Walk
# Input Method

Digitizing Tools and Basic Functions

melco

Selecting a Tool

Click on the desired tool in the input toolbar

- If you don't see the desired tool, it may be necessary to select the tool from a flyout.

- To access a flyout, click and hold on the tool within the same tool family. After a half second, the other tools within this family will appear at the right. You may then select your desired tool. This newly selected tool will now be displayed in the input toolbar for this tool family.

- Tools with flyouts are indicated by a small black arrow in the lower right corner of the tool.

Click & Hold
½ Second
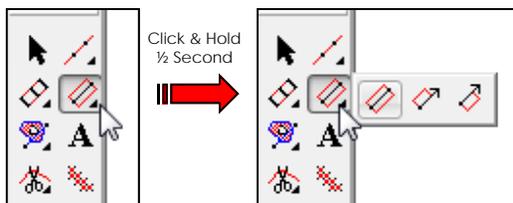
Selecting Properties

Once a digitizing tool or an element is selected, you can change the properties on the dynamic properties bar.

Creating the Elements

After selecting a digitizing tool and setting the properties, you can create the elements in the view window.

- Left Click = Creates a Straight Point

- Right Click = Creates a Curve Point

- Click & Drag = Pulls Bezier Handles from a point as you digitize

- [Backspace] = Deletes the last input point you created

- [Enter] = Completes the element or moves to the next step of an element

- [Ctrl] + [Enter] = Completes a column with the exit point on the opposite side

- [Shift] + [Enter] = Closes an open shape and completes the element

- Holding [Alt] = Constrains line angles to 15° increments

- [Esc] = Removes all points from the element

- [Esc] x 2 = Deselects Input Tool

- Watch the Status Bar for prompts when using the different input tools

Economy of Points
Use as few points as possible to create your shapes when digitizing. The fewer points an element has, the easier that element is to edit and scale. A straight line doesn't get any straighter by adding more straight points to it. A straight line is most effectively created by two straight points.

When working with curves, try stay within 180° in any sequence of three points.

DesignShop Symbols

Icons

Straight Point
(Non-Selected points display in blue)
(Selected Points display in black)

Curve Point
(Non-Selected points display in blue)
(Selected Points display in black)

Bezier Handle
(From a Straight Point, handles work independently)
(From a Curve Point, handles work in tandem)

Entry Point
(Indicates the start of an element)

Exit Point
(Indicates the end of an element)

Last Stitch of Previous Element
(Displays the last stitch of the previous element. If you are creating the first element of the design, it indicates the origin of the design)

Cursors

Edit Mode
(You can select elements)

Cursor Over an Element
(You can click and drag to move the element)
(Hold [Alt] to constrain the movement to the X or Y axis)

Cursor Over a Line
(You can add points along the line)
(Click and drag to move the line)

Cursor Over a Straight Point
(Click and drag to move the point)
(Hold [Shift] and click on the point to change it to a Curve Point)

Cursor Over a Curve Point
(Click and drag to move the point)
(Hold [Shift] and click on the point to change it to a Straight Point)

Cursor Over a Entry, Exit, or Handle
(Click and drag to move the point or letter)
(Hold [Ctrl] and click and drag to move the letter off the line)

Insert Hole, Split Line, or Fill Island
(Inserts holes, split lines, or fill islands into selected elements)

Insert Entry/Exit Points
(Insert or change the entry and exit points of the selected element)
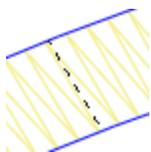(Can also resequence with multiple elements selected)

Insert Splice Line
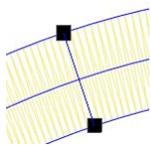(Inserts slice lines within an element)

Insert Stitch Direction Line
(Inserts stitch direction lines within an element)

Stitch Direction Lines

Stitch Direction Line
(Wireframe Editing Mode)
(Indicates the stitch direction of an element)

Stitch Direction Line
(Stitch Direction Editing)
(Creates a stitch direction line across a form. Multiple stitch direction lines can be used to create different effects. Created by clicking and dragging across an element with the stitch direction tool)
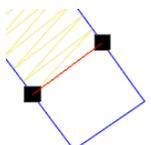
End Line
(Stitch Direction Editing)
(Creates an end line before the end of the shape. This allows for the compensation of stitch push. Created by right-click and dragging across an element with the stitch direction tool)

Other Lines
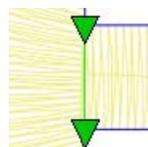
Splice Lines
(Breaks up larger, more complex shapes into smaller regions. Each region can have its own stitch direction line. Created by clicking and dragging across an element with the splice tool. This is usually done at a junction or odd angle in the shape.)
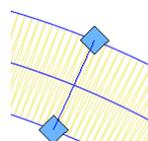
Singleline Width
(Indicates the width of a single line column. The width of the column can be changed by clicking on one of the points of the width and dragging.)

Walk Input Method
The Common Tools

| Walk Type: | Normal | Stitch Length: | 20 | □ Retrace |

Select Walk Input Method
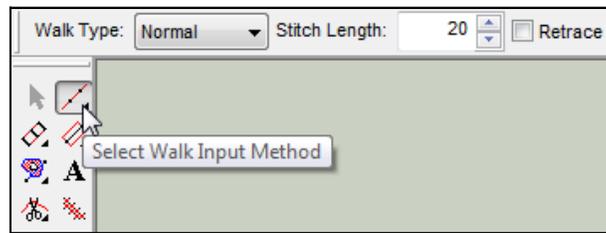
Walk Normal

- Creates a single running stitch
- Useful as Travel Stitches
  - Used to travel from one point in a design to another without trimming
  - Big factor in design efficiency
- Work well for small detail work
- Used for digitizing a manual underlay

Walk Normal Retrace & Walk Bean
Walk Normal Retrace elements are two layers of thread. Walk Bean elements are usually three layers of thread. Using these two elements is a very effective way to outline smaller designs without trimming.
The difference between two layers of thread and three layers is difficult to see.

Walk Bean

- Creates a multi-layered running stitch
  - Each stitch steps forward, back, and forward again.
  - Increasing the Bean Thickness would increase the number of times each stitch repeats.
- Used for detail work that is too small for a satin
- Sometimes used for small borders
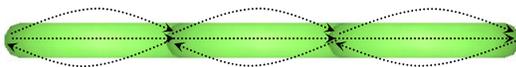
Auto Scroll
When using an input tool, if you move your cursor off of the view window, the screen will pan for you. To stop the panning, simply move your cursor back into the view window.
You can change the panning speed or turn off this option by going to Tools > Options > Preferences, and changing the settings under Auto Scroll.

Properties

Stitch Length
- Changes the length of stitches within the walk element The stitch length is the distance between needle penetrations.
- Longer stitches stay up out of the nap of the material better, but if the stitches are too long, they will snag.
- Shorter stitches follow curves better
- Keep stitch lengths between 15 -40 points

Retrace
- The walk element will trace back over itself to end where it began
- The needle penetrations line up

Offset
- Used to prevent needle penetrations lining up on a walk retrace.
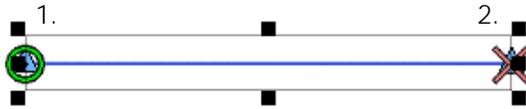
Curve Compensation

Example of Curve Compensation

- Shortens the stitch length inside curves

Bean Thickness
- Adjusts the layers in a Walk Bean

Creating a Walk Element
Straights, Curves, and Quantity of Points

Straight Lines

To create a straight line using a walk input method, simply choose the tool, then

1. Left-click to create a straight point at the beginning of the line.
2. Move the mouse to the end of the line and left-click to create a straight point at the end of the line. (If you want to constrain the line angle to 15° increments, hold [Alt] while moving the mouse.)
3. Press [Enter] on your keyboard to complete the element.
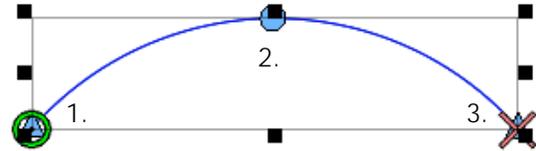
Curve Lines

To create a curve line using a walk input method, simply choose the tool, then

1. Left-click to create a straight point at the beginning of the line.
2. Move to the center of the curve and right-click to create a curve point.
3. Move to the end of the line and left-click to create a straight point.
4. Press [Enter] on your keyboard to complete the element.

Complex Shapes

- When creating curved segments, try to divide the curves into equal portions and use as few points as possible. However, if a curve exceeds 180°, use multiple curve points.
- To create Sharp angles, use a straight point. Straight points allow a line to change drastically from a curve to a straight line, or from one angle to another.
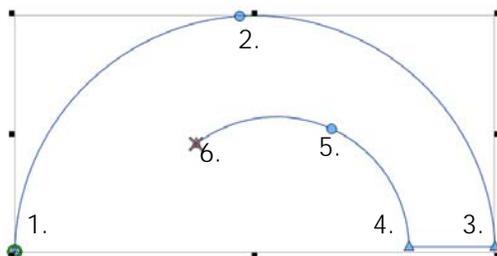
1. Straight
2. Curve
3. Straight
4. Straight
5. Curve
6. Straight
7. [Enter]

Straight Points vs. Curve Points

- Both straight points and curve points can have Bezier handles extending from them.
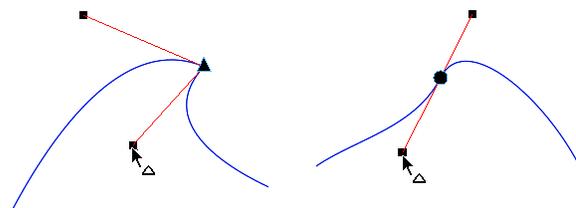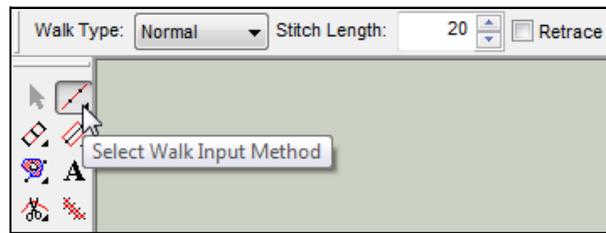
Straight points have Bezier handles that can be moved independently.

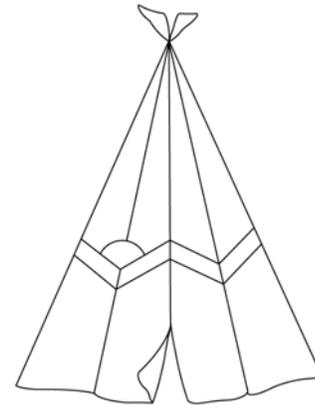Curve points have Bezier handles that move in tandem.

Walk Input Method
The Less Common Tools

Walk Jump

- Walk jumps are an older command that are no longer used very often.
- Defines a path, but no stitches will be made along that path.
- Used to move the frame on the machine without sinking stitches.
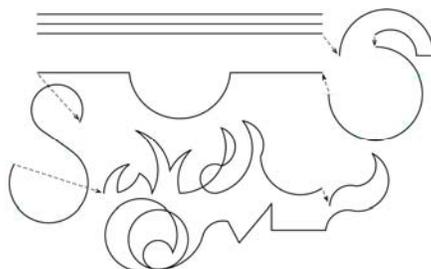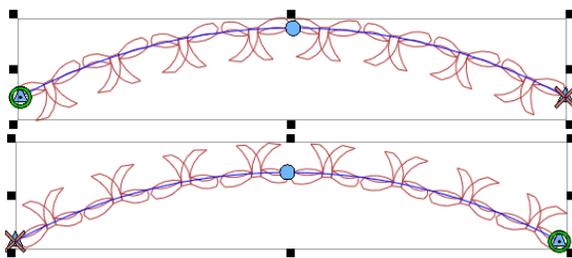

C:\Designs\Graphics\Teepee.bmp

Try to digitize this graphic allowing only 2-3 layers of stitching with no trims.
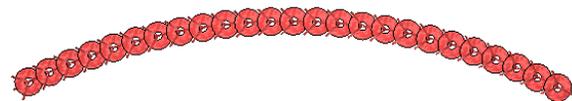
Walk Decorative

- Creates a repeating pattern along the input line
    - Orientation of the pattern is dependent on the direction the element was digitized
- Mostly used for decorative elements

Walk Sequin

- Creates a line of sequins
    - Fixing stitches for the sequins are set in Object Properties
- Mostly used for decorative elements
- Requires fairly advances digitizing knowledge

Manual Stitch
(Available Through the Flyout)

- Not used very often
    - Only sinks a stitch on input points
    - Has no Properties or Curves
- Used for creating your own Tie Ins and Tie Offs
- Used for creating your own Sequin Fixing Stitches
- Manual stitches can be used for traveling over a satin stitch

C:\Designs\Graphics\Lines.bmp
This design can be great practice for digitizing curves.