PantoStacker

PantoStacker[™] allows you to create a single row pantograph or an alternating staggered double-row pantograph that can be used to sew an entire quilt.

You can create the entire quilt layout, which will allow you to sew each row as you roll the quilt. You can use the size of your safety area to create the pantograph, or you can specify the size of the pantograph and apply the size of the patterns and rows later.

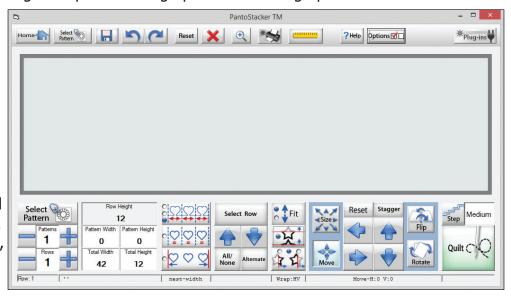
Based on your software and subscrtiption type, not all features will be available.

PantoStacker™

PantoStacker[™] is a powerful and efficient tool that will assist in creating repeating rows and patterns for your quilt. With this version, you are able to create a two row Pantograph with up to fifty patterns per row. These can then be sewn as much as you like or saved for later. We will first cover the functions then go over creating a couple of Pantographs. The Pantographs created in this version

will be treated as a pattern when you go to place them on your quilt.

When you first open PantoStacker™ it will take you to the screen to set your safety area. The dimension of the safety area you set will be the dimension for the new pantograph. This software will connect to the robotics at first. If you do not set the safe area, you will not be able to access this portion of the application.



Menu Bar

The settings across the top, the Menu Bar, are used to control your Pantograph if something needs to be Saved or Undone. You can Undo all steps all the way back to the start of your Pantograph layout.



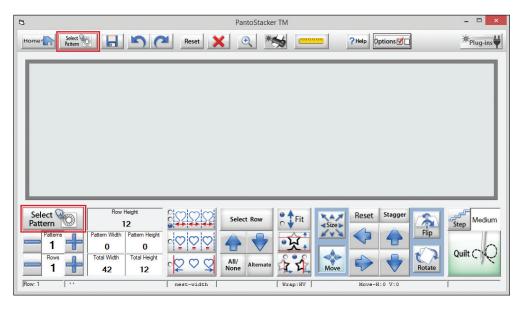
- **1. Home** Returns you to the Home screen for the Quilter's Creative Touch Software.
- **2. Select Pattern** Opens the pattern selection screen.
- **3. Save** Saves your current pantograph as a pattern so it can be used later.
- **4. Undo** Will remove the last action preformed.
- **5. Redo** Will reinstate the last action that was Undone.
- **6. Reset** Resets all settings within the pantograph, keeping the pattern.

- Delete All Deletes all settings, including selected pattern and sizing.
- **8. Zoom** Zooms in, tap and drag to move.
- 9. Print Opens the print setup screen.
- **10.Ruler** Used to gather measurement data regarding your quilt. You can also apply the measurements to the quilt or pantograph.
- **11.Help** Access to Help files.
- **12.Options** Access Options Menu.
- **13. Plug-ins** Displays the Plug-ins available, such as the Import/Export module.

Pick a Pattern

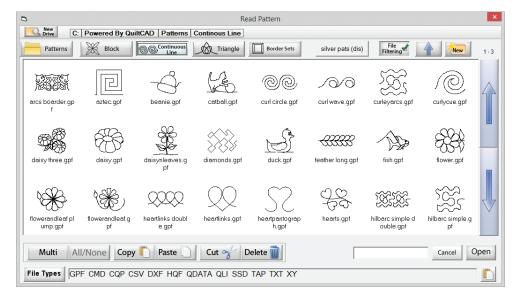
You must set your safety area first; these dimensions will be used for the pantograph layout size.

There are 2 ways to open the pattern selection window. There is one icon at the top on the Menu Bar and there is another on the bottom left of the pattern options Menu Bar.



This will bring up the pattern selection window.

For all of the examples regarding the PantoStacker™ we are going to select the 'Snickers.gpf' pattern under the Continuous Line category. Tap on Open or double click once you find the pattern or a different one you wish to use.



Quilter's Creative Touch can open any supported file type from this window. You will need to browse to the location of the file to open it. Also, there will be no preview available if the pattern is not in the .gpf format.

You may open any of the following file format types; CMD, CQP, CSV, DXF, QLI, HQF, Qdata, SSD, TAP, TXT, XY.

You will be promoted to save the file after opening an imported type.

Size

Once selected, the pattern will now be shown on your pantograph. You can adjust the size of the pattern by changing its height or width. The maximum height and width you can set is 200" and the

minimum being 1".

There are two steps to setting the size of the Pantograph.

Step 1

Tap on the 'Total Width' box. This will display a screen you can enter the total width of your pantograph. The width can be changed at any time. For this example, we want to change the total width of the pantograph to 60". Type in 60 and click OK. Now you will notice that the Pattern Height is still 12" but the Row Height will also be 24".

Step 2

Now change the height. Tap on the 'Total Height' box. This will display a screen you can enter the height of your pantograph.

Here we are going to set it to 14".

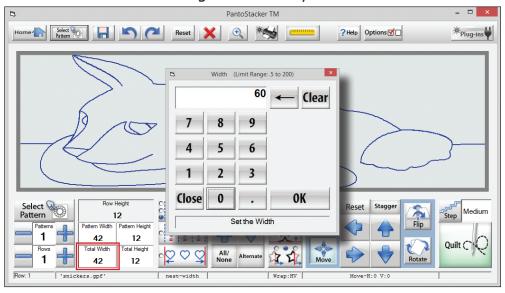
Click OK to apply the size.

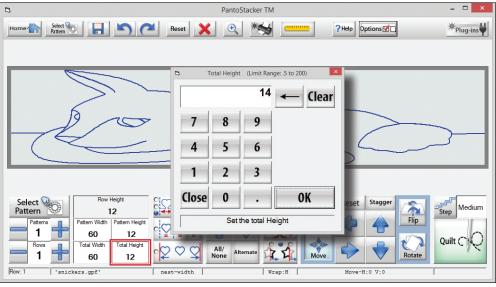
Pattern Count

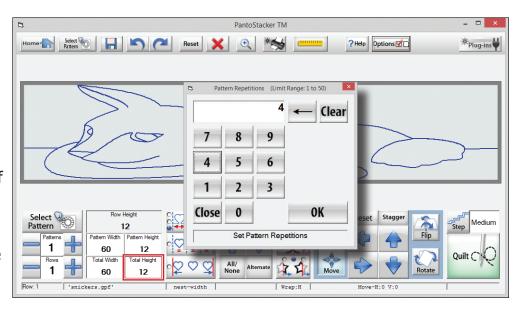
The pattern count is the number of patterns you set when the pantograph is created. If you want to add or remove patterns to this pantograph you can use the + or - buttons. You can also tap where the number is shown and add the number of patterns you want.

The pattern count can be adjusted at anytime.

In this example I have set the patterns to 4.







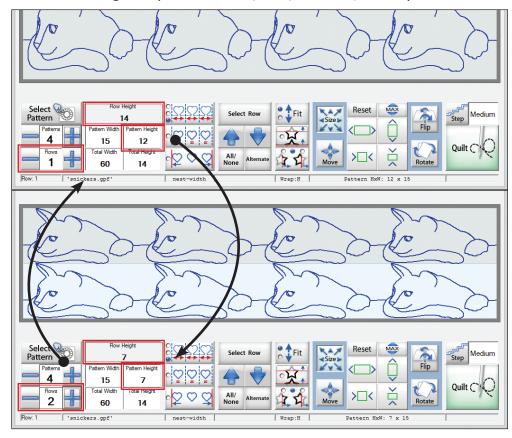
Rows

Within PantoStacker[™] you are limited to two rows. Each row will contain the same pattern. However, each row may contain its own settings for pattern count, size, rotation, and flips.

To add a row tap the + icon next to Rows.

You can see here how the Row Height changes in relation to the Pattern Height. If you remove a row after adding one, be aware that the Pattern Height will change again.

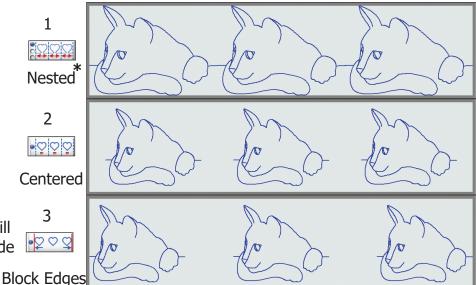
The Total Height will not change when adjusting rows but the Pattern Height will.



Nesting

- 1. **Nested** The patterns will stretch to connect within the pantograph and the pattern edges will line up to the next pattern. With this option, the pattern will lose its aspect ratio depending on how many patterns are in the block.
- **2. Centered** The patterns are evenly spaced and centered in the pantograph.
- **3. Block Edges** The patterns will be evenly spaced but the outside patterns will touch the side of the pantograph edge.

 Block Edges The patterns will be patterns will be patterns will touch the side of the pantograph edge.

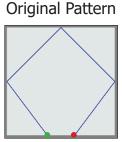


*When you have the Nested option selected, the patterns are automatically being sized so that the start and end points connect to make one continuous line. Therefore, the system removes the ability to change the width of the pattern.

Nesting Continued...

There are some patterns that do not display well when using the main Nested option, but depending on your pattern there are 3 types of options to chose from to set it correctly.

We are going to use a custom pattern in this example. This is when a display issue will most commonly arise, it may also be present in some purchased patterns. You will see how the three different Nested Options treat the pattern differently.



Nested options:

- 1. Fit Creates an overlapping repeating pattern using the maximum number of patterns that will fit inside the pantograph without wrapping the pattern.



2. By Ends - Creates an overlapping repeating pattern that will wrap around the pantograph with the maximum number of patterns that are required to fill the entire pantograph. The ends are determined by the Start and End Point of the pattern.





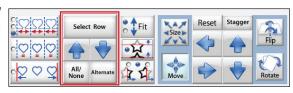
3. By Width - Using the total width of the pattern the pantograph will create a non overlapping repeating pattern.





Row Selection

The Select Row button allows you to individually select a row to modify. You can also navigate up and down the Rows you have created by using the Up and Down arrows.



Select Row - Selects or Deselects the current Row that has been highlighted.

♦ and ♠ Arrows - These are used to Highlight the two rows.

All/None - This option allows you to select all rows or none of them.

Alternate - Selects the Alternate rows you currently have selected. This will be used often when there are staggering rows on a Pantograph.

You can use the Select Row button in combination with the Up and Down arrows to select or modify the rows or select a row by tapping on it.

When selecting a row, darker background around the row indicates the row has been selected. The lighter color indicates the Row is not selected. When a row has been selected, the pattern will be outlined in blue and any changes you make to the pantograph will only effect those rows.

Fit and Pattern Wrapping

The following options are used to control the pattern when the size or placement is outside of the Pantograph:

The Fit feature

Option 1: Makes it so the pattern will fit inside the Total Height of the pantograph when the size is increased.

Option 2: When the pattern grows in size, it will remain centered in its row.

Pattern Wrapping: Vertical

When enabled, the pattern will 'wrap' from the top and come through on the bottom of the pantograph if the height is adjusted. At the same time, the bottom of the pattern will 'wrap' to the top of the pantograph.

Pattern Wrapping: Horizontal

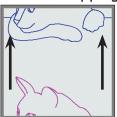
There are three modes for the Horizontal wrapping:

- **Disabled** When this setting is enabled, no horizontal wrapping will occur, left or right. If part of the pattern is cut off, the software will leave it there to be sewn.
- **Enabled** If the pattern becomes wider than the maximum width, or is moved beyond the edge of the pantograph, the pattern will 'wrap' from the right and come through on the left of the pantograph. At the same time, the left of the pattern will 'wrap' to the right of the pantograph. By default, this option will be selected.
- **Smart Wrap** This will remove a pattern that is not a complete pattern. Any amount of the pattern that is cut off due to wrapping will be removed.

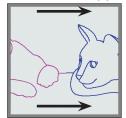




Vertical Wrapping



Horizontal Wrapping

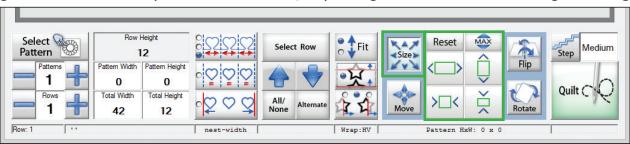


The portion of the pattern in pink represents what has been wrapped around the pantograph.

Pattern size

The Size option allows you to change the height and width of the patterns in a selected row.

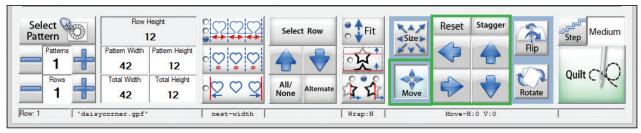
- **Reset** Resets the pattern to default size.
- Max Changes the pattern size to match the Row Height.
- **Increase Width** Increases the width of the selected pattern.
- **Increase Height** Increases the height of the selected pattern.
- **Decrease Width** Decreases the width of the selected pattern.
- **Decrease Height** Decreases the height of the selected pattern.
- **Aspect Ratio Lock** Locks the Aspect Ratio of the pattern. Any changes you make to the height will be reflected by the width. In turn, any changes to the width will change the height.



Move

You can change the position of the patterns within the row left to right, or up and down at anytime. There are two key things to point out; take note of your step size, the movement of the pattern is based on this setting. If you want the pattern to wrap around, make sure the Pattern Wrapping option is enabled.

If you tap the "Reset" button, the pattern will move back to its original location.



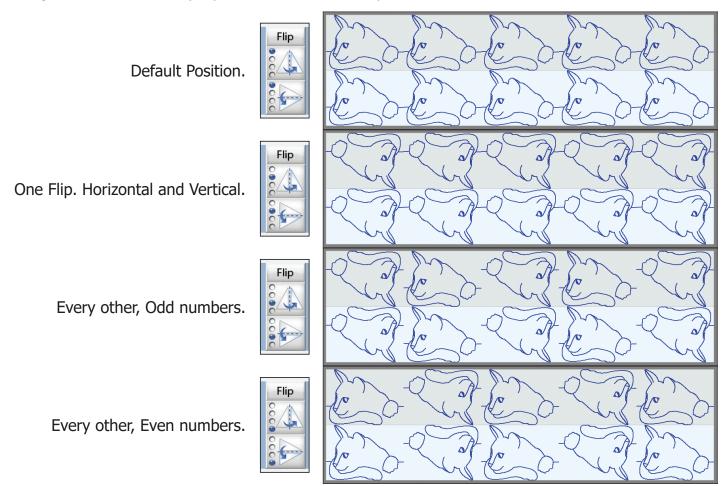
Stagger Patterns

Staggering patterns is an option under Move. This allows you to offset the selected row by half the pattern size. You can also adjust how the stagger affects the pattern by using the Move arrows.

Flipping Patterns

The Flip option allows patterns for the entire row, or every other pattern in the row, to be flipped vertically and horizontally. There are three different ways in which the flip feature works, by default there is no flip applied.

- Tap once Flips all patterns.
- **Tap twice** Only flips the odd numbered patterns: 1,3,5,7,9.....
- **Tap three times** Only flips the even numbered patterns: 2,4,6,8,10.....

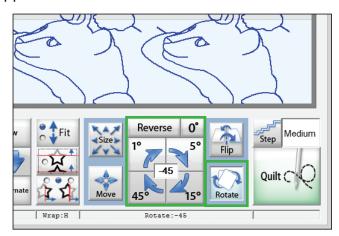


Rotate

With this feature you can also rotate the patterns in the pantograph. The value in the middle of the arrows to rotate the pattern is the current degree the pattern is set at, by default it will be zero. The pattern can be rotated in increments of 1°, 5°, 15°, and 45°. By default, the rotation will be set so the pattern rotates to the right, this can be changed by tapping the "Reverse" button. You will notice the direction of the arrows changes when this icon is tapped.

If you still have Pattern Wrapping enabled you will see the parts of the pattern that were cut off are now coming through the other side of the pantograph.

The last option is the 0° icon. By tapping this, it will reset the orientation of the pattern back to zero.



Medium

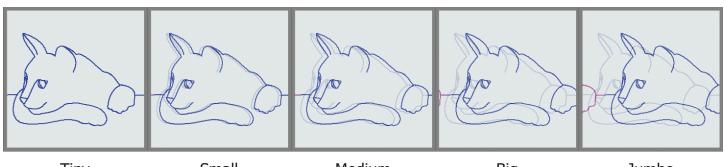
Quilt (

Step Size

The Step Size setting is used to change how much distance or proportion will be effected per tap. There is no numerical formula associated with the step size, they are simply increments of size according to the pattern or pantograph size.

- **Tiny** A small increment of movement.
- **Small** A slightly bigger increment of movement than Tiny.
- Medium A bigger increment than Small.
- **Big** A larger increment in movement as compared to Medium.
- **Jumbo** The largest movement increment .

In the examples shown, you can see each step size as if tapped once. Each step size is from the patterns original position. You can see how the Tiny and Small are best used for fine tuning the pattern, while the Big and Jumbo are best used for larger advancements.



Tiny Small Medium Big Jumbo

PantoAdvanced

PantoAdvanced is very similar to PantoStacker[™] but with more powerful tools that allow you to create a single row pantograph or an alternating staggered four-row pantograph that can be used to sew an entire quilt.

These Pantographs can be treated as a single pattern or they can be sewn as rows. You can create the entire quilt layout, which will allow you to sew each row as you roll the quilt. You can also have diffirent patterns in each row.

Based on your software and subscrtiption type, not all features will be available.

Panto Advanced

As we have already covered the Toolbar, we are now going to cover the three modes in which Panto Advanced operates.

The three modes are:

- **EZ** Very similar to PantoStacker™. This mode will automatically fill the pantograph with patterns based upon you size input.
- **Basic** This mode offers more control over you pantograph allowing you to specify rows and pattern counts.
- Advanced With this mode, you have control over every aspect of your pantograph.

Pick a Mode

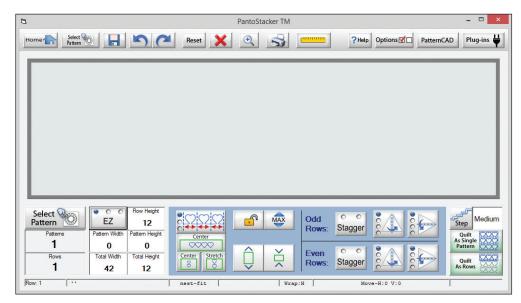
To select a Mode, tap on the EZ Icon. When switching between the different types of modes you will see the prompt shown here. Please note, if you click to change your mode, your current design and all the changes made to it will be lost.

If you do not want to lose your current pantograph settings, select 'X' Save your pantograph and then open it in a different mode.



EZ

One of the major differences in this mode is the ability to add and remove patterns and rows. There are no plus or minus buttons to change the counts it will only display a number. In order to get these to change you will want to adjust the Total Height and Width as well as the row height. If the total quilt height is 60" and you want 10 rows, you can change the row height to 6". This will create a quilt 60" tall with 10 rows.



Once you have the rows laid out, you can add patterns to the rows by adjusting the pattern width. You can change the Total Height, Total Width, Pattern Height, and Pattern Width at any time during the creation processes. However, EZ mode will always try and place the right amount of patterns into the pantograph.

You can choose to setup your size and row count first, or you can choose a pattern then edit the pantograph.

Pick a Pattern

There are 2 ways to open the pattern selection window; the Select Pattern button at the bottom left and the Select Pattern on the upper left.

For all of the examples regarding the PantoStacker[™] we are going to select the 'Snickers.gpf' pattern under the Continuous Line category. Tap on Open or double click. Once you find the pattern or a different one you wish to use you also double tap the pattern to select it.

Select Select Reset Rese

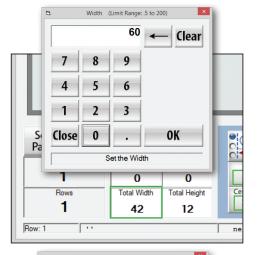
Pantograph Size

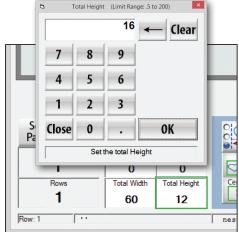
Upon launching PantoStackerTM, you will be asked to set your Safety Area. This is the allowable quilting space. Once this is set it will be used as the size of your Pantograph. In the demo, the size will bet set to $42'' \times 12''$.

We are going to change the Total Width First.

Tap on the Total Width box, this will display a screen you can enter the width of your pantograph.

Here you are going to set it to 60, then click OK.





Tap on the Total Height box this will display a screen you can enter the total height of your pantograph.

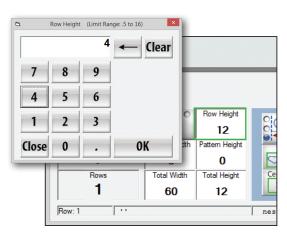
For this example, we want to change the total height of the pantograph to 16". Type in 16 and click OK.

You will now notice that the Pattern Height is 16" as well as the Row Height.

Pantograph Rows

Now we are going to add 4 rows. To do this, click on the Row Height Number and change it to 4.

The row height will now be 4", giving us 4 rows.



Pattern Count

Once the Total height and Width has been set, we can start to add patterns. If you selected a pattern before adjusting the size you should have a layout with multiple rows but one pattern per row.

There are a couple of ways to add patterns at this time. First, you can simply change the Pattern Width, in this example it is 4".

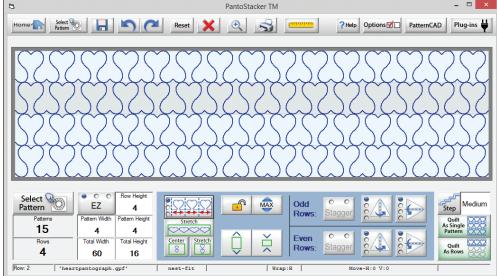
This will now make it so there is 10 patterns across with 4 rows.

These patterns will be connected in a continuous line unless a pattern that is not a continuous line is selected.

If a block pattern is used, the patterns will still be nested by width. There will be trim lines between the start and stop points of the pattern.

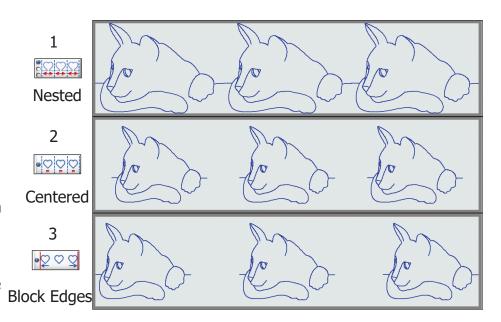
In EZ mode, the nesting option will be handled automatically.

PantoStacker TM Home A Select Reset X D ? Help Options ☑ PatternCAD Plug-ins ⊌ Pattern Width (Limit Range: .5 to 60 Clear 4 5 1 2 3 OK Close Select Pattern 1 59 999 Rows: 60 'heartpantograph.gpf



Nesting

- 1. **Nested** The patterns will stretch to connect within the pantograph and the pattern edges will line up to the next pattern. With this option, the pattern will lose its aspect ratio depending on how many patterns are in the block.
- **2. Centered** The patterns are evenly spaced and centered in the pantograph.
- **3. Block Edges** The patterns will be evenly spaced, but the outside patterns will touch the side of the pantograph edge.



Center and Stretch

The Stretch and Center options coexists with the Nesting options. These allow you to stretch or center the pattern according to the total width of the pantograph.

- **Center** Will keep the aspect ratio of the pattern while using the maximum number of patterns allowed in the total width of the pantograph.
- **Stretch** Will stretch the pattern to fill the total width of the pantograph.

In addition to the Stretch and Center option, you can also stretch or center the patterns in the pantograph horizontally. They work in the same fashion as the vertical center and stretch.

- **Center** Will keep the aspect ratio of the pattern while using the maximum number of patterns allowed in the total height of the pantograph.
- **Stretch** Will stretch the pattern to fill the total height of the pantograph.



These options allow you to modify the height of the pattern inside the pantograph. The icons with the blue arrows directly relates to the Pattern Height field.

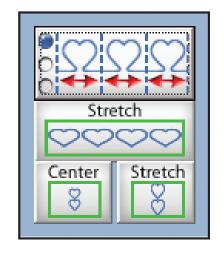
- **Aspect Ratio Lock** When the lock is closed, the aspect ratio of the pattern will not be lost. This means if you decrease or increase the height, the width will change as well. When the lock is open, the aspect ratio will not be kept. If you increase the height, the width of the pattern will not change.
- **Max Height** Changes the pattern to fill the Total Height available.
- **Increase Height** Used to increase the pattern height one step at a time.
- **Decrease Height** Used to decrease the pattern height one step at a time.

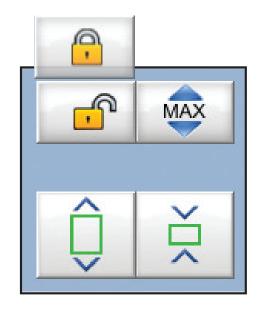
Staggering Patterns

Staggering is having the application automatically offset the patterns in the pantograph rows by half. This is a great tool to create repeating rows.

Please note, there are 2 options for staggering and flipping, you can apply the changes to the odd numbers rows or the even numbered Rows.

- **1. No Stagger** Patterns will be centered in the pantograph.
- **2. Stagger with Wrap** Patterns will be staggered on the row and will wrap around the pantograph.
- **3. Stagger without Wrap** Patterns will be staggered on the selected row but will not wrap around the pantograph. If the pattern has to be 'cut' it will be removed.





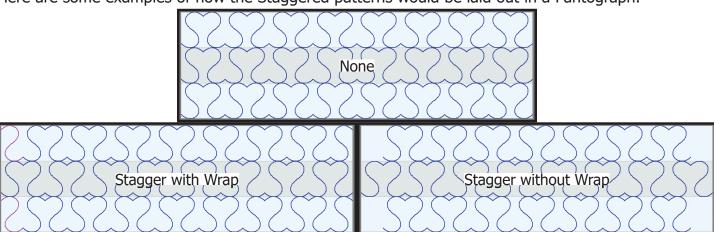






Staggering Patterns Continued...

Here are some examples of how the Staggered patterns would be laid out in a Pantograph.



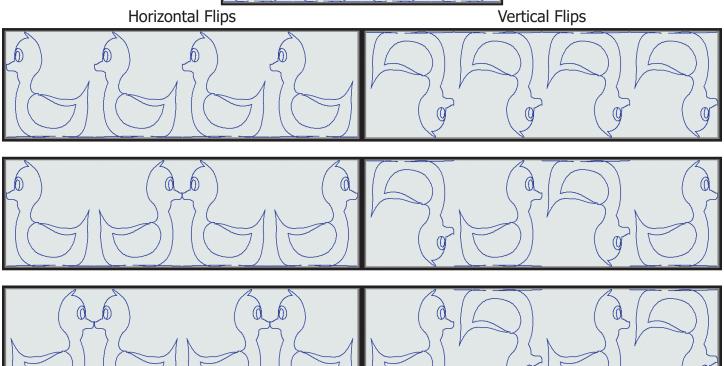
Flipping Patterns

The Flip option allows patterns for the entire row, or every other pattern in the row, to be flipped vertically and/or horizontally. There are three different ways in which the flip feature works, by default there is no flip applied.

- **Tap once** Flips all patterns.
- **Tap twice** Only flips the odd numbered patterns: 1,3,5,7,9.....
- **Tap three times** Only flips the even numbered patterns: 2,4,6,8,10.....

The same rules apply to both odd and even Rows.



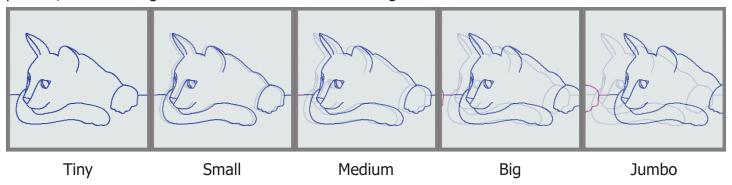


Step Size

The Step Size setting is used to change how much distance or proportion will be effected per tap. There is no numerical formula associated with the step size, they are simply increments of size according to the pattern or pantograph size.

- **Tiny** A small increment of movement.
- **Small** A slightly bigger increment of movement than Tiny.
- **Medium** A bigger increment than Small.
- **Big** A larger increment in movement as compared to Medium.
- **Jumbo** The largest movement increment.

In the examples shown below, you can see each step size as if tapped once. Each step size is from the patterns original position. You can see how the Tiny and Small are best used for fine tuning the pattern, while the Big and Jumbo are best used for larger advancements.



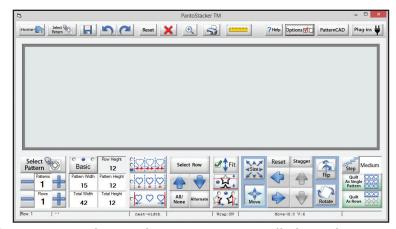
Now, if you have created a Pantograph, you can now choose to Quilt As a Single Pattern or select to Quilt as Rows. If you sew as a single pattern you will use the standard placement methods. If you select to Sew as Rows you will be taken to Sew as Rows screen. Examples of both can be found further down in the Help File.

Basic Mode

In basic mode, you are able to control more aspects of the Pantograph.

The biggest difference from EZ to Basic is the ability to add rows and patterns using the plus and minus buttons.

You also gain the ability to move patterns within the row, left and right, giving you more options for offsetting a pattern or row.



Medium

Step

As Single Pattern

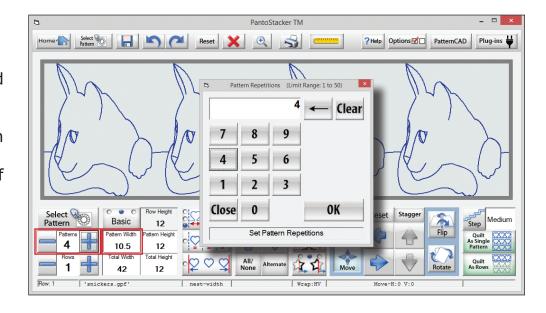
Quilt

As we have already covered many features within PantoStacker™, this next section will show the features that have been added by switching to the Basic mode.

Pattern Count

The pattern count is the number of patterns you set when the Pantograph is created. If you want to add or remove patterns to this Pantograph, you can use the + or - buttons. You can also tap where the number is shown and the number of patterns you want. The pattern count can be

adjusted at anytime.
In this example, I have set the patterns to 4.



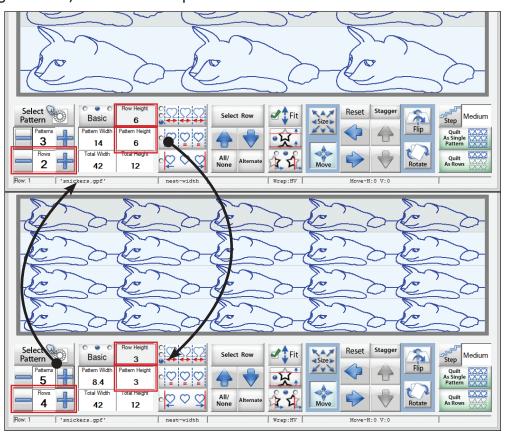
Rows

In Basic mode, you are limited to 99 rows. Each row will contain the same pattern. However, each row may contain its own settings for size, rotation and flips.

To add a row tap the + icon next to Rows.

You can see here how the Row Height changes in relation to the Pattern Height. If you remove a row after adding one, be aware that the Pattern Height will change again.

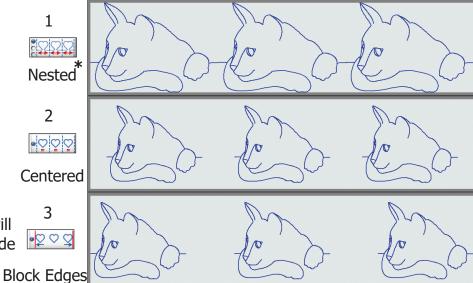
The Total Height will not change when adjusting rows, but the Pattern Height will.



Nesting

- 1. Nested The patterns will stretch to connect within the Pantograph and the pattern edges will line up to the next pattern. With this option, the pattern will lose its aspect ratio depending on how many patterns are in the block.
- **2. Centered** The patterns are evenly spaced and centered in the pantograph.
- **3. Block Edges** The patterns will be evenly spaced but the outside patterns will touch the side of the pantograph edge.

 Block Edges The patterns will be patterns will be patterns will touch the side of the pantograph edge.



*When you have the Nested option selected, the patterns are automatically being sized so that the start and end points connect to make one continuous line. Therefore, the system removes the ability to change the width of the pattern.

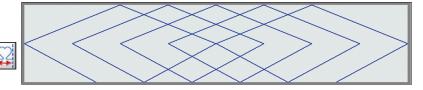
There are some patterns that do not display well using the main Nested option, but depending on your pattern there are 3 types of options to chose from to set it correctly.

We are going to use a custom pattern in this example. This is the time where the issue will most commonly arise. It may also be present in some purchased patterns. You will see how the three different Nested Options treat the pattern differently.

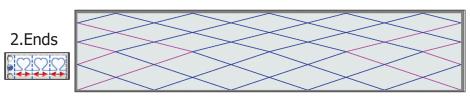
1.Fit

Nested options:

- 1. Fit Creates an overlapping repeating pattern using the maximum number of patterns that will fit inside the pantograph without wrapping the pattern.
- 2. By Ends Creates an overlapping repeating pattern that will wrap around the pantograph with the maximum number of patterns that are required to fill the entire pantograph. The ends are determined by the start and end Point of the pattern.
- **3. By Width** Using the total width of the pattern, the Pantograph will create a non overlapping repeating pattern.



Original Pattern





Row Selection

The Select Row button allows you to individually select a row to modify. You can also navigate up and down the rows you have created by using the Up and Down arrows.

- **Select Row** Selects or Deselects the current row that has been highlighted.
- **All/None** This option allows you to select all rows or none of them.
- **Alternate** Selects the Alternate rows you currently have selected. This will be used often when staggering rows on a Pantograph.

You can use the Select Row button in combination with the Up and Down arrows to select or modify the rows, or select a row by tapping on it.

When selecting a row, darker background around the row indicates the row has been selected. The lighter color indicates the row is not selected. When a row has been selected, the pattern will be outlined in blue and any changes you make to the pantograph will only effect those rows.

Fit and Pattern Wrapping

The following options are used to control the pattern when the size or placement is outside of the Pantograph:

The Fit feature

Option 1: Makes it so the pattern will fit inside the Total Height of the pantograph when the size is increased

Option 2: When the pattern grows in size it will remain centered in its row.

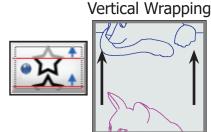




Flip

Pattern Wrapping: Vertical

When enabled, the pattern will 'wrap' from the top and come through on the bottom of the pantograph if the height is adjusted. At the same time, the bottom of the pattern will 'wrap' to the top of the pantograph.

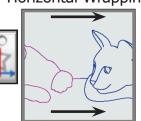


Pattern Wrapping: Horizontal

There are three modes for the Horizontal wrapping:

- **Disabled** When this setting is enable, no horizontal wrapping will occur, left or right. If part of the pattern is cut off, the software will leave it there to be sewn.
- **Enabled** If the pattern becomes wider than the maximum width or is moved beyond the edge of the Pantograph, the pattern will 'wrap' from the right and come through on the left of the Pantograph. At the same time, the left of the pattern will 'wrap' to the right of the Pantograph. By default, this option will be selected.
- **Smart Wrap** This will remove a pattern that is not a complete pattern. Any amount of the pattern that is cut off due to wrapping will be removed.





The portion of the pattern in pink represents what has been wrapped around the pantograph.

Pattern size

The Size option allows you to change the height and width of the patterns in a selected row.

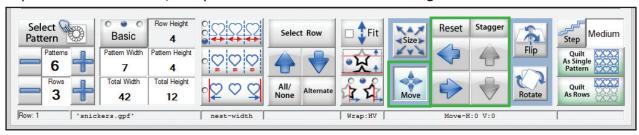
- Reset Resets the pattern to default size.
- **Max** Changes the pattern size to match the Row Height.
- **Increase Width** Increases the width of the selected pattern.
- **Increase Height** Increases the height of the selected pattern.
- **Decrease Width** Decreases the width of the selected pattern.
- **Decrease Height** Decreases the height of the selected pattern.
- **Aspect Ratio Lock** Locks the Aspect Ratio of the pattern. Any changes you make to the height will be reflected by the width, in turn, any changes to the width will change the height.



Move

You can change the position of the patterns within the row left to right at anytime. There are two key things to point out; take note of your step size, the movement of the pattern is based on this setting. If you want the pattern to wrap around, make ensure the Pattern Wrapping option is enabled.

If you tap the "Reset" button, the pattern will move back to its original location.



Stagger Patterns

Staggering patterns is an option under Move. This allows you to offset the selected row by half the pattern size. You can also adjust how the stagger affects the pattern by using the Move arrows.

Flipping Patterns

The flip option allows patterns for the entire row, or every other pattern in the row, to be flipped vertically and horizontally. There are three different ways in which the flip feature works, by default there is no flip applied.

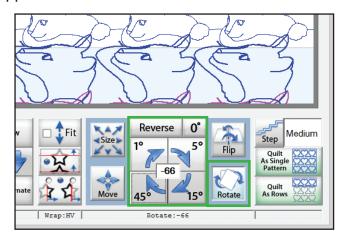
- **Tap once** Flips all patterns.
- **Tap twice** Only flips the odd numbered patterns: 1,3,5,7,9.....
- **Tap three times** Only flips the even numbered patterns: 2,4,6,8,10.....

Rotate

With this feature, you can rotate the patterns in the Pantograph. The value in the middle of the arrows to rotate the pattern is the current degree the pattern is set to, by default it will be zero. The pattern can be rotated in increments of 1°, 5°, 15°, and 45°. By default, the rotation will be set so the pattern rotates to the right, this can be changed by tapping the "Reverse" button. You will notice the direction of the arrows changes when this icon is tapped.

If you still have Pattern Wrapping enabled you will see the parts of the pattern that were cut off are now coming through the other side of the pantograph.

The last option is the 0° icon. By tapping this, it will reset the orientation of the pattern back to zero.

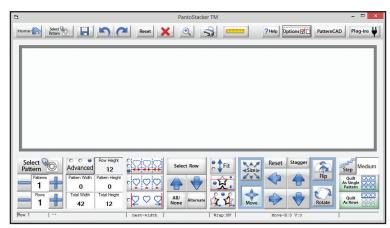


Advanced Mode

In Advanced mode, you are able to control all aspects of the Pantograph.

The biggest difference from the other modes is the ability to add different patterns in different rows.

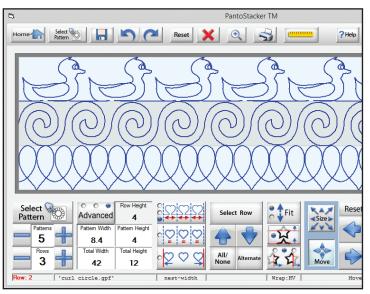
You also gain the ability to move pattern up and down beyond the row, giving you more options for staggering and interlocking a pattern by rows.



As we have already covered many features in the previous sections, this next section will show the features that have been added by switching to Advanced mode.

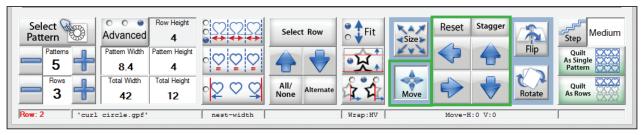
Pick a Pattern

In Advanced mode, you are able to have one specific pattern per row and each row has the ability to control is own count of patterns. To change the pattern on a specific row, you will need to select that row only then you can choose more than one row at a time. However, based on the rows you have selected, the new pattern they will be applied to those selected rows.

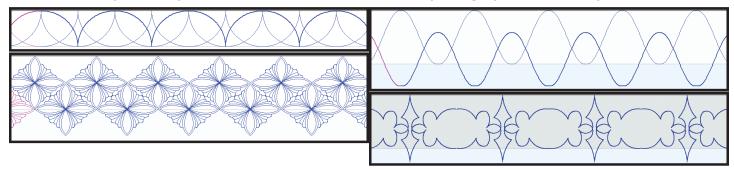


Move

You can change the position of the patterns within the row left to right, or beyond the row up and down at anytime. Take note of your step size, the movement of the pattern is based on this setting. If you want the pattern to wrap around, please ensure the Pattern Wrapping option is enabled. If you tap the "Reset" button, the pattern will move back to its original location.



This feature allows you to create interlocking pantograph, as well as new and unique pattern designs. Here are a couple examples of what can be created. These pantographs have multiple rows.



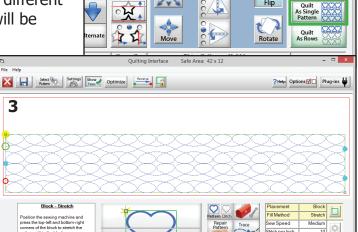
These very powerful tools, in combination with the other tools, give you all the control to create any type of design. With the placating methods available, you can create and sew anything!

Quilt as a Single Pattern

Select Solutions Show Optimize Reverse

There are two ways you can sew your pantograph, as a single pattern or one row at a time.

Quilt as a Single Pattern is the same as the Select & Sew button in Quilter's Creative Touch. Using this option will take the entire pantograph layout and transfer it to the placement screen. When placing your pantograph, it will be like placing a standard pattern. You can still use all the different placement methods, but that methods framework will be applied to the whole pantograph.



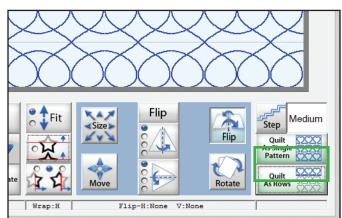
Quilt as Rows

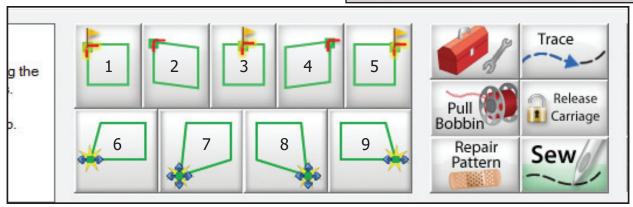
The Quilt as Rows sewing option allows you to sew one row of the pantograph at a time. This way, you can plan out your entire quilt in PantoStacker $^{\text{TM}}$ and have it sew one row at a time, allowing you to roll your quilt and sew the next row without going back and creating or selecting the next row of the pantograph.

This sewing method has its own unique Placement Method. You will not place them using Two Point

or Tilted Block for example.

With the sew as rows option you can also create a 2 or 3 row pantrograph and sew it down an entire quilt. Once the software reaches the last row it will cycle back to the top row.





The Placement tools for this method that are available in this mode:

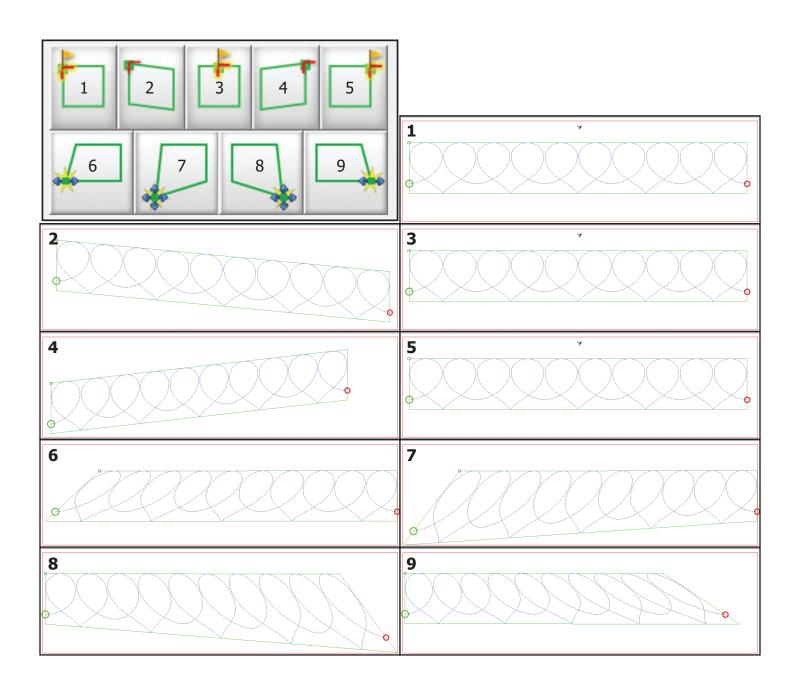
- **1. Top left Corner** Uses the Top Left corner of the row as the marker to place the row. This method will not distort or change the size of your row.
- **2. Top Left Corner Distort** Uses the Top Left corner of the row as the marker to place the row. This method has the ability to distort and change the size of your row.
- **3. Center** Uses the top Center point of the row as the placement marker. This method will not change the size of your row.
- **4. Top Right Corner Distort** Uses the Top Right corner of the row as the marker to place the row. This method has the ability to distort and change the size of your row.
- **5. Top Right Corner** Uses the Top Right corner of the row as the marker to place the row. This method will not distort or change the size of your row.
- **6. Move Lower Left** Extends the bottom left of the pattern, distorting the pattern angle while retaining the pattern height.
- **7. Distort Lower left** Extends the bottom left of the pattern, distorting the pattern angle and height.
- **8. Distort Lower Right** Extends the bottom right of the pattern, distorting the pattern angle and height.
- **9. Move Lower Right** Extends the bottom right of the pattern, distorting the pattern angle while retaining the pattern height.

Quilt as Rows Continued..

You must use either 1, 3, or 5 for the first placement option. These are anchor points. They will lock the Pantogragh on the placement screen. Once they are set, you can then adjust with the other placement options. If you set these points again after any adjustments, the placement will reset to the new anchor.

Here are some examples of the different placement buttons being used.

The Distort Top Left and Top Right will change the angle of the pattern, you also has the ability to change the width of the pattern with these buttons. When you use the Distort placement options, they have the ability to skew, stretch, and shrink the pattern. The opposing corner will stay anchored while the corner option you will use to adjust the pattern to that position. After you place the corner, you can then use the Align Bottom buttons to align the bottom portion of the row.



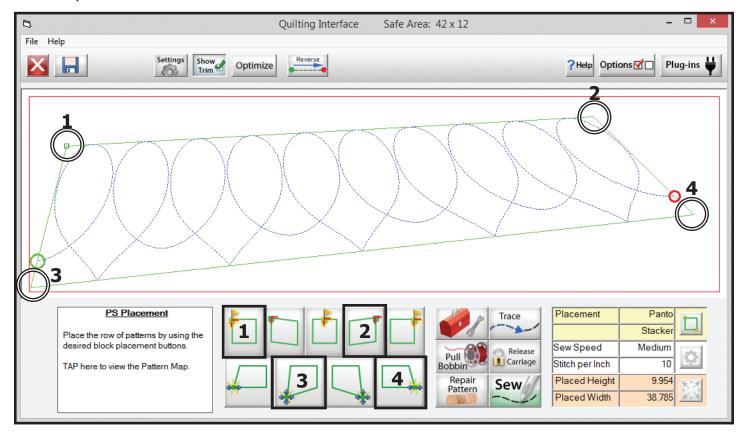
Quilt as Rows Continued..

The bottom alignment buttons allow a more accurate placement.

In this example, the align feature has been exaggerated to show how much you are able to adjust the pattern.

To create an alignment such as this you would:

- 1. Place the Top Left Corner.
- 2. Place the Top Right Corner Distort.
- 3. Use Move Lower Right.
- 4. Finally Distort Bottom Left.



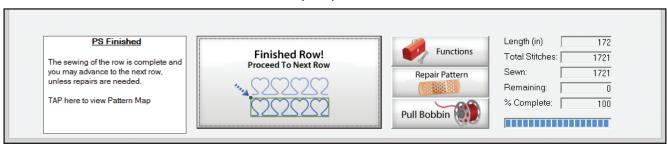
When you finish sewing the current row, you will see a message indicating the row has finished. Once you click the button to proceed, the software may indicate that the next row is outside of the

safety area, you will be prompted to mark your fabric in order to continue and you will need to roll your fabric in order to place the next row.

Once you click OK, the next screen you will see is the Sew Marker screen. The marker that is sewn is the top left corner, top center, or top right corner of the block for the next row to be sewn.

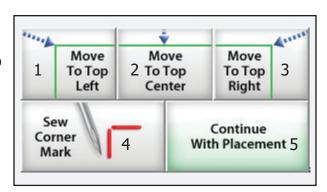


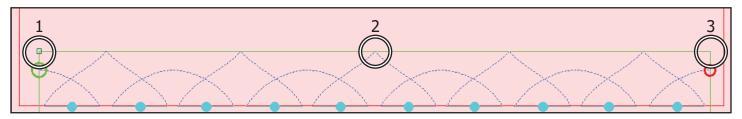
This will be used as a reference marker when you place the next row.



Quilt as Rows Continued..

- **1. Move to Top Left** Moves the sewing machine to the Top Left Corner of the next row.
- **2. Move to Top Center** Moves the sewing machine to the Top Center of the next row.
- **3. Move to top Right** Moves the sewing machine to the Top Right Corner of the next row.
- **4. Place Marker** Sews a marker consisting of three stitches.
- **5. Continue with Placement** After you sew the mark, tap this, roll the fabric on your frame, and continue to place the next row.



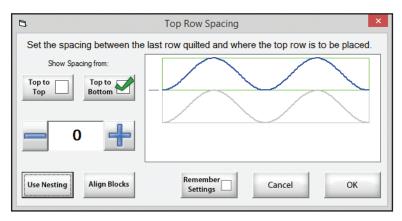


Once the machine has moved to the desired spot and you sew a Corner Marker, you can now advance the quilt on the frame, keeping the Marker that was just sewn within the Safety Area. Once the quilt has been rolled, you will use the Marker in conjunction with the Anchor point on the PantoStacker™ Placement Screen.

If you create a two row Pantograph but continue to sew past the second row, you will receive the following prompt. This is used to creating the nesting between the last row sewn of your Pantograph and the first row.

You can choose to add a Gap, have them Nested, or have it aligned to the Pattern block.

After you choose how you want the next row to be aligned, you will go through the processes of creating a mark.



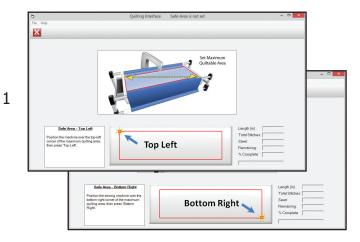
This concludes all the explination features that PantoStacker[™] and PantoAdvanced has to offer. Please be sure to check the other help files if you are looking for information regarding placements methods or what pattern formats can be used. On the following pages there are examples using all features of PantoStacker[™] and PantoAdvanced.

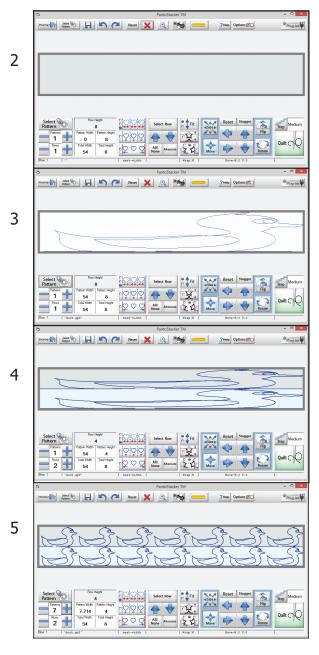
Examples

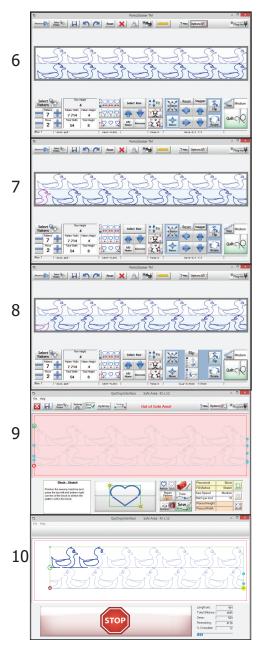
We are going to make some simple Pantographs, one from each mode, to demonstrate how to quickly a pantograph can be created.

PantoStacker™

- 1. Set your Safety Area.
- 2. Pick a Pattern.
- 3. Increase the Rows to 2.
- 4. Increase the Patterns to 7.
- 5. Deselect the top Row.
- 6. Stagger the bottom Row.
- 7. Flip the bottom Row horizontally.
- 8. Select Quilt.
- 9. Place the pantograph.
- 10. Sew it.







PantoStacker™ EZ

- 1. Set your Safety Area.
- 2. Pick a Pattern.
- 3. IChange the Pattrn width to 5
- 4. Change the Pattern Hright to 3.
- 5. Enable Vertical Stretch.
- 6. Enable Smart Stagger for the Even Rows.
- 7. Select Quilt as Rows.
- 8. Place the first row.
- 9. Sew it.

