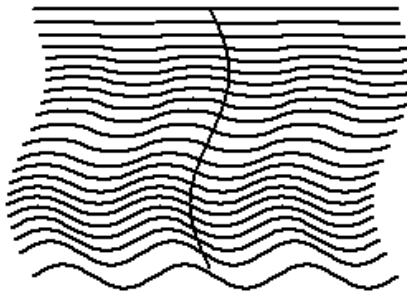
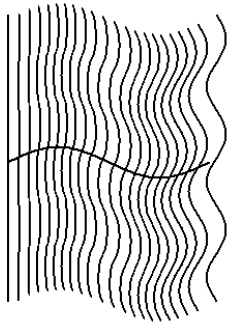
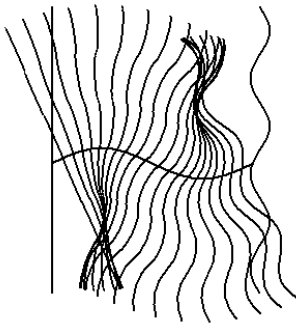
Blend...: to create a series of graphics to reflect the transformation process from one graphic to another. Blend can produce nice visual effect, which is suitable for the anti-counterfeit design. This is shown in the graphic.

The detailed procedure is as follows.

1) Draw a start object and a end object.
2) select **Effect > Blend** in the menu. The **Blend** dialog box pops up.
3) Set blend parameters in the **Blend** dialog box.
4) Click the **Start Object** button . The cursor changes to horizontal arrow pointing to right . Use this cursor to click the start object for blending.
5) Click the **End Object** button . The cursor changes to horizontal arrow pointing to left . Use this cursor to click the end object for blending.
6) If we want to mix along the path, click the **Path** button . The cursor changes to a curved arrow . Use this cursor to click the blended path object.

After appoint the mixed path, the graphics created by mixing are uniformly distributed along the path. Otherwise, the graphics created by mixing are uniformly distributed between the start object and the end object.

7) If select the mixed path, the **Rotate along Path** check box is valid. If select this check box, the created graphic rotates along the appointed path.
8) Click **Apply** in the dialog box, the Blend is created.

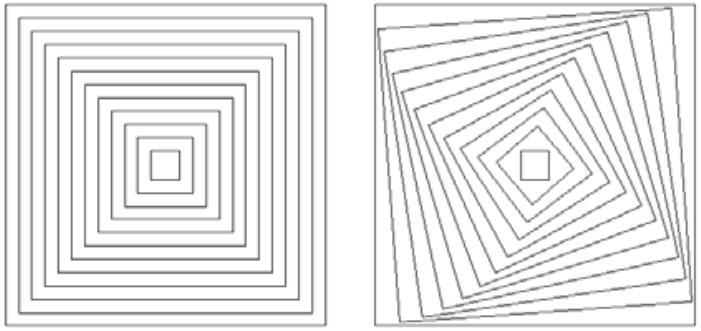






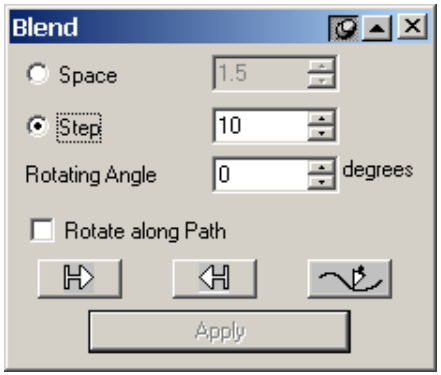
Space: refers to the minimum space among curves in the curve group generated by Blend. When this parameter is selected, you can input a value directly in the right box, or click the small arrow aside to select a value.

Step: refers to the number of intermediate graphics created during mixing. Inputting values directly or press the small arrow aside can adjust it. The bigger the steps, the denser of the curve distribution is.

Rotation Angle: It is the rotation angle of the last graphic after mixing if the Blend is invalid. The rotation angle of the first graphic created is 0, and that of the last graphic is set to s. The rotation angle of all other graphics increases by degrees of s/n (n is the steps). Inputting values directly or press the small arrow aside can adjust the value of s.

Rotate along Path: Only the mixed path is selected, the **Rotate along Path** check box is valid. If select this check box, the created graphic rotates along the appointed path.





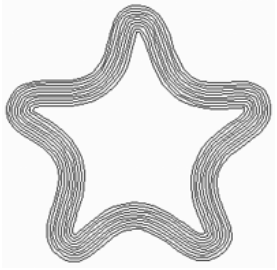
The effect of Blend is related to the start point of the curve, the direction of the curve and the number of control points. The user can use the Node Editor Tool to change the number of the control points, and change the direction of the curve by reversing the curve.

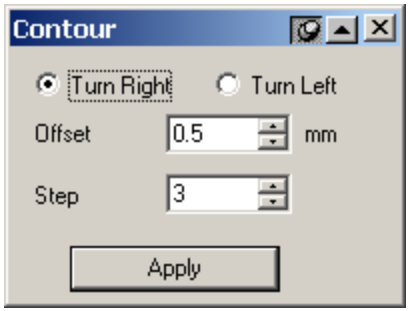
Notes:

① *The start object and end object can be graphic object, text or group object. If it is text, we need to convert it to curves and then mix. If it is group objects, there must be objects like graphic or text that can be mixed in the group, which are path.*

② *The path can be a graphic object, text and group object. If the path is text, we need to convert it to a graphic first and then use it for transform path. In case of the group object, there will be objects (graphics and text) that can participate in the mix in the group. These objects are all paths.*

Contour...: Create a group of curves that are isometric with each point on the selected graphic. The effect is shown in the graphic.





The detailed procedure is as follows.

1) Select the object as the base object for making isometric line.

2) If the **Contour** dialog box is not open, select **Effect > Contour** and the **Contour** dialog box pops up.

3) Set parameters in the **Contour** dialog box.

Direction: The round buttons **Turn Left** and **Turn Right** determines the isometric line is created in which side of the graphic. For a curve, assume that one person walks along the curve's direction, and his or her left side is the curve's left side and the right side is the curve's right side.

Offset: In the process of make isometric transform, the bigger the offset distance between the two adjacent isometric lines, the isometric line is sparser.

Step: It is the number of created isometric lines.

4) Click **Apply** in the dialog box, and the isometric lines are created. Group them.

Notes:

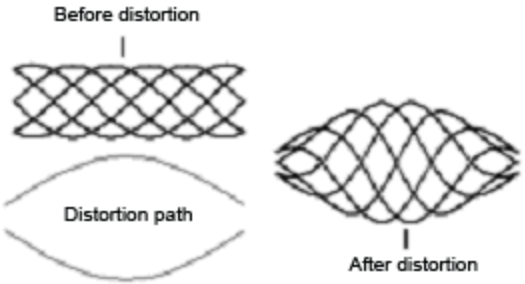
① *We can select the following objects as base objects for creating the isometric lines, such as graphic object, text, group object, and multiple objects. If select graphic object, the base object is each sub path for creating the isometric lines. If select group objects, there must be graphic or object in the group, which becomes the base object for creating the isometric lines. If select multiple objects, just like selecting group objects, the selected graphic or text is the base object for creating the isometric lines.*

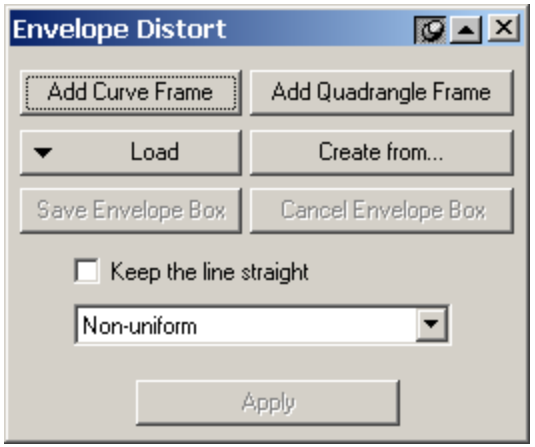
② *If we cannot create the assigned number of isometric lines due to the limitation of the size of the object, we try to create isometric lines as many as possible.*

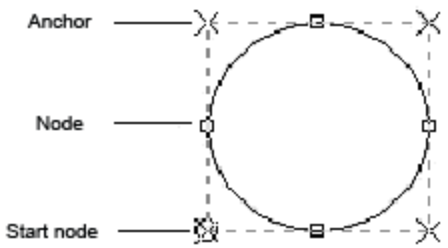
③ *If the operation of creating isometric lines is invalid because the offset value is set too big sometimes, the user can solve this problem by reducing the offset value or adjusting the direction (To Left or To Right).*

Envelope Distort...: Means one graphic transform along an assigned outline. Can create wonderful transform effect, and is often used in the anti-counterfeit design. The effect of one **Envelope Distort** is shown in the figure below.

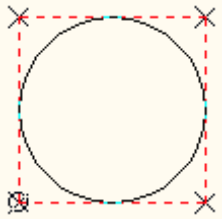
The procedure for Envelope Distort is as follows.
1) Select the graphic object and the group objects (group objects are graphic objects).
2) If the **Envelope Distort** dialog box is not open, select **Effect > Envelope Distort.** The **Envelope Distort** dialog box pops up.
3) Set the distort parameters in the dialog box.
Select the **Keep the line straight** check box, and then the line part of the graphic keeps line during transform. Select a uniform option (Non-uniform, or Uniform relatively, or Uniform absolutely) from the dropdown list, and it will try to make the Distorting Distortion path distribution of the graphic as you selected.
4) Create the Envelope frame.
There are a couple of methods for creating the envelope frame.
1. Press the **Add Curve Frame** button in the dialog box, and create an envelope frame around the selected object (The envelope transform frame can be red dotted lines with nodes. A furcated node has four base nodes. A frame-like node is an ordinary node. A round node with furcation inside is the start node. The effect of transform is related to the distribution of the four furcated nodes.

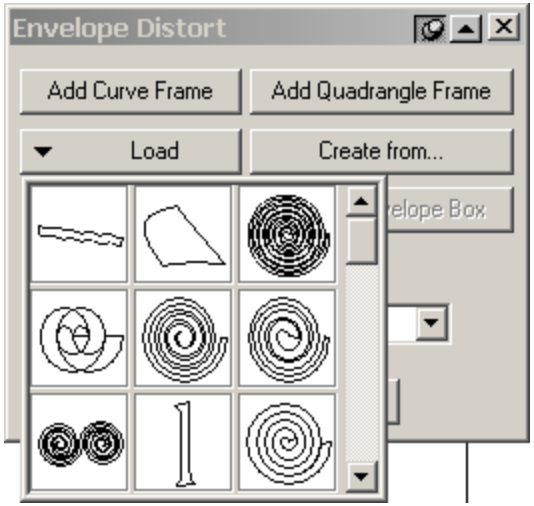


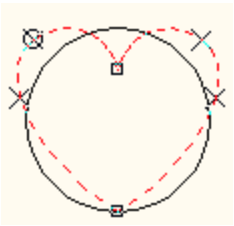


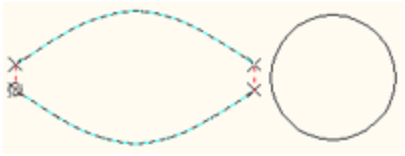


2. Press **Add Quadrangle Frame** in the dialog box, and create a quadrangle frame around the selected object.
3. Press **Load** in the dialog box, and the envelope dialog box pops up. Double-click the envelope frame in the dialog box, and create an envelope transform frame around the selected object.
4. Press **Create From** in the dialog box, and the cursor turns to a big black arrow. Use the mouse to click the graphic as the envelope frame in the page to create the envelope transform frame (the envelope frame shows at the clicked graphic).









If selected graphic is a single closed path, we need to set anchor point as follows. Open the **Node Editor** window, and select one node in the graphic. Click the **Anchor** button in the **Node Editor** window to set this node as the anchor point.
Apply the same methods to set anther three nodes.
5) Adjust the envelope frame
After the envelope frame is created, we can adjust it (if we don't need to adjust it, press Apply to do transform). The method of adjusting envelope frame and that of adjusting the shape of the graphic using Node Editor tool are the same, as well as move nodes and control points, add and delete nodes, and change the properties of the nodes. All these can refer to Section 4.4.

6) Create Transform Effect

After a satisfied envelope frame is created, press **Apply** in the dialog box. The selected object transform based on the shape of the envelope frame.

If the user is not satisfied with the transform effect, select **Node Editor** tool in the **Graph** toolbar. After adjust the envelope frame, and then press **Apply**.

If the transform effect is good, press **Cancel Envelope Box** in the dialog box. The Envelope Frame disappears and the transform effect is saved. In this case, the user cannot do transform again by using the method of adjusting envelope frame, but to create a new envelope frame.

If the user wants to save the current envelope frame of the object for other objects, press **Save Envelope Box** in the dialog box. The Envelope Frame is saved in the Reserved Envelope Frame (Press **Load**, which can be found at the end).

Notes:

① *For Envelope Distort, only one graphic object or a group object (the group object is the graphic object) can be selected.*

② *For creating the envelope frame from a graphic, the user only can select a closed path or an object with two open paths as the envelope frame object. Such objects include a graphic object (with only one closed path or two open sub paths), or a group object (with only two graphic objects, and each graphic has only one open sun path).*

③ *To apply a single closed path object as the envelope frame, four anchor points should be set. If the positions of anchor points are not set right, click Apply in the Envelope Distort dialog box. A dialog box pops up as shown in the graphic. Click OK and then reset the anchor points.*

④ *The effect of Envelope Distort has relationship with the direction of the path in the envelope frame. If the connection lines between the four furcated nodes are crossed, the effect of transform can be very odd. In this case, reverse one direction of the path in the envelope frame, and then do envelope transform.*

Fill Interlaced Line...: to fill in lines with different directions (horizontal or vertical) and colors respectively according to the folding states of the graphics. We often use Fill Interlaced Line to design latent effect, as shown in the graphic.

The procedure of **Fill Interlaced Line** is as follows.

1) Select the objects to be filled in (two or more).
2) Select **Effect > Fill Interlaced Line** to open the **Fill Interlaced Line** dialog box.
3) Set the options for **Fill Interlaced Line** in the dialog box.
4) Click **OK**, and the selected object is filled.

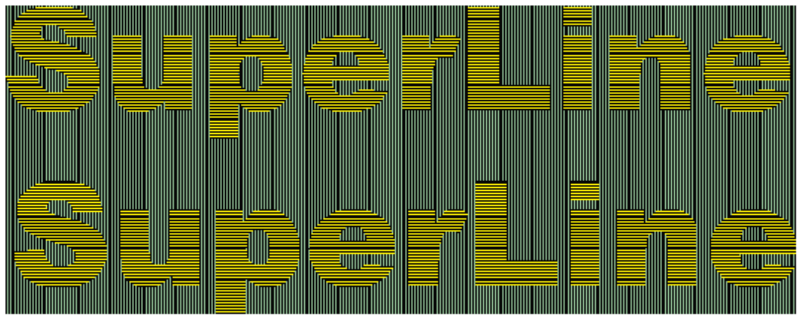
After the execution of **Fill Interlaced Line**, a new group object is created and the original selected object does not change.

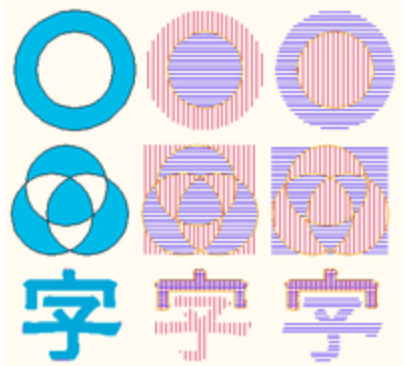
During the application of **Fill Interlaced Line**, which part of the object fill in horizontal lines and which fill in vertical lines are determined by the paths of the object.

For a cirque as shown in the figure above, the part of the cirque can fill in color. If do **Fill Interlaced Line** for this cirque, the part of the cirque fills in vertical lines and the inner part fills in horizontal lines. If the Exchange the Horizontal and Vertical Lines check box is checked, it is reverse.

For a graphic with multiple sub paths crossed partly as shown in the figure above, the part that the sub paths do not cross fills in horizontal lines and the crossed part and the whole frame fill in vertical lines. If the **Exchange the Horizontal and Vertical Lines** check box is checked, it is reverse.

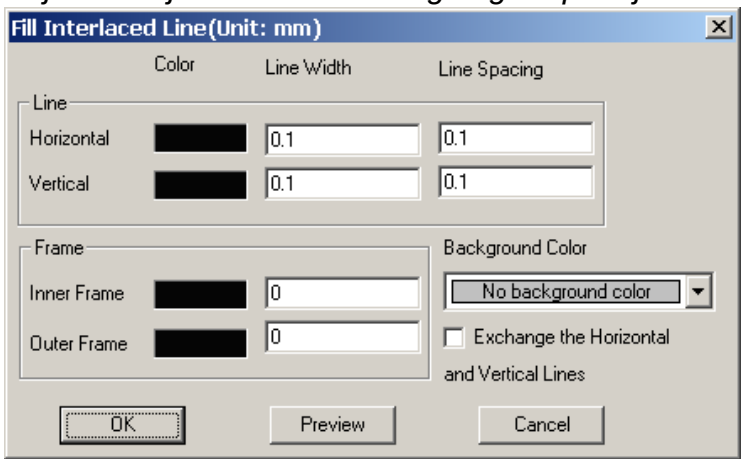
For a text as shown in the above figure, the text part fills in horizontal lines and the text frame fills in vertical lines. If the **Exchange the Horizontal and Vertical Lines** check box is checked, it is reverse.



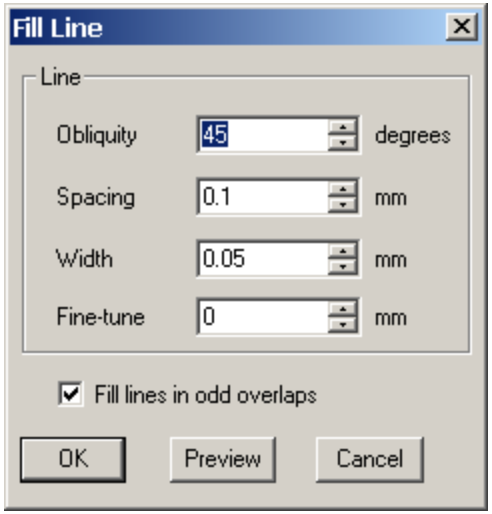


Line: It defines the properties (color, line width and terminal point) of the horizontal and vertical lines filled in the object. Click **Horizontal** or **Vertical**, the **Color** dialog box pops up. You can set the colors of horizontal and vertical lines respectively. And the line width can be specified in the **Line Width** edit boxes.
Line Spacing: It defines the line spacing between the adjacent horizontal and vertical lines filled in the object. The bigger the line spacing, the filled lines are sparser. Input values in **Line Spacing** edit boxes directly.
Frame: It refers to the properties (color, line width and terminal point) of the outer envelope frame around the horizontal and vertical lines. Click **Inner Frame** or **Outer Frame**, the **Color** dialog box pops up. You can set the colors of frame lines. And the corresponding **Line Width** edit boxes control line width of the frame.
Background Color: It refers to the filling color under the crossed lines, which are listed in the list box. There are three options in the list box. If **No background color** is selected, don't fill in any color under the crossed lines. If Last color used is selected, fill in the previously selected color under the crossed lines. If **New color** is selected, the **Color** dialog box pops up and allows the user to select the filling color under the crossed lines (This color becomes the **Last color used** for the next filling).
Exchange the Horizontal and Vertical Lines. When this option is selected, the horizontal and vertical lines of the filling object exchange.

Note: *We can select the following objects for Fill Inter-laced Line, such as a graphic object (with multiple sub path inside), text, group object, or multiple objects. If group object is selected, the graphic objects and text take effect. Selecting multiple objects is just like selecting a group object.*



Fill Line...: to fill in straight lines. Which is to use a series of parallel lines to fill in the inner area of the graphic. The density and the direction of the straight lines can be changed.
The procedure of **Fill Line** is as follows.
1) Select the objects to be filled in (one or more).
2) Select **Effect > Fill Line** to open the **Fill Line** dialog box.
3) Set the options in the dialog box.
4) Click **OK** and the selected object is filled.

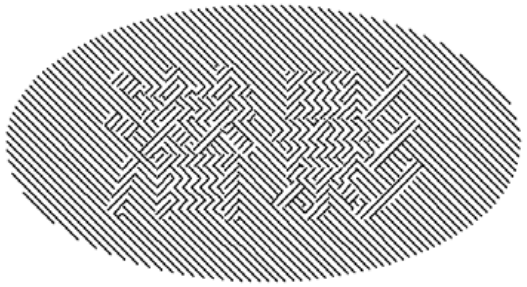


Note: *We can select the following objects as Fill Line, such as a graphic object, image, text, group object, clip-mask object, or multiple objects. If the graphic has multiple sub paths, each sub-path will be filled. If an image is selected, the image will disappear and there is no other effect. If text is selected, it is equivalent to convert the text to graphic first and then do Fill Line. If a clip-mask object is selected, fill in the mask object and other objects in the mask disappear. If a group object is selected, fill in the graphic object, text and clip-mask object in the group. Selecting multiple objects is just like selecting a group object.*

Obliquity: It refers to the obliquity degree of the filled parallel lines, which determines the direction of the line.
Spacing: It is the distance between the filled parallel lines. The bigger it is, the lines are sparser.
Width: It is the width of the parallel lines.
Fine-tune: It has small effect on the filling effect but determines the effect of the margin of the object. Its minimum value is 0 and maximum value is less than the sum of the line width and the spacing (It is insignificant to have a big value).
Fill lines in odd overlaps: It means to fill in the paths with odd directions in the selected paths.

The **Fill lines in odd overlaps** check box is useful for objects with multiple crossed paths. For a single path object, we must select this check box. The function of this option is shown in the graphic. The upper two graphics are the same original object, a group object. The lower-left graphic is the effect when this option is selected, while the lower-right one is the effect when it is NOT selected.

With the properties of the **Fill lines in odd overlaps**, by selecting the text and the graphic overlapped with it to do **Fill Line**, we can design the effect of characters cut in intaglio and characters cut in relief, as shown in the below graphic. According to this, we also can overlap the characters cut in intaglio and characters cut in relief filled in lines with different degrees, and create latent effect.



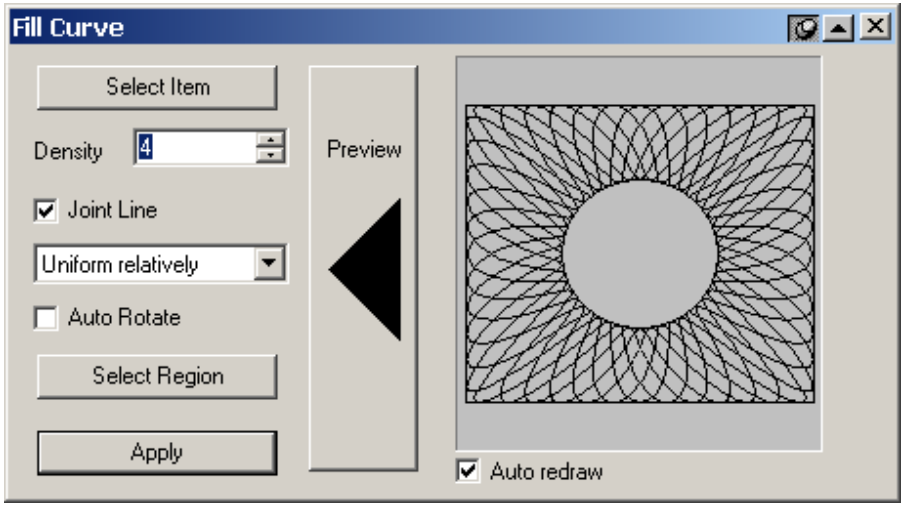
Fill Curve…: to fill an area using curves (unit). Fill Curve is absolutely necessary in the anti-counterfeit design.

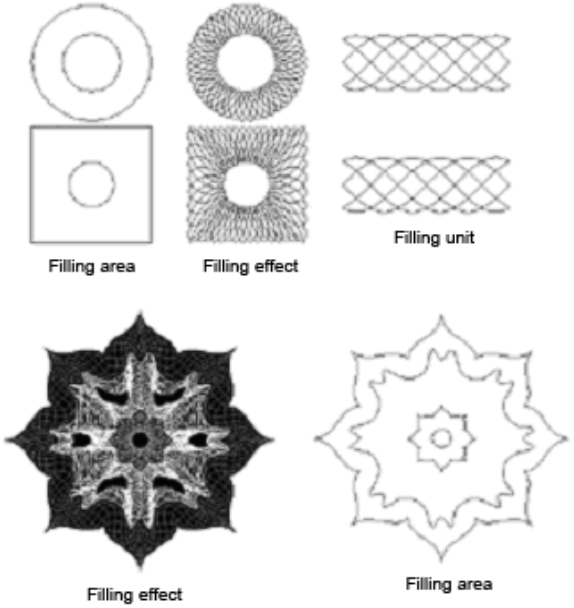
The procedure for Fill Curve is as follows.

1) If the **Fill Curve** dialog box is not opened, select **Effect > Fill Curve** in the menu. It is displayed as follows.
2) Select filling parameters in the dialog box.
3) Click **Select Item** in the dialog box. The cursor turns to a big black arrow ➡. Move the cursor to the page, click the graphic object as the filling unit.
4) Click **Select Region** in the dialog box. The cursor turns to a big black arrow ➡. Move the cursor to the page, click the graphic object as the filling area.
5) If the triangle arrow in **Preview** points to right, click this button to open the filling preview in the dialog box. Otherwise, click this button to close the preview.

If the **Auto Redraw** check box is selected when open the preview, the preview changes automatically when the filling parameters (such as **Density**) change.

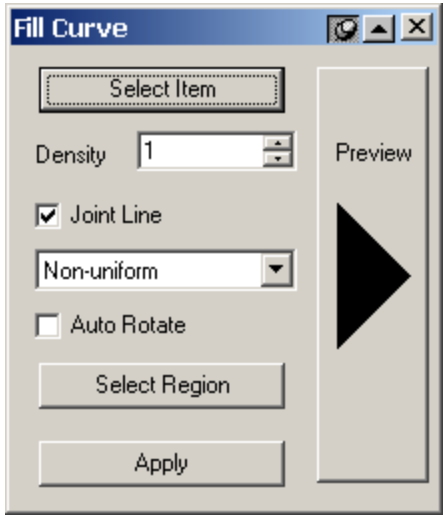
6) If the user is satisfied with the selected parameters, click **Apply** in the dialog box and filling effect is created.





Density means the repeated times in the filling area. The bigger it is, the denser the unit distribution is. The **Joint Lines** option enables you to get a better effect. The uniform options, including **Non-uniform, Uniform relatively** and **Uniform absolutely**, allows you to select a uniform degree of the distribution of the filling graphics.

And when the **Auto Rotate** option is checked, the filling graphic rotates according to the change of the filling area.

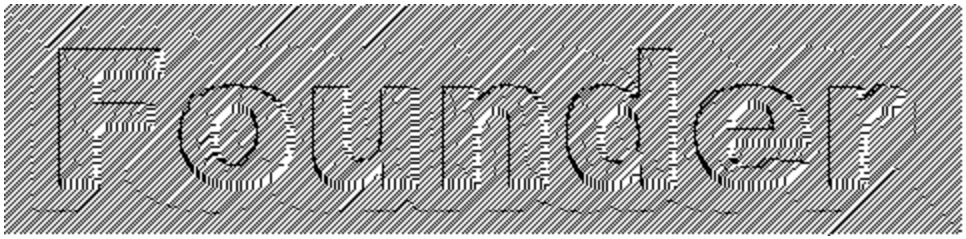


Notes:

① *The filling unit and filling area only can be one graphic object or group object (the group objects are graphic objects). Moreover, the object as filling area only can have two closed sub paths. This means that if the filling area is a graphic object it must contain two closed sun paths and if it is a group object it must have two graphic objects and each object has only one closed path. If the selected area does not meet this requirement, SuperLine pops up a message box.*

② *If there is unclosed graphic in the filling unit, it uses the filling graphic created from this graphic to fill.*

Relief on Line...: to use straight lines as the basic lines for filling the graphic, and design relief effect on lines at the rim of the graphic. The characteristics of **Relief on Straight Lines** are concise and standing-out at the rim. The effect of **Relief on Straight Lines** is shown in the graphic.



The method of designing **Relief on Straight Lines** is as follows.

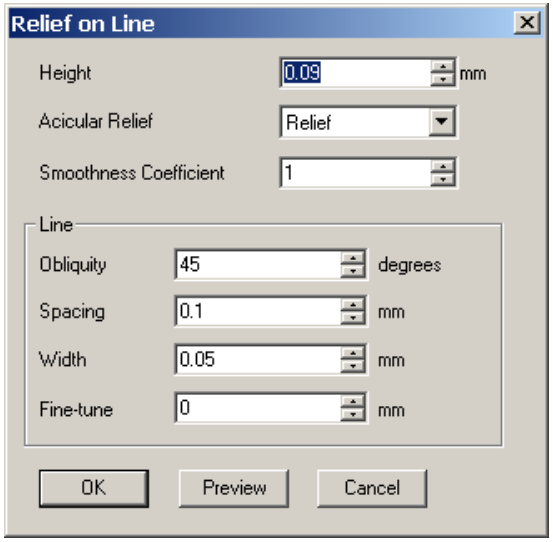
1) Select the object for making relief (one or more objects).
2) Select **Effect > Relief on Line** to open the **Relief on Line** dialog box.
3) Set relief effect options in the dialog box.
4) Click **OK.** The relief effect is generated for the selected object.

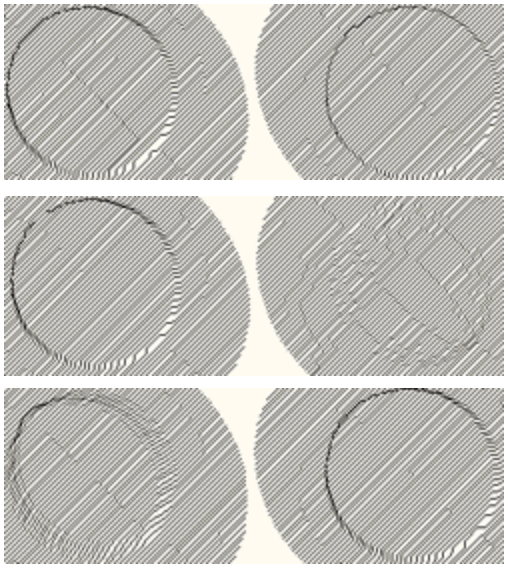
Notes:

① *Because the relief effect is created according to the folding of the border of the graphic, if there is only one sub path in the selected object, the create effect will not be satisfied. There must be many sub paths in the selected object when creating relief effect. For example, if we want to create the relief effect shown in the figure, we can select the ellipse and the rectangle (which is bigger than the ellipse and overlapped with the ellipse) at the same time, or select the group object after grouping the ellipse and the rectangle, or combine the ellipse and the rectangle to a graphic with multiple sub paths, and then select this graphic.*

② *When design the relief effect, we can select the following objects, such as a graphic, text, group object, or multiple objects. If text is selected, convert the text to curves first and then make relief effect. If group object is selected, the graphic object and text in the group take effect. If multiple objects are selected, it is the same as selecting a group object.*

Height: It is the height of the relief. The bigger it is, the relief effect is more apparent. If this value is bigger than the line spacing, the lines may get crossed.
Acicular Relief: It refers to make which kind of relief. There are two options in the list box, Relief and Raster. Select **Relief** to create traditional relief effect. Select **Rasterize** to create the effect of viewing objects through the raster. The latter effect is not very obvious, which makes it hard to be counterfeited.
Smoothness Coefficient: It refers to the smooth degree of the rim of the relief. The value ranges from 0.0001 to 1(0.001mm to 0.1mm). The bigger the coefficient, the rim of the relief is more precipitous. The smaller the coefficient, the rim of the relief is smoother.
Line: The options in the **Line** area determine the line characteristics for creating the relief. They are similar to the options set in the **Fill Line** dialog box.
Obliquity: It refers to the direction of the line for making relief.
Spacing: It is the distance between the lines. The smaller the spacing and the denser of the lines, the relief effect is finer. Inputting values in the box can do this.
Width: It is the width of the lines.
Fine-tune: It refers to the inner method for creating relief. It has small effect on the relief effect. Please refer to the explanation in Fill Line dialog box.



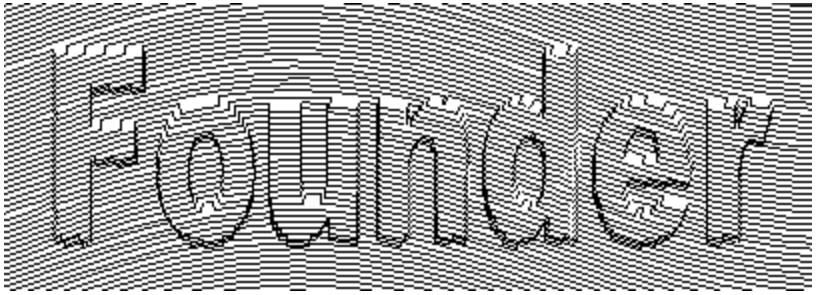


Height

Acicular Relief

Smoothness Coefficient

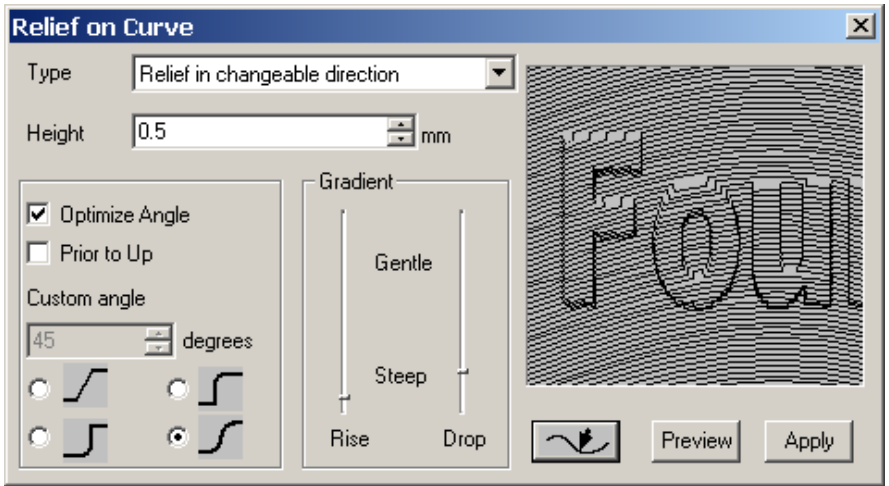
Relief on Curve...: to assign a group of curves as the basic lines filled in the graphic, and design relief effect at the rim of the graphic. The characteristics of Relief On Curves are flexible and much more favored to create patterns even hard to be counterfeited. The effect of Relief On Curves is shown in the graphic.



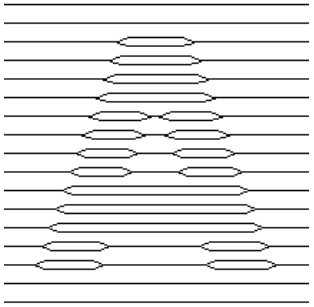
The procedure of designing **Relief on Curve** is as follows.
1) Select the object for making relief (one or more objects).
2) Select **Effect > Relief on Curve** to open the **Relief on Curve** dialog box.
3) Set relief effect options in the dialog box.
Assign Basic Curve for Relief: Basic Curve for Relief is the curve for making Relief on Curves, which is the curve to fill in the relief and determine the effect of the relief. In the dialog box, click **Path** button and the cursor turns to a big black arrow ➡. Move the cursor to the page, and click the graphic object as the Basic Curve for Relief. The selected object should be a group of relatively denser curves. The denser the curves, the relief effect is more beautiful.
Preview: Click Preview in the dialog box to preview the current relief effect on the dialog box.
4) If we are satisfied with the parameters, click **Apply** in the rotate window to create the relief effect.

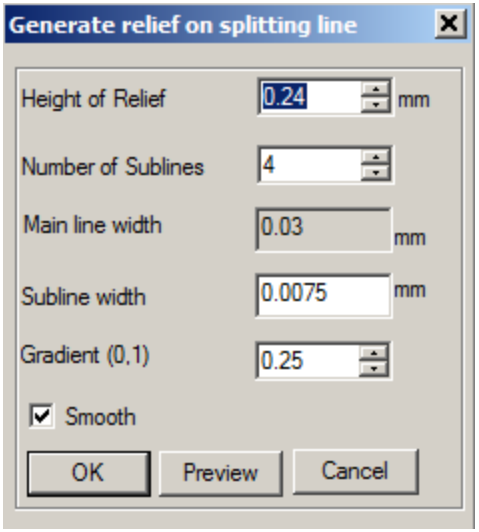
Note: *We can select the following objects for designing relief effects, such as a graphic object, text, group object, or multiple objects. If text is selected, convert it to curve first then make relief. If group object is selected, only the graphic objects and text in the group take effect. If multiple objects are selected, it is similar to selecting a group object.*

Type: It refers to the format of the relief, including the relief of convertible direction and relief of fixed direction.
Height: It is the height of the relief. The bigger it is, the relief effect is more apparent. If this value is bigger than the line spacing, the lines may get crossed.
Gradient: It is the smooth degree at the rim of the relief, which can be adjusted by two scroll bars.
The left scroll bar is used for adjusting the gradient of the beginning rim of the relief. Drag the scroll bar up, and the rim turns smooth. Drag it down, and the rim turns precipitous.
The right scroll bar is used for adjusting the gradient of the end rim of the relief. Drag the scroll bar up, and the rim turns smooth. Drag it down, and the rim turns precipitous.
The beginning rim and the end rim of are related to the direction of the curve, but not simply the right and the left.
Optimize Angle: Select this check box. Both the relief object and the basic lines determine the curve direction of the beginning and end rim of created relief. Otherwise, the curve direction is only determined by the basic lines, but has no relationship with the relief object.
Prior to Up: Select **Prior to Up**, and the starting and end curve of the relief are convex. Otherwise, the curves are concave. This check box is only valid to relief of convertible direction.
Custom angle: This can be used to set the relief degree, which is the curve direction at the starting and end rim. This check box is only valid to relief of fixed direction.
Relief style: There are four buttons in the group box to control the relief styles.



Relief on Split Line...: to use split lines as the basic lines for filling the graphic, and design relief effect on lines at the rim of the graphic.
The procedure of designing **Relief on Split Line** is as follows.
1) Create an object and a path, put the path above on the object. And select them.
2) Select **Effect > Relief on Split Line** to open the **Relief on Split Line** dialog box.
3) Set relief effect options in the dialog box.
Height of Relief: the space of the split lines(from the above line to the bottom line)
Number of Sublines: the number of the sub line.
Main line width: is the line width of the path, automatically indentify with SuperLine.
Subline width: calculated by dividing the **Number of Sublines** by the **Main line width**.
Gradient: the gradient of the start and end of the split line.





Auto Lace…: to continuously copy one or more elements and create a frame. It has many different formats. Lace is the framework of the texture, which provides clear skeleton for the whole texture and makes the whole texture a clean-cut. It is also an important decoration in the anti-counterfeit design.

The procedure of the **Auto Lace** is as follows.

1) Select the object as lace unit (see Notes).

2) Select **Effect > Auto Lace** to open the **Auto Lace** dialog box.

3) Set lace options in the dialog box.

Closed joint is to join the copied lace units as one and create the symmetric ungrouped lace, ignores the filling properties of the units. **Simple joint** is to simply join the copied lace units to a lace. The created lace is not symmetric and can be ungrouped to lace units can keep the filling properties of the lace unit.

Width: It means the width of the created lace object. **Height**: It means the height of the created lace object.

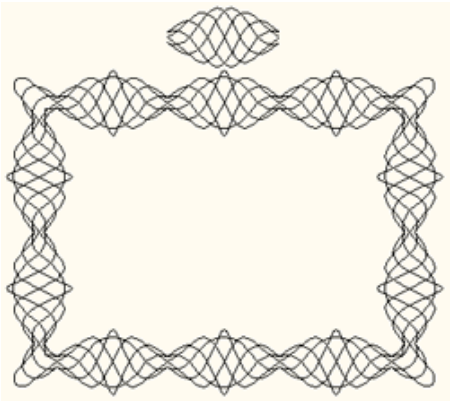
Unit: Determines the unit for the Width and Height values.

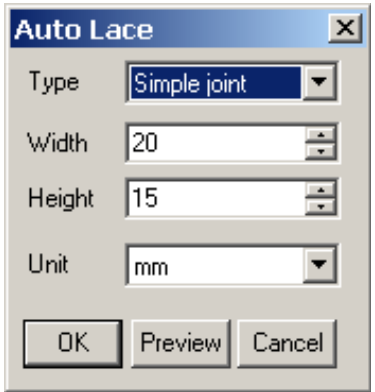
4) Click **OK** and the lace is created. At the corner of the lace, SuperLine will treat it specially to make the joint between the lace units natural and smooth.

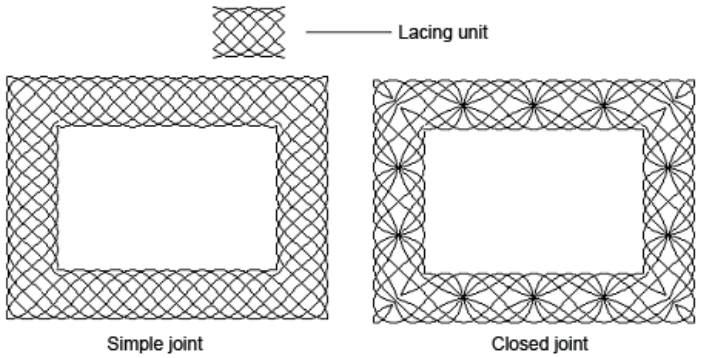
Notes:

① *The lace unit of **Simple joint** can be any graphic objects and text objects.*

② *The lace unit of **Closed joint** can be single graphic object, multiple objects, and group objects. If multiple objects are selected, there must be a graphic object with open sub path and the text objects and clip-mask objects are all used for creating lace (Text must be converted to curve first and only mask in clip-mask objects are used.). If a group object is selected, there must be graphic objects with open sub path in the group and the text and clip-mask objects are all used for creating lace.*

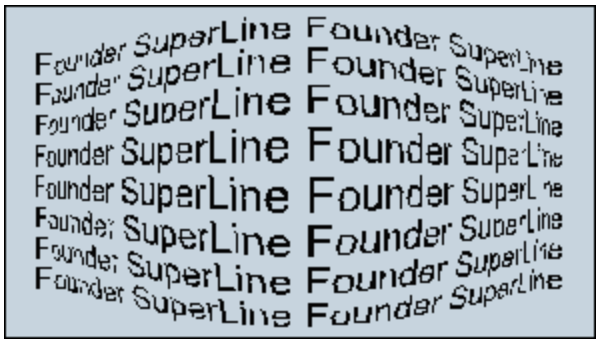


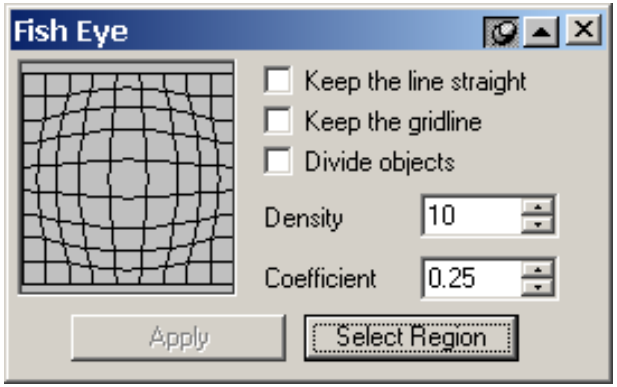




Fish Eye…: to create concave-convex effect of the graphic.
The procedure of creating **Fish Eye** effect is as follows.
1) Select the object for making fisheye.
2) If the **Fish Eye** dialog box is not opened, open it by clicking **Effect > Fish Eye.**
3) Set up options in the rotate window.
The grid sketch map for guiding filtering is at the left side of the dialog box. The distribution of grid determines the effect of filtering.
4) After assigning all parameters, click Apply in the dialog box to create fisheye effect.

Notes:
① *We can select the following objects for creating fisheye effect, such as a graphic object, text, group object, or multiple objects. If text is selected, convert it to curve first then make fisheye effect. If group object is selected, make fisheye effect for the graphic objects and text in the group at the same time. If multiple objects are selected, it is similar to selecting a group object.*
② *We can select the following objects as the filtering area such as a graphic object, text (need to convert to curves first), and group object.*





Keep the line straight: If this check box is selected, the straight line keeps straight line during the process of graphic change.

Keep the gridline: If this check box is selected, the grid lines for guiding the filtering also keep as a part of filtering effect after the graphic change is done.

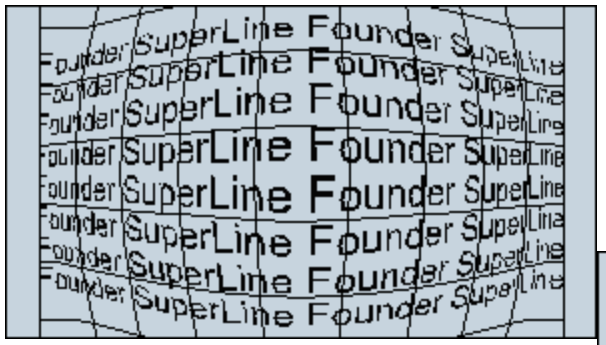
Divide objects: Select this check box. Add nodes on the graphic as necessary during the graphic change. This can make the wave filtering change more complete. If this check box is not selected, the graphic change may be limited.

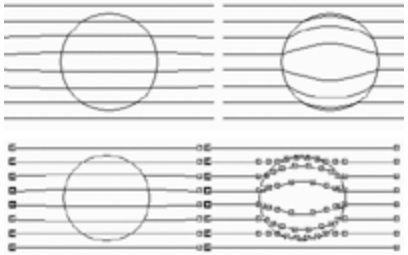
Use the **Node Editor** tool in the **Graph** toolbar to select the changed graphic (if it is the group object, **Ungroup** first.), and view the added nodes.

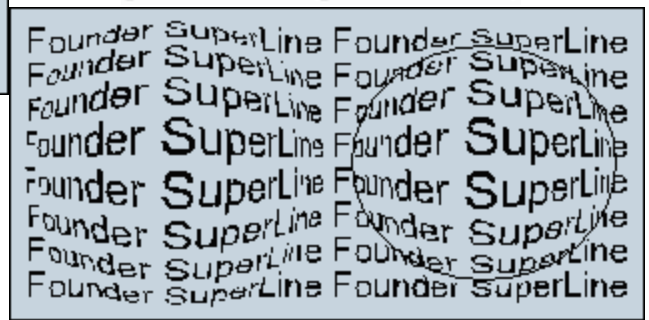
Density: It is the density of the grid lines. The bigger the density, the change is finer. It ranges from 2 to 20.

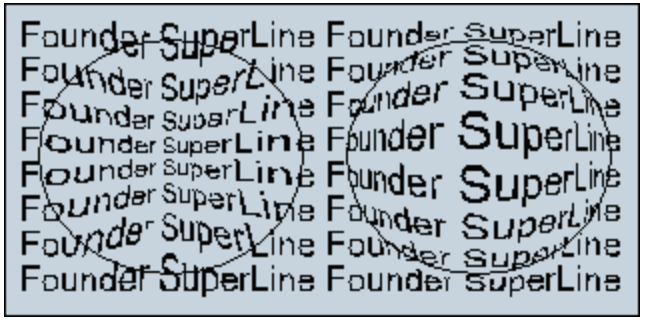
Coefficient: It is the degree of the wave filtering effect and ranges from -1 to 1. If it is bigger than 1, the wave filtering effect is convex. If it is less than 0, the effect is concave.

Select Region: The user can decide which part to change area during making fisheye effect. It is equivalent to assign the wave filtering, which is the mask (or selected area) in the wave filtering of image. Click the **Select Region** button, the cursor turns to an arrow pointing to right. Use the mouse to click the graphic object used as the wave filtering area. The part of the object in the area is filtered, and the rest keeps unchanged. If no Select Area is selected, the whole part of the selected object is filtered.



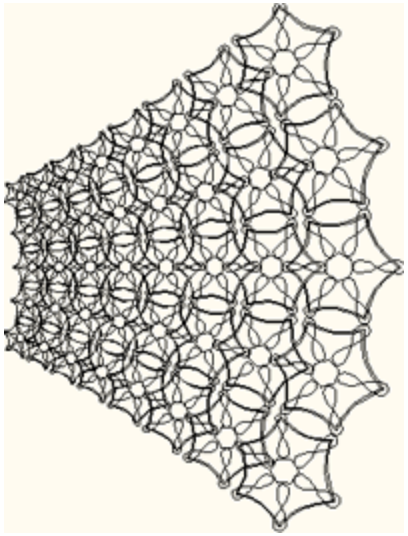


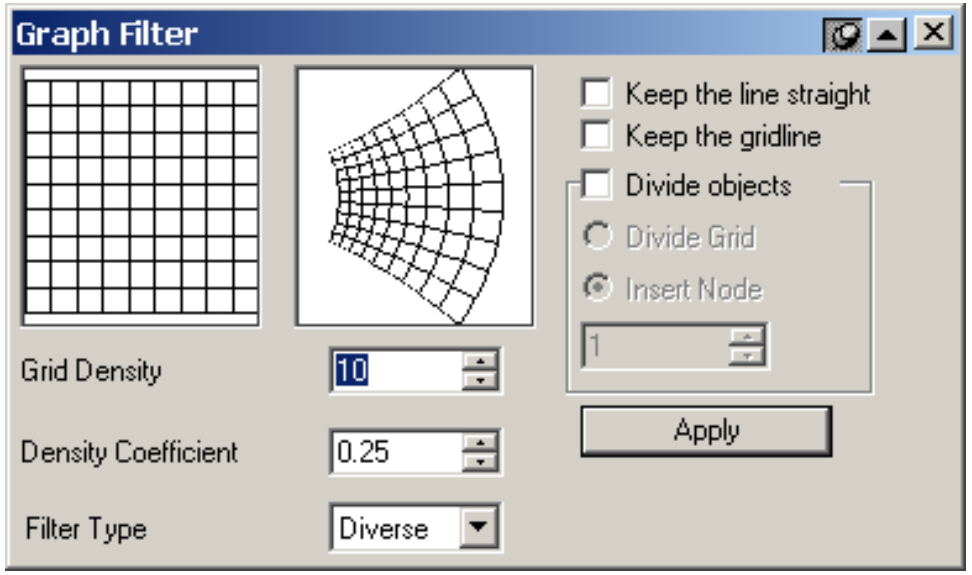




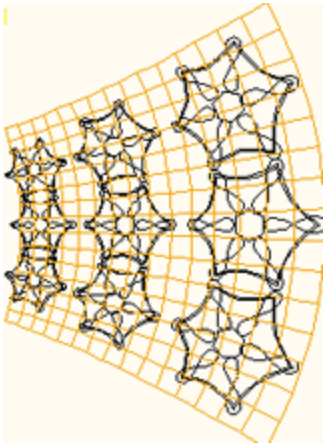
Graph Filter...: to change the shape of the object to cause the pattern of the object to change.
The procedure for creating **Graphic Filter** is as follows.
1) Select the object for filtering.
2) If the **Graph Filter** dialog box is not opened, open it by clicking **Effect > Graph Filter.**
3) Set the options in the dialog box.
The grid sketch map for guiding wave filtering is at the left side of the dialog box. The effect sketch map for wave filtering is in the middle.
4) After assigning all parameters, click **Apply** in the dialog box to create **Graphic Filter** effect.

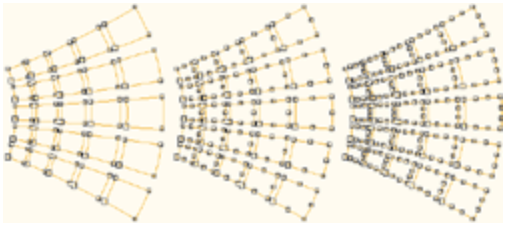
Note: *We can select the following objects for creating graphic filter effect, such as a graphic object, text, group object, or multiple objects. If text is selected, convert it to curve first then make graphic filter effect. If group object is selected, only the graphic objects and text in the group participate in Wave Filtering. If multiple objects are selected, it is similar to selecting a group object.*

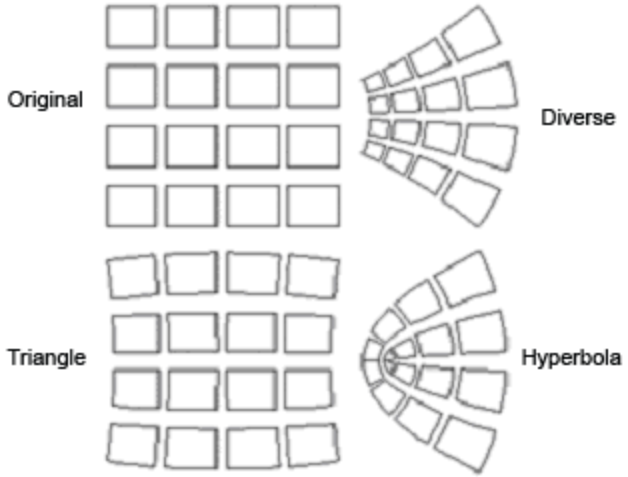




Keep the line straight: If this check box is selected, the line keeps line.
Keep the gridline: If this check box is selected, the grid lines for guiding the wave filtering also keep as a part of wave filtering effect after the graphic change is done.
Divide objects: This determines how to deal with the nodes in the graphic during wave filtering. If this check box is not selected, no nodes are added and the graphic change may be limited.
Divide Grid and **Insert Node** :If **Divide objects** is selected, **Divide Grid** and **Insert Node** round buttons are valid. So we can add nodes as necessary. Select the **Divide Grid** round button to add nodes according to the grid distribution. Select the **Insert Node** round button and input the number of nodes in the following value box to insert the assigned number of nodes on the adjacent grid lines. The more the inserted nodes, the wave filtering is smoother and finer.
Use the **Node Editor** tool in the **Graph** toolbar to select the changed graphic (if it is the group object, **Ungroup** first.), and view the added nodes.
Filter Type: This list box defines the styles of the graphic change after wave filtered. There are three options, **Diverse**, **Hyperbola** and **Triangle**. The filtering effect of each option is shown in the following figure.
Grid Density: It is the density of the grid lines. The bigger the density, the change is finer. It ranges from 2 to 20.
Density Coefficient: It is the degree of the wave filtering effect. When the filtering type is Radiate and Triangle, it is valid and ranges from -1 to 1. The bigger the coefficient, the effect is more obvious.







Density Filter...:to change the density distribution of the object to cause the pattern of the object to change. The procedure for creating density filter is as follows.

1) Select the object for filtering.

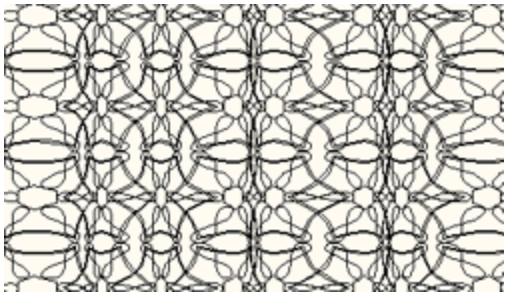
2) If the **Density Filter** dialog box is not opened, open it by clicking **Effect > Density Filter.**

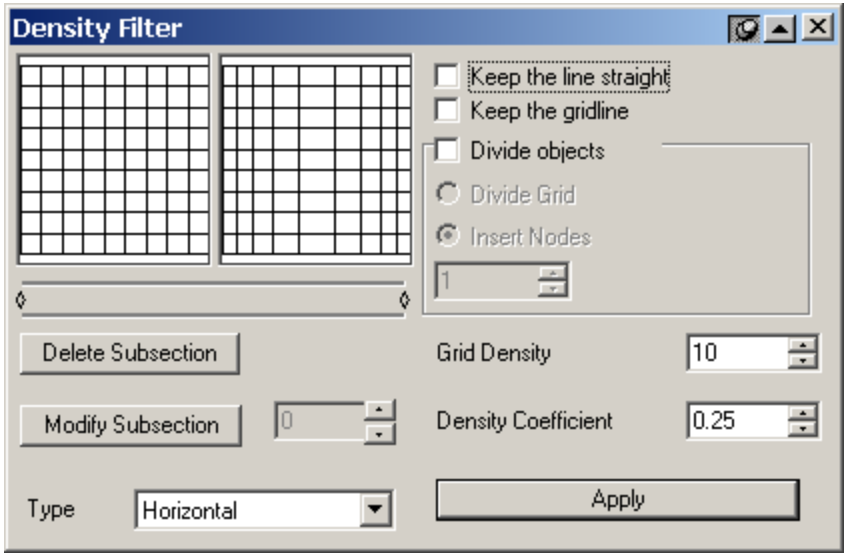
3) Set the options in the dialog box.

The grid sketch map for guiding wave filtering is at the left side of the dialog box. The effect sketch map for wave filtering is in the middle.

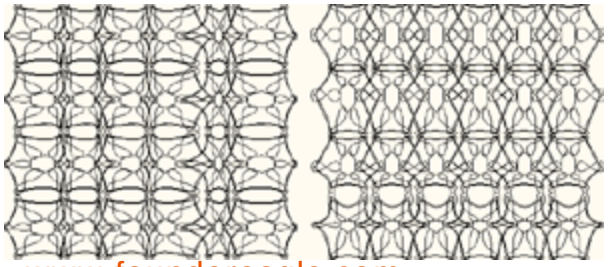
4) After assigning all parameters, click **Apply** in the dialog box to create density filter effect.

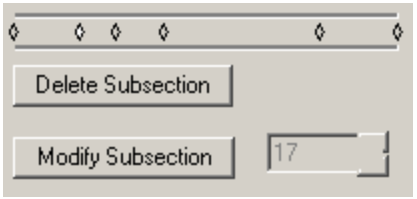
Note: *We can select the following objects for creating Density Filter effect, such as a graphic object, text, group object, or multiple objects. If text is selected, convert it to curve first then make Density Filter effect. If group object is selected, only the graphic objects and text in the group participate in Wave Filtering. If multiple objects are selected, it is similar to selecting a group object.*

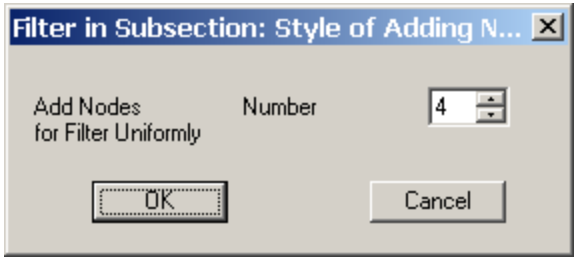




Keep the line straight: Refer to **Graphic Filter**.
Keep the gridline: Refer to **Graphic Filter**.
Divide objects: Refer **to Graphic Filter**.
Type: This list box defines the styles of the graphic change after filtered. There are two options, **Horizontal** and **Vertical**. The filtering effect of each option is shown in the below graphic.
Grid Density: It is the density of the grid lines. The bigger the density, the change is finer. It ranges from 3 to 20.
Density Coefficient: It is the degree of the filtering effect and ranges from -1 to 1. If it is bigger than 0, the filtering effect is convex. If it is less than 0, the effect is concave.
Density Distribution of the Assigned Filtering: The user can decide the density distribution of the assigned graphic that means which parts are dense and which parts are sparse.
There are horizontal lines in the dialog box, which have a lot of scroll bars. These are the tools for adjusting the density distribution. The number and position of the scroll bars determine the density distribution of the wave filtering.
Click the blank area of the horizontal line to add a scroll bar.
Click a scroll bar to select it as the current scroll bar. Its position shows in the value box between the **Delete Subsection** and **Modify Subsection** buttons.
Click **Cancel to cancel the current scroll bar.**
Drag a scroll bar to set its position.
Click **Modify Subsection** and set the number of filtering nodes from the popped up dialog box. Press **OK**, the number and position of the scroll bar will change correspondingly.
After parameters are set, the user can preview the current effect in the dialog box.



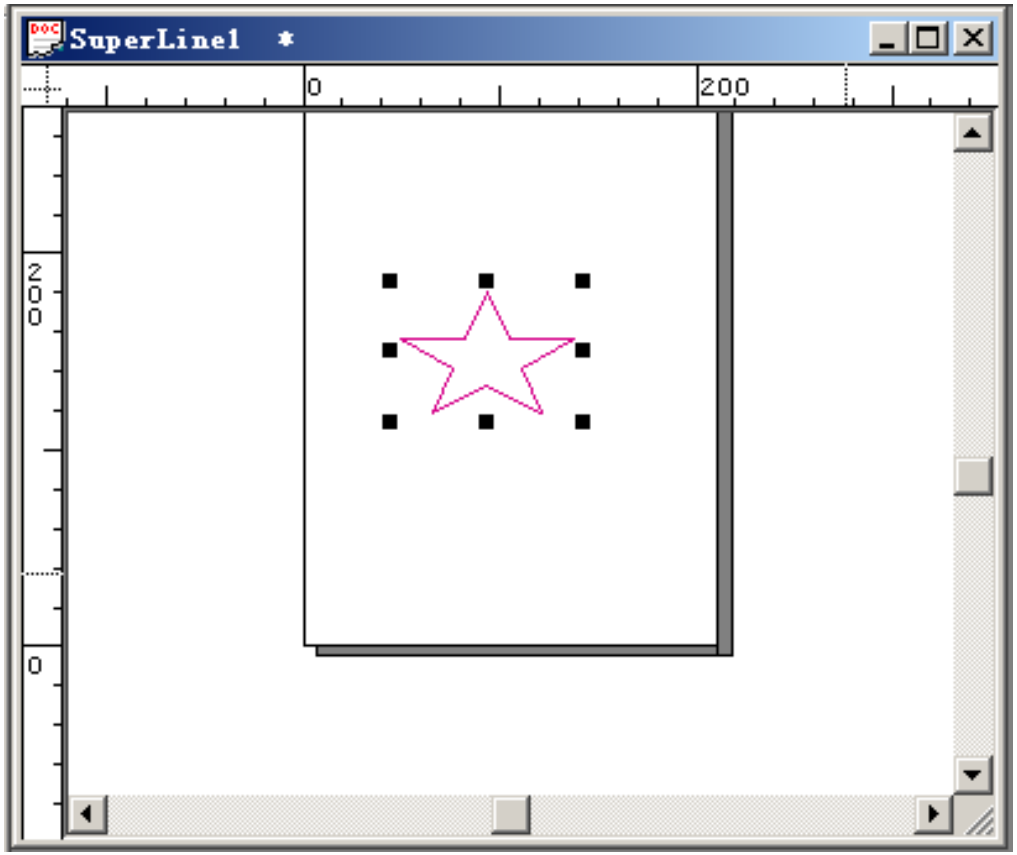




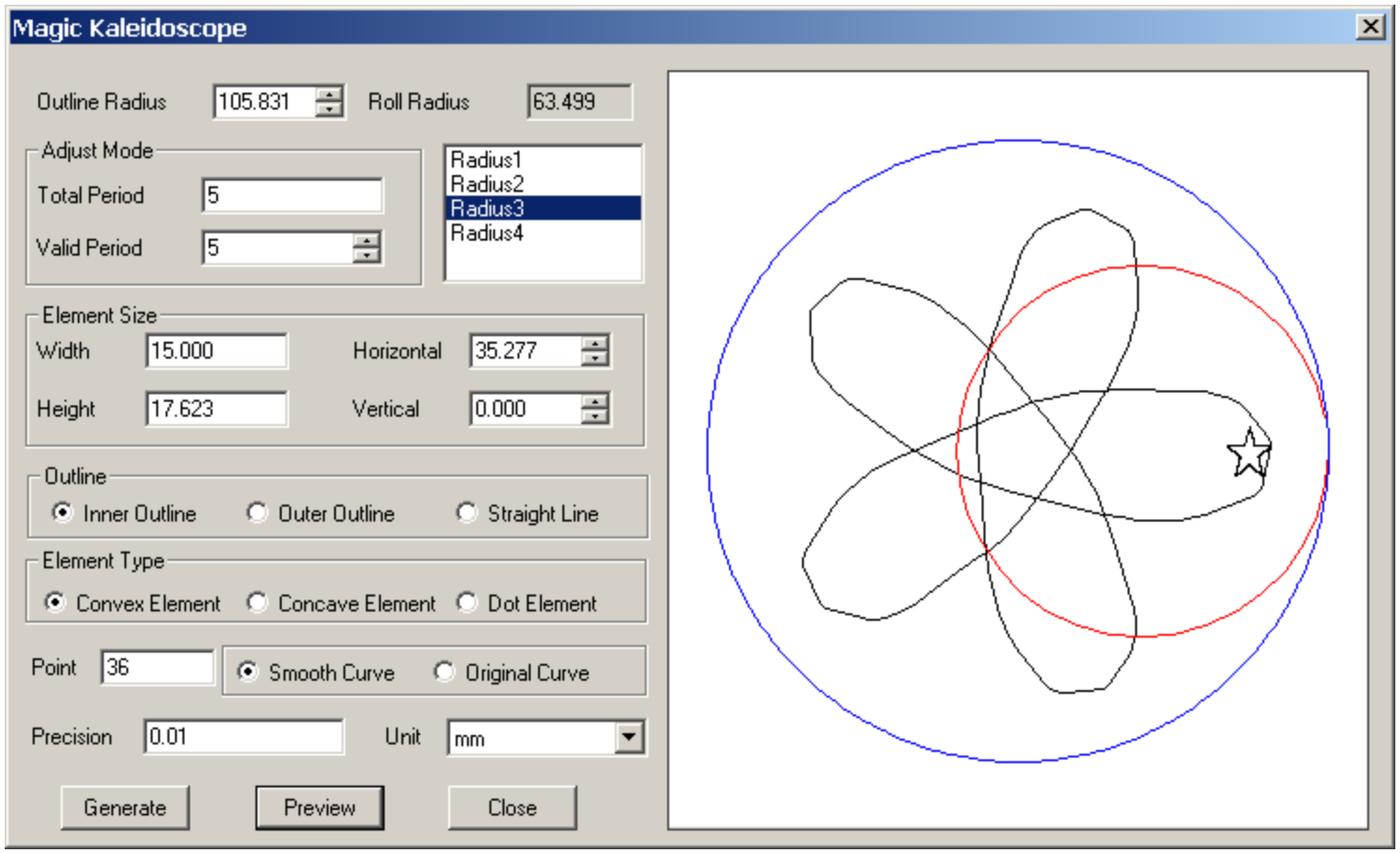
Magic Kaleidoscope: to design a variety of guilloche patterns at your pleasure by only creating a graphic element and define several parameters.

To generate kaleidoscope, perform as follows:

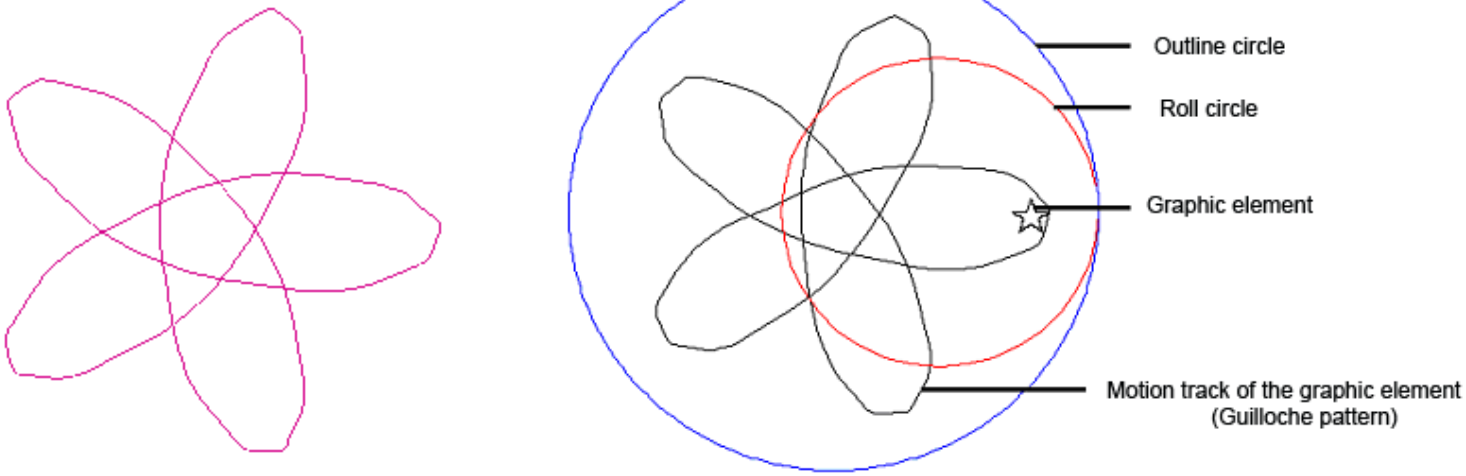
(1)Create a graphic element on the page and make it selected. For example:



(2) Select the **Magic Kaleidoscope** command under the **Effect** menu to open the **Magic Kaleidoscope** dialog box, shown as in the following figure.



(3) In the preview area, as you can see, the graphic object created in procedure (1) (the pentagon) has become a basic unit of the kaleidoscope. Here as an example, we remain all parameters in the **Magic Kaleidoscope** dialog box to their default values, and click **OK**. A kaleidoscope pattern will be generated on the page, as shown in the following figure.



Basic Working Principle of Magic Kaleidoscope

Outline Circle: the big, outmost and abstract circle. Its outline stays in an unmoved state, representing the motion track of the small roll circle inside. It determines the range and size of the generated pattern.

Roll Circle: the small rolling circle inside the outline circle. It moves along the outline of the bigger circle.

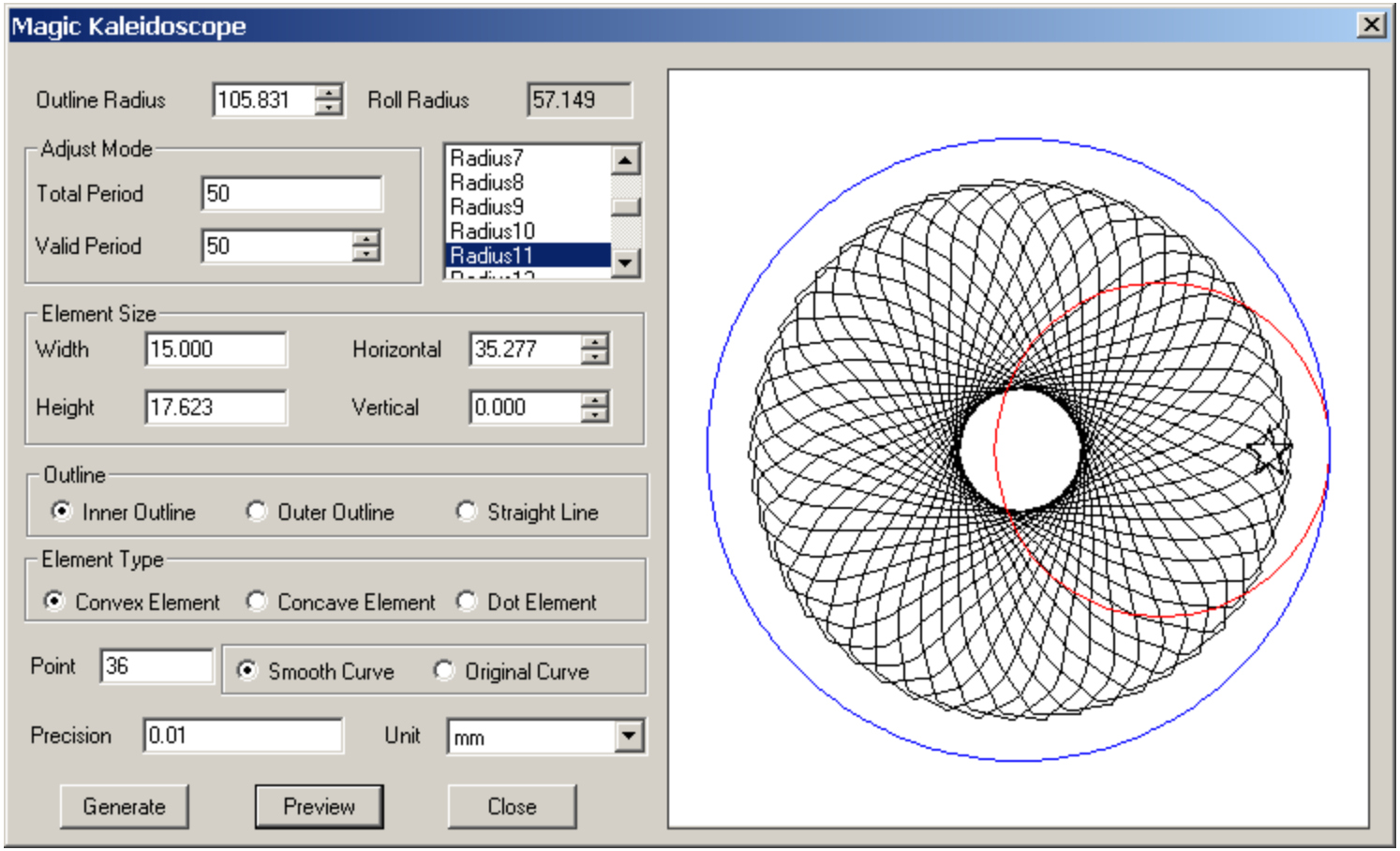
Graphic element: located randomly inside the roll circle, rotating while rolling along with the roll circle.

Motion track of the graphic element: the finally generated guilloche pattern, describing the motion track of the graphic element as a result of the rotation and

Parameter settings

The settings for the big outline circle, the small roll circle and the graphic element are closely affected by each other. Different combination of their settings can produce various kaleidoscope effects.

When you want to view the effect after you have modified one or more of the parameters, you can click the **Preview** button or click anywhere in the preview area to preview. In this way, you don't need to generate it on the page each time.



1) Settings for outline circle and roll circle

Radiuses of the outline and roll circles determine the shape, size and period of the kaleidoscope.

Outline Radius: the radius of the outline circle, you can define its value by inputting a number or clicking the adjustment button to select a value.

Roll Radius: the radius of the roll circle. Its value is automatically generated based on the outline radius and total period. The list box in its below provides all available options for you to select.

Total Period: the input period by the user for the motion track of the graphic element.

Valid Period: the period allowed to be set, its value must be an integer no more than the total period. By default, it is the total period.

2) Settings for the graphic element

Width and **Height:** you can define the width and height of the graphic element through these two options. Different settings will produce various kaleidoscope effects. When the **Element Type** is set to **Dot Element**, these two options are disabled.

Horizontal and **Vertical**: refer to the horizontal and vertical spacing between the center of the graphic element and that of the roll circle. Taking the center of the roll circle as the origin of coordinate, positive value represents a location on the right or above of the center, and negative value represents a location on the left or below of the center.

Notes:

① *For the elements created on the page, when being imported into the Magic Kaleidoscope dialog box, no matter what sizes they are in, they will all be taken as 0 by default. You can define their sizes by changing the **Width** and **Height** values. Click the preview area when you have changed these two values, the modified preview effect will be displayed.*

② *All previews are displayed in appropriate proportion, therefore, the outline radius, roll radius and element size represented in the preview are NOT the actual sizes.*

3) Outline setting

Inner Outline: roll circle rolls along the inner side of the outline.

Outer Outline: roll circle rolls along the outer side of the outline.

Straight Outline: roll circle rolls in straight line.

4) Element Type setting

Convex Element: The kaleidoscope describes the motion track of the point on the element that is closest to the tangent point.

Concave Element: The kaleidoscope describes the motion track of the point on the element that moves in even speed.

Dot Element: the element is considered as a dot. The kaleidoscope describes the motion track of the dot.

5) Precision settings

Point: refers to the original points on the track in each period. The bigger the Point value is, the smoother the lines are, but the speed will be slower.

Smooth Curve: the original points are automatically reduced, so as to fit smooth cubic Bezier curve

Original Curve: No fitting for the original points, the pattern is formed by combining the starts and ends of straight line segments directly.

Precision: refers to the precision for the curve fitting. The bigger the value is,the lower the precision will be.

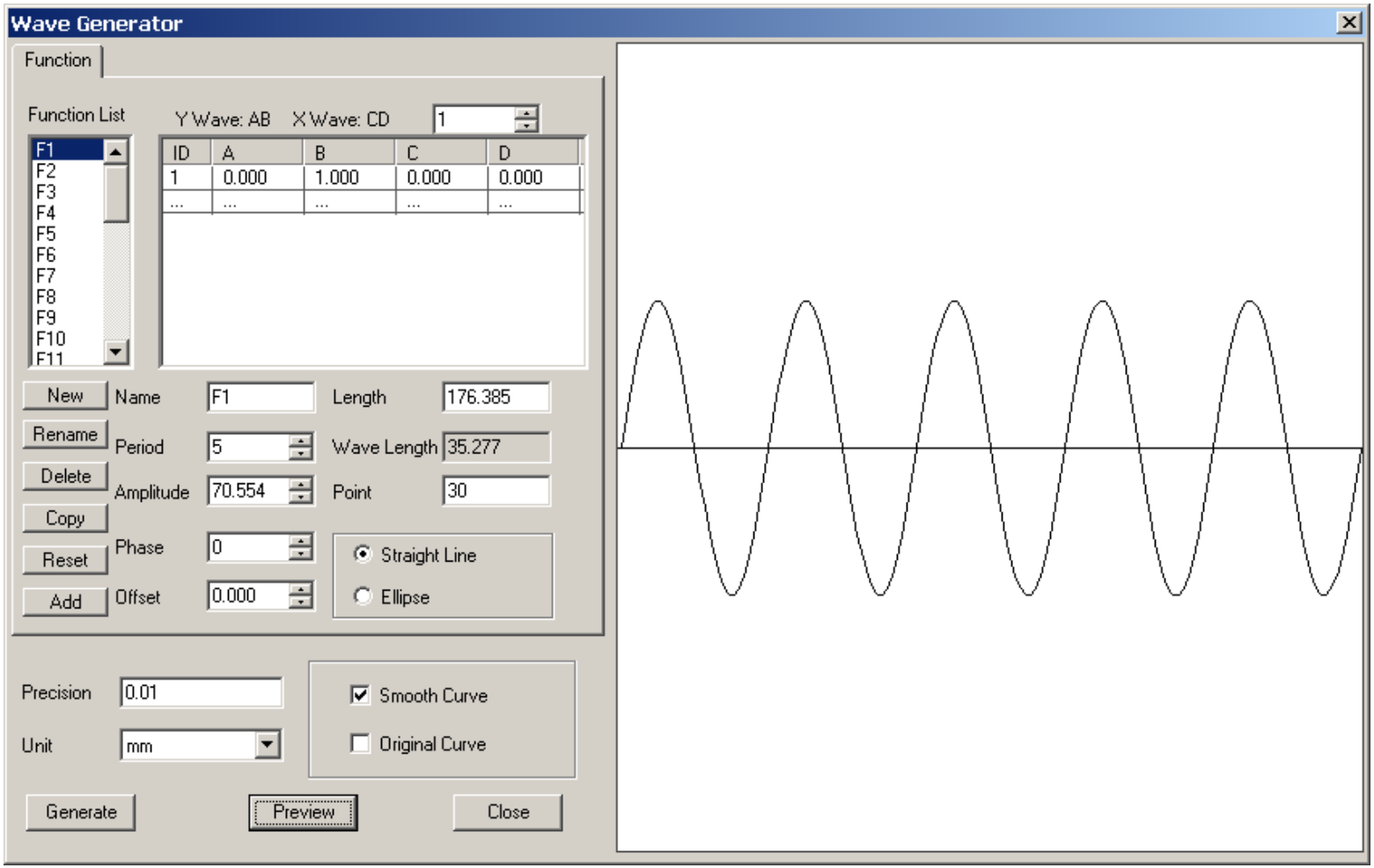
Unit: options include pt and mm.

Note: *In case that the Magic Kaleidoscope dialog box is opened as no object is selected in the page, the element will be a circle by default.*

Wave Generator: create the splendid guilloche effects provided by wave vibration.

Basic parameter settings for wave Functions

Select the **Wave Generator** command under the **Effect** menu, and the **Wave Generator** dialog box appears.



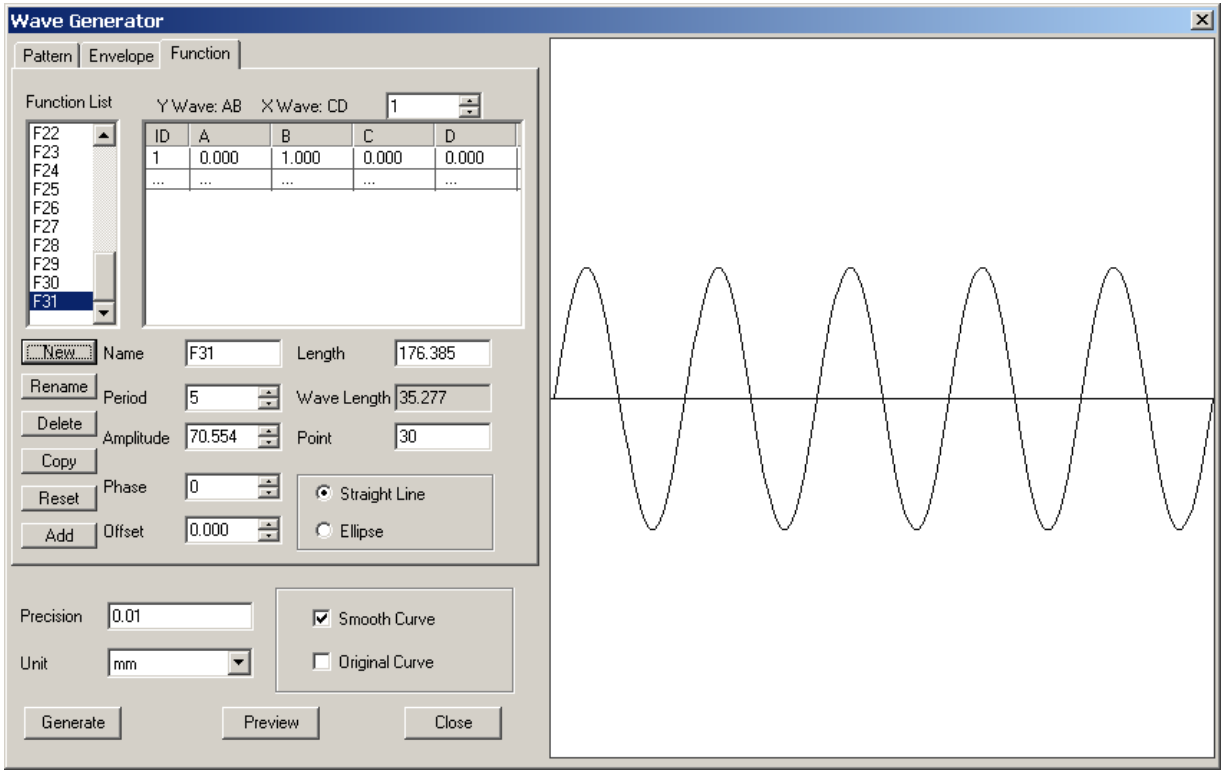
Founder SuperLine 4.60 provides you with 30 wave functions, being listed in the **Function List** box, to meet your general needs in pattern design. In addition to this, it also allows you to create, modify, copy or delete functions, so as to gain more custom effects.

1) Create, Edit and Delete wave functions

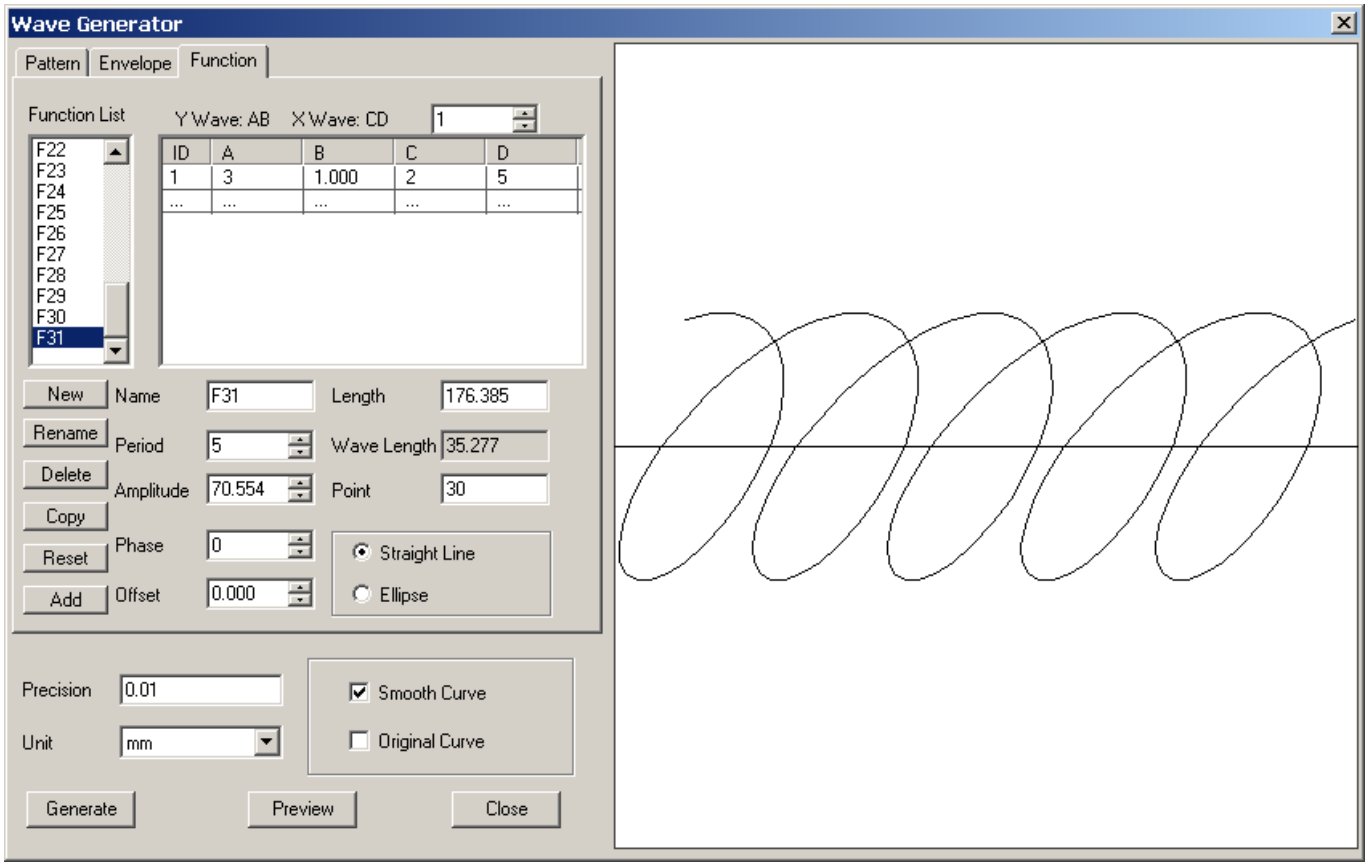
You can create, edit, copy and delete functions in the **Wave Generator** dialog box.

Create a function

Click the **New** button. A new function named “Fn” will be generated at the down most line of the **Function List** box, and become selected. The table on the right displays some **coefficient** settings: B1 =1; A1 = C1=D1 =0. And the preview area displays the wave outline of this function.



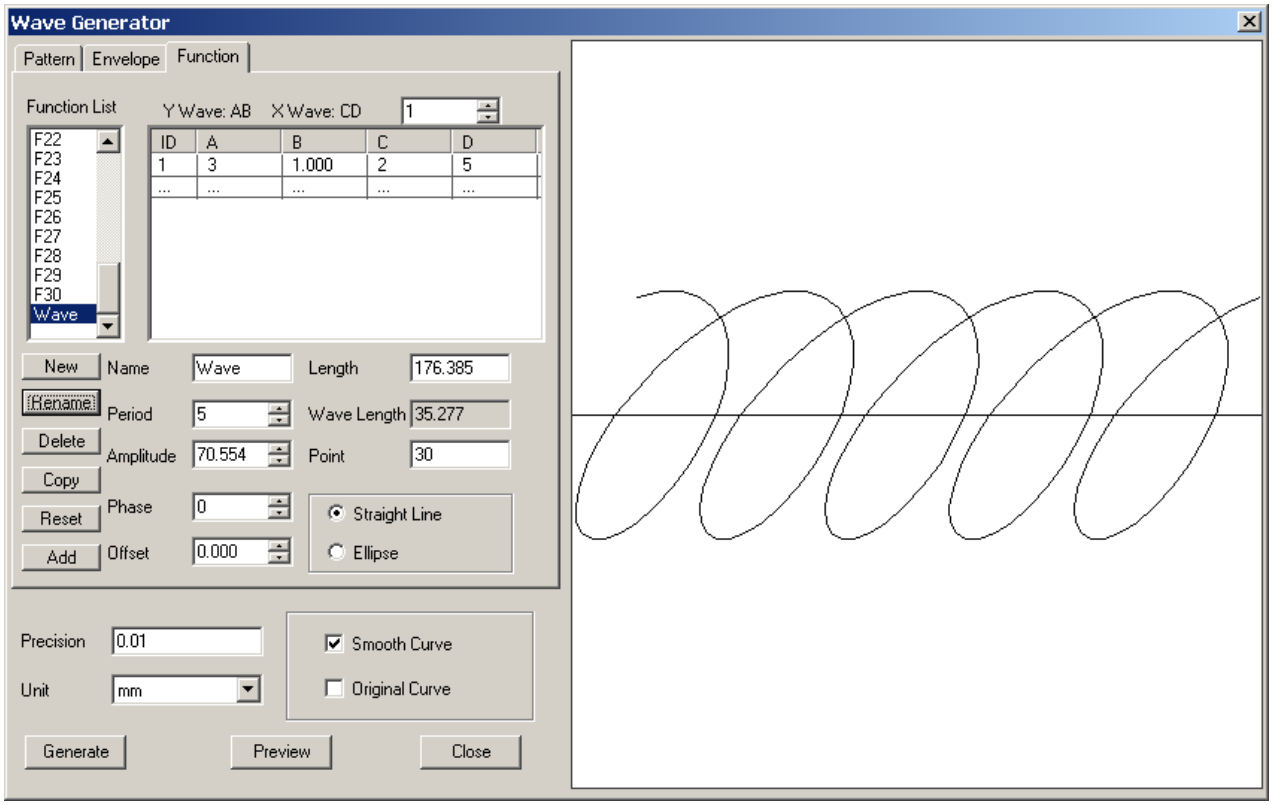
To modify the values of A, B, C and D, double-click the corresponding value and enter a new one. For example, you can modify as follows: A1=3, B1=1, C1=2, D1=5, and the new wave will be previewed as:



You can continue to modify values of such parameters as Length, Period, Amplitude, till you get the satisfied effect. Details on how to set these values are provided in the later sections.

Rename a function

To change the function name, select the function you want to rename, and enter a new name in the **Name** edit box, for example, we input a new name “Wave”, and then click the **Rename** button. See the following figure.



Delete a function

Select a function in the **Function List** box and click the **Delete** button to delete.

Copy a function

Select a function in the **Function List** box and click the **Copy** button to copy. The copied function is located at the down most line of the **Function List** box and named as “CopyXXX”. You can change its name by using the **Rename** button.

Reset a function

When the **Reset** button is clicked, the **Function List** box will be restored to include only the original 30 default functions. All the user-defined functions will be removed.

Add a function

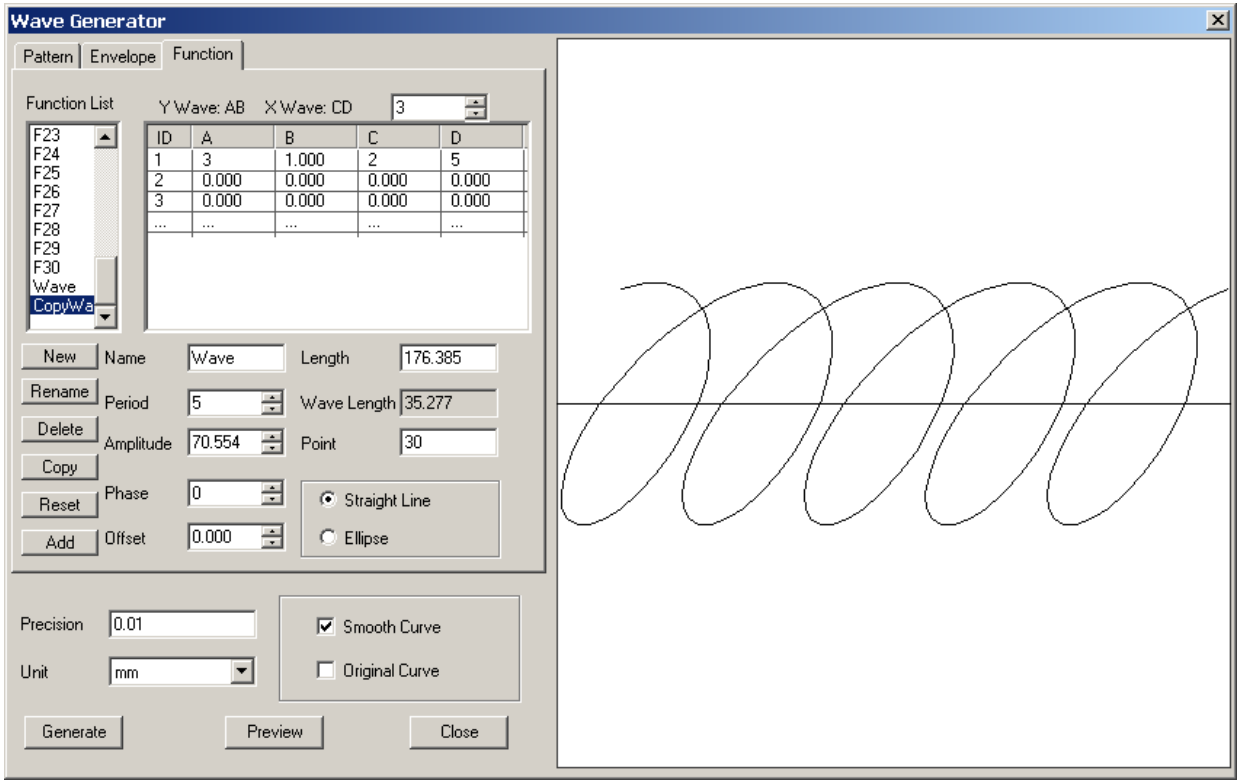
When the **Add** button is clicked, functions in the **Function List** box will be displayed in a new order, in which the original 30 default functions are displayed in front of the user-defined functions.

Note: *For any of the original 30 functions, if you have changed the settings, but haven’t renamed it, the Add operation will automatically restore its default settings. Therefore, in case that you are creating functions based on a default function, we recommend you to copy it before you perform the add operation.*

2) Basic Parameters

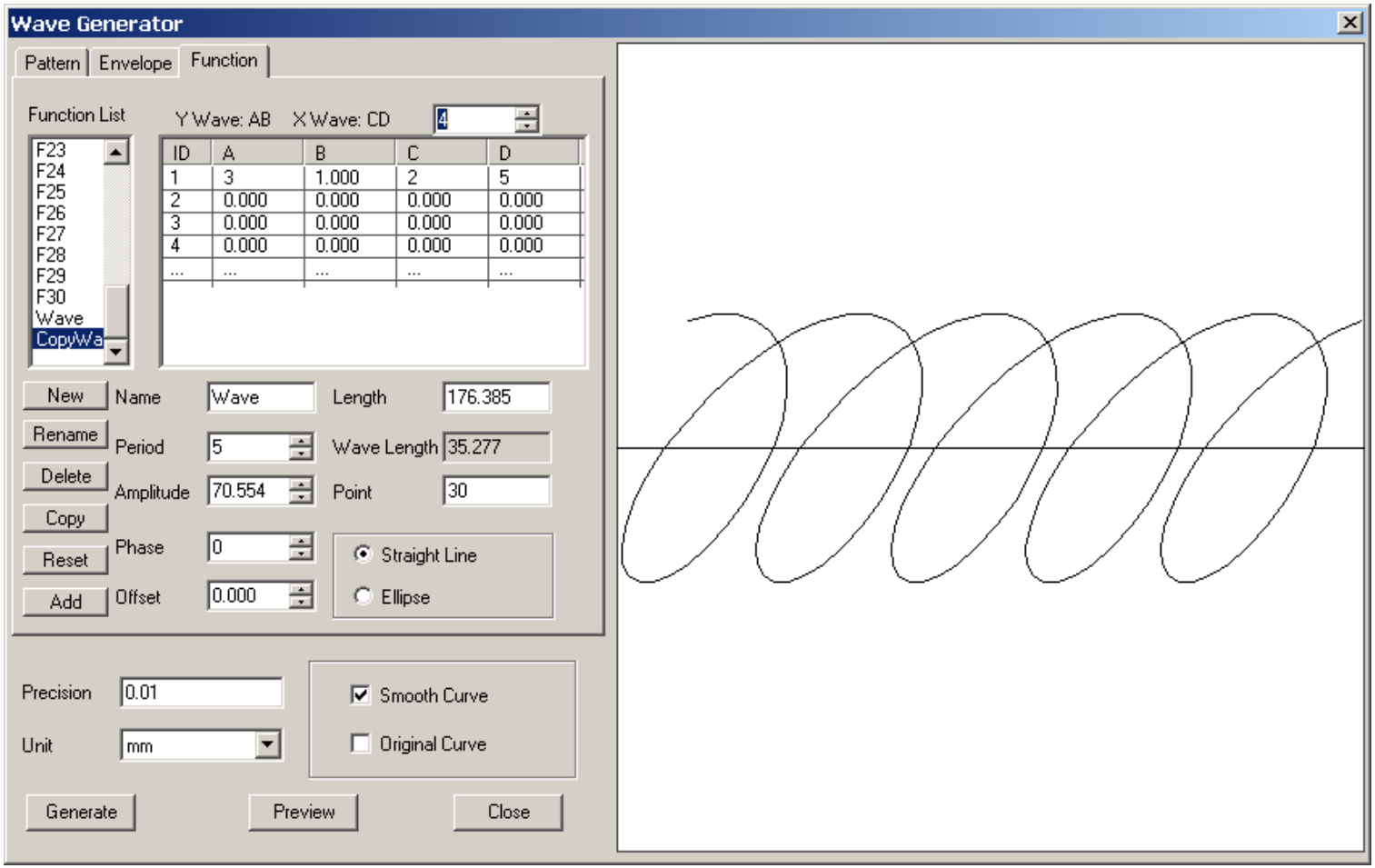
Wave lines are the basic elements of the wave patterns. The shapes and directions of these lines are determined by interior wave functions. We can change the basic wave lines by changing the settings of these functions, such as the coefficient values, Length, Period, Amplitude and etc.

Edit the coefficient table



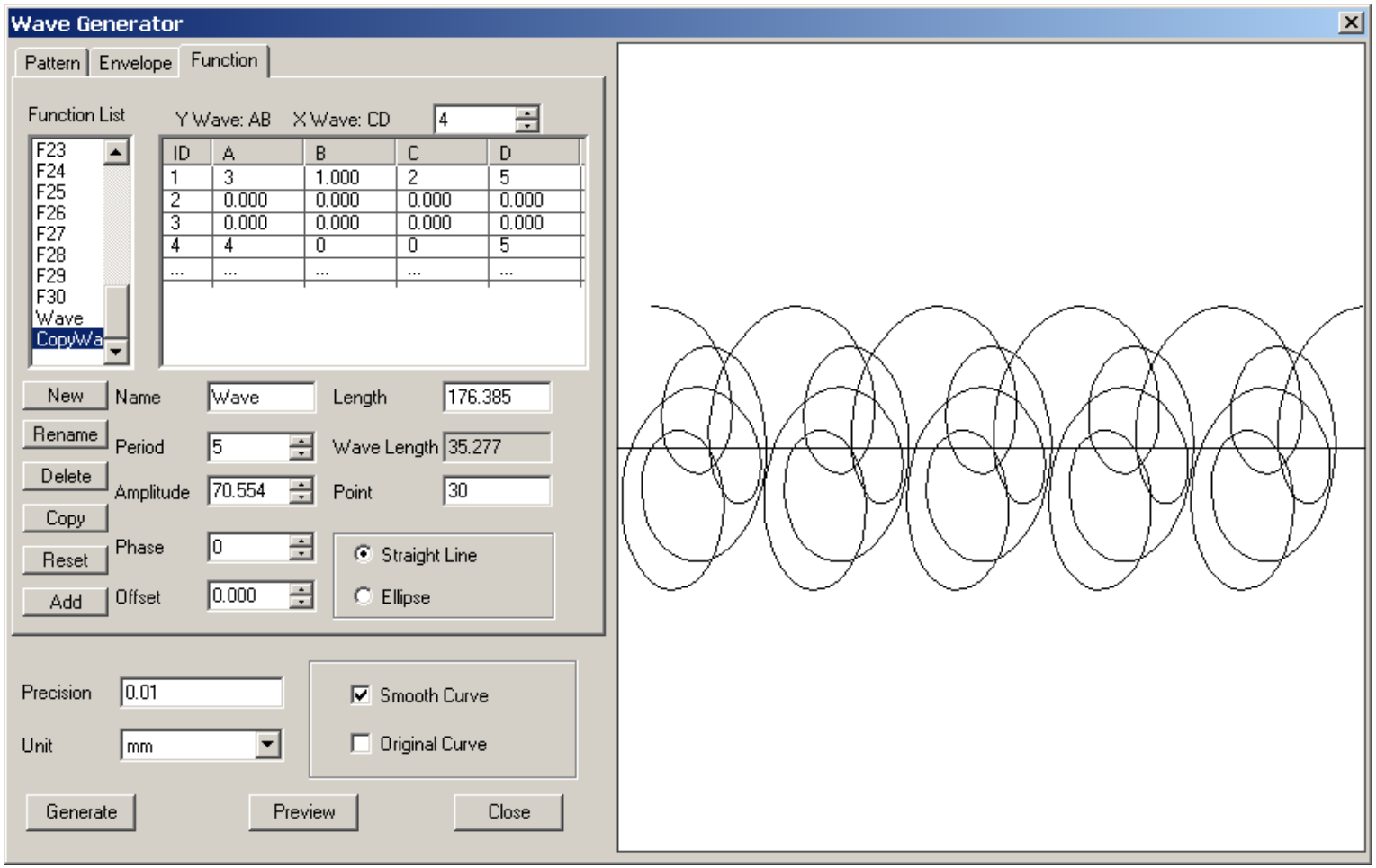
In the figure above, the coefficient table refers to the table on the right of the Function List. The coefficient values in this table determine the shape of the basic waves. On the upper-right of the table, there is an edit box. The number in the box controls the lines available in the table.

Add or reduce lines: to add or reduce lines in the table, directly input a line number in the “Y Wave: AB X Wave: CD” edit box, or click the button to select a line number, and then click anywhere in the table.
Take the figure above as an example, if we change the line number “3” to “4”, and then click in the table, the lines in the table will count to 4, see the following figure.



The A, B, C and D values for the new added lines are all set to 0 by default. To change their values, you can double-click the corresponding value to make it selected, and then directly input a new value. For example, we can make a change as: A=4, B=C=0, D=5.

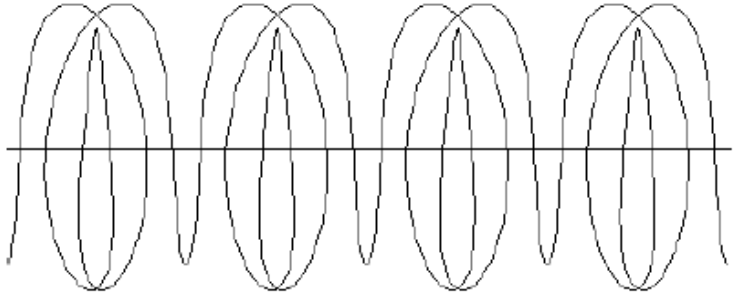
Note: *Valid value in the "Y Wave: AB X Wave: CD" edit box is 1~20.*

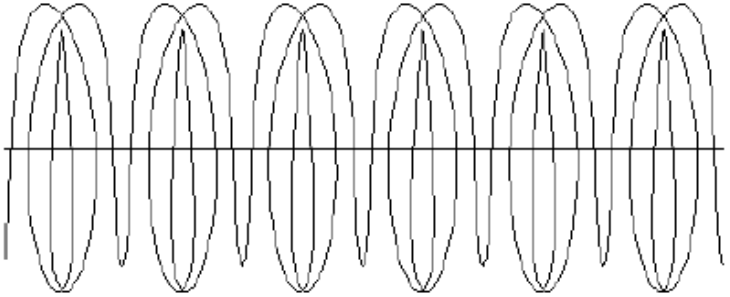


3) Other Parameters

Length: the total length of the wave you want to create. When it is applied to an ellipse, it represents the perimeter of the ellipse. Valid value is 4-2000.

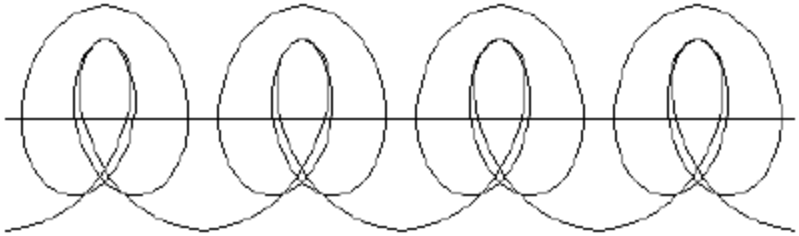
Period: refers to the period of the current function, the value can be an integer larger than 0. The following figures display the previewed waves when it is set to 4 and 6:

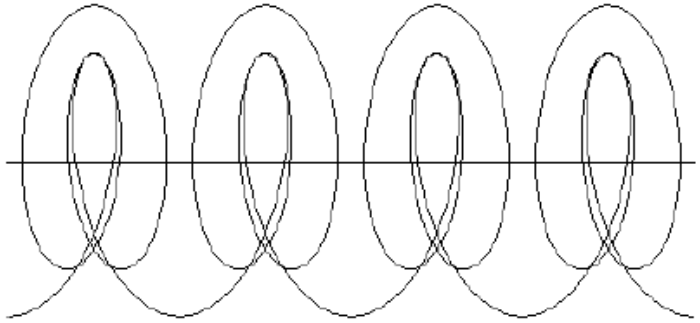




Wave Length: calculated by dividing the **Length** by the **Period**.

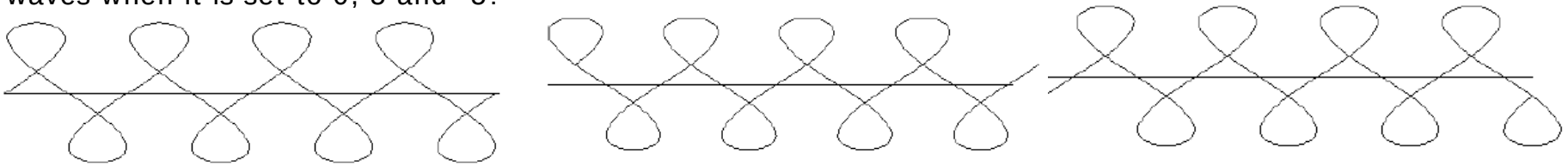
Amplitude: can be set to any real number, representing the height of the current wave. The following figures display the previewed waves when it is set to 50 and 80:



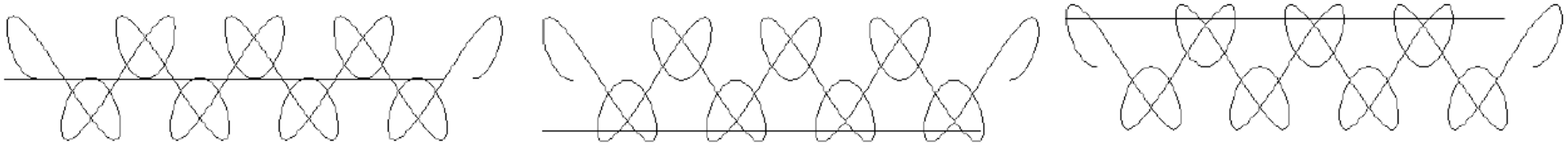


Point: represents how many points a period consists of. For example, if the period is set to 5, and the point is set to 30, then the total points of the graphic will be 30+(30-1)×4 = 146. It can be set to an integer between 24~ 100.

Phase: representing the horizontal starting location of the wave. 100 is a period, valid value for this parameter is an integer between -100~100. When it is a positive value, the starting location moves rightward; and when it is a negative value, it moves leftward. If it is set to “-100”, or “0”, or “100”, the starting location stays at a same place, the initial place for a complete period. The following figures display the previewed waves when it is set to 0, 5 and -5:



Offset: representing the vertical offset of the wave, can be set to any real number. When it is a positive value, the whole wave offsets upward; and when it is a negative value, it the whole wave offsets downward. The following figures display the previewed waves when it is set to 0, 20 and -20:



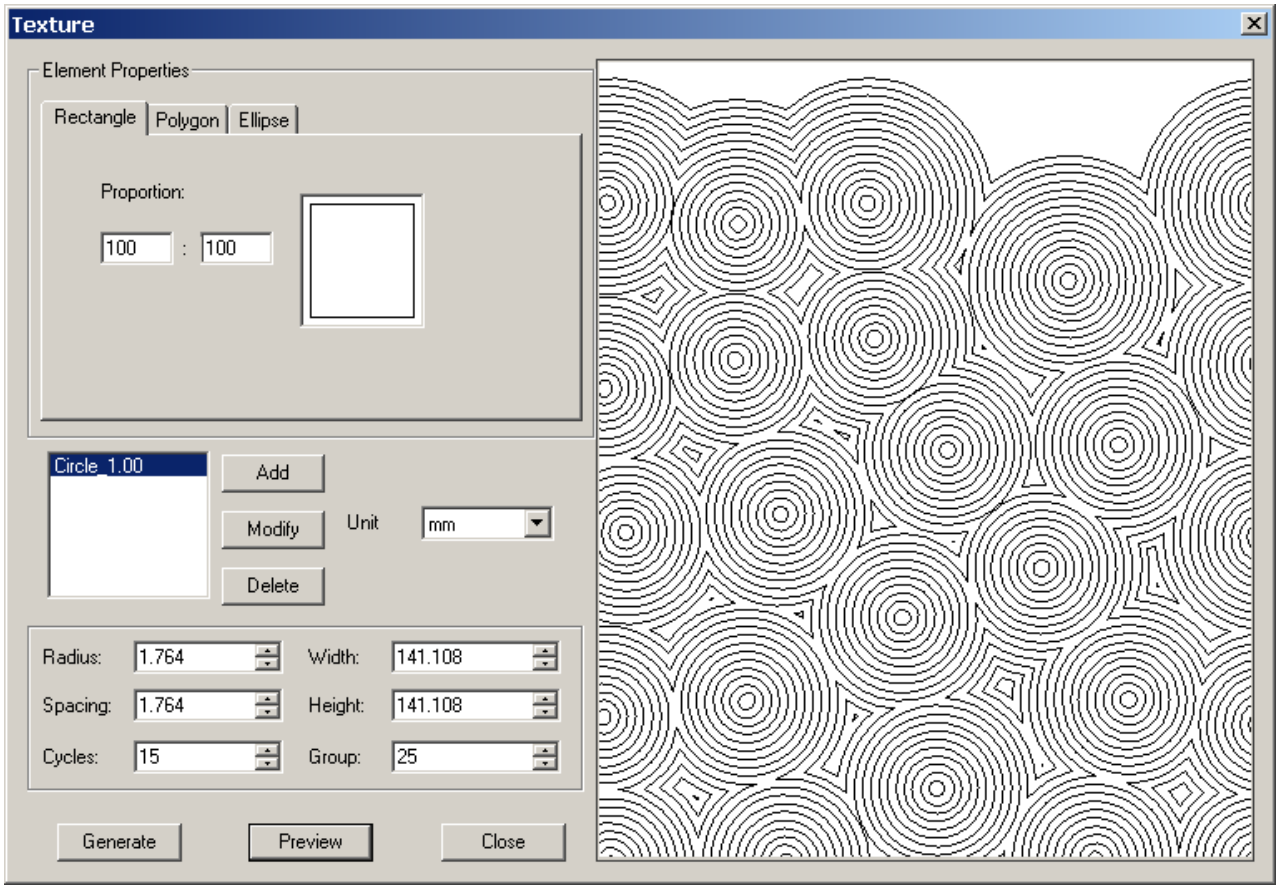
Straight Line: waves are arrayed in straight line.
Ellipse: waves are arrayed in ellipse.
Precision: refers to the precision for fitting the Bezier curves. The smaller the value is, the smoother the curve will be. The value can be set to 0.01-10.
Note: *If you want to gain accurate and smooth graphics, please set this value to a comparably small value.*
Unit: the unit for the Length, Wave Length, Amplitude and Offset values. Options include mm and pt.
Smooth Curve: to fit all points to form a Bezier curve, so as to make the curve smoother.
Original Curve: to connect points with straight lines. When points are small in quantity, the generated curve will be NOT so smooth that saw tooth may appear.
Note: *If you specify too few points, the graphic generated will be NOT smooth and accurate enough. But if you specify too many points, the speed for generation and preview will be slower while the quality of the graphic is improved.*

Texture(T): By only designing a basic drawing element, and defining related parameters as needed in the texture parameter setting interface, you can actualize diverse texture effects.

Generate a texture

To create a texture, perform the steps below:

(1) From the main menu, select **Effect → Texture(T)** to open the Texture dialog box as shown in the following figure:



Element Properties: Basic elements can be a rectangle, a polygon or an ellipse. And settings for these basic elements can be combined together.

Rectangle: The two **Proportion** edit boxes allow you to specify the width and height percentages of the rectangle. For example, a value of 100 and 100 determines a square.

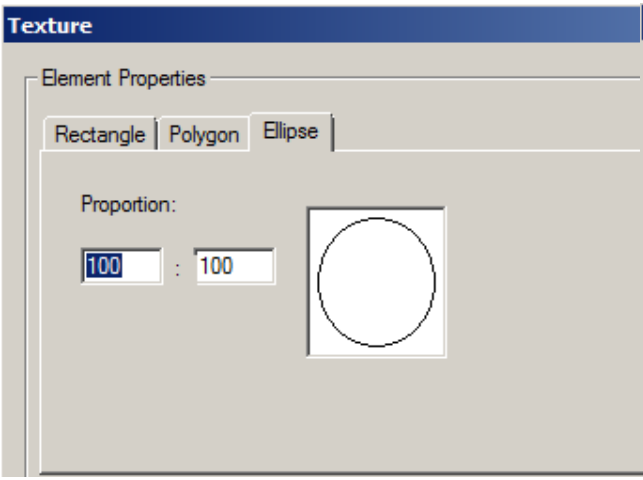
Polygon:

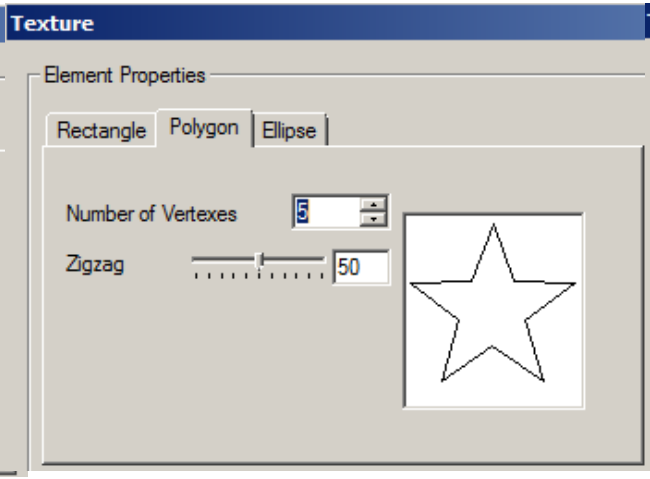
Number of Vertexes: refers to the number of the vertexes that the polygon contains. Valid value is 3~20.

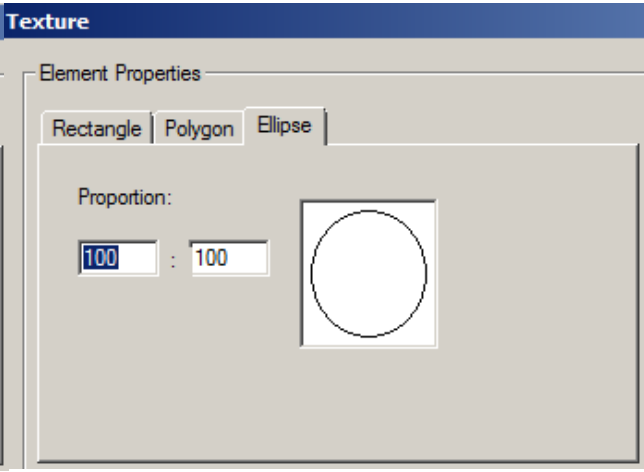
Zigzag: this parameter controls the extent in which the sides are concave or convex. The lower the value, the smaller the degrees at the vertexes will be. The default value is 50.

Ellipse:

Proportion: The two boxes specify the length percentages of the long and the short axes of the ellipse. For example, a value of 100 and 100 determines a circle.







Add an element

Click the **Add** button when you complete the **Element Properties** setting, an item of message like "Square_0.50" will be added to the list box on the right of the **Add** button, showing basic information about the type and property of the element. For example, "Square_0.50" means that the element is a rectangle, and the ratio of the width to the height is 0.50.

Note: *You can add to the list box more than one element. And meanwhile, you can click Preview to preview the effect of the combination of multiple elements.*

Modify an element

Select an element in the list box, and make changes to its setting in the **Element Properties** area. After that, click the **Modify** button, the setting changes.

Delete an element

Select an element and click **Delete** to delete the unneeded element.

Radius

This parameter specifies the radius of each basic element. Valid value is 0.01~100mm.

Spacing

When more than one cycles are applied, this parameter controls the spacing between the adjacent cycles.

Note: *The Spacing parameter doesn't take effect when the Cycles is set to 1.*

Cycles

This parameter specifies the times the element is copied. 1 represents a single element. When the value is bigger than 1, the elements combine. The bigger the value is, the more complex the generated graphics will be.

Group

This parameter controls the groups of the element or element combination. The bigger the value is, the elements will stay denser each other.

Width and Height

Refer to the width and height of the page for the texture.

Unit

Here refers to the unit for the values of Radius, Spacing, Width and Height. Options include pt and mm.

Image

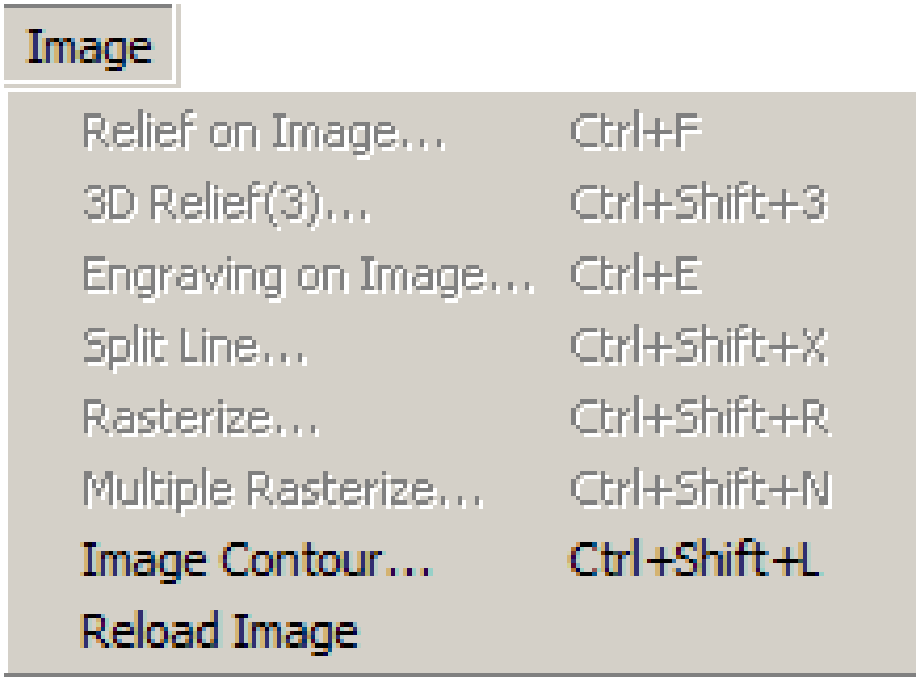


Image
Relief on Image... Ctrl+F
3D Relief(3)... Ctrl+Shift+3
Engraving on Image... Ctrl+E
Split Line... Ctrl+Shift+X
Rasterize... Ctrl+Shift+R
Multiple Rasterize... Ctrl+Shift+N
Image Contour... Ctrl+Shift+L
Reload Image

Relief on Image...:

(1) Prepare image

It is usually done in other image processing software such as Adobe PhotoShop and Founder Artworld. We need to do appropriate Gaussian Blur for too precipitous images.

Save the created image in the right format (like TIFF, etc.). In the Founder SuperLine page, select **File > Import** in the menu to import the image to the page.

(2) Create curve group

Create curve group in the page. The spacing between lines in the group should be appropriate (for example, the spacing is 0.2mm). If the spacing is too big, the relief effect is too rough. It is too small, it requires high back end printing techniques.

There are a lot of detailed methods for creating curve group, such as **Copy, Blend, Contour**, and etc.

(3) Create relief

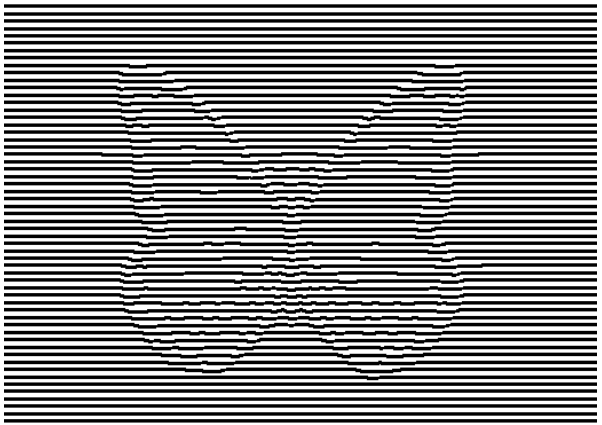
Overlap the curve group and the image in the page, and select these two objects. Select the **Relief on Image** command under the **Image** menu to open the **Relief on Image** dialog box. And set the relief parameters in this opened dialog box.

Click **OK** when you complete the setup of the parameters, and the relief is created, which is at the same position of the original image. Move the image and the original curve group away, and the created relief appears.

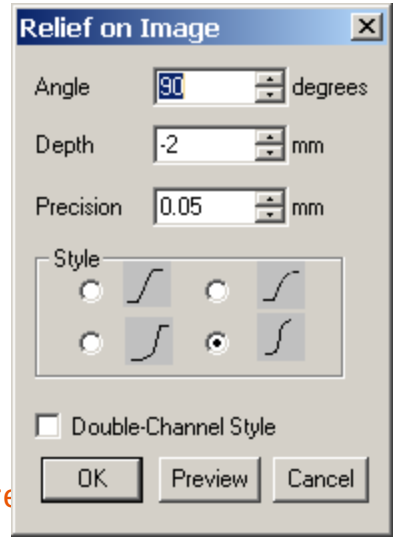
Notes:

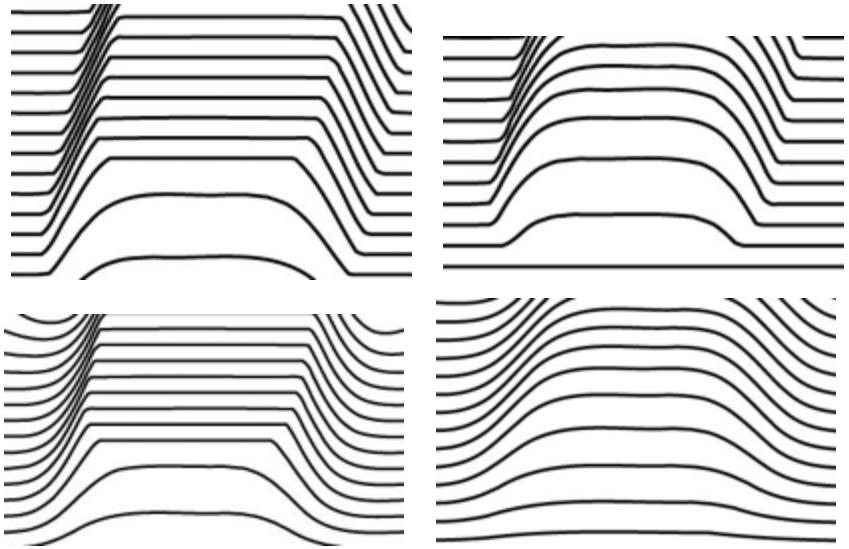
① *You can change the color of the relief through the **Stroke** color parameter of the **Fill and Stroke** dialog box.*

② *The part outside of the image is taken as 100% white, this is because that most of the users are accustomed to drawing black images on white background.*



Angle: It controls the degree and direction of the line fluctuation where the relief is generated.
Depth: It controls the degree of relief fluctuation. When the value is positive, the lines in the bright part of the image are convex, and those in the dark part are concave. When the value is negative, it is reverse. The bigger the absolute value of the parameter, the bigger the fluctuation will be. This value can be bigger than the line spacing, but a too big value may cause multiple curves to get crossed and thus bring negative affect on effect. Therefore, experience may be required when you are defining this parameter. You can experiment with different values to compare their effects. The general experience says that, the more blur the image has, the bigger the depth should be; and the smaller the curve spacing, the smaller it is.
Precision: It refers to the precision of the relief, i.e. the similarity with the image. The smaller the value, the created relief will be more similar with the image, however, this takes longer time. Usually, it is appropriate to set it to 0.05mm.
Style: The four buttons in the Style area control the style of the relief. The different effects enabled by them are shown in the following figures:
Double-Channel Style: When this option is NOT checked, the operation is in the normal mode, in which the brightness of the image controls the vertical offset value of the relief lines. When it is checked, the operation is in the double-channel way, in which the red and the green channels of the image will be used to control the horizontal and vertical offsets of the relief lines respectively.





3D Relief(3)... refers to relief on the texture that is composed of text. Currently relief can only be created on lines, therefore, the user must convert the texture to curve at first. 3D relief can provide symmetrical varying density effects in all the four directions.

To create 3D relief, perform as follows:

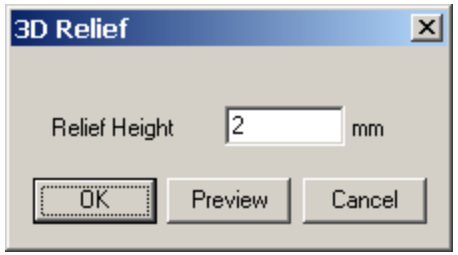
(1) Re-form the texture by converting text to curve;

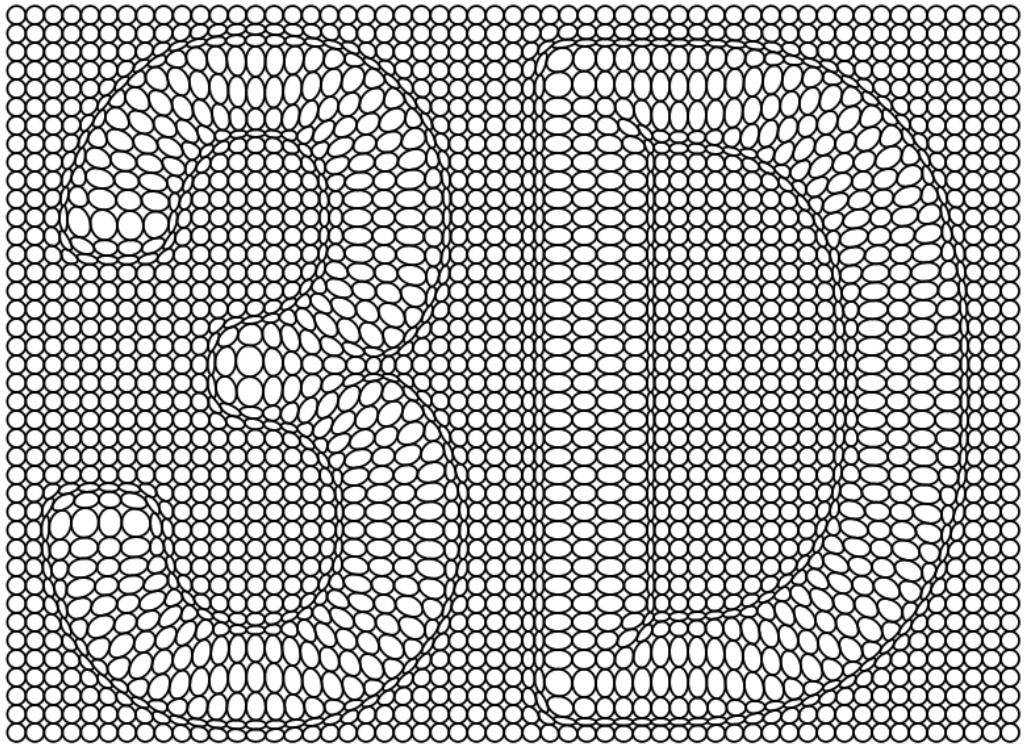
(2) Import an image to the page, overlap it with the texture, and make them both selected;

(3) Select the **3D Relief** command under the **Image** menu to open the **3D Relief** dialog box;

(4) Set the **Relief Height** value. You can click the **Preview** button to view the effect and adjust the value based on the preview effect.

Click **OK**, and the 3D relief will be generated.





Engraving on Image... Use curves in various thickness to represent the shade of color. You can perform the following steps to create engraving effect on image.

(1)Prepare image

(2) Create curve group

The spacing between lines in the group should be appropriate (for example, the spacing is 0.2mm). If the spacing is too big, the relief effect is too rough. It is too small, it requires high back end printing techniques.

(3) Create Engraving

Overlap the curve group and the image in the page, and select these two objects. Select the **Engraving on Image** command under the **Image** menu to open the **Engraving on Image** dialog box. And set the engraving parameters in this opened dialog box.

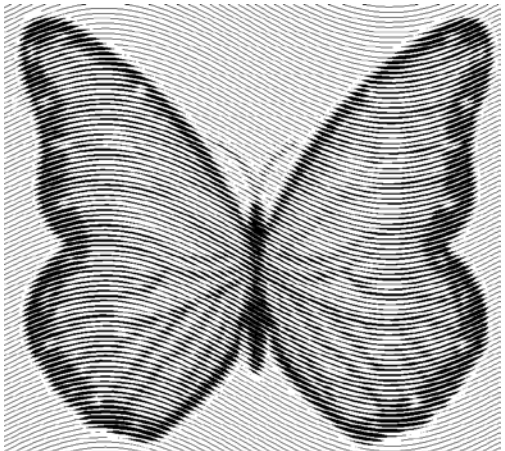
Max Width: It is the line width of 100% black.

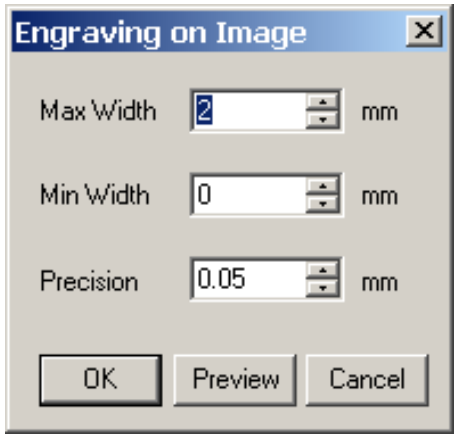
Min Width: It is the line width of 0% black.

Precision: It is used to control the precision of the created gradient line. The smaller the parameter, the smoother the created curve will be, however, this takes longer time. Usually, it is appropriate to set it to 0.05mm.

Click **OK** when you complete the setup of the parameters, and the engraving is created, which is at the same position of the original image. Move the image and the original curve group away, and the created engraving appears.

If you want to change the color of the engraving, you can select **Edit > Fill Color** in the menu to open the **Color** dialog box, and set within the box the color parameters for the whole engraving, such as color mode and value.





Split Line…

(1) Create curve group

The spacing between lines in the group should be appropriate (for example, the spacing is 0.2mm). If the spacing is too big, the relief effect is too rough. It is too small, it requires high back end printing techniques.

(2) Prepare image

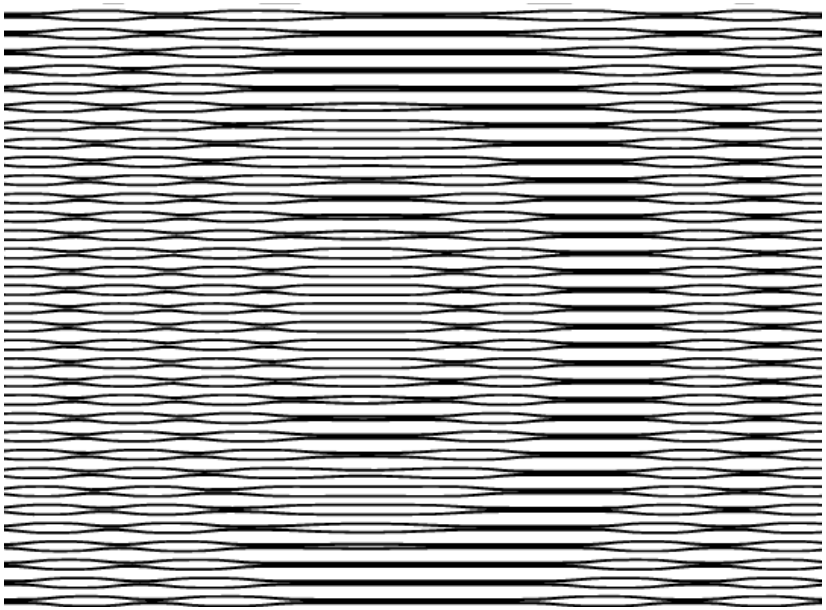
(3) Create split line

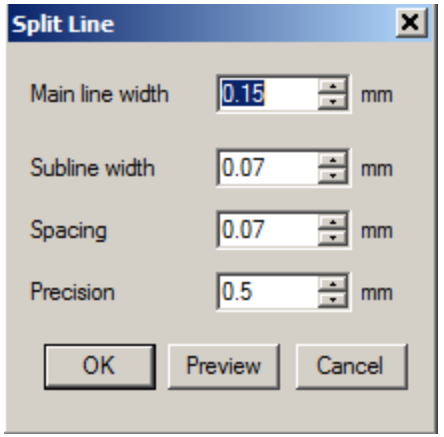
Main line width: is the line width of the main line.

Subline width: is the sub line width of the Subline.

Space: the space of two split line.

Precision: It is used to control the precision of the created gradient line. The smaller the parameter, the smoother the created curve will be, however, this takes longer time. Usually, it is appropriate to set it to 0.05mm.





Rasterize... represents the arrangement of the object by changing the width and (or) size of the object. The object is bigger and the line width is wider at the dark area of the image; it is reverse at the bright area. The steps for creating raster effect are as follows.

(1) Prepare image

(2) Create curve group

The size of the objects in the group should be appropriate. If the size is too big, the raster effect will be too different from the real image. If it is too small, it takes too long a time to process. Then make a texture.

(3) Create raster effect

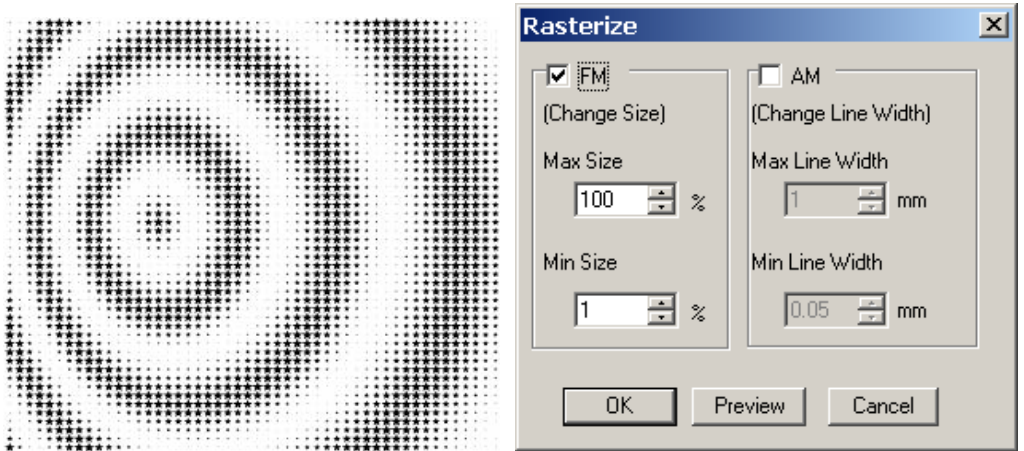
Overlap the curve group and the image in the page, and select these two objects. Select the **Rasterize** command under the **Image** menu to open the **Rasterize** dialog box. And set the raster parameters in this opened dialog box.

FM: Check this option to change the size of the object. **Max Size** is the size of the object where the figure brightness is pure black. Min Size is the size of the object where the figure brightness is pure white. Both range from 0 to 100.

AM: Check this option to change the line width of the object. **Max Line Width** is the line width of the object where the figure brightness is pure black. **Min Line Width** is the line width of the object where the figure brightness is pure white.

Click **OK** when you complete the setup of the parameters, and the raster is created at the right side of the original image.

Note: *You can change the color of the raster through the **Stroke** color parameter of the **Fill and Stroke** dialog box.*



Multiple Rasterize... is an enhancement to the **Rasterize** function. With this enhancement, you can use one regular or any number of irregular graphic objects to form a texture by way of auto array or Multi-copy functions, and then use this texture to characterize image.

To apply Multiple Rasterize, perform as follows:

(1) Select together an image object, a background object and a screening object.

The background object can be null, or a group object, or a single object, or a clip object (but must be a graphic object, NOT an image object). Make an image object and two graphic objects selected together, the first graphic object is background object, and the second is screening object.

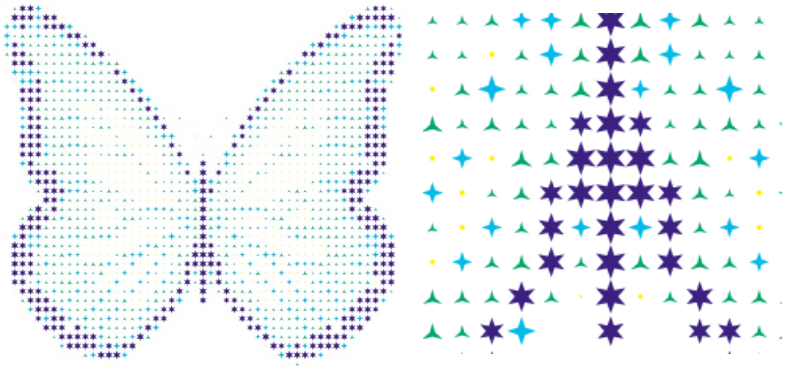
The screening object can be a group object, or a single object, or a clip object (but must be a graphic object, NOT an image object).

(2) Select the **Multiple Rasterize** command under the **Image** menu to open the **Multiple Rasterize** dialog box.

Background Mode: Options include **Standard Matrix**, **Odd Line Shift Matrix** and **Even Line Shift Matrix**.

Screening Mode: **Graphic Blend** or **Graphic Zoom**. When the **Graphic Blend** is selected, the **Screening Level** option in the below is activated, with which you can set a screening level (range 1-256). And when **Graphic Zoom** is selected, the **Graphics Scaling Adjustment** parameters are activated. You can decide to enable or disable the AM and/or FM zoom mode, and define corresponding size and line width values.

Click **OK** when you complete the setup of the parameters, and the screened graphic is created, which is on the right of the image object.



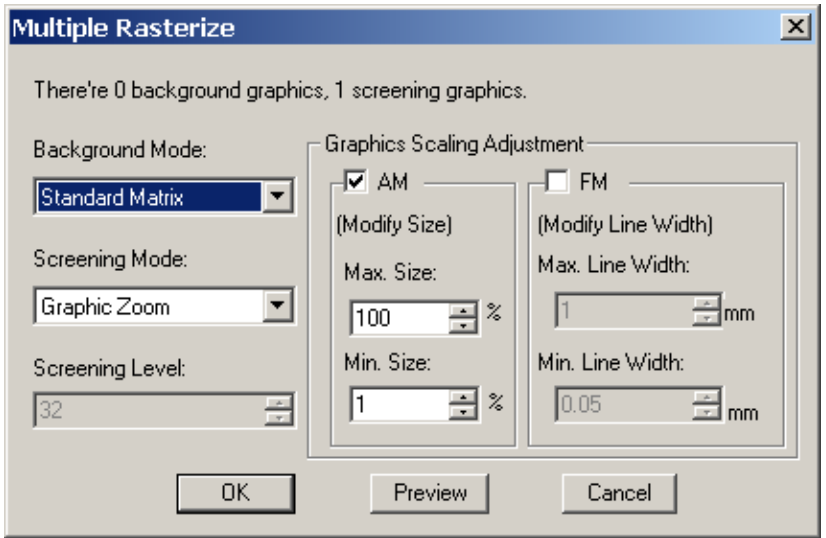
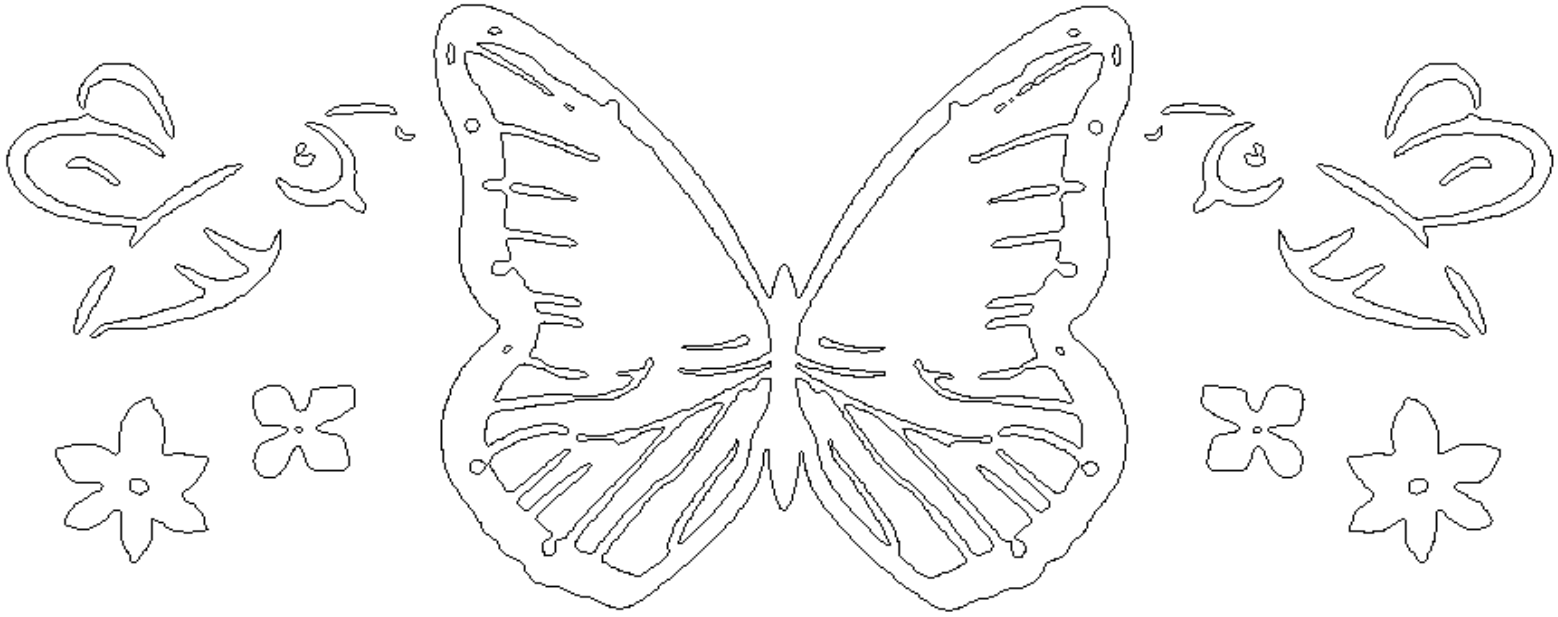
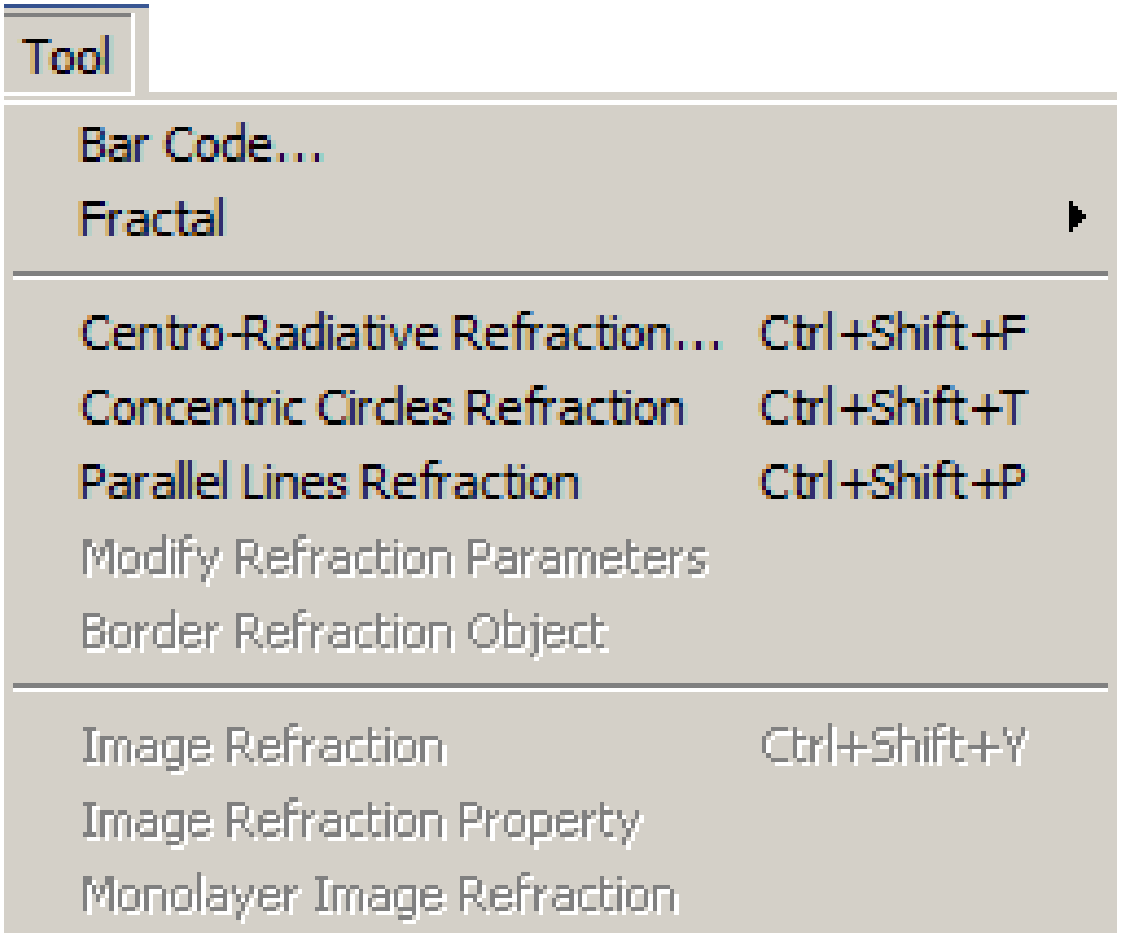


Image Contour...: Image Outline is used for vectorization of the digital images, and usually for black and white images. The created vectorization outline can be used for cutting other image objects or other operations. The procedure is as follows.
Select **Image > Image Contour** in the menu, and the **Import** file dialog box pops up. Select the image for picking up the outline and click OK to get it.
Note: *Image Outline effect is designed for vectorization of the black and white scanning drafts. Generally speaking, please do NOT apply it to natural images.*

Reload Image: While working on image effect for an image, we usually need to try many times to modify parameters so as to get a satisfied result. With an aim to provide convenience in such a case, **Reload Image** enables you to reload the image easily. It saves the operations for searching the paths for importing images. To reload image, select the image object to be inputted again, and run the **Reload Image** command under the **Image** menu.



Tool


Tool
Bar Code...
Fractal
Centro-Radiative Refraction... Ctrl+Shift+F
Concentric Circles Refraction Ctrl+Shift+T
Parallel Lines Refraction Ctrl+Shift+P
Modify Refraction Parameters
Border Refraction Object
Image Refraction Ctrl+Shift+Y
Image Refraction Property
Monolayer Image Refraction

Bar Code…: automatically insert the standard bar codes to the page:
Procedures:
(1)Select **Tool > Bar Code** to open the **Bar Code** dialog box;
(2) After configuration of all options of the bar code, click **OK**. The cursor becomes
(3) Click at the target position to generate the bar code as shown in the figure below, or cancel it by pressing the **Esc** key.

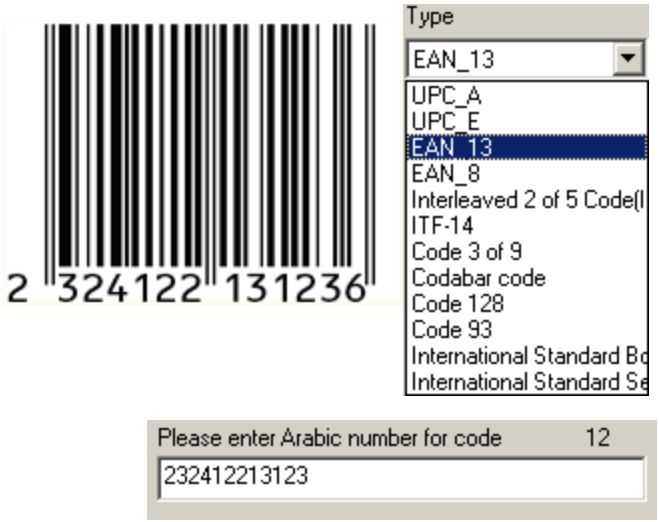
In the **Bar Code** dialog box, users may configure the following bar code options:

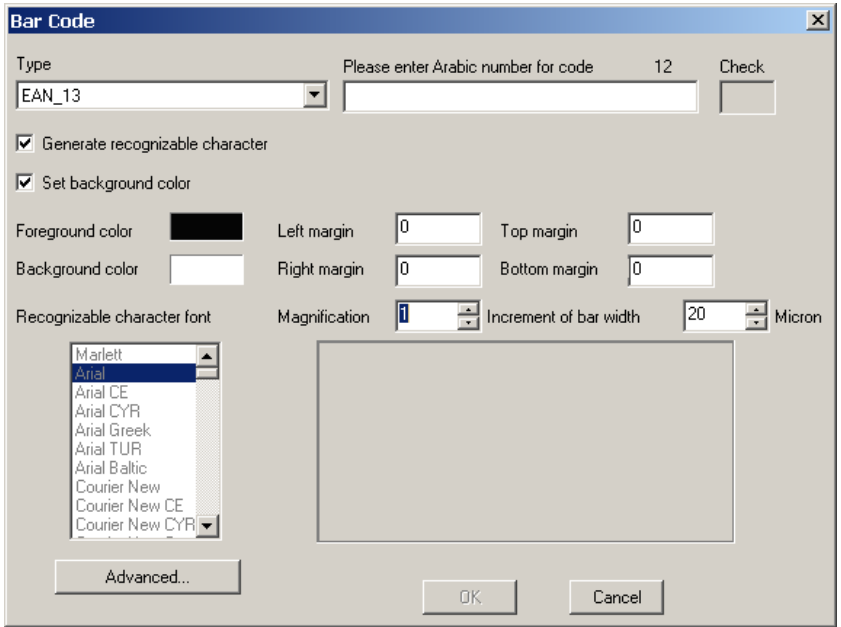
10.2.1 Types of bar codes

Select the types of bar codes in the **Type** list box, including USA UPC-A, UPC-E, European EAN-13 and EAN-8, ISBN, ISSN, Interleaved 2 of 5 Code, Code 3 of 9, Codabar code, Code 128, Code 93, and etc.

10.2.2 Bar code data

Enter the bar code data in the **Please enter Arabic number for code** edit box (figure below) that is acceptable by the active type of the bar code. As for Code 128, you have to select the starting code, switchover code and data code that cannot be inputted directly in the edit box.





The table below shows the types of bar codes, code length and applicable character sets:

Types	Input length	Character set
UPC_A	11	0-9
UPC_E	6	0-9
EAN_13	12	0-9
EAN_8	7	0-9
Interleaved 2 of 5 Code	≤40	0-9
ITF_14	13	0-9
Code 3 of 9	≤40	0-9, A-Z, '-', '.', blank, '$', '/', '+', '%'
Codabar code	≤40	0-9, '-', '. ', '$', '/', '+', ':'
Code 128	≤40	Set A, B and C (as set out in national standard GB/T15425-94)
Code 93	≤40	0-9, A-Z, '-', '.', blank, '$', '/', '+', '%'
ISBN	12	0-9
ISSN	12	0-9

The code length appears above the edit box. For fixed-length bar codes like UPC_A, UPC_E, EAN_13, EAN_8, ITF_14, ISBN and ISSN, the input character length will be the same as the bar code length. For other length-adjustable bar codes, the code length refers to the maximum characters allowed for input.

10.2.3 Check character of bar codes

Bar codes like UPC_A, UPC_E, EAN_13, EAN_8, Code 128, Code 93, IFT_14, ISBN and ISSN have the check characters. For Interleaved 2 of 5 Code and Code 3 of 9, users can add the check character by checking **Add checkout** option. Codabar Code has no check character.

The check character will be automatically generated after input of the specified-length bar code characters.

10.2.4 Recognizable character

The identifiable character refers to the numbers below the bar code. Users may generate the identifiable character below the bar code by selecting the **Generate recognizable character** option.

10.2.5 Bar code color

Foreground color, i.e. the color of the bar code symbols and the identifiable characters, is black by default. The display color of the **Foreground color** button is the same with the color of the bar code. Click the button to pop up the Color dialog box to select other colors. When the **Set background color** option is checked, the bar code will have the display color of the Background color button as the **background color** (white by default). You can also select other background color by way of the **Background color** button.

10.2.6 Left/right/upper/lower boxes

When the **Set background color** option is checked, the background color area will be added the left/ right/upper/lower boxes on the bar code size with the box values input in the fields (in the units of mm).

10.2.7 Font of recognizable characters

The default font of the recognizable characters is Arial. UPC_A, UPC_E, EAN_13, EAN_8, ISBN and ISSN bar codes allow for no other fonts. In case of no default font or to other bar codes, users may select another font in the **Recognizable character font** list box.

10.2.8 Magnification

The magnification of the bar codes can zoom in or out the bar codes on the page. The value of **Magnification** ranges from 0.8 to 2. (Magnification of ITF_14 from 0. 625 to 1.2)

10.2.9 Increment of Bar Width

The bar width increment refers to the bar width increase in printing, which, in the units of micron, may be inputted in the **Increment of bar width** field. It ranges from 0 to 99.

10.2.10 Preview of bar codes effects

There is the bar code preview window at the lower right corner of the dialog box. For fixed-length bar codes like UPC_A, UPC_E, EAN_13, EAN_8, ITE_14, ISBN and ISSN bar codes, the bar codes can be displayed only after the input of the specified length. Other bar codes allow for display while inputting the characters.

10.2.11 Special configuration

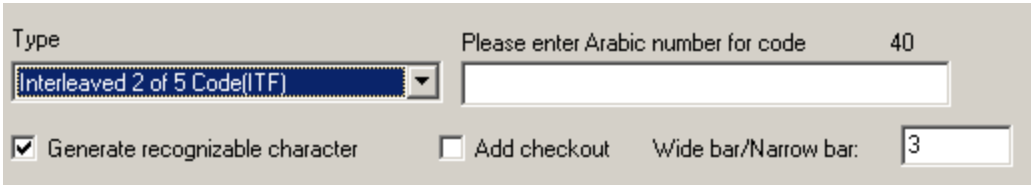
The above section introduces the common configuration of all types of bar codes. Some bar codes also feature special configurations that will be listed below the **Please enter Arabic number for code** edit box only when the relevant types of the bar codes are selected.

Interleaved 2 of 5 Code and Code 3 of 9

The following figure shows the special configurations, including:

Add checkout: Check the **Add checkout** option to generate the check code;

Wide bar/Narrow bar: The **Wide Bar/Narrow Bar** option controls the wide/narrow-bar proportion. Valid value ranges from 2.0 to 3.0.

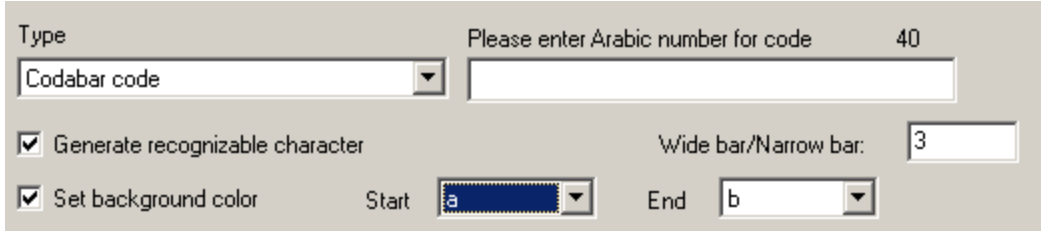


Codabar Code

The figure below shows the special configurations including:

Wide bar/narrow bar: This option controls the wide/narrow-bar proportion. Valid value ranges from 2.0 to 3.0.

Start/End codes: You can select a starting code and an ending code (a, b, c or d) in the **Start** and **End** list box.



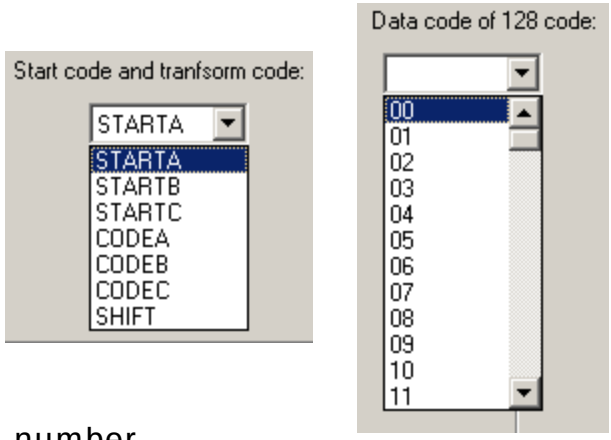
Code 128

The figure below shows the special configurations including:

Start code and transform code: Code 128 must start from the start code while the transform code can change the active character set. The start codes are **STARTA, STARTB** and **STARTC**. And the transform codes are **CODEA, CODEB, CODEC** and **SHIFT** as shown in the figure below.

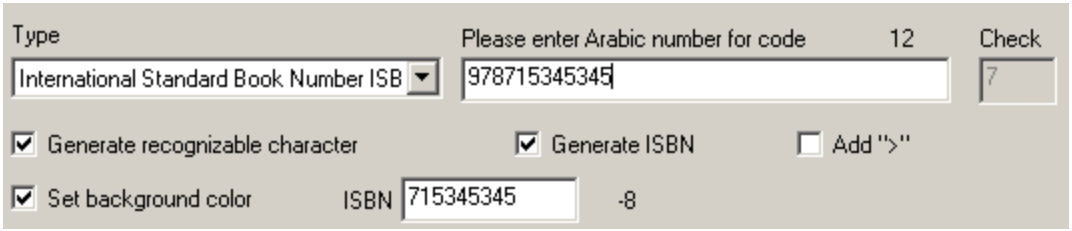
The start code and transform code will be selected in the **Start code and transform code** box instead of direct input in the Please enter Arabic number for code edit box. In case of unauthorized selections, a message box will pop up to invalidate the options, otherwise the selected contents will be added to the current position of the Please enter Arabic number for code edit box in the brackets, which can only be deleted as a whole.

Data code of 128 code: You may select the data not represented by characters in the **Data code of 128 code** list box as shown in the figure below.



ISBN

The figure below shows the special configurations including:



Generate ISBN: Select the Generate ISBN check box to generate ISBN number.

ISBN: An ISBN number consists of 10 numbers and 3 "-" separators with the last digit as the check digit and the other 9 digits consistent with those of the bar code characters (excluding the check digit). After inputting the bar code characters, the ISBN number will be automatically generated with the former separator retained and the check code displayed outside of the edit box. While meeting the above conditions, the first 9 numbers and the first 2 separators of ISBN number may be modified in the edit box.

Add '>': Select the **Add '>'** check box to generate '**>'.**

ISSN

The figure below shows the special configurations including:

Menu

Generate ISSN: Select the Generate ISSN check box to generate ISSN number.
ISSN: An ISSN number consists of 8 numbers and 1 "-" separator. The ISSN number will be automatically generated upon the input of the bar code characters subject to no modification.
Add '>': Select the Add '>' check box to generate '>'.
Extra code: 2-digit number representing the issue number, input in Extra code field.

10.2.12 Advanced options

Click the **Advanced** button to open the **Advanced** dialog box, in which to configure other senior options.
Resolution : A user may select the output resolution (DPI) in the **Resolution** list box, which has no impact on the bar code generation when the Reduced Lines is set to "0". To define this option, you may select or input a value.
Reduced Lines : The **Reduced Lines** list box will allow users to determine whether to reduce the lines. Inputting the value of "1" will reduce 1 line, i.e. (1/resolution) inch, otherwise there is no impact on the bar code.
The above two options are specifically designed for Founder PSPNT. To improve the output precision, the **Resolution** should be consistent with that of the output device, and the Reduced Lines is set to 1.

Generate magnification increase title

Select the **Generate magnification increment title** option to generate the rate increment title in the format of M xx B yy. xx refers to the multiplication of magnification and 100, and yy the bar width increment (micron).

Generate negative

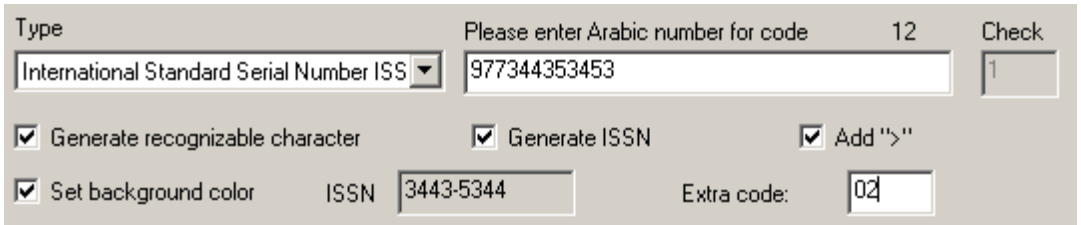
Select the **Generate negative** option to interchange the foreground color and the background color.

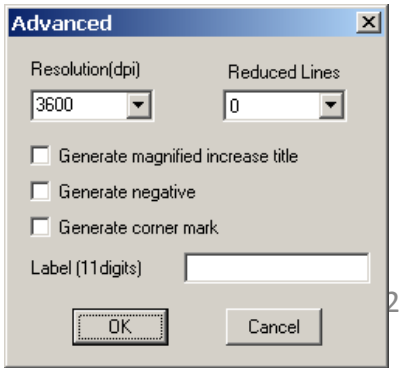
Generate corner mark

Select the **Generate corner mark** option to generate superscripts around the bar code, marking the valid area of the bar code, excluding the magnification increment title and label.

Label

The label is an 11-digit number to mark the bar code inputted in the **Label** field.





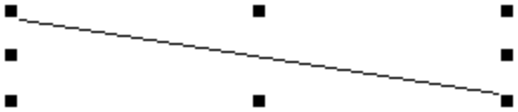
Fractal:

1. Dragon Curve

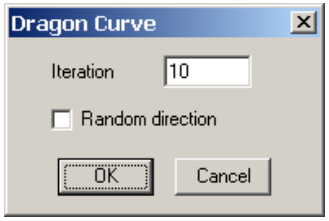
Dragon curve replaces a straight line segment with two lines in the right angle to create a broken line, then replace each straight line segment of the broken line with two short lines in the right angle, repeat the steps in designated times.

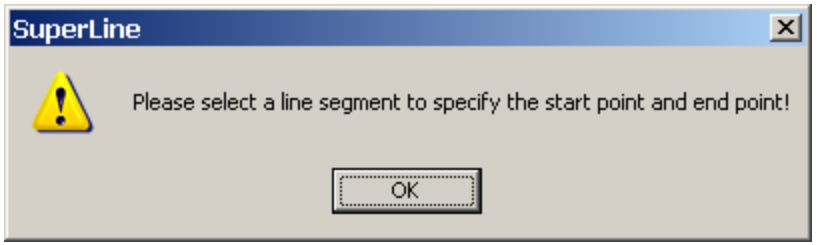
Procedures:

(1)Select a straight line segment;



(2) Select **Tool > Fractal > Dragon Curve**. The dialog box as shown in the following figure now pops up.

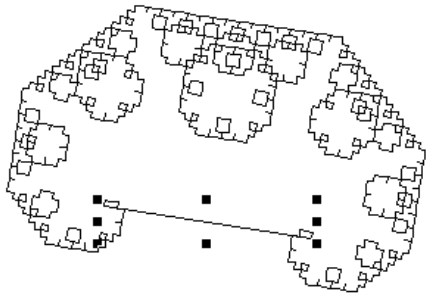


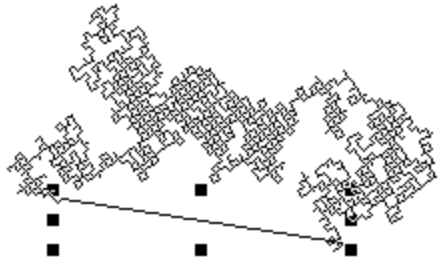


If the user does not select a straight line segment, then the warning dialog box will be displayed as shown in the figure below.

(3) Fill in **Iteration** filed in the dialog box, and click **OK**. The iterative direction will remain the same in the generation of the standard dragon curve as shown in the figure below.

If the **Random direction** option is selected, variations of the dragon curve will be generated in unpredictable shape.



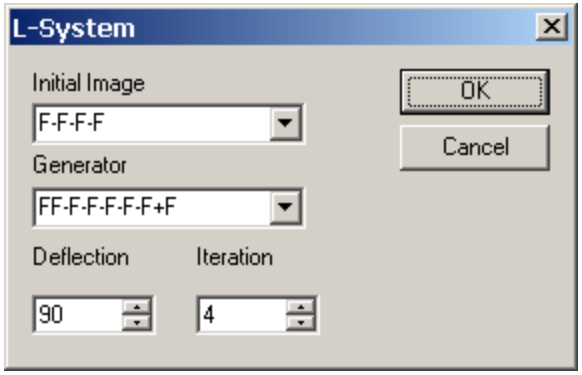


2. L-System

L-System generates fractal graphics via the form syntax. The generating element will replace the initial element to create the new initial element, which will take place repetitively until reaching the iterative times.

Procedures:

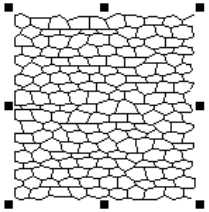
Select **Tool > Fractal > L-System**, and the **L-System** dialog box, as shown in the following figure, appears.



Select the parameters and click **OK** with the effect shown in the figure below.

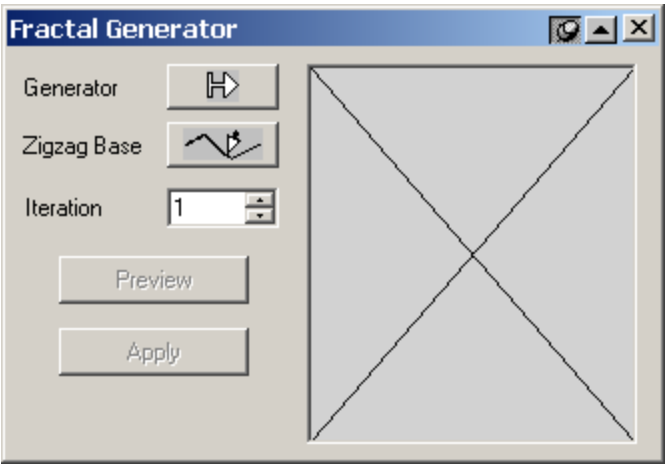
3. Wall Texture

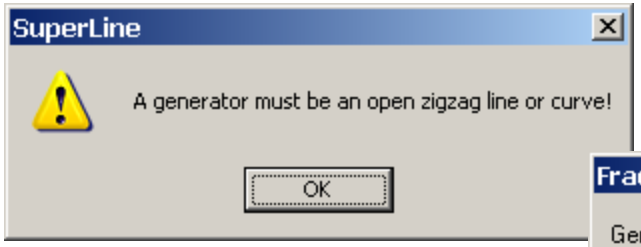
Wall Texture will generate the pattern like a wall. To do this, select **Tool > Fractal > Wall Texture**. The effect is shown as follows:

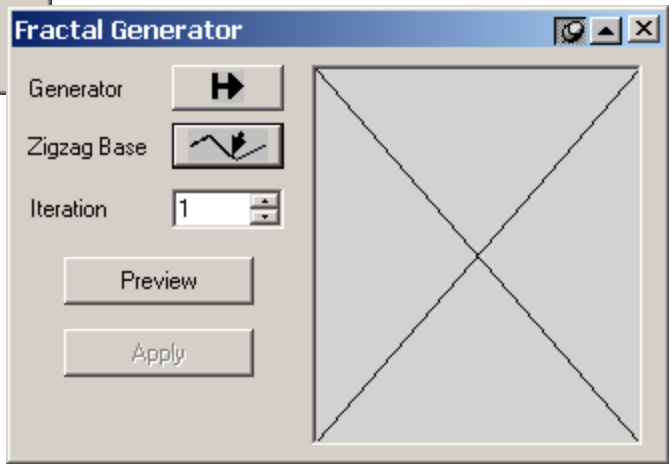


4. Fractal generator

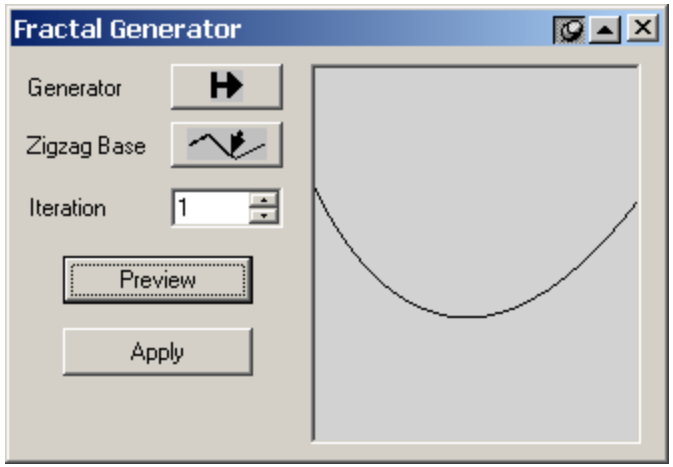
The fractal generator can generate some special fractal patterns and the paths with very simple operation.
Select **Tool > Fractal > Fractal Generator**, and the **Fractal Generator** dialog box appears now.
Click the **Generator** button , the cursor will become , click an open curve/zigzag line. In case of successful selection, the arrow in the **Generator** button will become black , or otherwise the warning dialog box as shown in the figure below will appear.
Click the **Zigzag Base** button , the cursor will become , select an open curve/broken line.
In case of successful selection, the arrow in the **Zigzag Base** button will become black.

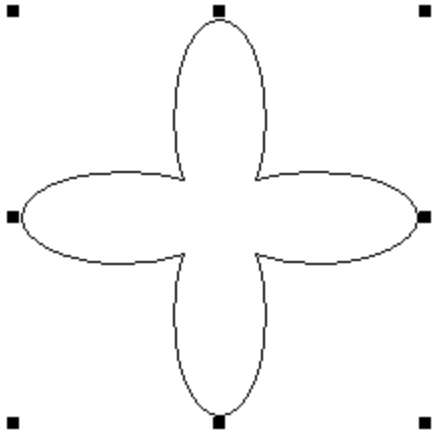






Designate the iterative times, click **Preview**, the right **Preview** window will display the iterative results. If satisfied with the new fractal graphics, the user may click **Apply**, the fractal graphics will be generated around the **Zigzag Base**.





Notes:

① *The graphic generation is linked with the curve direction.*

② *Fractal graphics can have some characteristics that regular polygons generally have, and symmetrical in shape. But only when Zigzag base has polygon characteristics, the fractal graphic generated can have these characteristics. The user can eliminate the polygon characteristics by way of Convert to Curve.*

5. Random Texture

Procedures:

(1) Select **Tool > Fractal > Random Texture** to open the **Random Texture** dialog box shown as in the following figure.

(2) You can define the width and height of the generated texture, and the density level as well (bigger value represents higher level).

(3) Click **OK**. The texture effect you defined will appear on the page.

(4) Import an image, and select the image and the texture together, and then apply the **Engraving on Image** function. The generated engraving is the new screening effect of the random texture.

Note: *When the density level is set to a lower value, the generated screening effect may be NOT good enough. Therefore, you should set a comparably higher level for the sake of effect. But, higher density level may affect the speed the random texture is generated. Please set the level according to your actual demand.*

Centro-Radiative Refraction...: can create the radiating effect from the center, as shown in the following figure.

It can simulate the effect a group of lights rotating around a center. First, an open curve serves as the backbone of the refraction, then the curve is rotated and reproduced with the starting point as the center, and the different-direction parallel lines fill the space in the curve. Users can determine the final refraction effect by controlling the groups of the parallel lines, the numbers of each group of parallel lines, direction of the parallel lines. The parallel lines herein may also be named as light or beam (a metaphor to the optical phenomenon) or the texture.

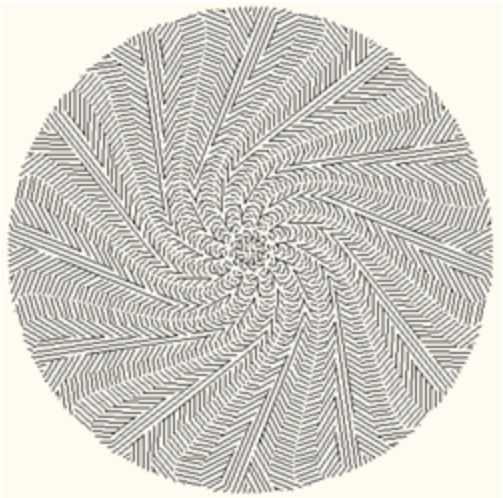
Follow the steps below to create the central radiation refraction:

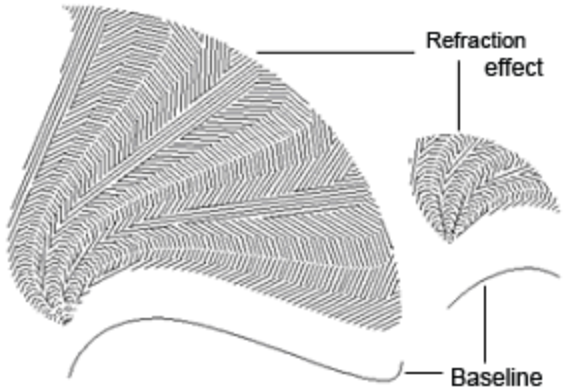
(1)Select an unclosed path as the backbone line of the refraction, which determines the rotating mode of the refraction as shown in figure below.

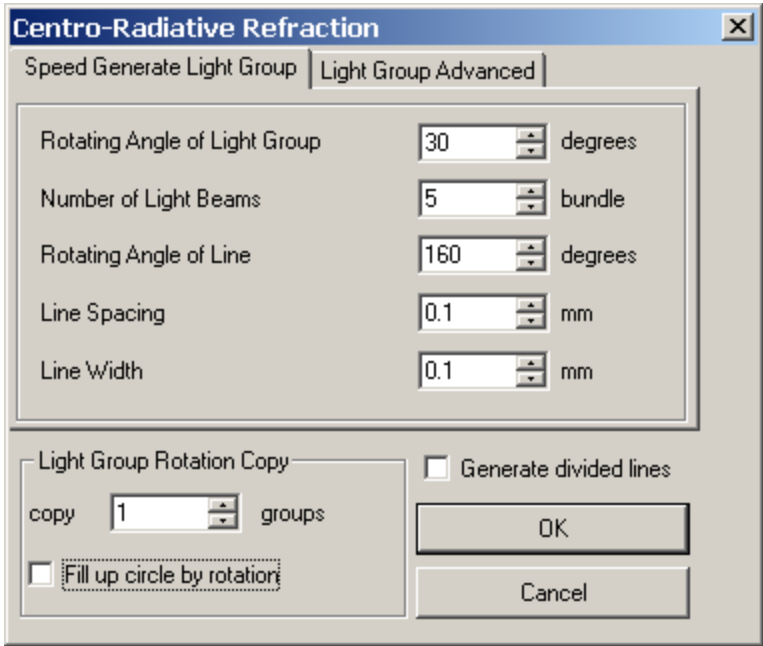
(2) Select **Tool > Centro-Radiative Refractio**n to open the **Centro-Radiative Refraction** dialog box.

(3) Configure the refraction options in the dialog box.

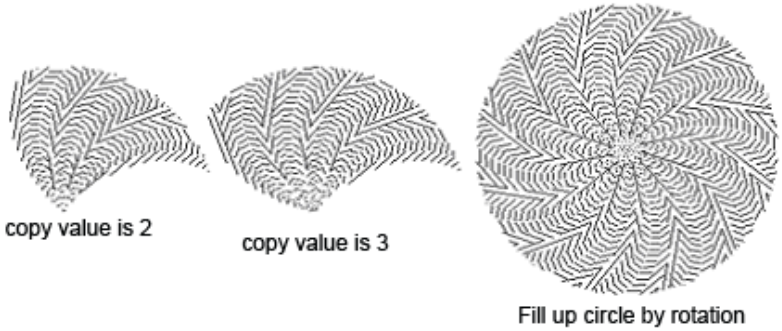
The refraction options include the line groups, beam structure in each group and the generation of cutting line.



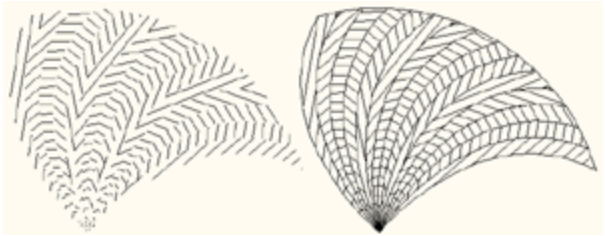




Determine the groups in the **Light Group Rotation Copy** box;
Input the line group numbers in the **copy** box, the sum of which and the total rotating angle of the group should not exceed 360°; Selecting the **Fill up circle by rotation** check box, the system will automatically determine the line groups to ensure full-circle refraction.



Select the **Generate divided lines**, there will be divided lines between adjacent line groups.



It is most complex and critical to determine the line structure of each group with the following parameters:
Rotating Angle of Light Group: Refers to the rotating angle of each light group. The larger is the rotating angle, the greater the area that is covered by the light group. This rotating angle equals to the sum of the rotating angles of each beam in the group.

Number of Light Beams: Refers to how many different directions in each group of light beams. When filling in skeleton graphics, it refers to how many groups of light beams.
Rotating angle of Line: change of line direction.
Line Spacing: distance of adjacent lines in each beam (generally below 1mm).
Line Width: width of each beam.

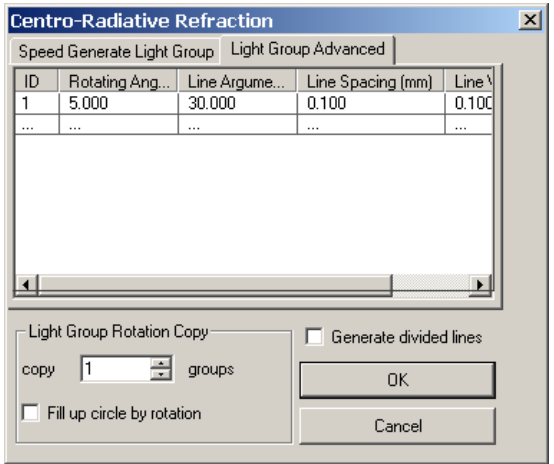
There are two methods for setting up the beam structures of each group:

Quickly configure the line group

The width/interval of each beam in one group is the same with equal rotating angles of the beams and the direction gap between adjacent beams.
Click the **Speed Generate Line Group** tab in the dialog box to configure the beam features.
Rotating Angle of Light Group: set in the field from 0°to 360°, equivalent to the sum of the beam angles.
Number of Light Beams: set in the field from 1 to 100.
Rotating angle of Line: direction change. In case of the 3 beams and texture rotating angle of 90°, it means that the line direction from the first beam changes 90°.
Line Spacing: as set in the field from 0.001 to 10.
Line Width: as set in the field from 0.001 to 10.

Customize the group configuration

Users may configure the line width, line spacing, rotating angle and direction of each beam in one group independently. Switch to the **Light Group Advanced** tab to configure the beams.



The list in the dialog box represents the features of the lines with each row representing one beam and each column representing one feature. The serial number represents the order of the beams, the beam angles constitute the group rotating angle with the texture phase gap representing line direction as the angle gap of adjacent beams. There are also texture interval and texture width.

To change certain parameters, double-click in the target position, and then input the data.

To input the data, right-click, pop out the shortcut menu. Select **Undo** to undo the last operation; select **Cut** to cut the selected data to the clipboard to paste to other data; select **Copy** to copy the selected data for paste; select **Paste** to paste the data on the clipboard to the target position; select **Delete** to delete the selected data; click **Select All** to select all current data.

In addition, right-click to pop up the shortcut menu, select **Copy** to copy the current row, select **Delete** to delete the current row.

Drag the serial-number column to copy the target row.

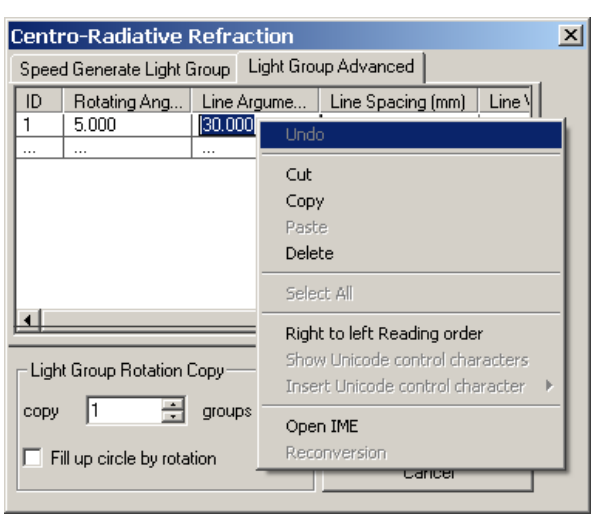
(4) Click **OK** in the dialog box to generate the refraction effect.

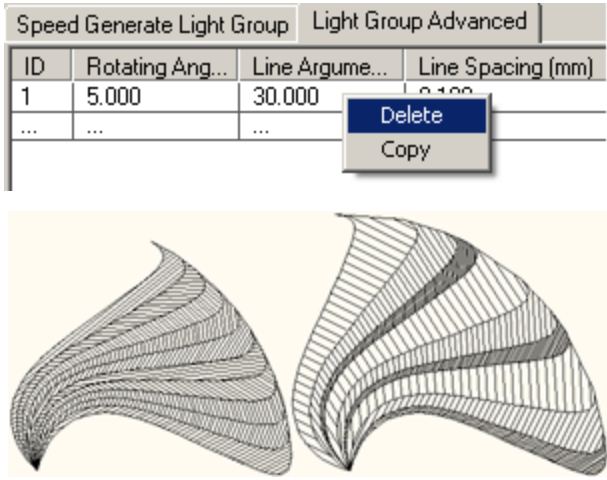
The figure below shows the refraction effects from two beam structures.

Notes:

① In central radiation refraction, users can only select one open path, i.e. one open graphic object instead of any text, group, object, picture and clip mask object.

*② Users may change the object size of the central radiation refraction by the mouse or modification of the width and height value in the **Object Panel**, or change the color and line width of the central radiation refraction object by modifying the outline and outline properties; This also applies to the concentric circle refraction and parallel line refraction.*





Concentric Circles Refraction: can create the concentric circular refraction effect as shown by the figure below. the concentric circle refraction also fills in the graphic space by lines. The users can determine the beams in each group, beam direction and the final refraction effect. In contrast, the central radiation refraction will automatically generate the refraction backbone concurrently with the refraction operation, the concentric circle refraction requires the user to design the skeletal figure prior to refraction operation. Similarly, the lines refer to the parallel lines, or textures.

Follow the steps below for concentric circle refraction:

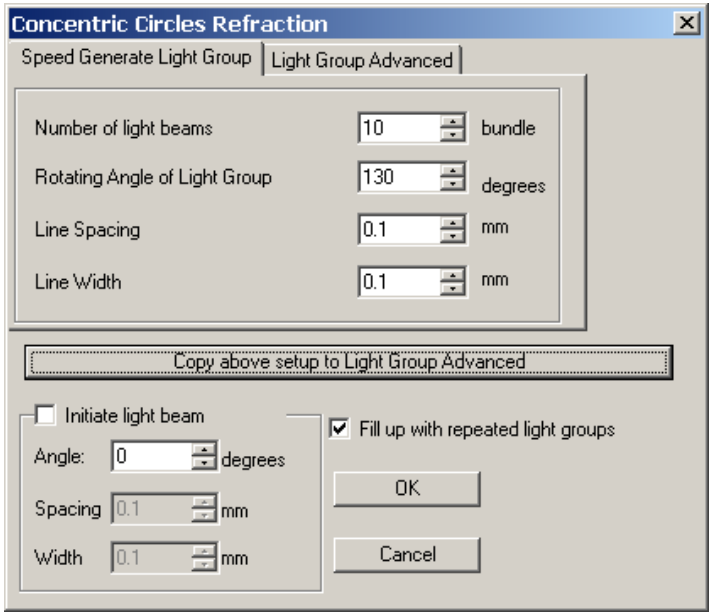
(1)Create skeletal graphics consisting of a series of closed figures that determine the line-filling position and the refraction shape. The sample skeletal figure can be created in such methods as curve combination and reproduction.

(2) Select the skeletal figure.

(3) Select **Tool > Concentric Circles Refraction** to open the **Concentric Circles Refraction** dialog box.

(4) Configure the refraction option in the dialog box.

The refraction options consist of the starting beam, beam structure in each group and the filling of all skeletal figures.



Select the **Initiate light beam** check box to create the starting beam, i.e. filling the backbone path in the center. Users may select the line direction, line interval and width in the **Angle, Spacing** and **Width** boxes. In case of no selection of the **Initiate light beam** check box, the backbone path in the center will not be filled. However, the user may set the starting angle in the Angle box, based on which other beams will change directions.

Select the **Fill up with repeated light groups** check box, the line group will repeatedly fill in the skeletal figure until it is full. Otherwise, only one designated beam is filled.

Like the central radiation refraction, the concentric circle refraction also fills the graphics with a group of beams, and allows the configuration of the beam structure of each group in the following parameters:

Number of light beams: different directions in each group.

Rotating Angle of Light Group: beam direction change.

Line Spacing: distance of adjacent lines in each beam (generally below 1mm).

Line Width: width of each beam.

Configure the beam structures of each group in the following ways:

Quick configuration of the group

The line width/interval of each beam is equal with the equivalent beam direction gap.

Click the **Speed Generate Light Group** option in the dialog box to configure the beam features.

Number of light beams; as set out in the field from 2 to 100 (with user number assumed as 1, the system will automatically generate the refraction with 2 beams).

Rotating Angle of Light Group: beam direction change. In case of the starting angle of 0°, 3 beams and 90° texture rotating angle, the system will generate the starting beam angle of 0°, the first beam angle of 30°, the second beam angle of 60°, and then 120° and 150° to 180° with the angle gap of 30° for subsequent beams.

Line Spacing: as set out in the field from 0.001 to 10.

Line Width: as set out in the field from 0.001 to 10.

Customize the group configuration

Users may configure the line width, line interval, rotating angle and direction of each beam in one group independently.

Click the **Light Group Advanced** option in the dialog box, configure the beams.

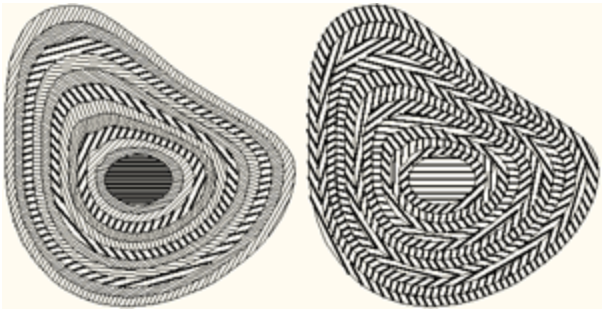
The list in the dialog box represents the features of the lines with each row representing one beam and each column representing one feature. The serial number represents the order of the beams, the beam angles constitute the group rotating angle with the texture phase gap representing line direction as the angle gap of adjacent beams. There are also texture interval and texture width.

To modify and edit the beam data in the list, please refer to the content of Central Radiation Refraction.

Select the **Copy above setup to Light Group Advanced** button, the data on the **Speed Generate Light Groups** pane will be copied to the list of **Light Group Advanced** pane.

(7) Click **OK** in the dialog box to generate the refraction effect.

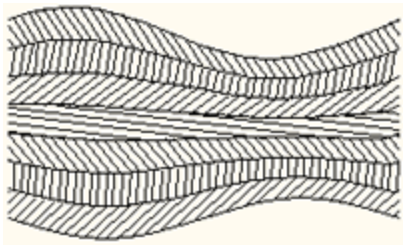
The figure shows the refraction effect of quick group configuration and customized group configuration.

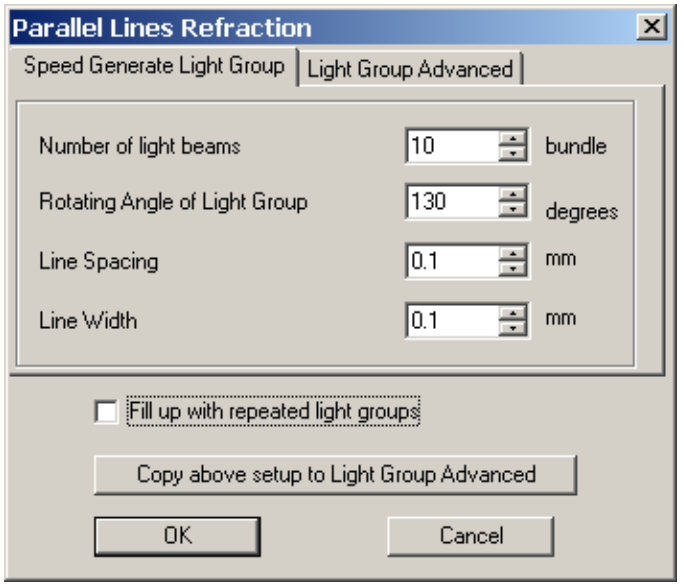


Note: *In concentric circle refraction, the skeletal figure may be a graphic object, or a group object or multiple graphic objects. However, it always consists of multiple closed paths.*

Parallel Lines Refraction: is similar to concentric circle refraction, but the skeletal figure consists of multiple open curves with the beams to fill the curve space as shown in the figure below.
With the parallel line refraction, one group of beams will fill in the space between the open paths. Users can determine the final refraction effect by controlling the beams of each group and the beam directions. The lines herein also refer to the parallel lines or textures.
Follow the steps below to create parallel line refraction:
(1)Create skeletal graphics consisted of a series of open curves that determine the line-filling position and the refraction shape. The sample skeletal figure can be created in such methods as curve combination and reproduction.
(2) Select the skeletal figure.
(3) Select **Tool > Parallel Lines Refraction** to open the **Parallel Lines Refraction** dialog box.
(4) Configure the refraction option in the dialog box.
Select the **Fill up with repeated light groups** check box, the line group will repeatedly fill in the skeletal figure until it is full. Otherwise, only one designated beam is filled.

The beam structure of each group has the following parameters:
Number of light beams: different directions in each group.
Rotating Angle of Light Group: beam direction change.
Line Spacing: distance of adjacent lines in each beam (generally below 1mm).
Line Width: width of each beam.





Configure the beam structures of each group in the following ways:

Quick configuration of the group

The line width/interval of each beam is equal with the equivalent beam direction gap.

Click the **Speed Generate Light Groups** option in the dialog box to configure the beam features.

Number of light beams: as set out in the field from 2 to 100 (with user number assumed as 1, the system will automatically generate the refraction with 2 beams).

Rotating Angle of Light Group: beam direction change. In case of the starting angle of 0°, 3 beams and 90° texture rotating angle, the system will generate the starting beam angle of 0°, the first beam angle of 30°, the second beam angle of 60°, and then 120° and 150° to 180° with the angle gap of 30° for subsequent beams.

Line Spacing: as set out in the field from 0.001 to 10.

Line Width: as set out in the field from 0.001 to 10.

Customize the group configuration

Users may configure the line width, line interval, rotating angle and direction of each beam in one group independently.

Click the **Light Group Advanced** option in the dialog box, configure the beams.

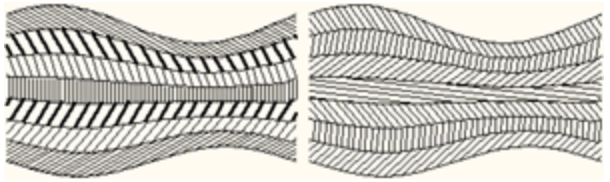
The list in the dialog box represents the features of the lines with each row representing one beam and each column representing one feature. The serial number represents the order of the beams, the beam angles constitute the group rotating angle with the texture phase gap representing line direction as the angle gap of adjacent beams. There are also texture interval and texture width.

To modify and edit the beam data in the list, please refer to the content of Central Radiation Refraction.

Select the **Copy above setup to Light Group Advanced** button, the data on **Group Quick Create** pane will be copied to the list of **Group Senior Customization** pane.

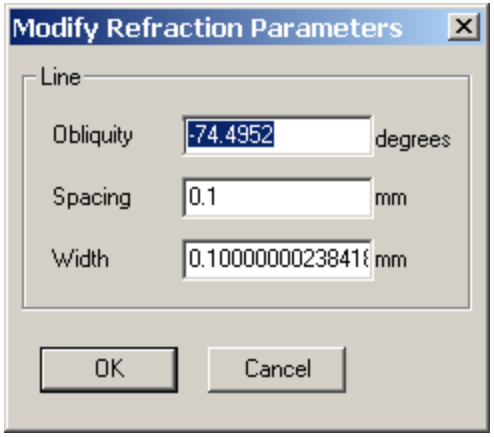
(5) Click **OK** in the dialog box to generate the refraction effect.

The figure shows the refraction effect of quick group



Note: *In parallel line refraction, the skeletal figure may be a graphic object, or a group object or multiple graphic objects. However, it always consists of multiple closed paths.*

Modify Refraction Parameters: After the refraction operation of a graphics, the user may also change the refraction via the **Modify refraction parameters** function as follows:
(1) Select the generated refraction beam group, select **Object > Ungroup;**
(2) Select the target group, enter into **Tool > Modify Refraction Parameters**, change the bevel, interval and outline in the **Modify Refraction Parameters** dialog box;



(3) Click **OK in the dialog box to complete the operation.**

Border Refraction Object: to pick up graphic refraction outline
Pick up the refraction outline as follows:
(1) Select the generated refraction beam group, select **Object > Ungroup;**
(2) Select the target beam at the edge, click **Tool > Border Refraction Object** to generate the refraction outline.

Image Refraction: is to divide an image into different areas according to its brightness. Fill in each area using straight lines with different directions. This function is used for special refraction printing.
The procedure is as follows.

(1) Prepare image

It is usually done in other image processing software such as Adobe PhotoShop and Founder Artworld. Save the created image in the right format (like TIFF, etc.). In the Founder SuperLine page, select **File > Import** in the menu to import the image to the page.

(2) Create refraction effect

Grading: It controls to divide the image into how many layers and fill in parallel lines in the area of each layer.
Spacing: The space between the filled lines in the same area.
Width: The line width of the filled lines in the one area.
Angle: It shows the distribution of the segment array directions in different areas. For example, it divides to four levels, and when the angle distribution ranges from 30° to 150°, the segment array directions in each area are 30°, 60°, 90°, 120° and 150° respectively. It ranges from 0° to 180°.
After the parameters are set, click **OK** and the refraction effect is made.
Note: *The user can change the refraction image size by using mouse or modifying the values in the width and height edit boxes in the Object Panel. The user may also change the color and line width of the refraction image object by modifying the Stroke in the Fill and Stroke dialog box.*

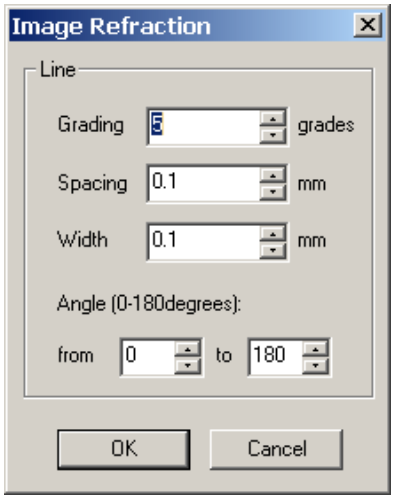
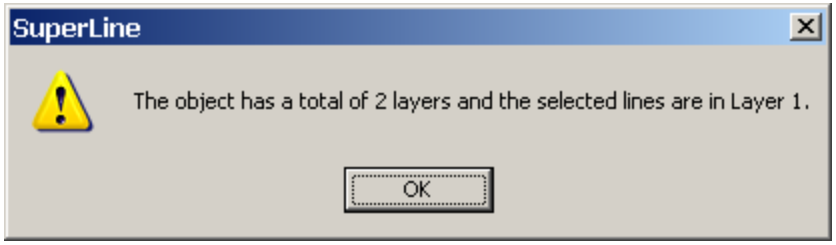


Image Refraction Property: For the created image refraction, the user can view the refraction properties of any grading to make sure which grade it is. The detailed procedure is as follows.
(1) Select the created image refraction. Ungroup it by selecting **Object > Ungroup** in the menu.
(2) Randomly select one grade of refraction, and select **Tool > Image Refraction Property**. View the total grading of refraction and the grading number of this grade of refraction in the popped up dialog box.



Monolayer Image Refraction: We can do monolayer image refraction for an image object, which is to process only one level of refraction. This function can do local modification and adjustment for the created image refraction. The procedure is as follows.

(1) Select the image object.

(2) Select the **Monolayer Image Refraction** command under the **Tool** menu to open the **Monolayer Image Refraction** dialog box. And set related parameters.

Grade: It controls to divide the image into how many layers and fill in parallel lines in the area of each layer.

Refract grade: the level of refract.

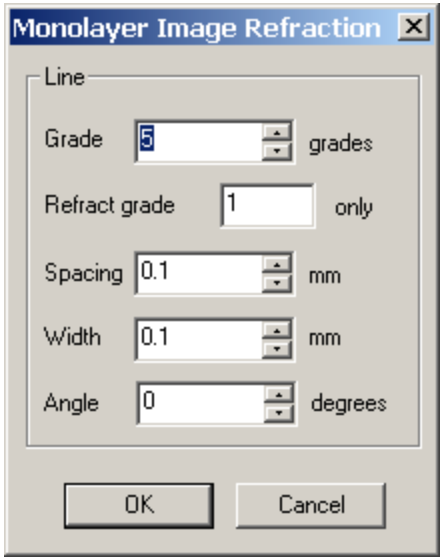
Spacing: The space between the filled lines in the same area.

Width: The line width of the filled lines in the one area.

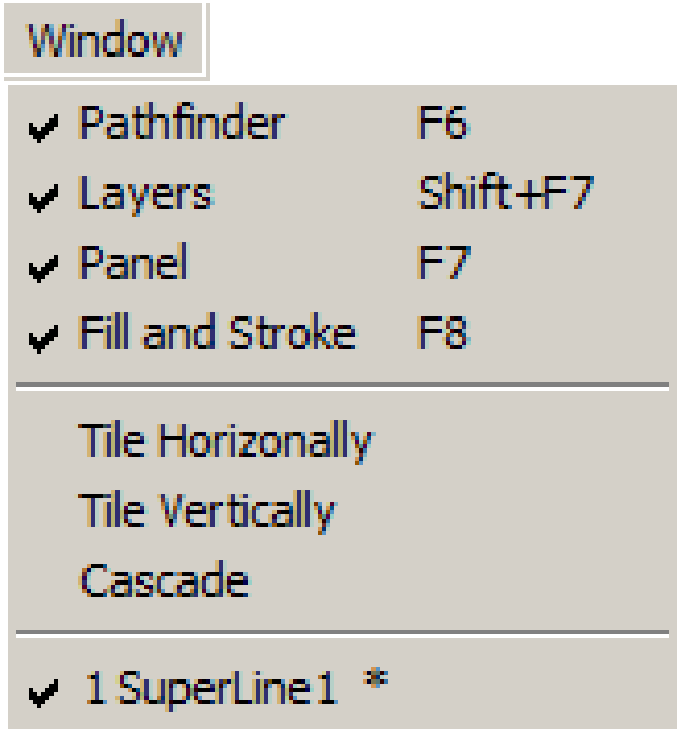
Angle: It shows the distribution of the segment array directions in different areas. For example, it divides to four levels, and when the angle distribution ranges from 30° to 150°, the segment array directions in each area are 30°, 60°, 90°, 120° and 150° respectively. It ranges from 0° to 180°.

(3) Click **OK to complete.**

Note: *The value range of the **Refract grade xxx only** parameter is from 1 to the number of grade (if the user set it bigger than the number of grading, it will create refraction according to the highest number of grading automatically).*

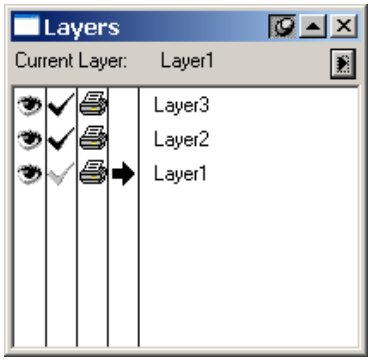


Window

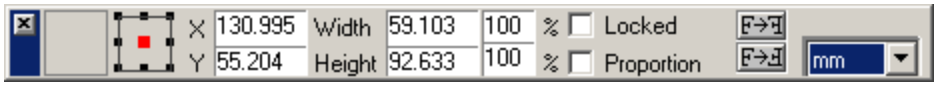

Window
Pathfinder F6
Layers Shift+F7
Panel F7
Fill and Stroke F8
Tile Horizonally
Tile Vertically
Cascade
1 SuperLine1 *

Pathfinder:

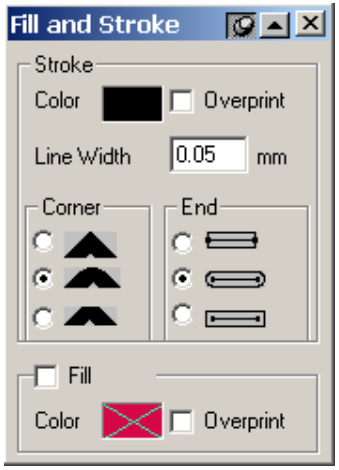
Layers:



Panel:

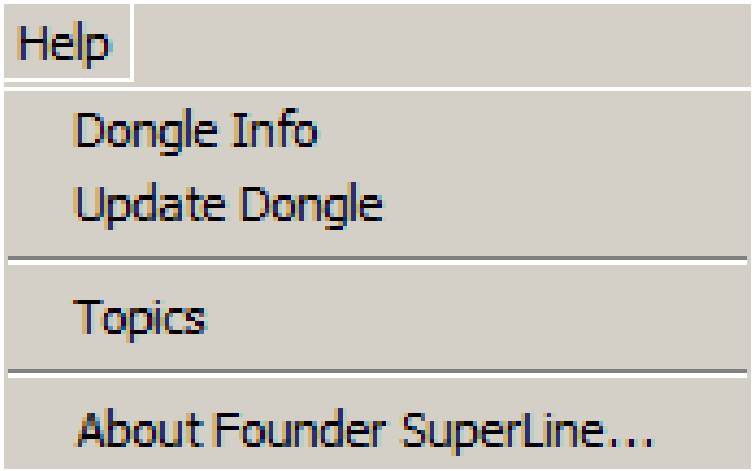


Fill and Stroke:



When more than one document window are opened, you can display all of them concurrently by selecting the **Tile Vertically**, or **Tile Horizontally** or **Cascade** command under the **Window** menu.

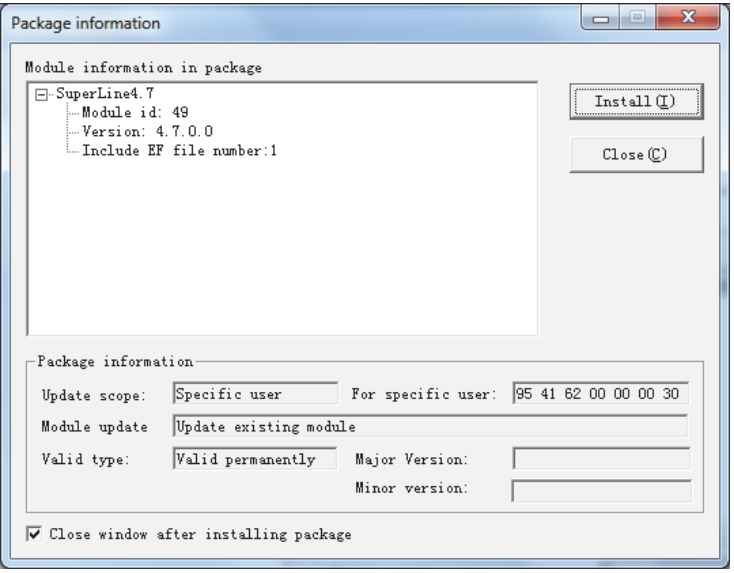
Help

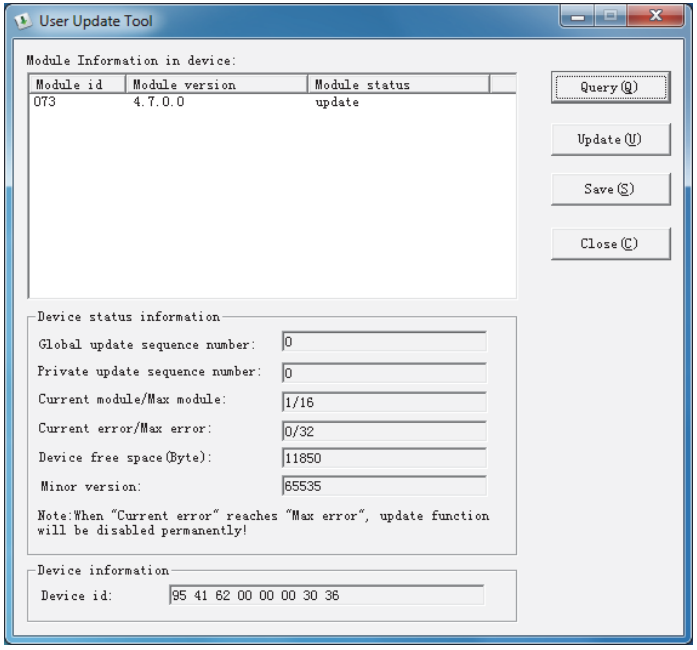

Help
Dongle Info
Update Dongle
Topics
About Founder SuperLine...

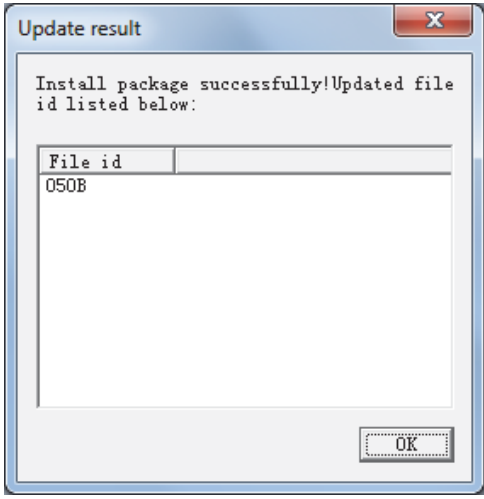
Dongle Info: to update SuperLine dongle - add modules.

How to update SuplerLine dongle – Add Module

1. Please make sure the dongle of **SuperLine** is plugged in.
2. If **SuperLine** is running, please click menu **Help -> Dongle Info**.
3. If you cannot run **SuperLine**, please go to **Windows** Start menu, Select **All Programs ->Founder -> Founder SuperLine4.71-> Update Dongle -> Add Module**. The User Update Tool will be opened.
4. Click **"Query"** button to read the dongle, the following window will pop up.
5. Click **"Update"** button. Select the ***.pkg** file which is sent by Founder.
6. Click **"Open"** button, then this window will pop up:
7. Click **"Install"** to add the module.
8. The following window pops up if the update is installed successfully. Click **"OK"** to close the window.



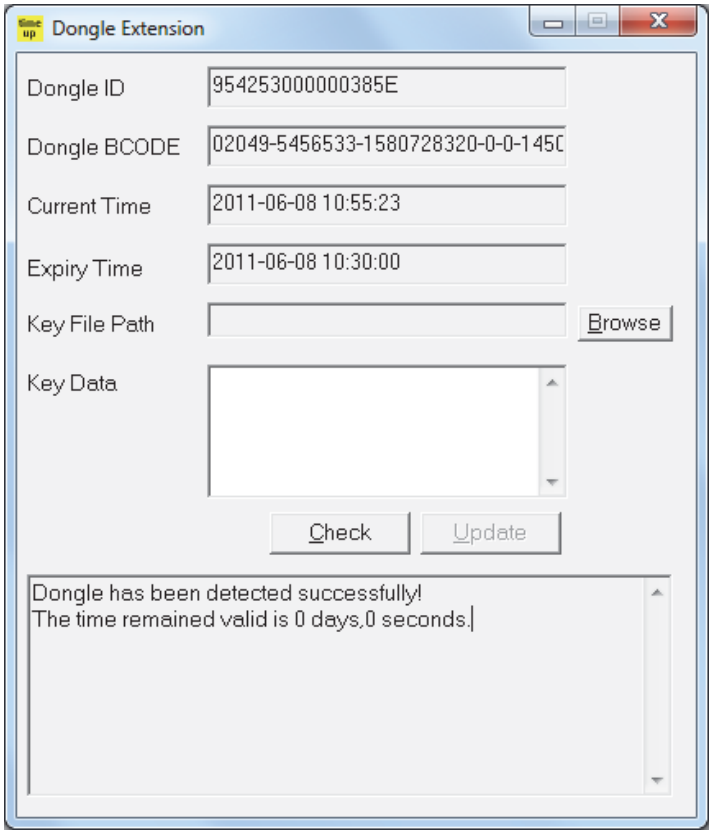




Update Dongle: to check and extend SuperLine dongle .

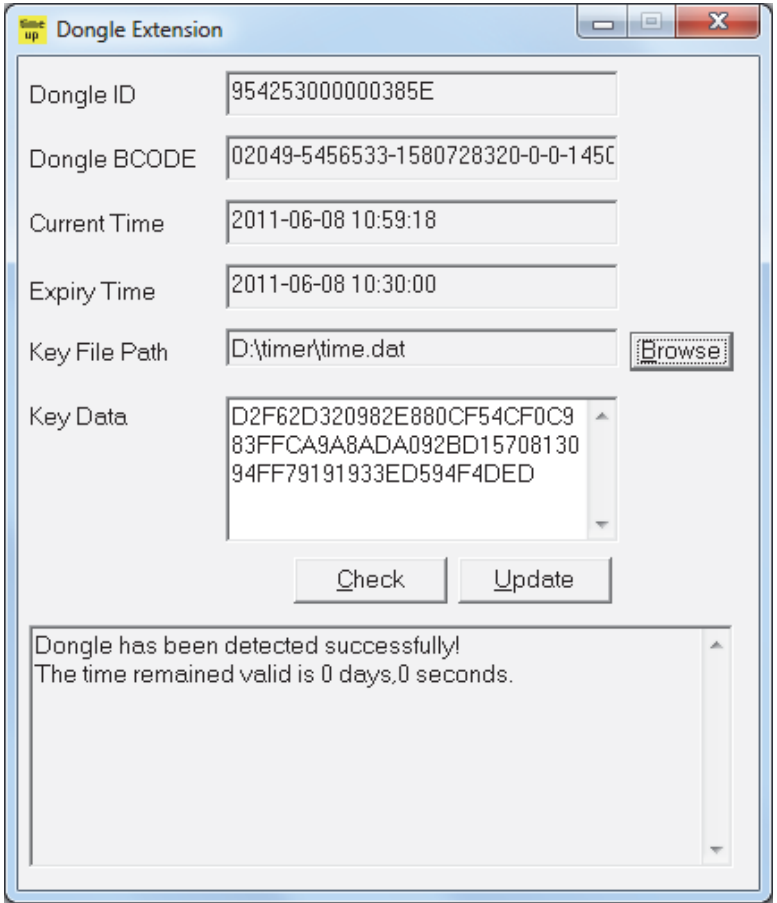
How to check SuperLine dongle and extend time

1. Please make sure the dongle of **SuperLine** is plugged in.
2. If **SuperLine** is running, please click menu **Help -> Update Dongle.**
3. If you cannot run **SuperLine**, please go to **Windows Start** menu, Select **All Programs ->Founder -> Founder SuperLine4.71 -> Update Dongle -> Extend Time.**
4. The following window will pop up; you can get the information such as dongle ID, expired time etc.
5. You can send the screen to Founder if needed.

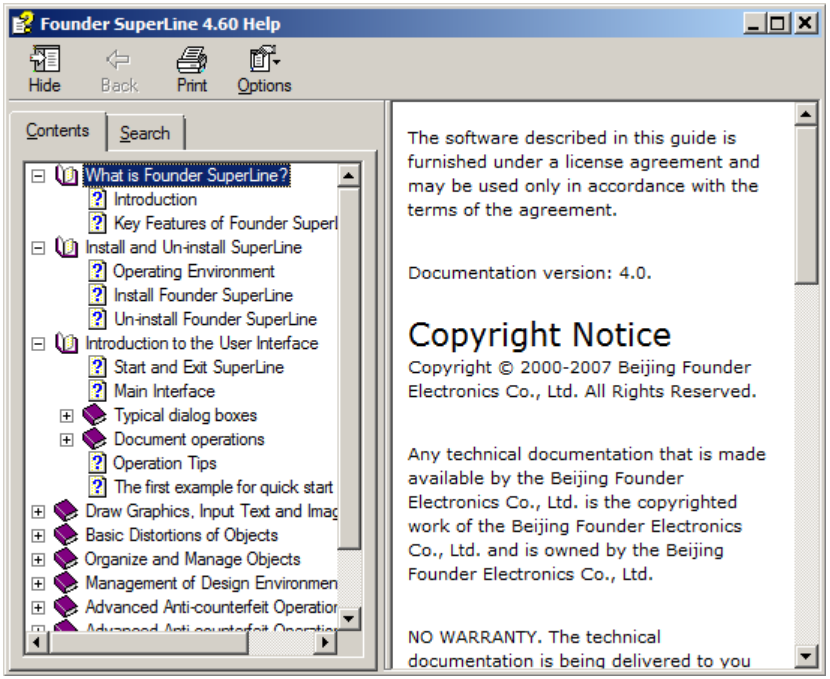


How to extend the timer dongle or make it permanent

1. Please make sure the dongle of **SuperLine** is plugged in.
2. If **SuperLine** is running, please click menu **Help -> Update Dongle**.
3. If you cannot run **SuperLine**, please go to **Windows Start** menu, Select **All Programs ->Founder -> Founder SuperLine4.71 -> Update Dongle -> Extend Time**.
4. Click "**Browse"** button and select the time extension file (.dat file).
5. Click "**Update"** button, then you can see the expi**SuperLine** red time is changed.



Topics: to get the help document.



About Founder SuperLine: to get the version and copyright time.

The Ctrl key

The **Select** tool  will appear, whichever drawing tool you currently select, by pressing the **Ctrl** key, while the release of the **Ctrl** key will restore the original tool.

The Space key

The **Hand Tool**  will appear, whichever drawing tool you currently select, by pressing the space key, while the release of the Space key will restore the original tool.

The Right-cliczk menu

Right-click in the drawing area will pop up the shortcut menu that contains the most commonly used commands to facilitate your operations. Depending on the object selected, they will be different. However, the universal menu commands include: **Undo, Redo, Group, Ungroup, Rotate, Arrange, Open Curve Mirror, Convert to Curve and etc.**

Right-click in any of the toolbars will also pop up a shortcut menu that contains commands for hiding/displaying the toolbars, property windows, grid and guides, as well as commands for snapping objects.

www.foundereagle.com

Beijing Founder Electronics CO., Ltd.

Thanks

No.9, 5th Street, Shangdi Information Industry Base Haidian District, Beijing 100085, China.
Tel: +86 10 6298 1440 Fax: +86 10 6298 1440