

# Quilt Crazy LLC

## Unofficial V3 / V3 Pro

### User's Manual



**V3 version 3.66 and V3 Pro version 4.28**

**01/04/2022**

This is my version of an unofficial user's manual for QBot V3 & V3 Pro.

This is NOT provided or commissioned by LitenUp Technologies (QBot), and I am solely responsible for the content. The use of the QBot name is for the purpose of identification only, I do NOT own or have any right to this name which is owned by LitenUp Technologies. Any discrepancies in this document should be addressed to me not to the LitenUp Technologies. This is based on my knowledge and experience with QBot and not based on any inside information on the workings of QBot. I will attempt to provide the information in a user view reference rather than a technical reference. As such many examples may use terms that are not technically correct, but are provided to make them more understandable to non-technical users. I do NOT intend these to be a replacement for the videos done by LitenUp but an expansion of the usage. I will attempt to add additional information to the videos done by LitenUp. Be sure and watch the official QBot videos as they are very well done.

The intent of this "user manual" is not a tutorial on how to quilt with QBot. This is what the functions are, what they do and how to use them. There are several video tutorials on how to quilt with QBot including some done by me.

Since V3 Pro is the same program with added features I will address the additional features in V3 Pro separately. All information in the V3 section will work the same way with V3Pro. Some screen shots may show a V3 or the V3 Pro screen but will be fully functional for those with V3 (unless there is a specific notation that that part applies ONLY to V3Pro).

Two terms will be used that may not be familiar to some. These are X and Y axis and Delta.

The X axis is the horizontal line (left and right)

The Y axis is the vertical line (toward and away from you, for our use this is the vertical line)

Delta coordinate is the distance from the last point to the next point

I will address the usage in sections that follow the main QBot menu screen. In order to keep these in smaller pieces some functions will be in separate videos. I

will identify them as sub-sections to help you follow them in a logical order; i.e.; Pattern Quilting will be done in a number of sections as will some of the other functions. Pattern Quilting part 1, part 2, part 3 etc.

I am not a professional program writer, programmer or videographer so please bear with me. I have been using QBot since early version 2 and longarm quilt 6 or 7 days a week. I do 99.9 percent of all quilts as custom quilts for my customers and have been fortunate enough to be trusted with close to 200 quilts a year for quilting.

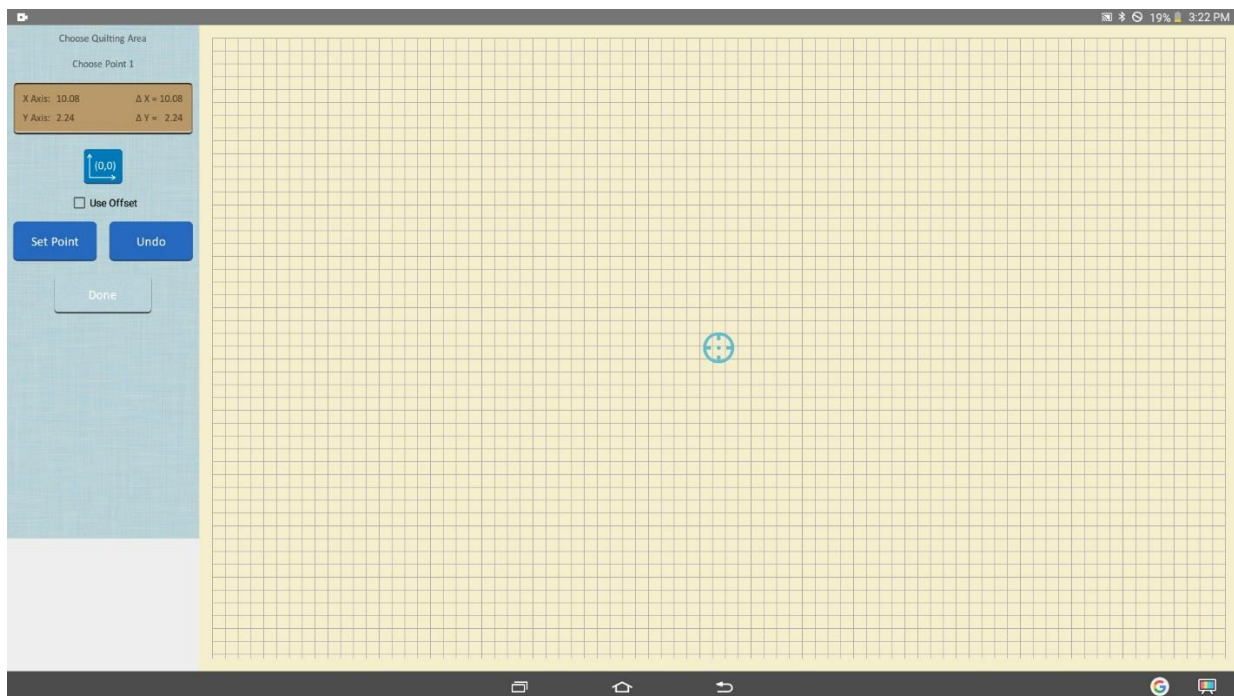
The tablet screen shots used in this document are done on a tablet with an 18-inch screen so the visual size will appear larger that you may see on your screen if you are using a smaller tablet screen.

## Part I

### PATTERN QUILTING

#### Choose Quilting area screen layout

Once selecting Pattern Quilting you will be taken to the pattern screen. There are 2 general areas of this screen



- 1 On the left side of the screen is the information section. This section provides information on the location and selection of the pattern quilting. At the top of the section the number of points selected is displayed. Below the points selected is the relative point coordinates and the Delta coordinates. Next down the screen is a blue box with an “L” shaped double arrow and a “0,0” box. Next down the screen is the check box to tell QBot that your points are being selected while using the Offset feature. The offset feature allows you to use a laser that does not point directly where the needle is. This makes it easier to see the dot of the laser. QBot uses the location where the needle is to place stitches. With the laser pointing to a spot other than where the needle will be, QBot needs to know how far and in which direction(s) the laser dot is in relation to the needle position

and QBot will automatically take this offset into account and make appropriate adjustments. (Calibrating the laser will be covered separately). ONLY check the laser offset box if you are using a laser to mark points. The three blue boxes allow you to select points, undue selected points in reverse order from selection, as well as a box to complete your selection "Done". The remaining white box provides the coordinates of each point selected (both X and Y coordinates). X coordinates increase in number as you move from left to right and Y coordinates decrease in number as you move down the screen. These are relative only and do NOT represent actual specific positions.

- 2 The rest of the screen shows where your points have been selected and once you have completed selection will show the outline of the area you have selected (as well as other information as you continue). The screen has a grid on in the selected screen area. At this point the only information usable is horizontal and vertical relevance.

The design process starts by selecting the outside area you are going to be placing your design into. This area can be any shape or size.

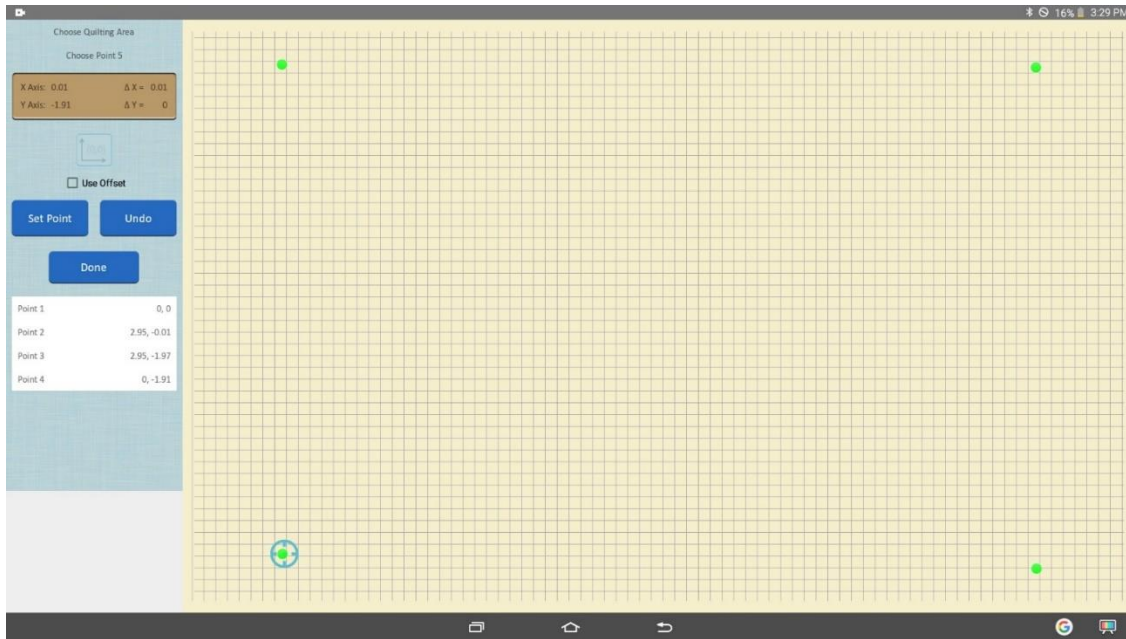
If you were doing an edge-to-edge design you would select the 4 corners of the area you want to quilt in that your quilt head can move within. The starting position is not material although most generally you would start at the top left. The order you select after the first point should be sequential. This order does NOT have to be sequential to function. Failing to use sequential order will present you with what can be a confusing outside border. The border presented will follow the order that you select points. If you were choosing to only quilt in a specific block you would select an area around that block. This can be ANY shape that has at least 3 points and can have any number of points. If the area to be selected is the outside of a particular shape and you want your design to fit into this shape exactly you may need a number of selection points. This area selected provides QBot with the information necessary to utilize your table screen, as well as a screen representation of the area you are using. The smaller the area selected the larger it will appear on the screen. This area does NOT affect where

QBot will start or stop moving. And if you are NOT going to be using the TRIM function is for your reference ONLY. QBot will move your head to wherever you have told it to move, even outside this boundary whether that is where you expect or not, and can stitch beyond this boundary. This ability to stitch outside the boundary is NOT the same for all QBOT functions.

As you move your head to the start position of your quilting area you will notice the coordinates as well as the delta coordinates will keep track of where the head is. Once you get to the starting point and select a point the delta numbers will go to "0" while the coordinate numbers will keep track of where you are.

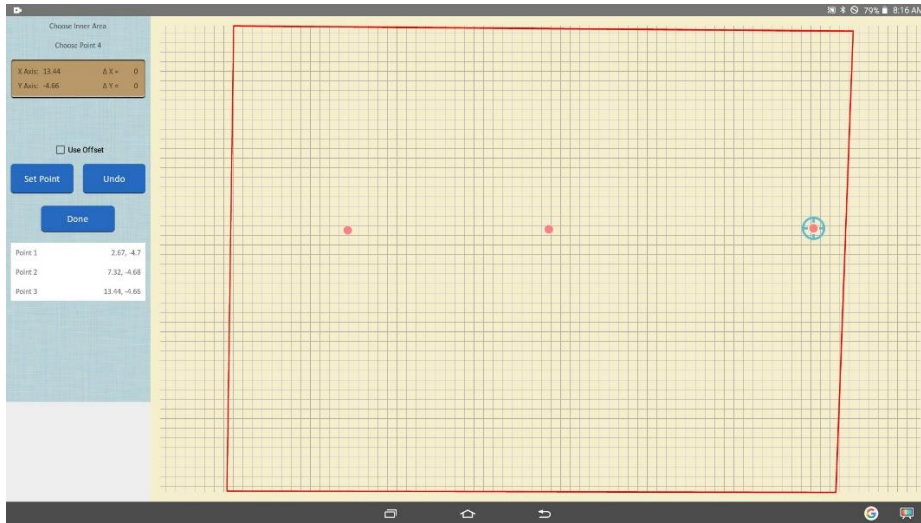


If you want the starting point to be 0,0 then select the blue box with the double headed arrows. This will reset all 4 numbers to "0". In most cases this is not necessary. Once you select your first point the coordinate of that point will be displayed in the white box below the three blue selection buttons. As you continue to select points each one will appear in order of selection with that points reference location. Again, in most cases this is information you likely will not use, although this information can be used to determine if a line is level (starting Y coordinate is the same as the ending Y coordinate if you are moving along the X axis (i.e., point one the "Y" axis is 0.05 and point 2 the "Y" axis is also 0.05 or vice versa)

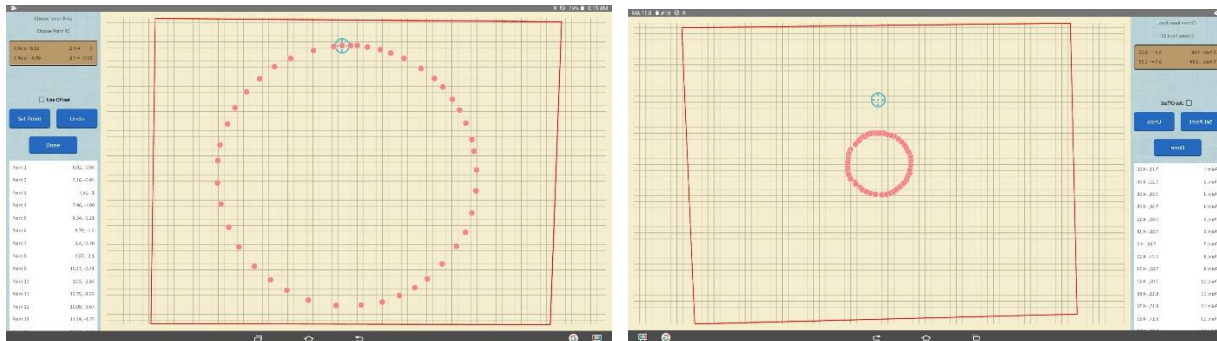


The larger the area selected the less distance each of the grid boxes will represent. In all but a very few instances the distance from one grid line to the next or the area of a grid box should be considered as general alignment only. Although it is possible to use these lines as actual distance calculation but this is complicated and an advanced user use only and requires calculations that change with every quilting area. Just consider it as a vertical and horizontal reference set of lines.

Straight lines only need 1 point at the beginning and one point at the end for QBot to calculate a straight line. The advantage of only using 2 points is that the line will be direct and straight. The disadvantage is that with only 2 points, if you should need to use this line in a percent restart situation you can only start at the beginning or end of the line. If the line is short or you want to make sure it is straight use only the two points. You can use as many points as you want, but only two are necessary for a straight line.



Curved lines will need more points to be used. The smaller or tighter the curve the more points will be necessary to have a smooth curve. Failing to use enough points can result in a choppy curve (this generally will be visible on the screen). There is no reasonable limit to how many points you can use.



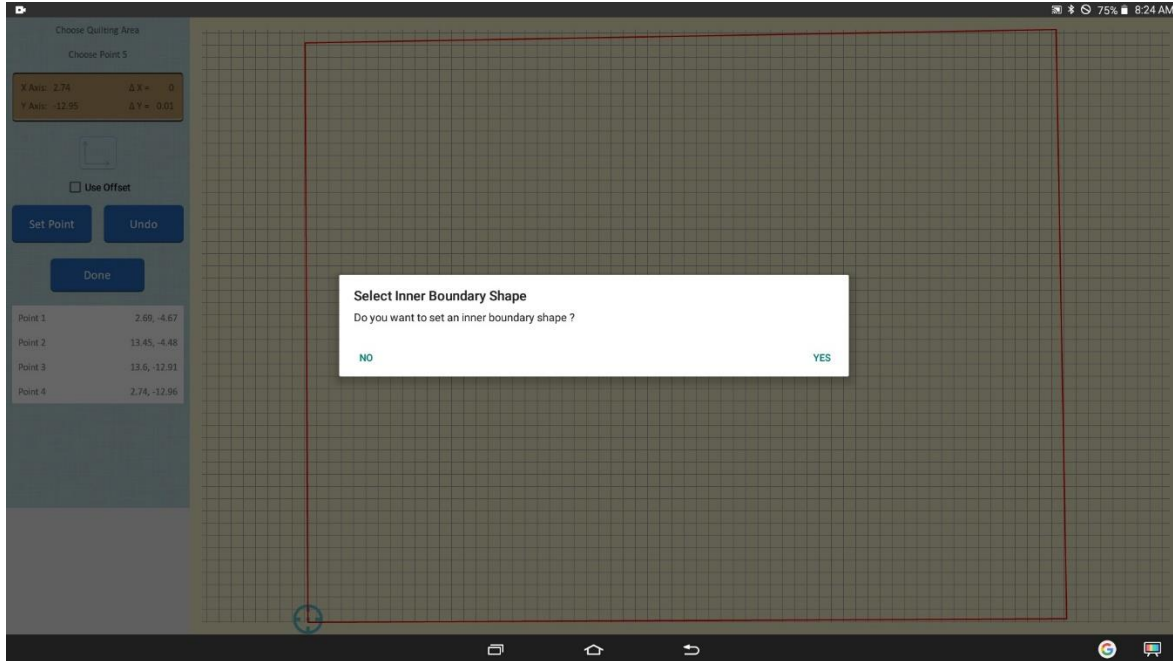
Since this quilting area is not a limit to where you can stitch, this can be used to an advantage as long as you are not using the “TRIM” function. (See later in aligning rows or restarting after a loss of power).

Selecting points can be done by selecting the “Set Point” button, touching the design screen or if you have enabled voice recognition by saying “O.K.”

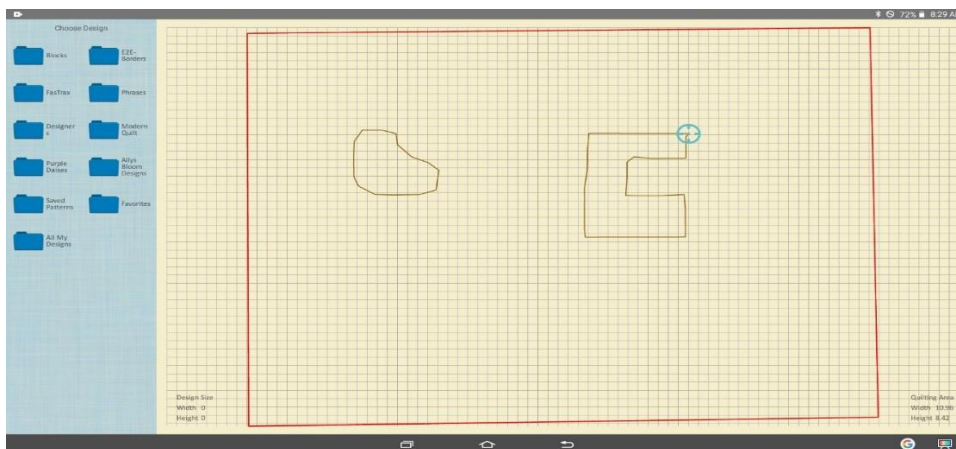
Once you have completed your selection process click on the “Done” button.

You will be presented with an option to select an inner border shape. If you have a part of the quilting area that you do NOT want the design to stitch over you would select “YES” otherwise select “No”.





If you do have an area you wish to exclude stitching (or many areas such as appliques), select “YES”. The screen will change and you will be presented with the outline of the quilting area you selected and you will be able to outline the area you do NOT want the design to quilt over. The select process is the same as selecting the quilting area except that the blue button for set coordinates to “0” will not appear. Once you have completed marking the area to exclude select the “Done” button. At this point you will be allowed to select another area to exclude; if you have more, select “YES” and continue until you have excluded all the areas you want. After you have excluded everything, you need to select “NO”.



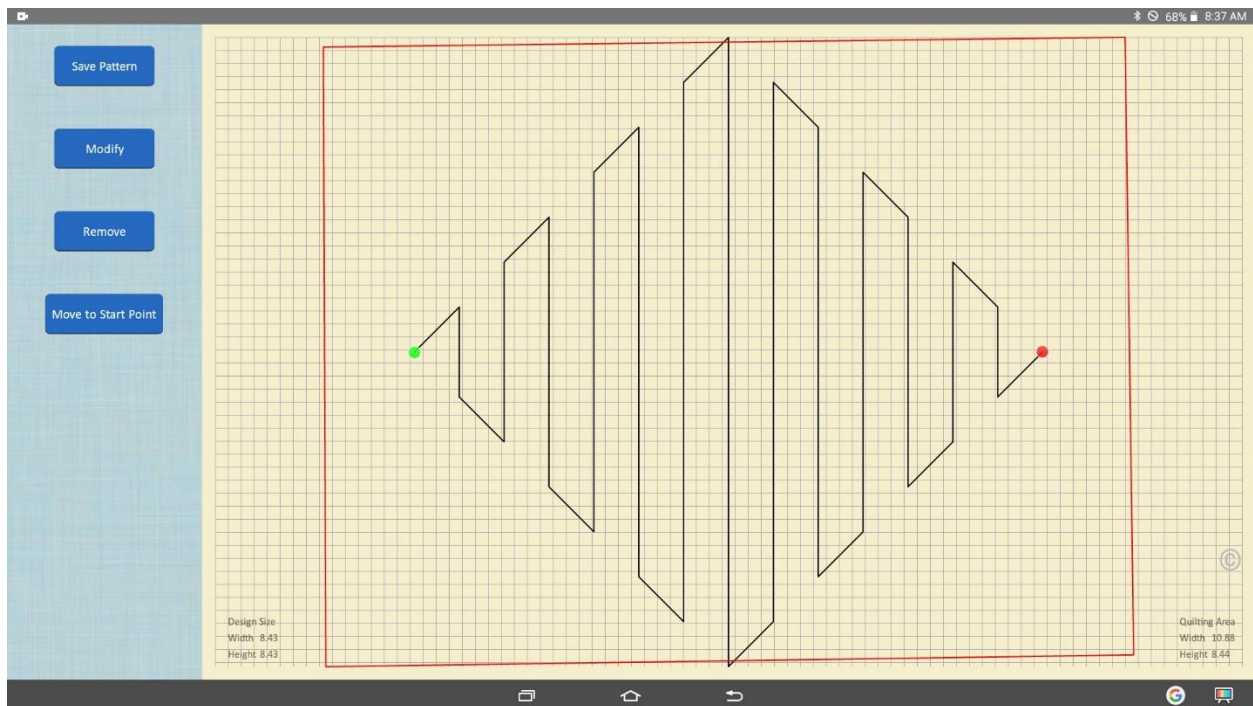
## **Choose Design**

Once you have selected your quilting area and selected the inner borders (areas to exclude) you will be taken to the “Choose Design” screen. This screen is where you will select the digital design you want to stitch. You will see a representation of the quilting area you selected as well as the inner border (excluded area) if you selected any.

In the left portion of the screen, you will see all of your folders that QBot has access to. Select a folder and a list of the designs will be provided.

Select the design you want to use. You may ONLY select one design (exception is with V3 Pro). You can use the search button to find a design within this folder. Designs are listed in modified alphabetical order. Design names with the first letter capitalized first then design names with the first letter lower case next (limit of the operating system not QBot). You can use the left arrow on your tablet to back up if you select the wrong folder.

An additional folder will be available that has all the designs that have been imported into QBot.



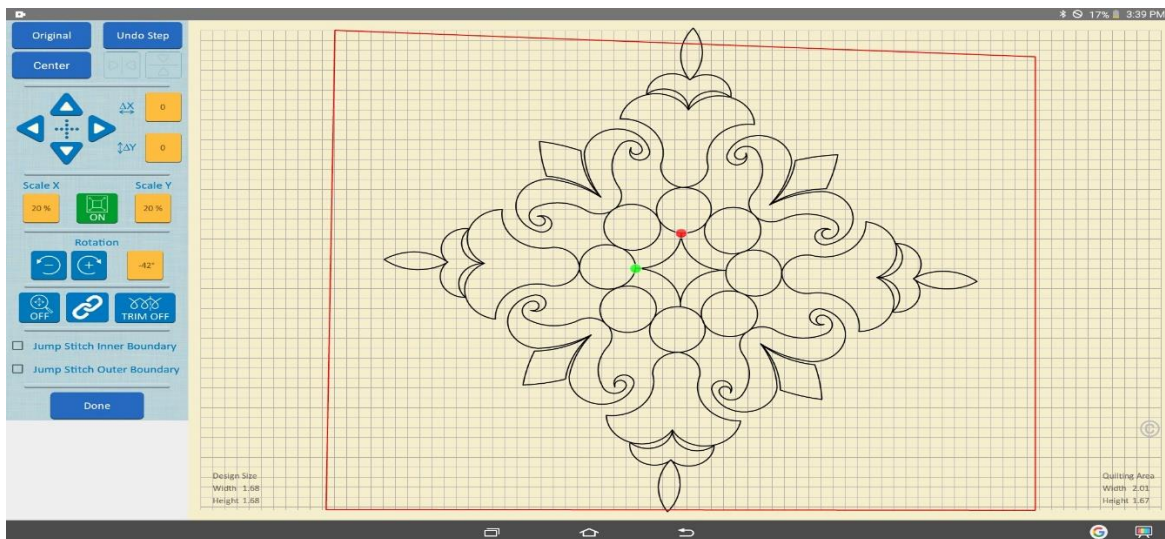
Once you have selected a design you will be taken to another screen that will overlay the selected design with the quilting area. QBot will attempt to fit the design within this area by enlarging or shrinking the design size (proportionally) to best fit the design area. This may or may not be the size you want to use.

On the bottom right of the screen is the Quilting Area. This is the Width and Height of the area you selected as your outer boundary.

In the left border of the screen, you will have 4 options.

1. "Save Pattern" The ability to save the pattern as it appears for future use (be sure to use a unique name to prevent replacing the original design).
2. "Modify" The ability to move and/or resize the design.
3. "Remove" Delete the design from the screen (only) and choose another design
4. "Move to Start Point" End the design process and start stitching the design.

In most cases you will select the "Modify" button for the next step in the process. This will allow you to move or change the size of the design to fit your needs.



The modify design window is the heart of the design process. This is where you will make any changes to the placement and, size and proportion of the digital design you selected.

On the left side of the screen are your modification buttons.



“Original” will return everything you have done to the original size and placement you were when you select “Modify”. This is your start modify all over again. Any changes or modifications will be lost.

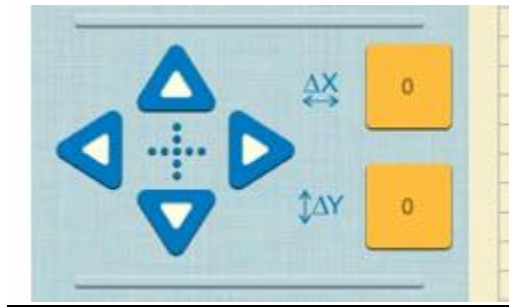
“Undo Step” will reverse the last action (this can be done one step at a time for the last several steps).

“Center” If you have moved or modified the design, this will center the design in the design area.

“Four Arrows” these arrows will move the design in the direction the arrow points. Subsequent selections will move the design each time in that direction.

“Mirror“ left/right - up/down These two choices allow you to flip the design vertically or horizontally. Once you change the size in any way these buttons are no longer available. If you find you need these after changing the design, select “Done” then select “Modify”. This will return you to the modify screen and the buttons will again be available until you move or resize the design.

### Delta X and Delta Y buttons



“Delta X button” This will give you the relative X axis position change from the original center position of the design.

“Delta Y button” This will give you the relative Y axis position change from the original center position of the design.



If you double tap on either of these two boxes (fast tap) the box will turn from yellow to red. This will prevent the design from being moved in that direction. This can be returned to usable by double tapping again. This is useful when you want to move design horizontally and prevent it from moving vertically (or vice versa) If you lock the Y axis for instance you can move the design left or right with either the arrows or one finger without changing the vertical (Y axis) location. To resume the ability to move up and down double click on the red delta box and you will again be able to move up and down.

If you single click on one of the delta x or y boxes you will be presented with a “Enter in the new delta x (or y) value”. This will allow you to enter how far you want to move in that direction in decimal inches to the 100<sup>th</sup>. of an inch. Positive to the right and negative to the left for x axis and positive up and negative down for the y axis.

## Scale X and Scale Y buttons



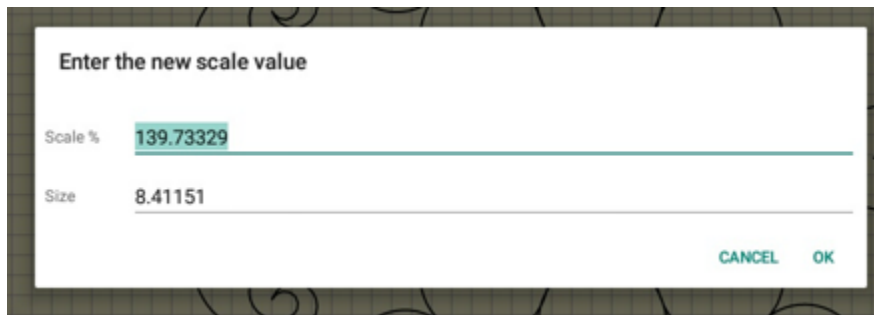
These two buttons allow you to move the design left or right. This can be done in percentage or in actual size.

Between the Scale X and Scale Y button is a green On/Off proportional button.

With this button you have the option to have any change to one button duplicated to the other button (proportional scaling). If the button is green, it will be proportional, if the button is yellow the change will only apply to the axis you are changing (non-proportional). Stretch the vertical without affecting the horizontal (taller and skinnier or shorter and wider).

You can either change the size and location by dragging the design on the screen with two fingers or by using the Scale / Size buttons.

Selecting one of these buttons allows you the ability to change the size of the design. Your choices are change by scale percentage or by actual size in decimal inches.



Changing the size (either by % or size) will change both the X and Y sizes at the same time (proportional) if the proportional button is "ON".

Example: if the design is 4" wide and 2" tall at 100 %

Changing the Scale % on either axis to 50% will resize the design to 2" wide and 1" tall. As you enter the change size, the Scale % will change as you enter the new Size. The same hold true for changing the "Size" number as the Scale % will change as you enter the new number.

With the proportional button "OFF" changing the same 4" by 2" design by 50% on the "X" axis will result in a design 2" wide by 2" tall. (Non-proportional change)

After entering a new number, you must select the "OK" for the change to occur. You can at any time select the "Cancel" to return to the previous size.

The same results occur if you use the "Two Finger" approach to change size rather than entering a specific number.

Double tapping on either the Scale X or Scale Y will result in QBot scaling the design to fit in the quilting area proportionally the best it can (see limitations to border position in the trim section below). If you turn proportional scaling off (the green button between the Scale X and Scale Y button), double tapping on the Scale X button will cause the design to be fit between the vertical borders without respect to the horizontal borders (non-proportionally). Double tapping will cause the design to be fit between the horizontal borders without respect to the vertical borders (non-proportionally)

### **Rotation button**



The minus arrow will rotate the design to the left

Selecting the position button to the right of the arrows and entering a negative number will also rotate to the left that number of degrees.

The Plus arrow will rotate the design to the right

Selecting the position button to the right and entering a positive number will also rotate to the right that number of degrees.

You may also rotate the design using three fingers on the screen and turning to the position you wish.

A good general practice is to use the three finger to rotate to the approximate position, then use the arrows to fine tune the position, or use the manual entry and fine tune with the arrows.

You can also rotate the design either direction on the screen by using the “three finger” approach.

### **Magnifying Glass button**



Selecting this button (button will change to GREEN when in the magnify function and the name will change to “ON”) will allow you to zoom the screen using the two-finger method. In this function you can only zoom or move the design left, right, up or down. To get back to the modify functions once you get the screen positioned the way you want again select the Magnifying button. The button will change back to blue and the title will change to “OFF”. The screen will remain in the magnify mode until you are done modifying the design or you again select the button and return to normal size. This function is generally used in the modify design phase to place the design in a very specific place.

### **Chain button**



The chain button will place an additional version of the design on the screen. The second version of the design will be added to the first by placing the start position of the new version at the end of the previous version. (Start position is indicated



by a green dot and the end position is indicated by a red dot). Once chained the pieces change to a single item with the green button remaining at the original start and the end mark will be at the end of the last chained item. You can chain as many times as you wish. Be careful when chaining a complex design as you may get ahead of the screen and end up chaining outside of the quilt area or off the screen. QBot will do what you ask even if it is NOT what you expect. As long as the start and end point are on the same horizontal coordinate the design will be directly across on the X axis. If the design has a start and stop that are NOT on the same horizontal X axis, it will still chain them but they will NOT be in a straight line left to right. You can of course modify the position and move them as you wish. If you chain a design that has the start and stop position in the SAME place QBot will place on design directly on top of the other (you will NOT be able to see that there are two (or more) designs on top of each other (like using the overlay function discussed later).

The chain function can NOT be use with multi-segment designs; attempting to chain them will result in an error message. A multi segment design is a design that has 2 or more pieces that are not connected (example a circle inside another circle). These are designs that use the jump stitch approach to get from one part of the design to the next.

### TRIM button



The trim button will delete design portions outside the selected area. Once you select the TRIM button you will be presented with a menu screen with 5 trim choices.



## Left / Right / Top / Bottom / Boundary

- a. Selecting the left button will delete any portion of the design that is to the left of the outside boundary. You will only see the trimmed version after you select done. If it is not what you want you can return to the design screen by selecting "Modify".
- b. Selecting the bottom button will trim anything below the bottom outside boundary.
- c. Selecting the right button will delete any portion of the design that is to the right of the outside boundary.
- d. Selecting the top button will delete any portion of the design that is above the top outside boundary.
- e. Selecting the boundary button will delete any portion of the design that is outside the outer boundary on every side

The "Boundary" button does not work exactly as the four side buttons. The Boundary button will calculate what is outside the boundary and remove that portion. The other 4 buttons may not remove all that is outside that boundary side. This is due to the way QBot calculates what is outside the boundary. In the example screen you will notice that the top boundary is NOT level. The top left is higher than the top right. Using the trim (side) function QBot looks at the boundary and calculates what is outside the highest point of the top boundary and deletes that portion. It will not remove anything beyond that point. This holds true for each of the four sides. For the bottom boundary QBot will use the lowest point and remove anything below that point. For the left boundary QBot uses the point the furthest to the left and deletes anything to the left of that point. For the right boundary QBot uses the furthest point to the right and deletes anything to the right of that point.

If your boundaries are NOT level left to right or top to bottom on the side you want the design to be removed use the "Boundary" function rather than selecting which side.

The "Boundary" selection will work as you might expect, although there may be situations where you do NOT want something removed beyond one of more of the boundaries. Below are some examples where the individual side selections

don't work as you might expect. Look at the top and bottom or left and right of the boundary and you will notice that the boundaries are not level, therefore not all of the design outside the boundary is removed.

Illustration #1 is a left boundary issue (note the bottom left corner is where the design is cut, since the bottom left is further to the left than the top left the design is only cut from the left corner and past.)

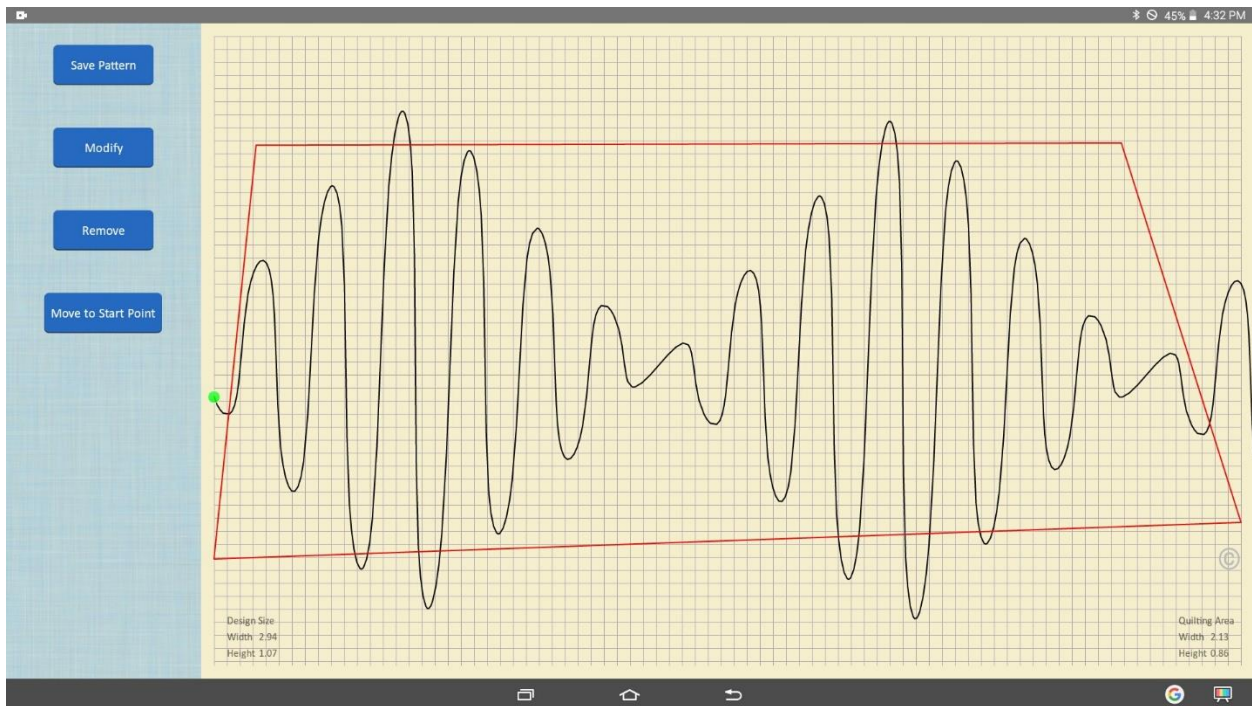


Illustration #2 is a right boundary (note the bottom right corner is where the design is cut, since the bottom right is further to the right than the top right the design is only cut from the right corner and past.)

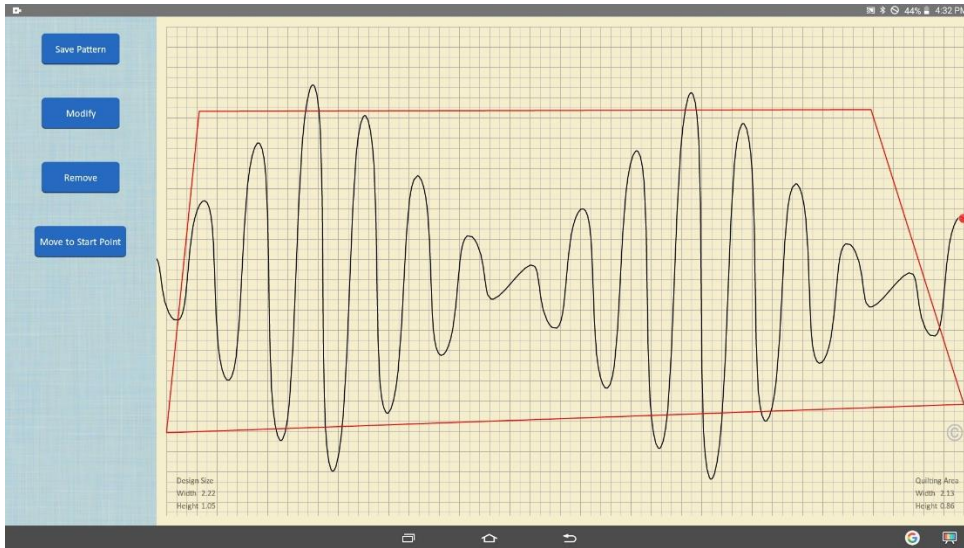


Illustration #3 is a bottom boundary (note the bottom right corner is where the design is cut, since the bottom left is further down than the bottom right the design is only cut from the left corner and past.)

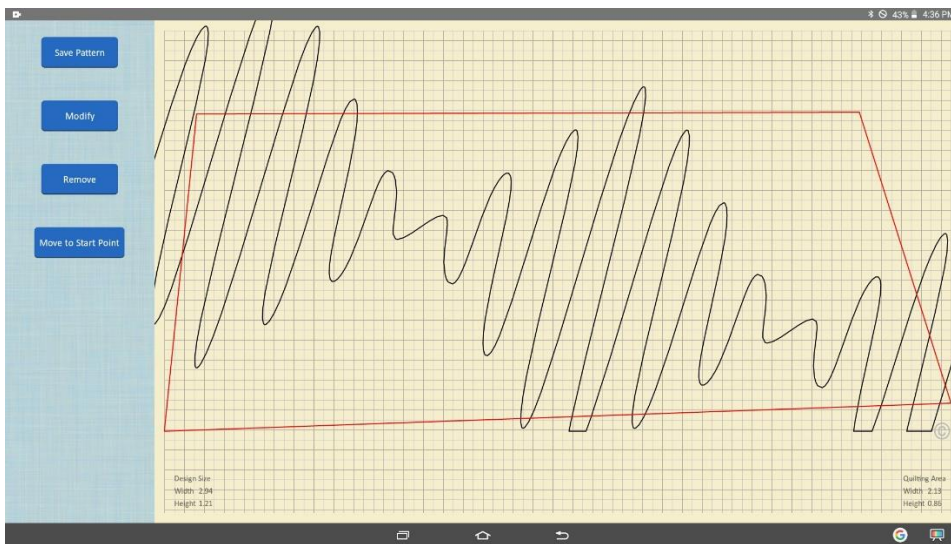


Illustration #4 is a top boundary (note the top left corner is where the design is cut, since the top right is further down than the top left, the design is only cut from the top left height and past.)

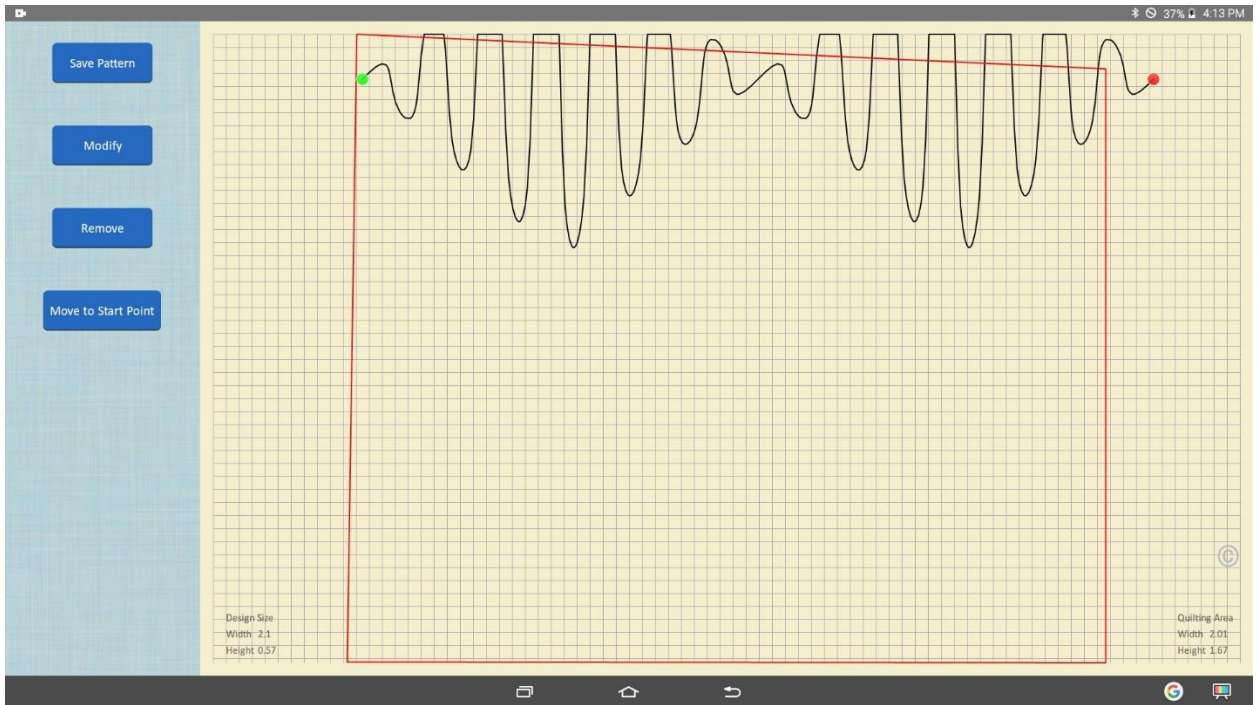
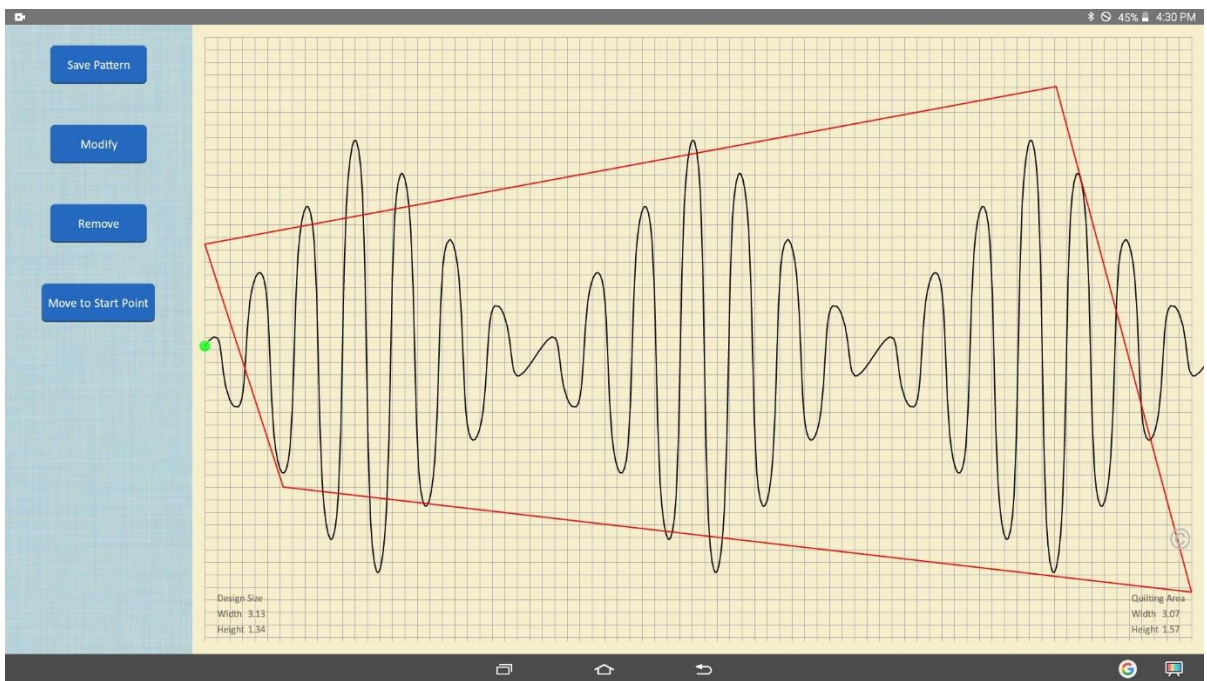


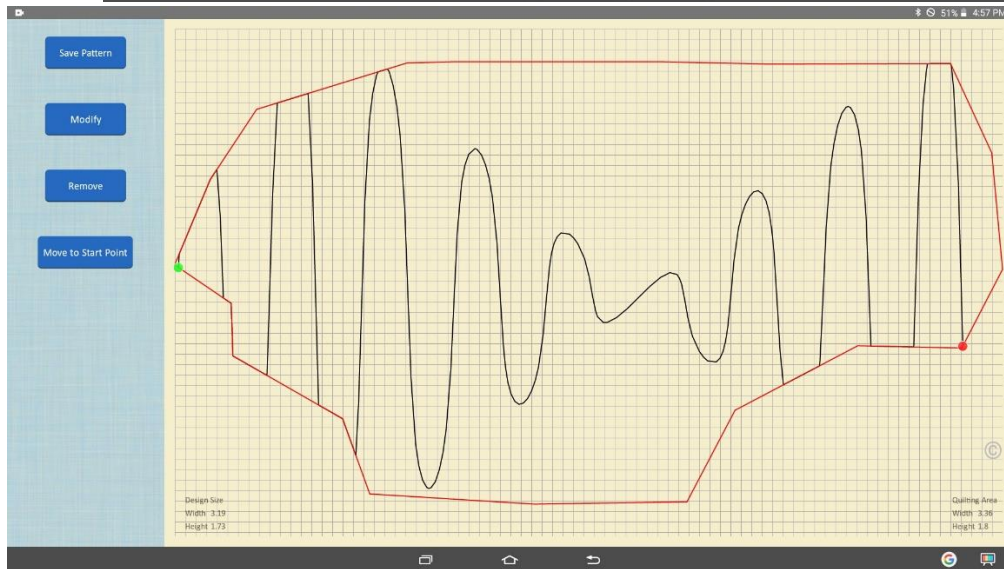
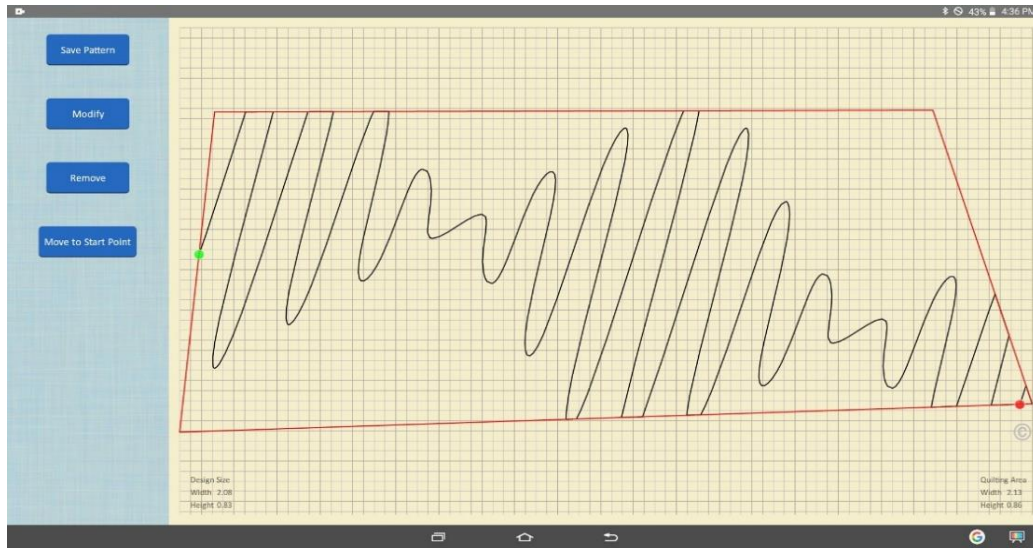
Illustration #5 is all four sides selected (note the same situation on all four sides occurs).



**THIS IS NOT A BUG** but a result of how to remove portions of the design beyond a boundary. Any boundary that is level will result in a cut that you would expect. If your boundaries are NOT level use the “Trim Boundary” selection rather than the individual sides.

Once select the “Done” button you will see what the stitch out is going to be like. If you are NOT happy with the selection you can use the modify button from that screen and re-select the type of trim you want. Each time you select the “Modify” button any trim you selected and any selection from the jump choices will be removed and you will need to re-select what you want before selecting “Done” again.

Illustration #6 is a Boundary selection (2 different examples of trim boundary)



### Jump Stitch Inner Boundary



If you select Jump inner boundary the screen displayed when you select “Done” will show you where each jump stitch will be (displayed by a green start dot and a red stop dot) at each segment. You will be able to see how many jump stitches will occur and where they are. Depending on the inner boundary and the design there may be from 1 to several jump stitches.

Selecting just inner boundary will result in QBot pausing when it gets to a point on the inner boundary where the stitch meets a portion of the inner boundary. QBot will pause, allowing you to pull up the bobbin thread and cut the top and bottom thread before it moves to the next point in the design that is not within the inner boundary. Selecting "Continue" after you have cut the thread will allow QBot to move the head to the next start point and pause. You may then pull up the bobbin thread and select "GO" which will cause QBot to again start stitching the rest of the design until it gets to another place where the stitch hits the inner boundary. When QBot gets to a pause point you may be able to see the next section that QBot is prepared to stitch. This next section will be in BLUE on your screen. Depending on your screen it may be easy to see the next section or difficult, depending on the amount of stitching involved in the next section and on your tablet you may or may not be able to identify the next section. At the pause point you may choose to skip the next section (as it may be very small and not worth stitching) or may continue and stitch the next section. If you choose to skip a section the screen will show you what jump section you are currently on and how many there are. You will have the option to continue with the next section "Quilt Segment", Skip the next segment or End Quilting. If you choose to skip the next segment you will again have the option to again skip this segment and to skip another or quilt that segment. This process will continue until the current design is completed.

### **Jump Stitch Outer Boundary**

The same process is used as in Jump Stitch Inner Boundary except uses the outer boundary.

It is possible to use both skip Inner and outer boundary at the same time if it fits the design you are working on.

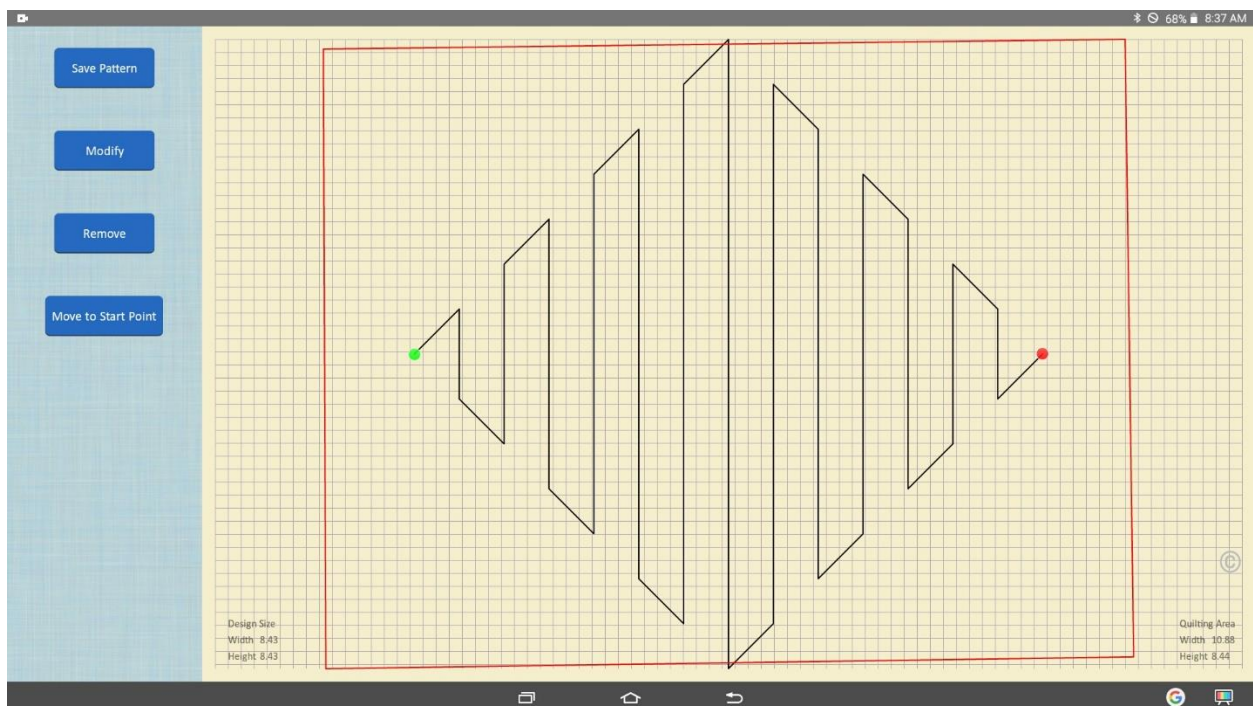
If you have an inner boundary and the design covers part of that boundary, QBot will stitch along the boundary to get to the next start point without stopping. Due to fabric compression these stitch lines may not be exactly on top of each other. If the stitches are directly on top of each other they can become bulky. In the



case where there are a lot of jump stitches the stitched boundary may not be acceptable to you as the lines stitched to get to the next point may be used multiple times.

The choice of using Jump stitch or continue stitch should be weighed before starting the stitching process. You can go back and change the option by selecting "Modify" until you get to the Move to Start screen. Returning to the Modify screen clears any jump stitch selections as well as trim selections.

Once you have modified your design and are ready to continue selecting the "Done" button will take you to a screen with 4 buttons



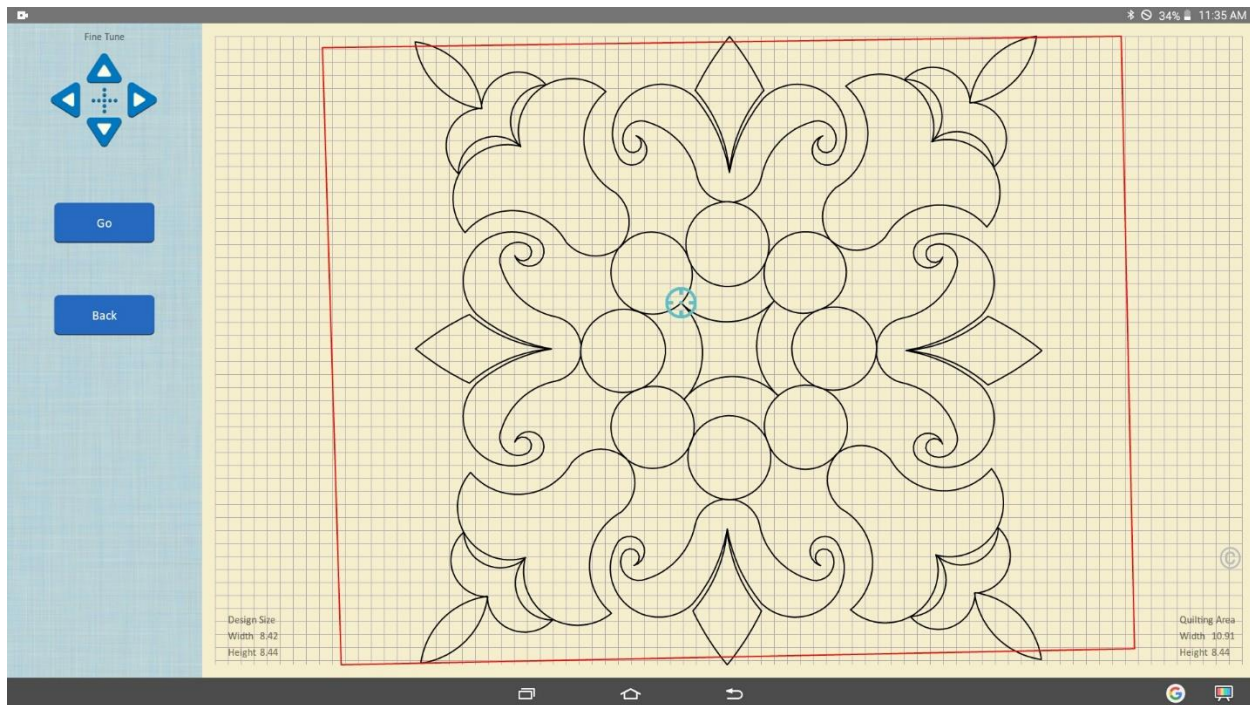
1. Save Pattern
2. Modify
3. Remove
4. Move to Start Point

**Save Pattern** button will allow you to save the current design changes. You will be able to enter a name for the modified design. Use a unique name for this new design. If you use the same name as the un-modified design, the original will be overwritten. Saved designs will be stored in both the "All Designs" folder as well as the "Saved designs" folder. If you enter a name that already occurs you will receive a warning window "Duplicate file name detected" "Would you like to overwrite the existing pattern?". Your choices are "Cancel" and "Overwrite". Cancel will return you to the "Save Pattern" screen and allow a different name or cancel the save process. Overwrite will copy the new design changes and overwrite the previous design.

**Modify** button will return you to the modify screen with no changes. Remember if you return to the modify screen any changes to the "Jump" buttons and the "Trim" button will need to be re-selected.

**Remove** button will remove the current design and return you to the "Choose Design" window with a blank screen except with the outer boundary and inner boundary you selected. This is the "Do Over" button. Any time in the modify process that you just want to start the design selection and modifications process over again, select "Done" and when you get to this screen select "Remove"

**Move to Start Point** button will take you to the "**Fine Tune**" screen.



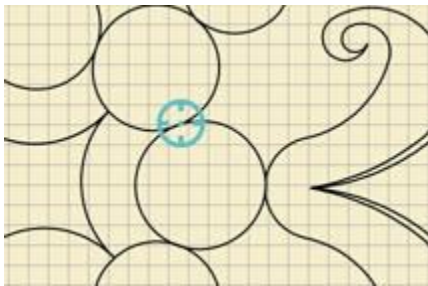
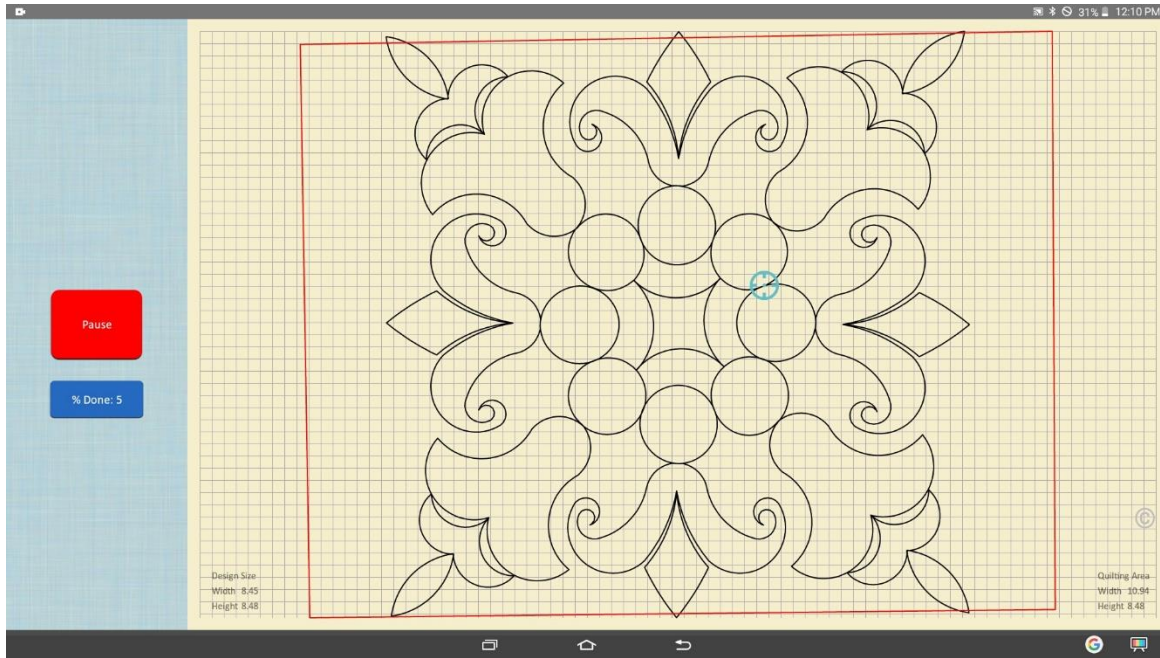
This screen is the final screen before stitching begins. The quilt head will move the point where the stitching will begin.

At this screen you will have the opportunity to move the head to a different point. This is intended for minor changes. You can move the head in any of the four directions. Pressing one of the direction arrows (or holding one down) will move the head very small amounts in that direction. This would be used to move the head a small amount to start at an exact point if it did not land there when it moved. The entire design will be shifted based on the amount you move with these arrows. If you have more than a very small amount to move, you would be better off starting over.

Your other selections are “Back” and “Go”.

Back will return you to the previous screen (save pattern etc.)

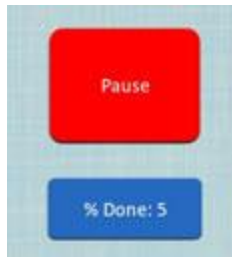
“Go” will start QBot stitching. If your setup has one of the QBot connector cables to your stitch regulator, not only will QBOT start moving but your stitch regulator will be turned on. If you do NOT have a QBOT connector cable you will need to start the stitch regulator first then select the “Go” button.



While QBot is moving through your design you will see a representation of the process on your screen. You will see your inner and outer boundaries as well as your design. On the screen there will be a blue circle with 5 dots in the center.

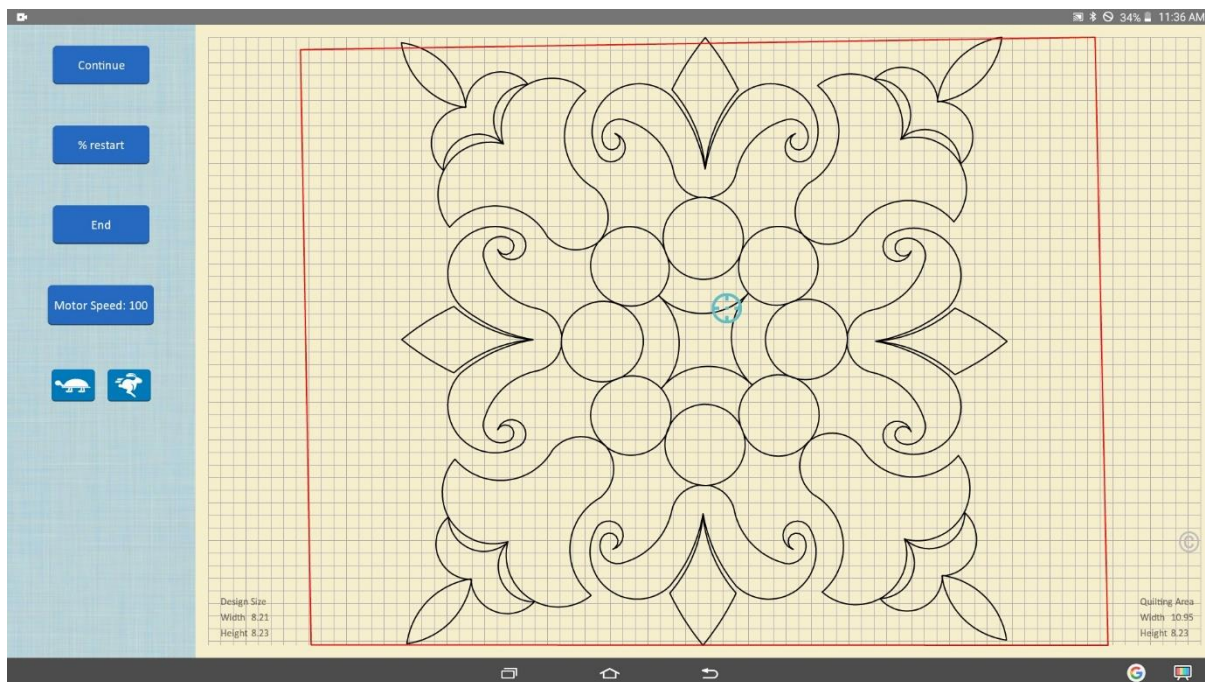
This blue circle represents the movement of the quilt head as the tablet sends the data to the QBot head. This dot is based on the position when the data is sent and likely will NOT be the exact position of the head as the QBOT head receives and stores the data as it sends it to the motors. You will notice a short delay between the position of the blue circle and the actual position of the head. This is normal.

Two buttons appear on the process view screen.



One is a RED Pause button and a % Done button. The % Done button will update to current percentage of the progress as the stitching is completed. Keep in mind that this is the percent of the design that has been sent from the software to the QBOT head and will lead the actual completion by a small amount.

The large “RED” pause button will pause stitching when selected. You will be taken to another screen with 6 buttons.



1. Continue
2. % Restart
3. End
4. Motor Speed
5. Turtle
6. Rabbit

The continue button will continue stitching where it was paused.

The % Restart button will pause allow you to move forward or back in the stitching (more below)

The End button will end the stitching process at that point.

The motor speed button shows the motor speed, on a scale of 0 to 255 with 255 being the maximum your quilt head will run. The default speed is 100 which is just under ½ of your head's maximum speed.

Turtle/Rabbit buttons



Selecting the turtle button will reduce the head speed which will be displayed on the Motor speed button. Holding down the button will continue to reduce the speed until released.

Selecting the Rabbit button will increase the head speed, also displayed on the motor speed button up to the max of 255.

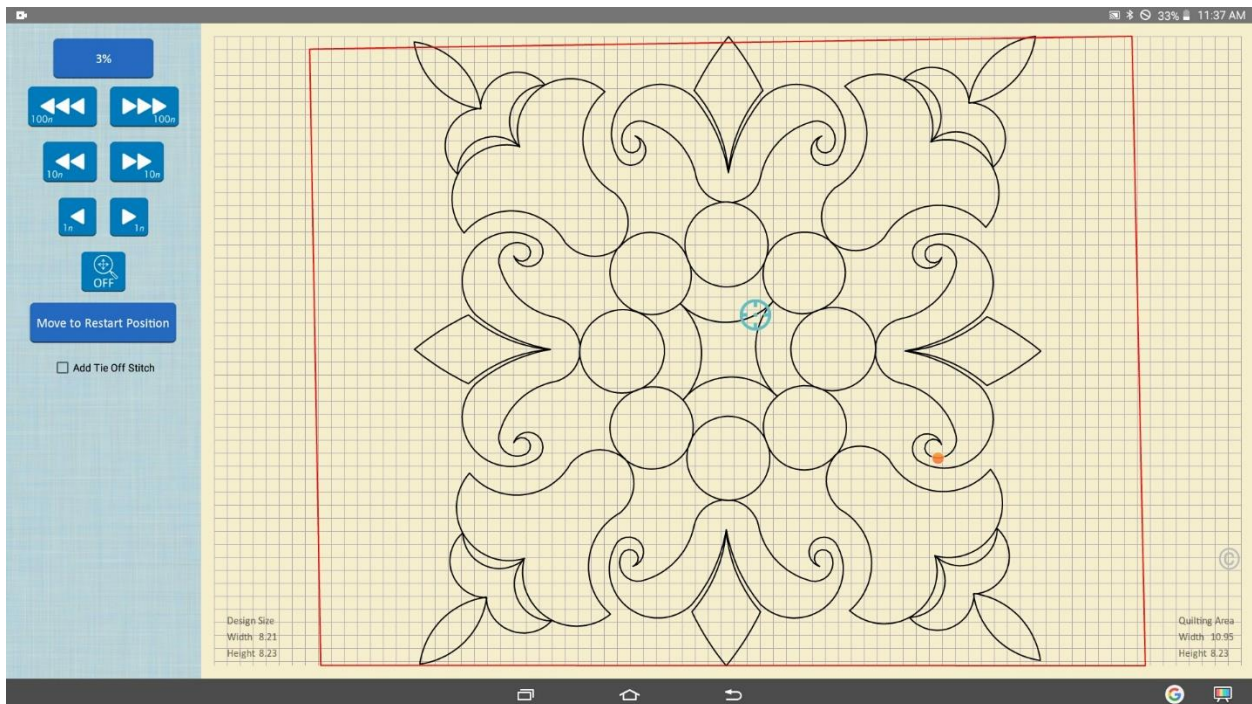


Designs with very small circles and dense stitching with short rapid direction changes stitch better at slower speeds. Long straight designs or designs with gradual direction changes can be stitched at faster speeds.

You will see your quilt head speed up and slow down at different times when it comes to direction changes. This is done automatically but if you know there are lots of short stitches with direction changes you may want to modify the speed. (Circles and stars may be crisper)



**% Restart** If you select the % restart button you will be presented with a screen allowing you to return to the Pause screen or to continue with the percent restart. The purpose of % restart is to allow you to re-start after a thread break, loss of power or connection, or any other reason that you want to start at any point other than the beginning of the design.



Selecting “OK” will take you to the percent restart screen. On the right of the screen will be your boundaries and design as well as the Blue Head target button and an Orange dot.



The blue button is where your head is in the process. The orange dot is where the software has stopped (remember there is a short delay between the software and the actual head position).

At the top of the left part of the screen is a % complete button that will allow you to enter what percent of the design you want the head to return to (“0” would be the beginning and “100” would be the end). After entering a number, you can cancel manual change (Cancel) or continue (“OK”). Selecting OK will move the head to that percent of the design and the orange dot will show where that percent is and where the head will move to.

There are 6 forward/backward buttons



Each will move the blue head button in that direction (fast – 100n, medium 10n and slow 1n) the “n” after the number is the number of nodes it will move with each selection. Use these buttons to move the blue head position target to where you want to restart the stitching process. Positions available are controlled by the number of nodes available (the more nodes the more places you can move to, the less nodes you can stop at). Depending on the number of nodes you may have to start before the spot you might prefer.

Magnify button: This button will allow you to zoom in or out on the design screen. If you have a large design like an E2E design and you want to zoom in a

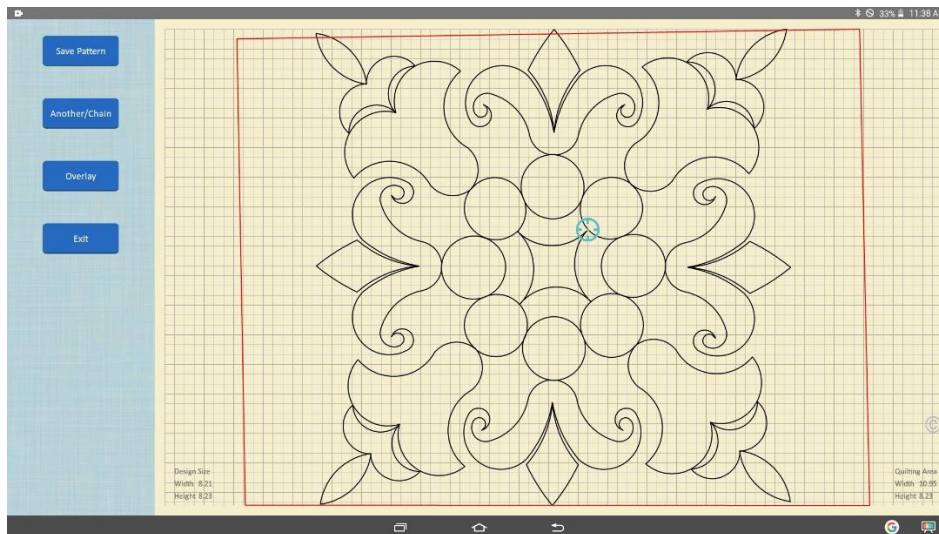


lot, initially you may not be able to get the head position target (blue) and the software start button (orange) in the same window. While in the zoom select window you can only change the zoom ratio and the screen position with the one finger procedure. To return to the ability to use the forward/backward buttons you will need to deselect the Zoom button. The screen will remain in the zoom that you selected. You can move the head to the position you want to restart at and use the arrows to move the software to the same place (both targets at the same place). You can add a tie off stitch by checking the “add Tie Off Stitch” box.

Once you have told the software where you want to restart you should select the “Move to Restart Position” button.

Once the head has completed its move to the new position you can again make small adjustments to the head position (Fine Tune), go back to the head positioning screen or select “Go”.

Selecting “Go” will continue stitching until the design is completed. Once complete you will get the complete screen that has 4 choices.



1. Save Pattern
2. Another/Chain
3. Overlay
4. Exit

Selecting the Save button will give you another chance to save the modified design in the event you did not save it previously.

Selecting the “Another/Chain” button will chain the design and allow an additional version to be stitched (same chain rules as in the design process).

Selecting “Overlay” will add another copy of the design directly on top of the previous. If you do not move the design and continue stitching it will do a duplicate stitch over the first.

If you select the “Modify” button you will be able to move the duplicated design to another position and return to the ‘Modify’ screen. You will still be able to see the original stitched design on the screen.

Once the stitch process is complete selecting “Exit” will return you to the main QBot screen.

## Part II

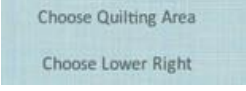
### 4 Point Quick Scale

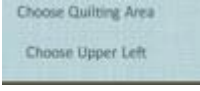
Quick scale is a very simple, quick means of completing a block design. Other than telling QBot where to place the design and what design, QBot will do the rest for you. QBot will size the design to fit in the block you have selected. 4 point quick scale ONLY allows a four sided area (block) although it does not have to be square as it can be a any 4 sided shape, if this is what you need.

The process is quite simple

1. Select "4 Point Quick Scale" from the menu.
2. Select the four corners of your block.
  - a. There is a specific order that this must be done and will appear on

the screen. (Upper Right ,

b. Lower Right ,

c. Upper Left ,

d. and Lower Left 

Not following the proper order will result in improper orientation.

3. Select the design you want to quilt
4. Move to start point
5. Start quilting.

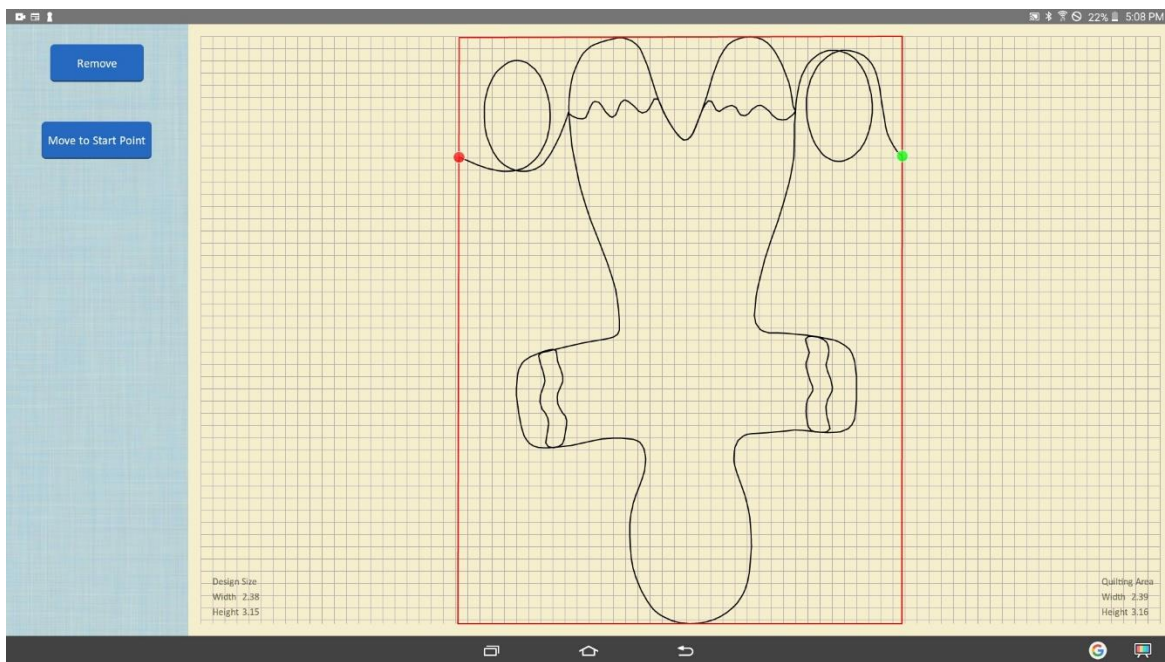
As it is very simple there are no editing features. The design can only be saved after the quilt process. You can pause the stitching (same screens as pattern quilting, and perform % restart as well as fine tuning start position).

Since there are no editing features with the design, your choice must be oriented with the top up. If your block is not oriented with the top up on your quilt space, or the design is not oriented top up on your design space, it will not orient as you

would expect as you do not have the ability to rotate the design. There is a workaround in this case. The screen shows you what order to select the quilt area in, this determines the orientation. The order is top right, bottom right, top left, bottom left. If the block is not right side up you can trick QBot into placing the design in the orientation you want. Select the points in the order of the design rather than the order on your quilt block. In the example the design is upside down and your block has the top up on your screen. Select the 4 points relative to the orientation of your design (Lower Left, Upper Left, Lower Right, Upper Right). This will place the design on your block with the design in the upright order rather than with the top to the left.

This can be done for any of the 4 orientations. Just select the points in relation to the design rather than the order of the block.

Figure #1: Upside down design, right side up block, selected as requested on the screen.



Selecting points based on orientation of the design (upside-down, note: first 3 points selected and requesting the last point, prompt is for bottom left, actual selection will be top right). In this example using an upside-down design.

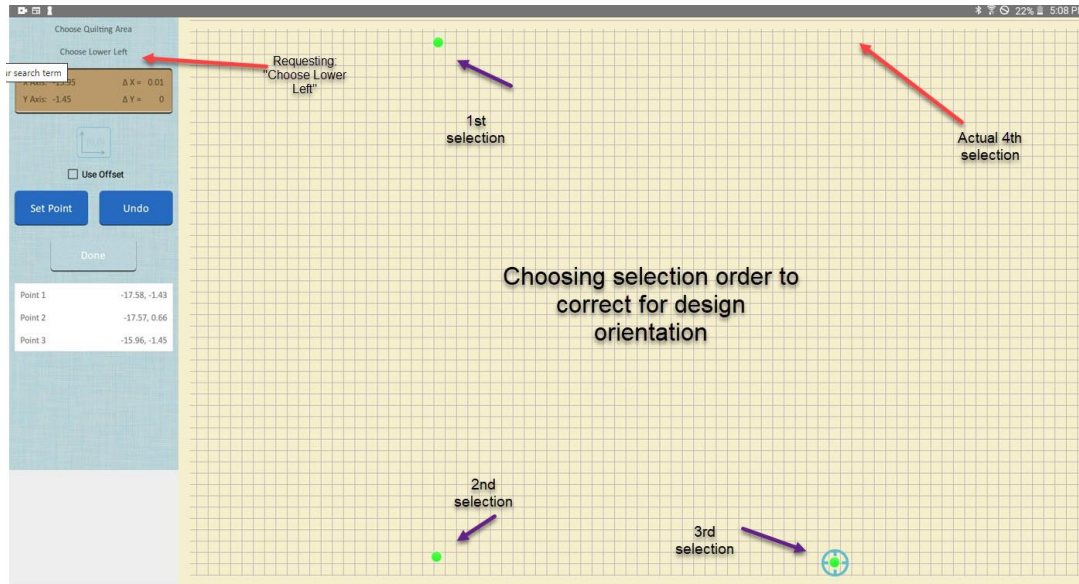
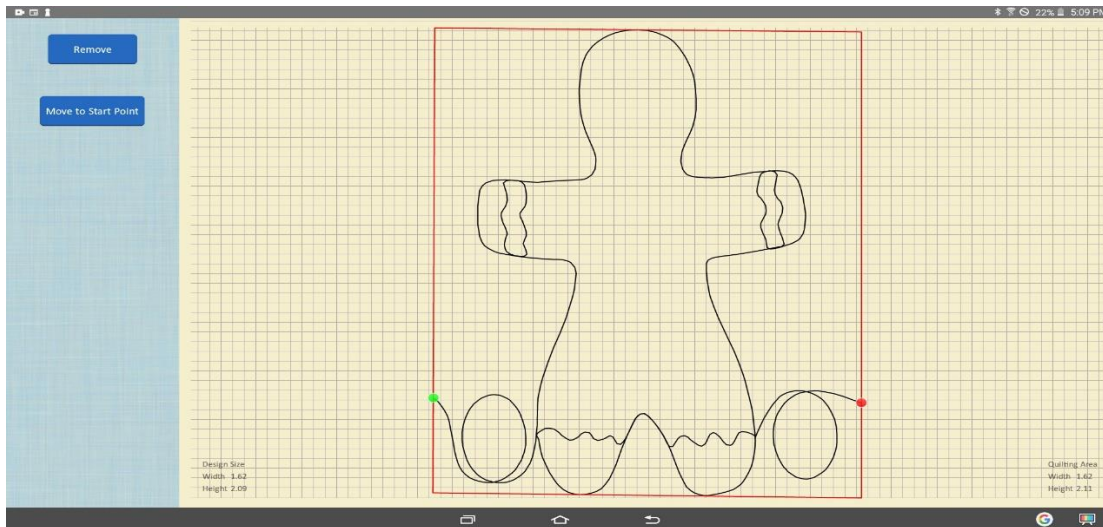


Figure #3: Same upside-down design with the quilt area selection process adjusted to match the design orientation rather than the block orientation.



After completion of the stitching, the following screen will appear.



At this point you can

1. Save the design for use later
2. Another/Chain design (not functional in Quick Scale)
3. Overlay (places a duplicate design on top of the present design).
4. Exit (returns to main menu)

## **Record Free Motion**

Free motion recording is a simple way to create a design without additional software. The process is as follows:

### **1. Start Recording**

- a. Move the quilt head to match the design and save the newly created design. While the head is moving the screen will not reflect your movements.

### **2. Stop recording**

- a. Your screen will display what you are recording to this point

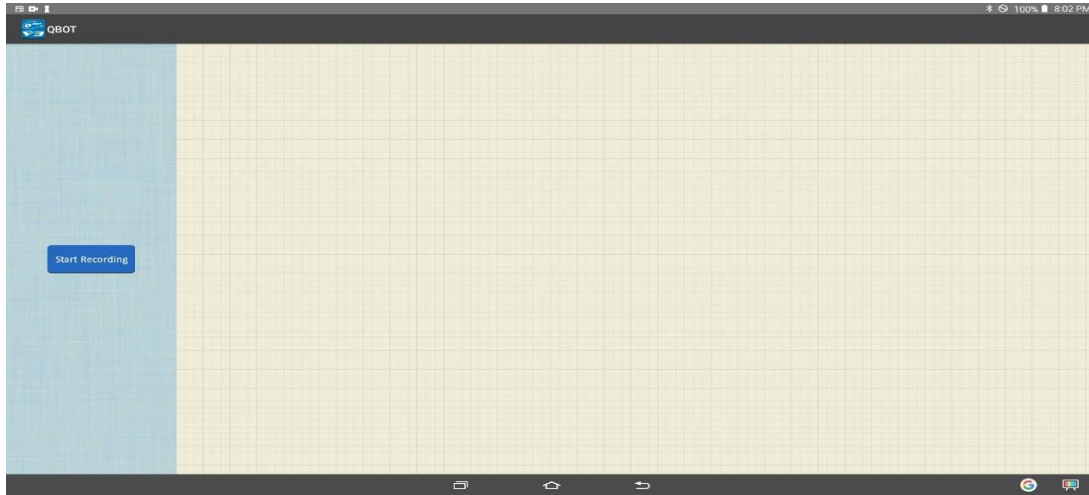
### **3. Continue Recording**

- a. (As if the stop was only to pause)
- b. What you have done recorded thus far will not show on the screen.  
Stop recording if you previously selected "continue"
- c. Your screen will display what you are recording

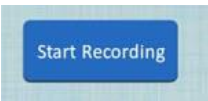
### **4. Keep Design**

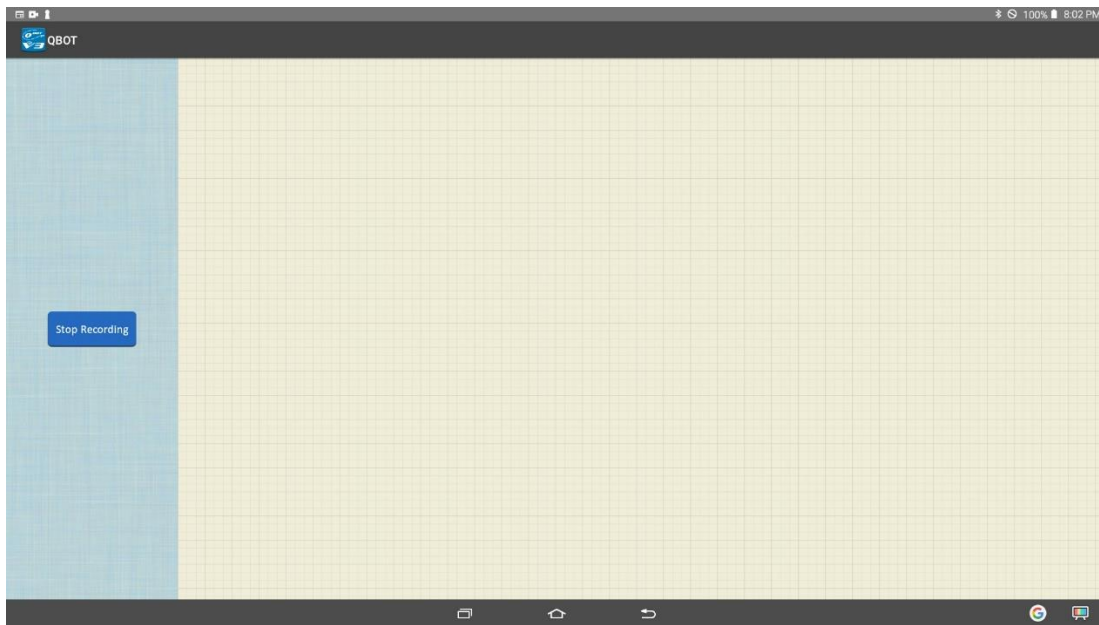
- a. This will allow you to enter a name for the design to be saved  
After entering the save name, you will be taken to the Design Management screen to allow you to move the newly created design to the folder you want to hold the design.

## Start Recording



After selecting the “Record Free Motion Recording” option from the main menu you will be taken to the above screen. Selecting the “Start Recording”

button  will take you to the recording screen.



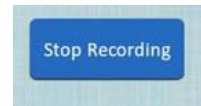
At this point you can start tracing or moving the head to record your movements. The screen will remain blank during this process. You will NOT be able to see your progress on the screen as you record the design at this point.

There are no editing features and no screen representation while recording. You can pause and continue during the recording but you cannot go back to a

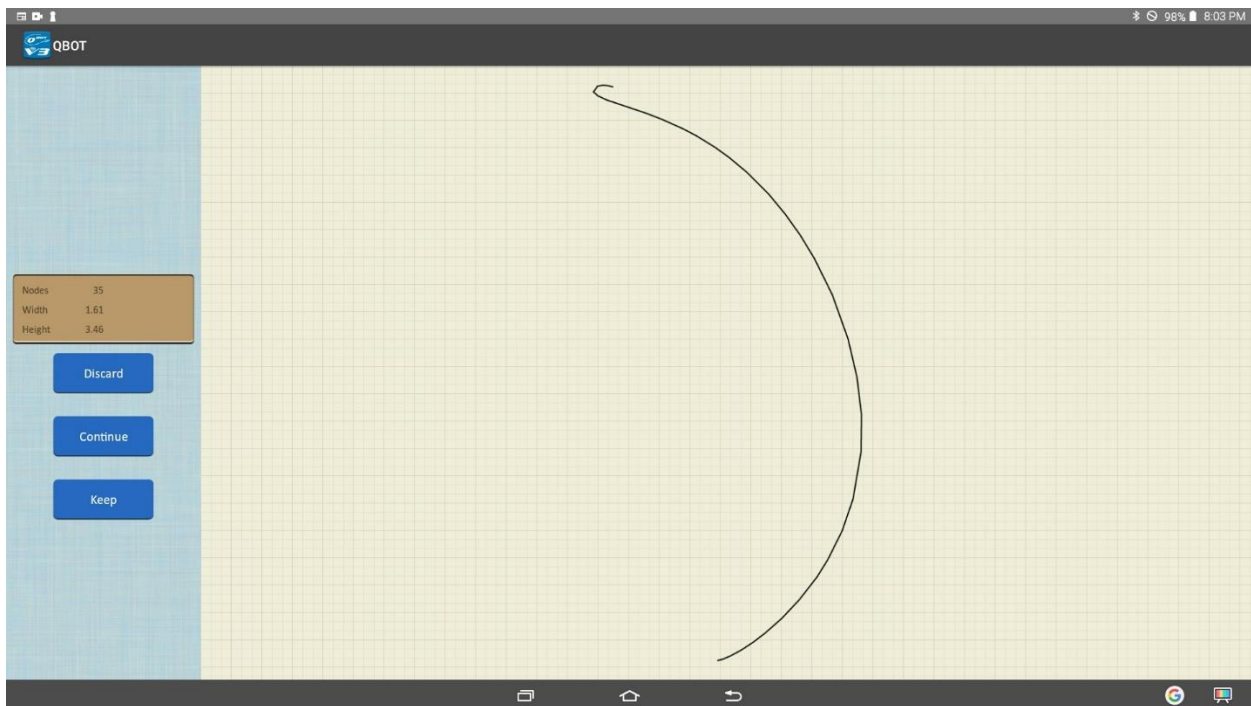


previous spot or undo an error after starting recording. Take your time creating the design.

There is no time limit and QBot does not record the speed but DOES record EVERY movement. If you make a mistake, you can stop recording and “Discard” what you have recorded so far and start again.



At any time, you can select the “Stop Recording” button. This will pause the recording and you will be taken to the below screen. On this screen you will see what has been recorded so far. If you have not completed the design, you have the option to continue from where you left off, which will return you to the recording screen. The progress shown on stop screen will not appear on the recording screen, but you can will continue with the recording where ever you left off.

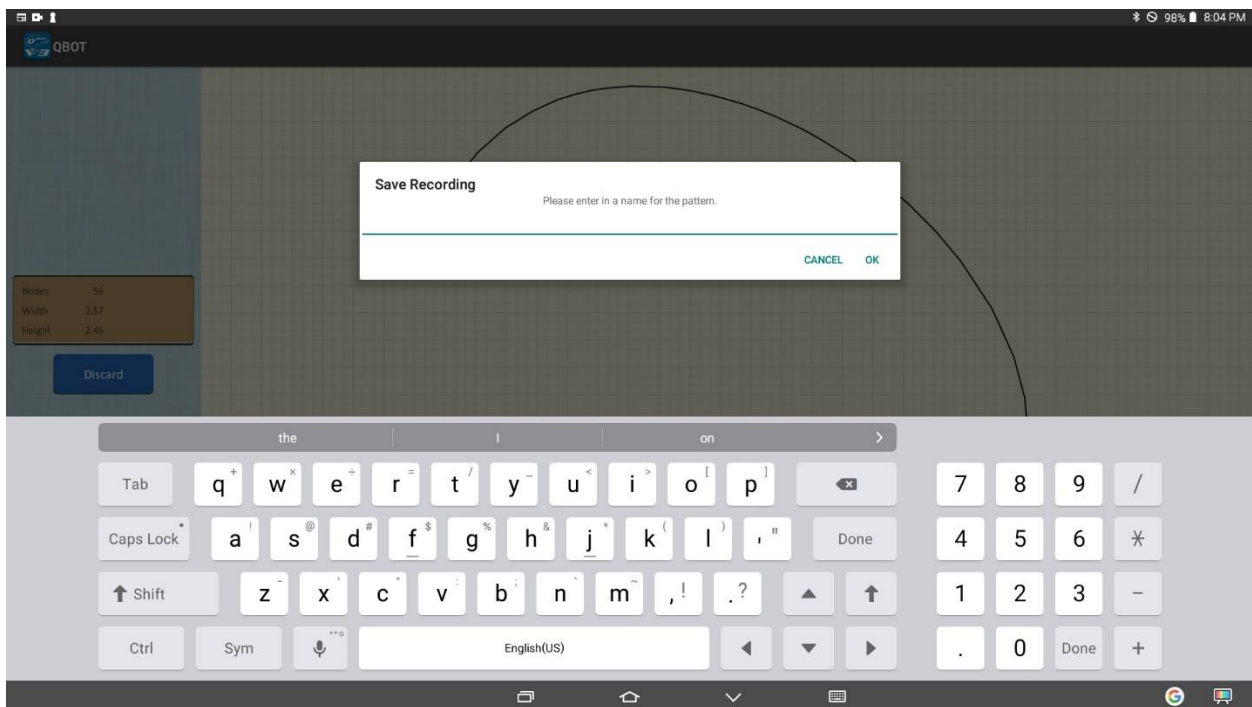


The other options are:

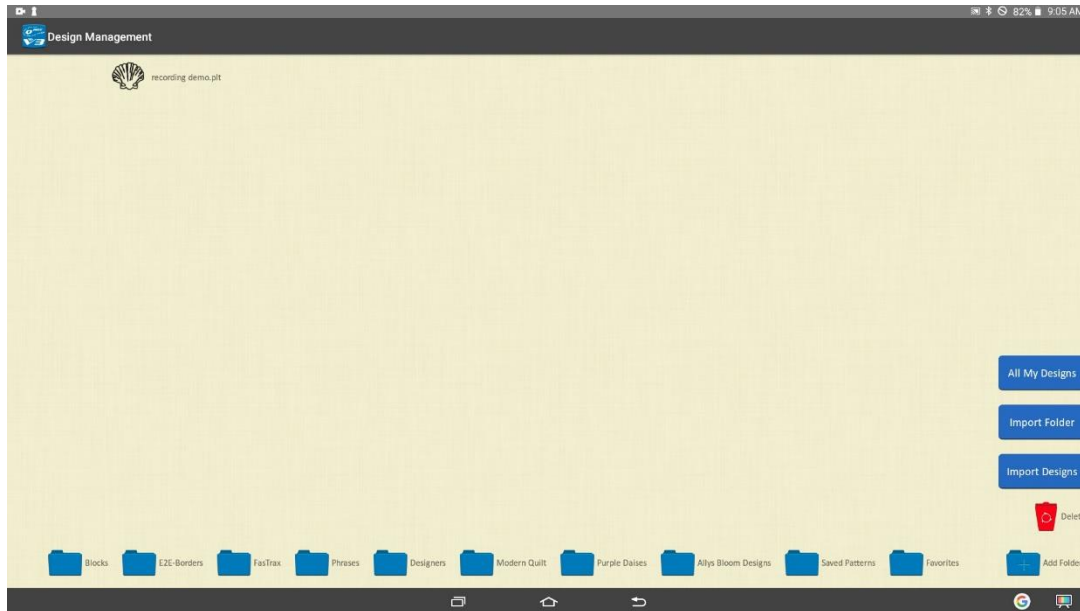
Discard what has been recorded thus far, or Keep the recorded design (save for use later).



Selecting the “Keep” (save the design for use later) will take you to the “Save Recording” prompt. At this time, you can enter a unique name for the newly created design which will take you to the import design window.



After entering the name for your newly created design you will be taken to the “Import Design” window. You may drag the design to a particular folder. QBot will also show it in the “All Designs” folder.



Once done you can return to the “Main Menu”. Your new design is now available for use.

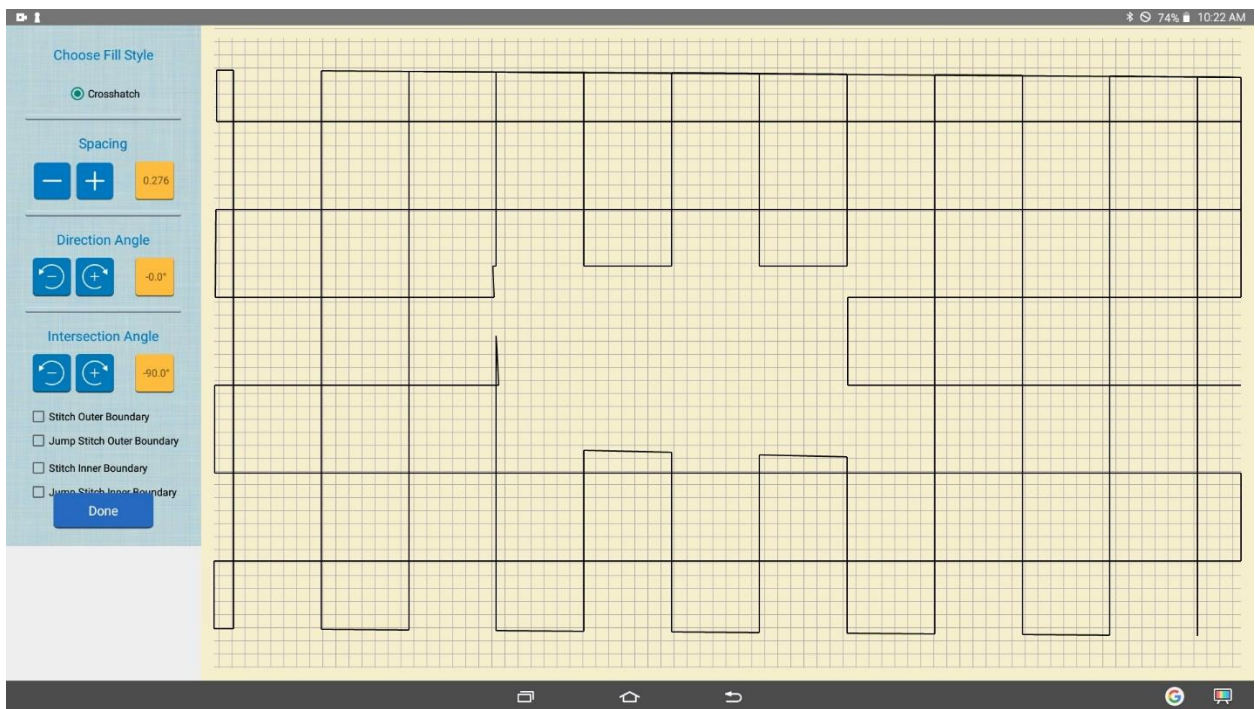
## **Crosshatch**

Crosshatch allows you the ability to create a crosshatch fill design.

The process is:

1. Select Crosshatch from the main menu.
2. Select the quilting area where the crosshatch will be created. The crosshatch will fill the selected area.
3. Select 1 or more inner boundaries where you do not want the crosshatch to fill if needed.
4. Adjust the Spacing, Direction Angle, Intersection Angle
5. Select if you wish to Stitch or Jump Stitch the outer and/or the Inner Boundary.

You can modify the default settings in the Design Management screen.



You have 3 ways to change the options.

Select the section you want to change (blue buttons or yellow button) then modify the number as you wish.

1. Use the “+” and “-“ buttons
2. Select the yellow button next to each choice and enter a numerical number in decimal inches.
3. Use the “Two Finger” method to change the numbers.

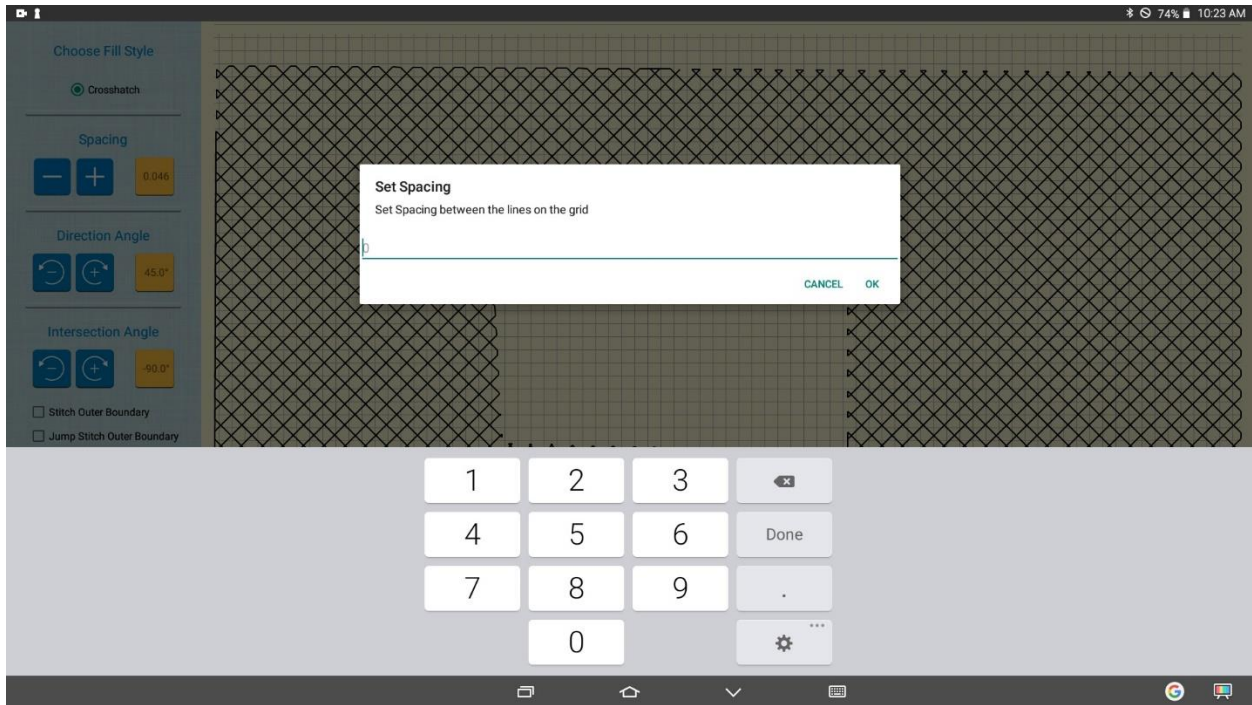
**V3 Pro exception:** *V3 Pro has an addition editing function not found in V3.*

### Fine Tuning

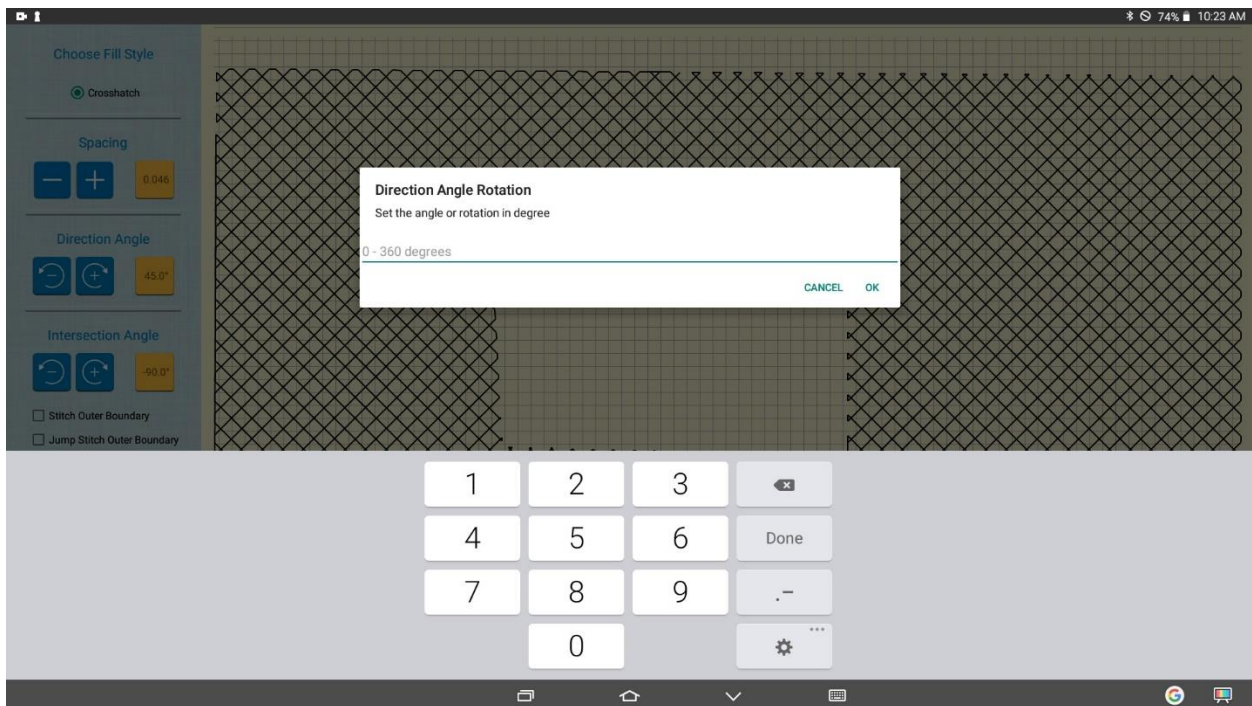


*With V3 Pro (ONLY) you can fine tune the crosshatch position left/right/up/down by using the either the arrows, the delta X and Y buttons or by using the One finger modify ability and drag the design in the direction you want to move. This is handy for positioning the cross hatch to minimize or eliminate the occasional boundary gap or lining a cross hatch design with a previous crosshatch.*

If you have selected 1 or more inner boundaries the crosshatch will skip these areas (as seen in these screen examples).

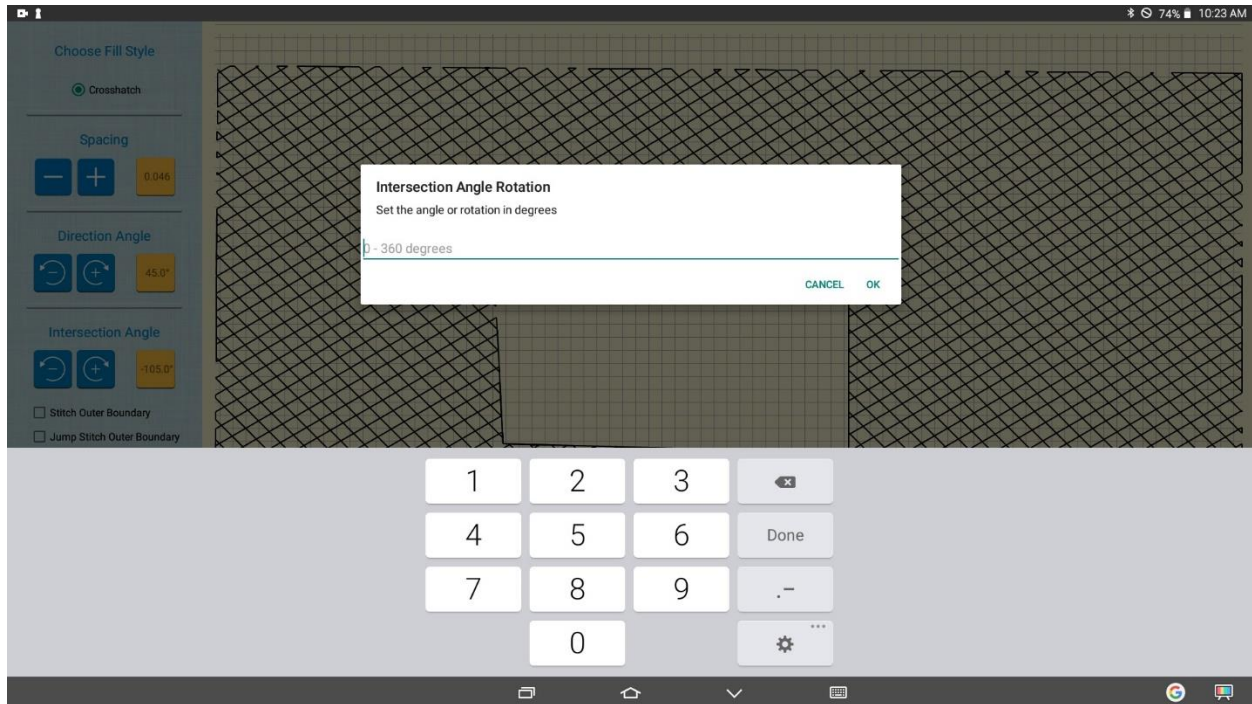


The Spacing section will change how close or far the cross hatches are from each other, entered in decimal inches. Selecting the yellow button will present the above screen for decimal inch input.



The Direction Angle will rotate the crosshatch left or right in decimal degrees.

You may change this value using the left and right arrow buttons, or using the two-finger process or by manually entering an amount by selecting the yellow button which will present the above window. Enter the amount in decimal degrees.



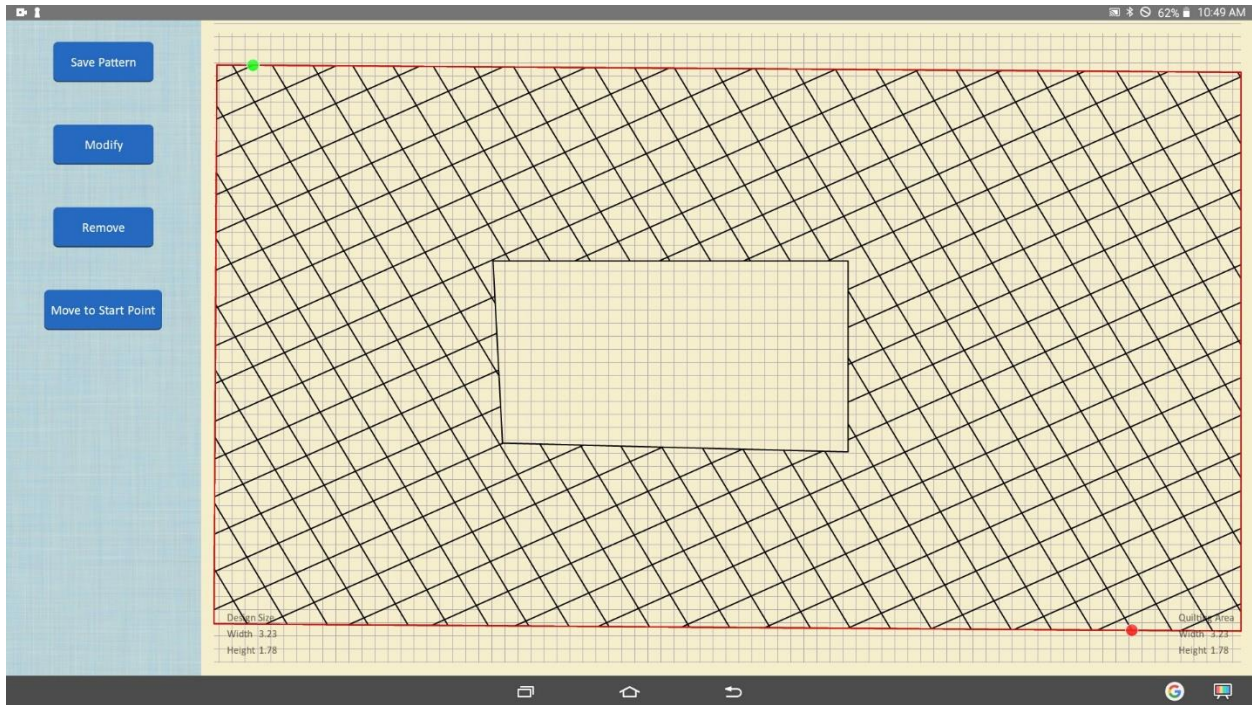
The Intersection Angle will change the angle of the crosshatch in decimal degrees.

As with all three adjustments if you select the yellow button, you will have the opportunity to manually enter the amount in decimal degrees.

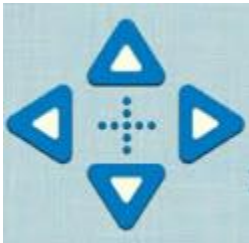
QBot has to figure how to accomplish the entire crosshatch as a single stitch unless you select one of the stitch/jump stitch buttons. As a result, your crosshatch may contain over stitching. During the stitch out it may appear unusual in the order it is stitched but it does complete the design as you see on the screen.

If you do NOT choose to stitch the inner and or outer boundaries you will likely see short blank boundary lines on any of the four sides. Making small adjustments to the spacing, direction and intersection angles can minimize the few gaps at the boundaries. Selecting the Stitch Inner or Outer boundaries will illuminate these gaps.

Once you have completed your adjustments to the design selecting “Done” will take you to your final screen before stitch-out. At this screen you will see the crosshatch design as you have modified and have 4 options.



1. Save Pattern: This will save the created crosshatch for use later as it exists.
2. Modify. This will return you to the previous modify screen to make any addition changes you prefer. You can the select “Done” and will be taken again to this screen.
3. Remove: This will delete your crosshatch design and allow you to start over.
4. Move to Start Point:



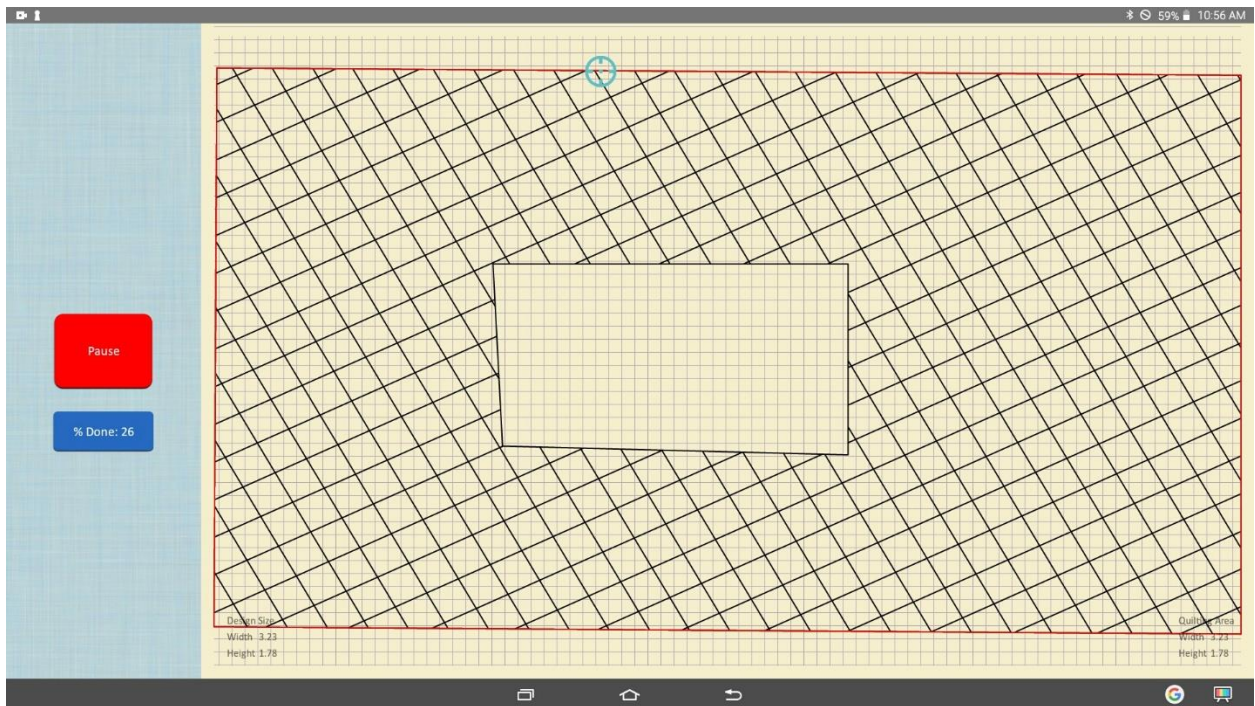
Move to Start Point will move the quilt head to the start point and allow any fine tuning you may want to do.



“Back” which will take you back to the Modify window.

“GO” will start stitching.

Once the stitching begins you will have the option to “Pause”. As the stitching continues the % Done button will reflect how far the stitching has been completed, with the blue target circle showing where the head is (subject to the time delay between the software and the quilt head).



Selecting “Pause” will allow you to perform a “% Restart”, Modify Stitching Speed or “End” the stitching process. Selecting “End” will provide one more opportunity to return or take you to the End screen.



You will have the opportunity to

“Save Pattern” Save for future use.

“Another / Chain” Not functional in Crosshatch.

“Overlay” places a duplicate design on top of the existing design. Useful if you need to start the stitching process over by using the % Restart to restart at other than the first stitch.

“Exit” Complete the process.

## Part III

### Applique

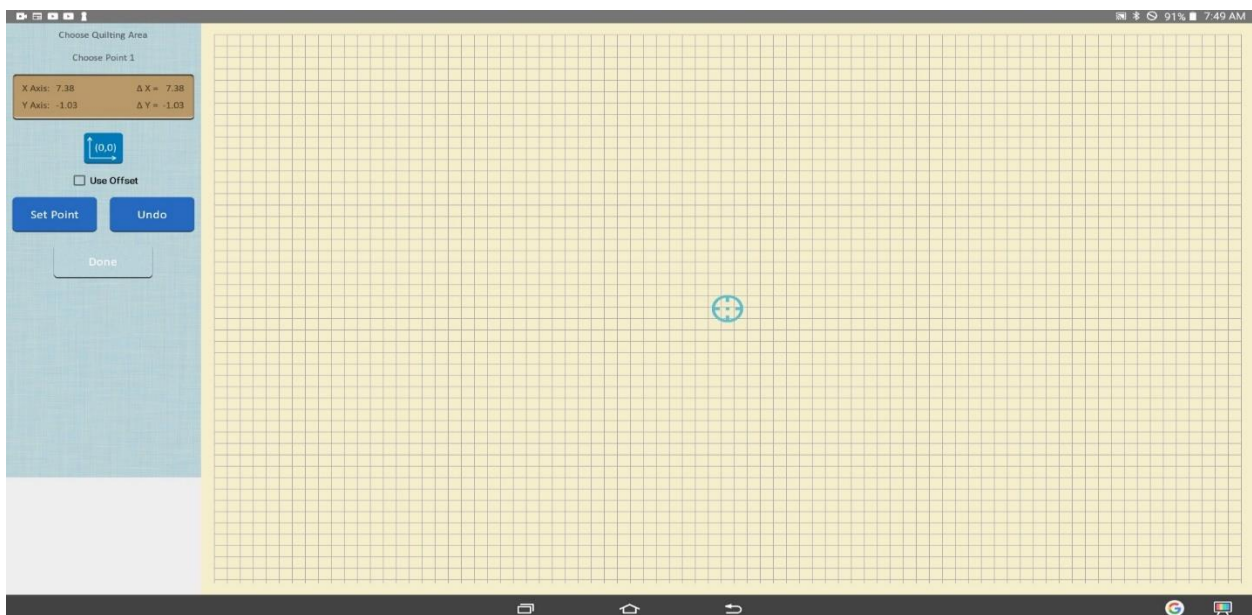
The applique section allows you to quilt an applique stitch on your long arm. Not only do you have access to the standard applique stitch but the ability to modify it in a number of ways to fit your design.

Before starting this portion, I recommend that you affix the applique to the quilt so it can not move during setup or stitching. An adhesive is preferable.

The process is fairly straight forward, you can only stitch one applique at a time.

1. Mark the quilting area (this is the area you will be quilting in). Unlike Pattern Quilting you can not stitch beyond the area you select. Just leave some room around your applique.
2. Mark the outline of the applique.
3. Adjust the applique stitch to your liking.
4. Stitch the applique.
5. End or add echo stitching around the applique (The echo portion will be covered separately below in the Echo section, but can be done as an addition to the applique).

After selecting the Applique / Echo button from the main screen you will get to the Choose Quilting Area screen.



The same menu items appear in the left portion of the window as most of the other select windows and the controls work the same.

What is different from the Pattern Quilting is that the quilting area you select WILL limit you to using only that area if you are doing an echo. Any echo stitching area will not be stitched (like trim to boundary). The quilting area only needs to be just larger than what you intend on stitching including space for echo if you are adding an echo to the applique. The quilting area MUST be 3 or more points. Once your have selected the area, select the " Done" button. You can ONLY do one applique at a time.

You will then be presented with the Applique/ Echo Boundary Selection screen.



This screen allows you to outline the applique you want to stitch around (an inner boundary). In the left window is the common coordinates and delta coordinates. A new set of choices appear below the coordinates box. There are two sections for path and the common box for selecting the use of the laser offset. This is an application where having a QBot laser is especially helpful.

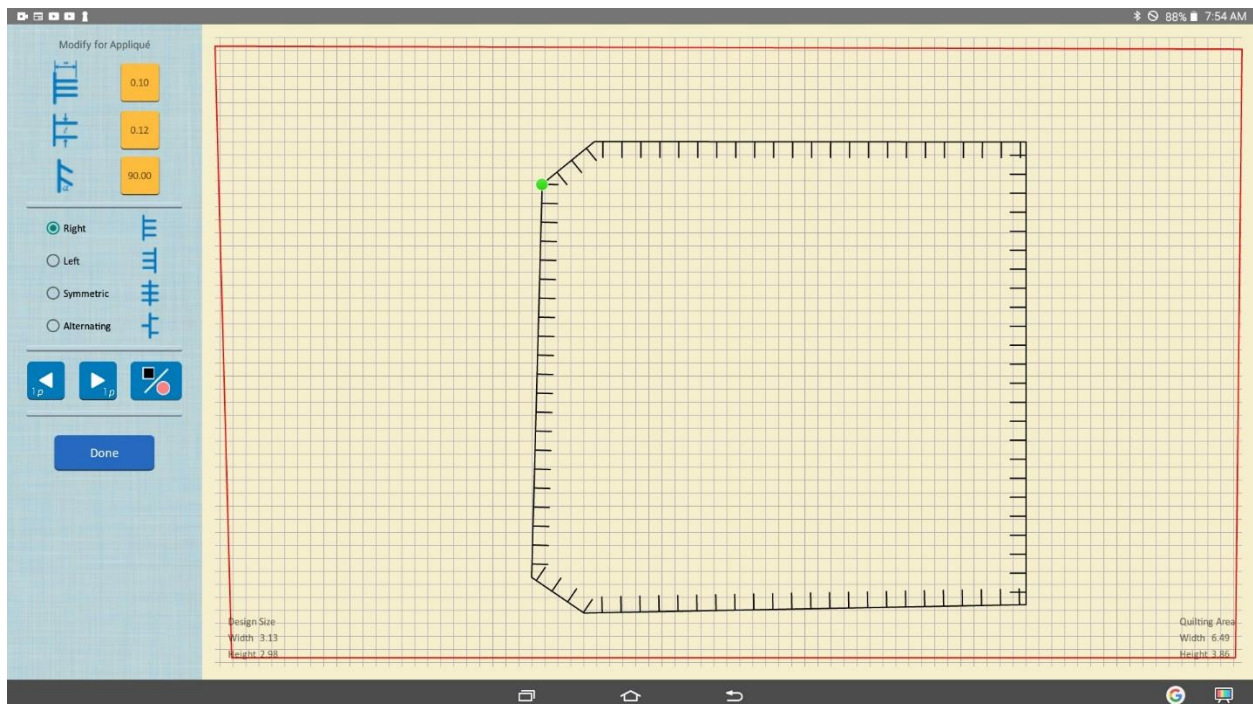
Closed path means that QBot will connect the last set point you make with the first set point you make. Completing a perimeter, you have made.

Open path means the area you selected will be left open (not a closed perimeter). All echo will be closed path.

In addition to the usual Set Point and Undo buttons, you will see a new button "Anchor Point" button. This anchor point will force a stitch at that point (regardless of the stitch length you have set on your stitch regulator). This is useful in corners as well as points you know you want a stitch made. Regular boundary points will appear on the screen as orange dots. Anchor points will appear as black boxes as a visual reference. Selecting the Anchor Point button will place an anchor point. As with the rest of the program touching the screen, selecting "set point" or using the "O.K." voice command (if you have voice set up), will mark a point. You will have an opportunity to add or modify anchor points later.

Selecting "Echo" will take you directly to the echo function and skip the applique process. If you are planning on doing an echo after the applique there will be an option later in this process after the applique stitch is completed to accomplish this.

Once you have selected an inner boundary around the applique, select the "Done" button. Your next screen is where you make any adjustments to the applique stitch.

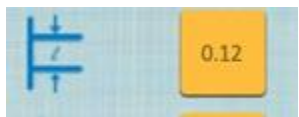


There are 3 buttons for changing the stitch type.



Length of stitch in decimal inches.

Selecting this button will allow you to enter the length of the applique stitch in decimal inches.



Distance between stiches in decimal inches.

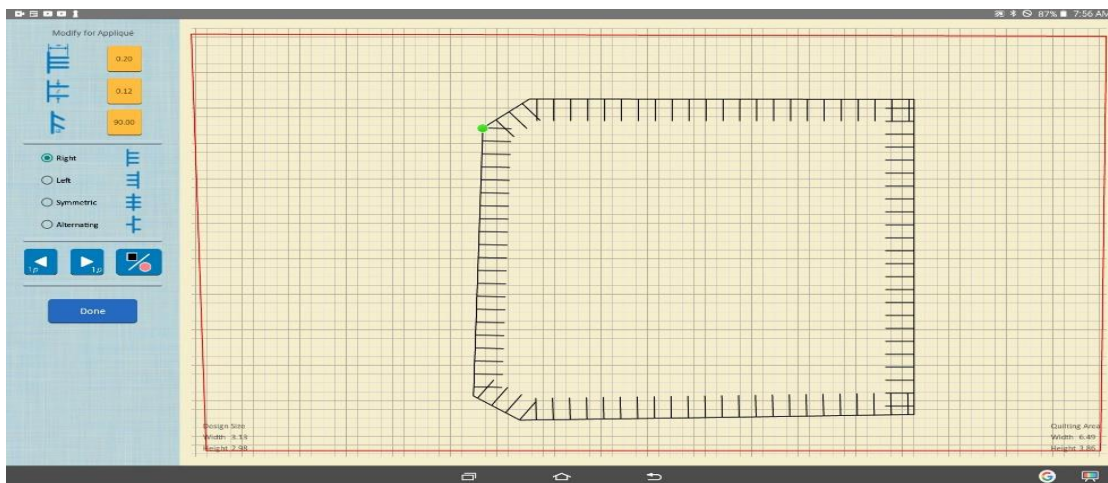
Selecting this button will allow you to change the distance between each applique stitch in decimal inches.



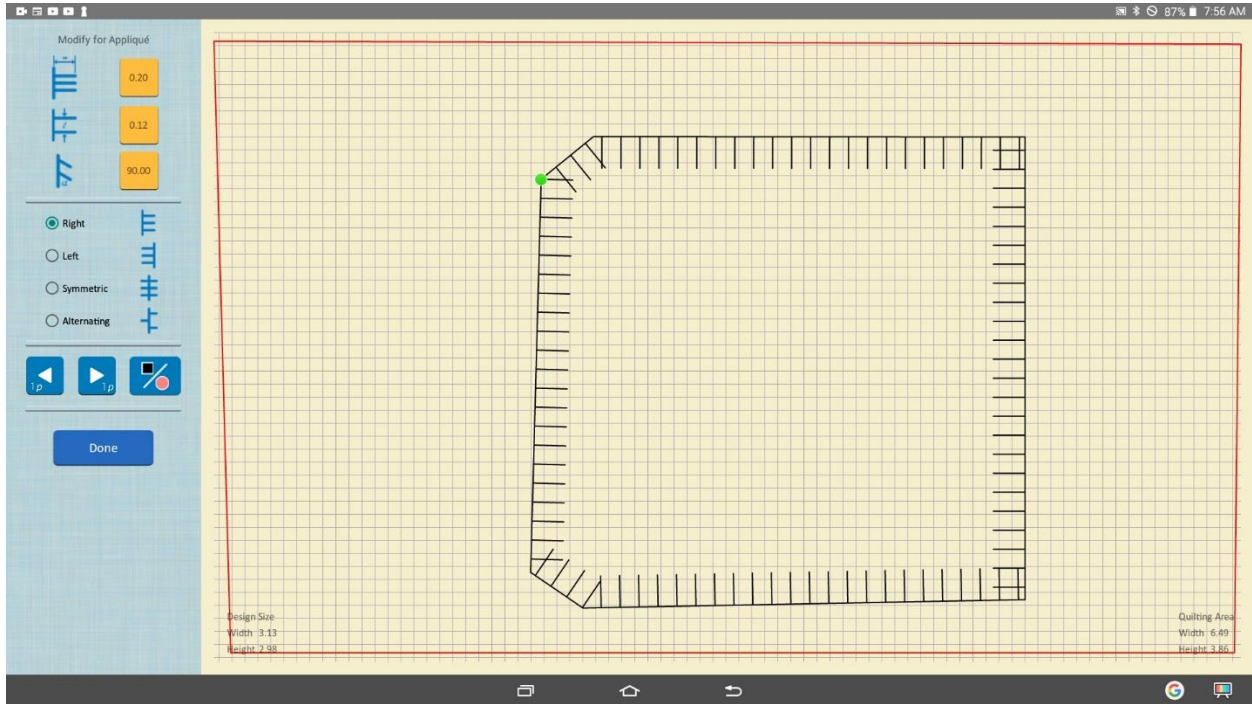
Angle of stitch.

This will allow you to change the angle of the applique stitch decimal degrees.

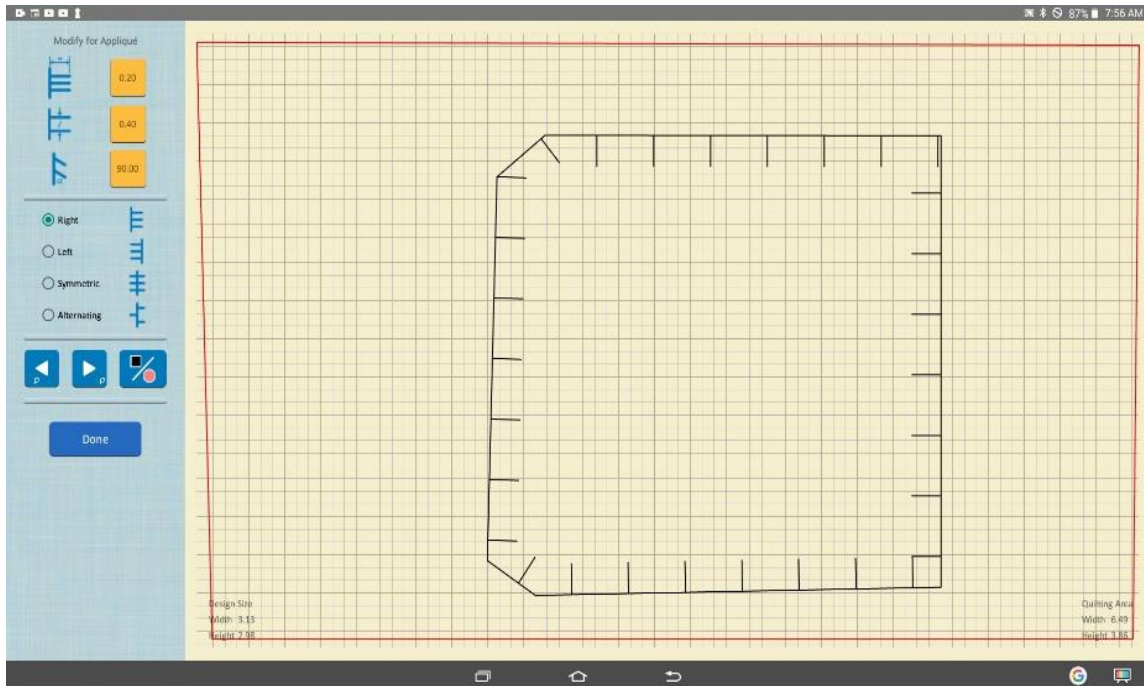
Below are some examples of modifying these stitches.



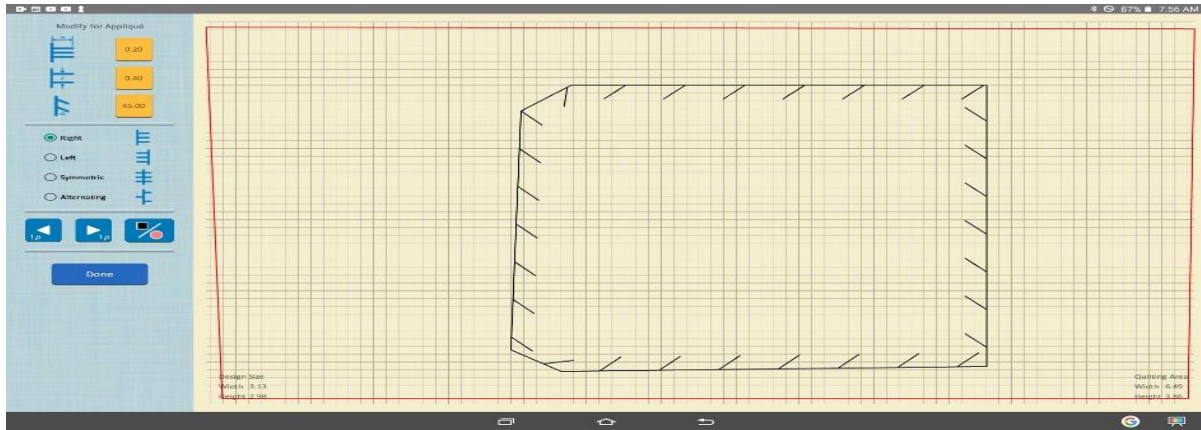
## Length



Length changed to “.20” inches



Distance changed to .40 inches.



Angle changed to 45 degrees.

Use these changes to fit your needs.

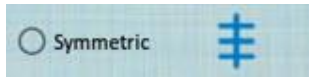
There are 4 stitch types:



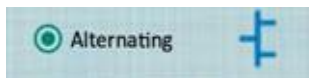
This will change to stitch to go to the right (inside).



This will change the stitch to go to the left (outside).



This will change to symmetric (both inside and outside).



This will change to alternating (inside-outside-inside).

You can toggle between regular selection point and anchor point.

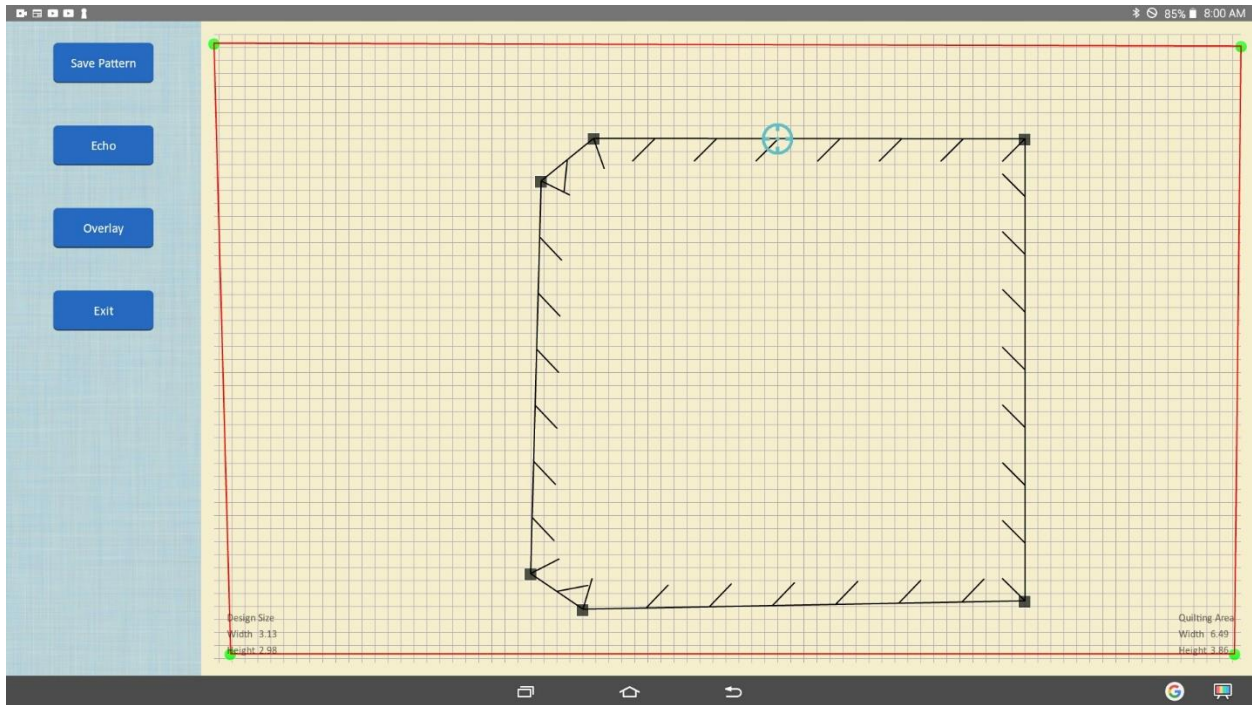


Selecting one of these buttons will cycle through the selection points (forward and backward one point at a time).



Selecting this toggle button will change the highlighted point to a regular point or to an anchor point. This will toggle back and forth between these two possibilities.

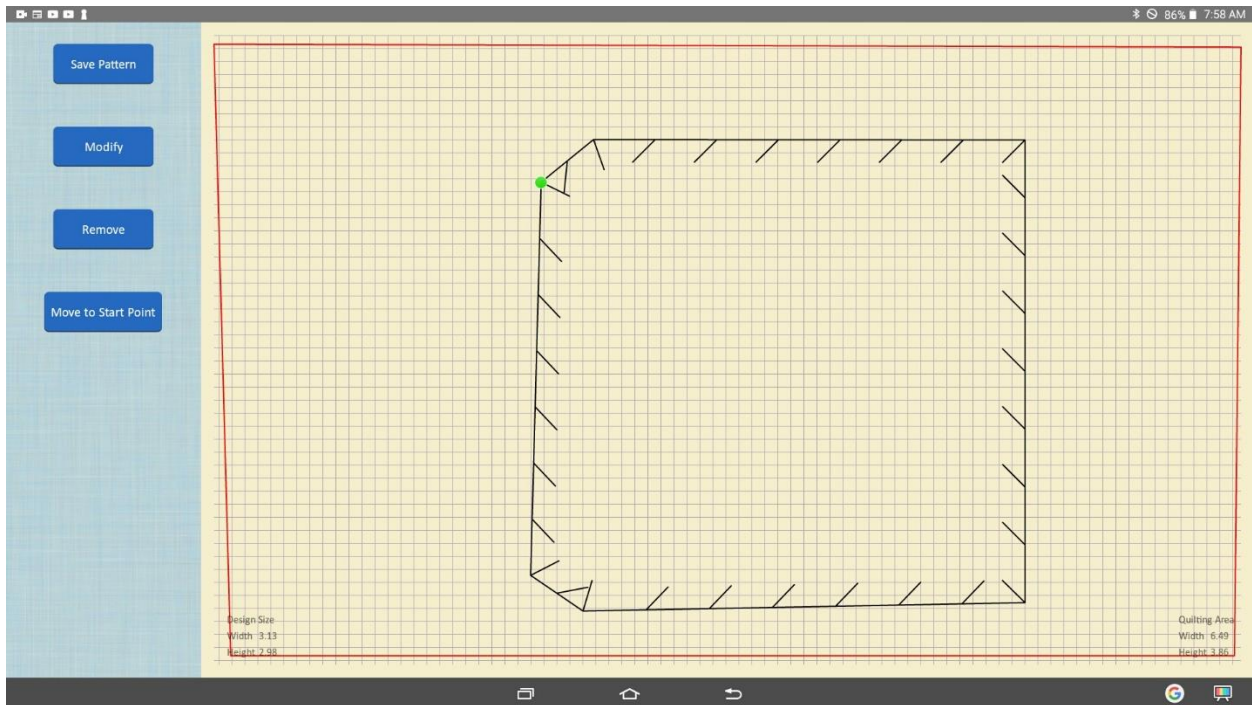




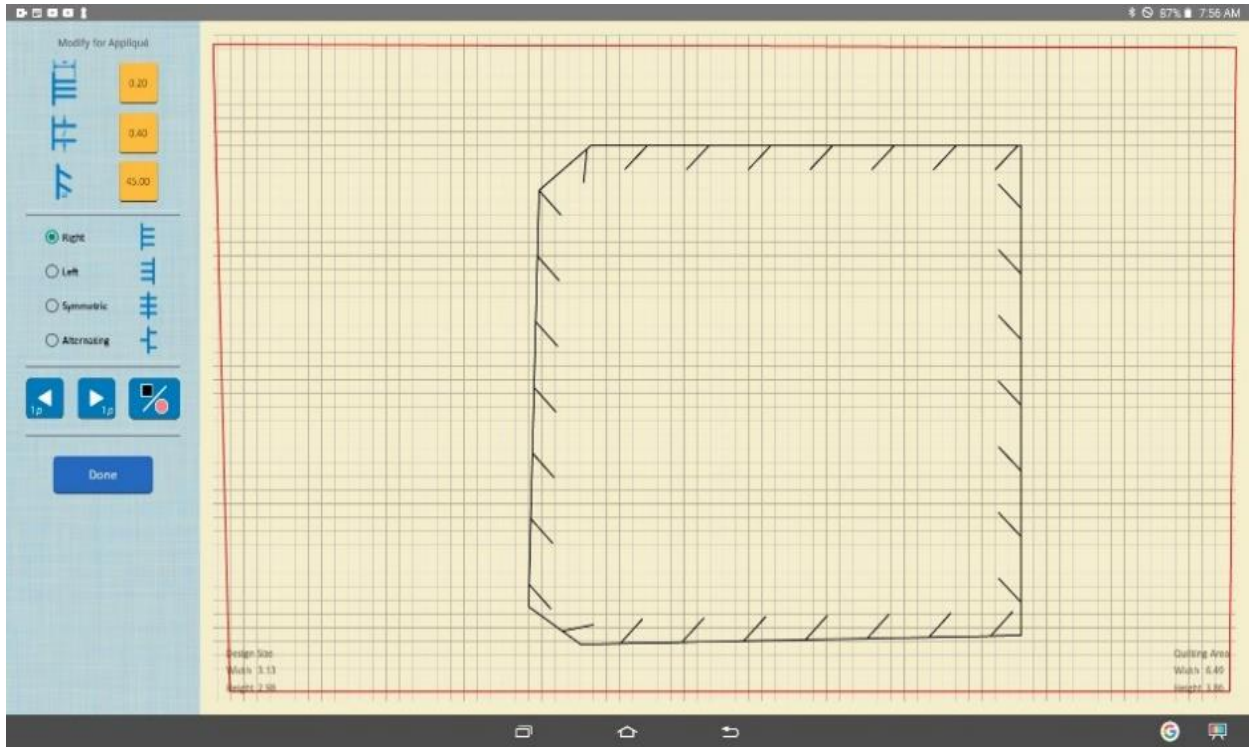
The non-anchor points will be orange circles, and the anchor points will be black boxes.

Once you have made the edits you want select the “Done” button” to continue.

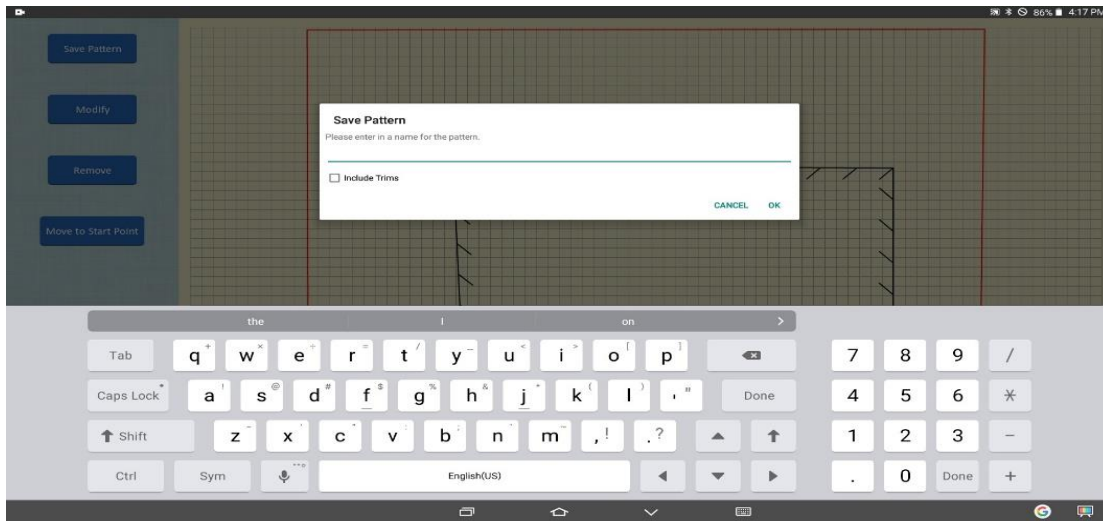
You will be presented with the confirmation screen.



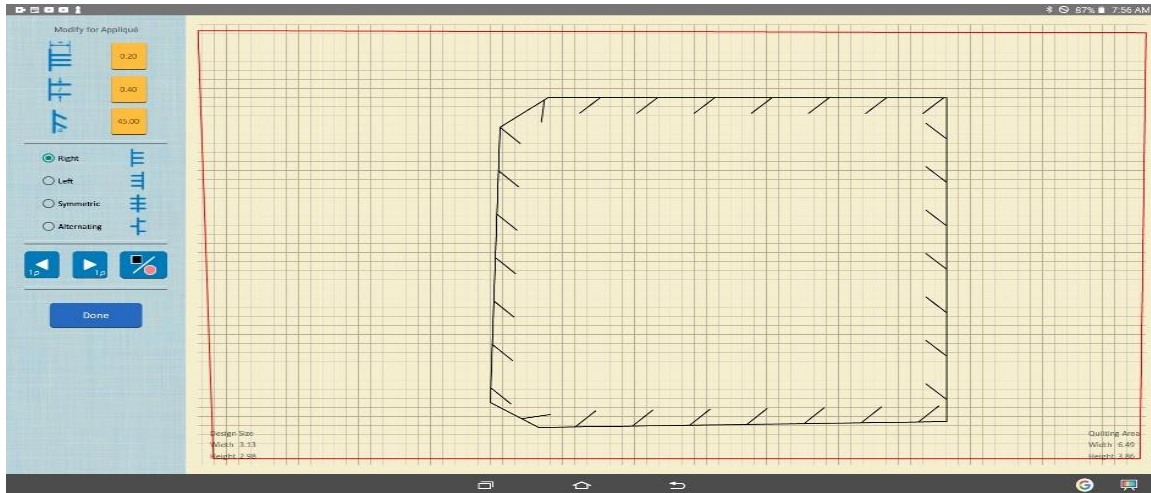
Quilt Crazy user's manual for QBot V3 Complete Rev. 1  
Pattern Quilting



“Save” will allow you to save your modifications for use later.



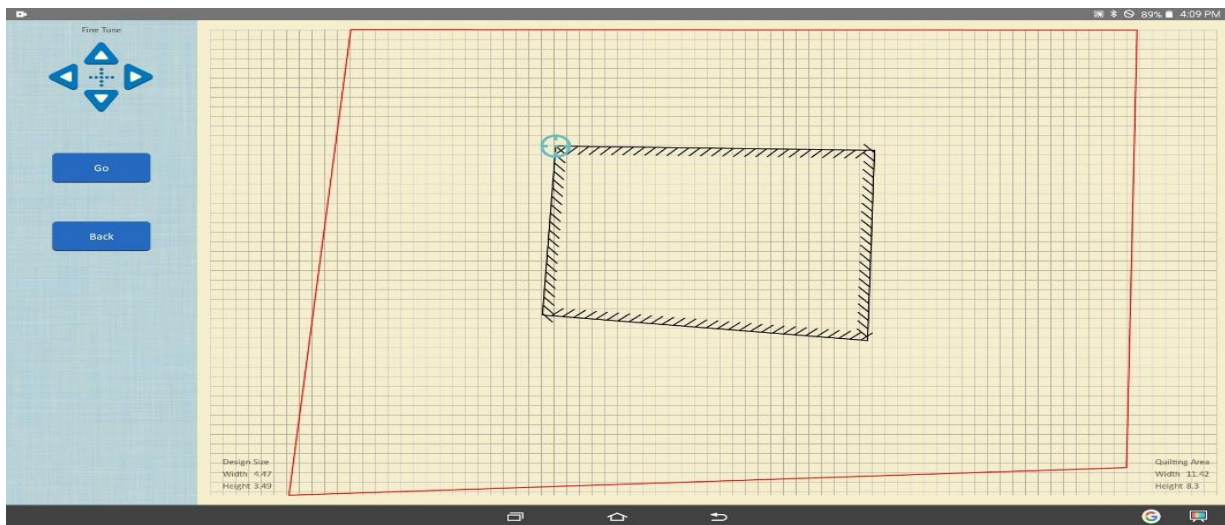
“Modify” will return you to the modify screen to adjust any settings.



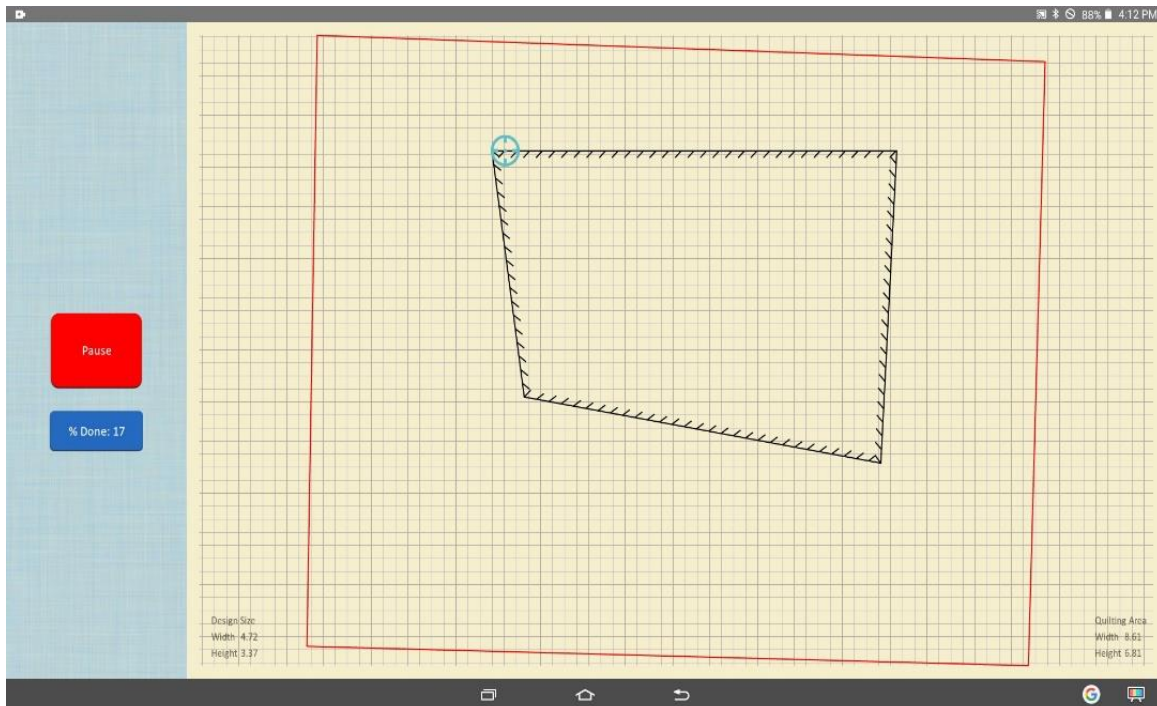
“Remove” deletes any modification’s you made and allows to start the modification again.

“Move to Start Point” moves the quilt head to the start point of the stitch design and pauses, allowing any fine tuning to the start point and option to “Go” or return to the previous screen.

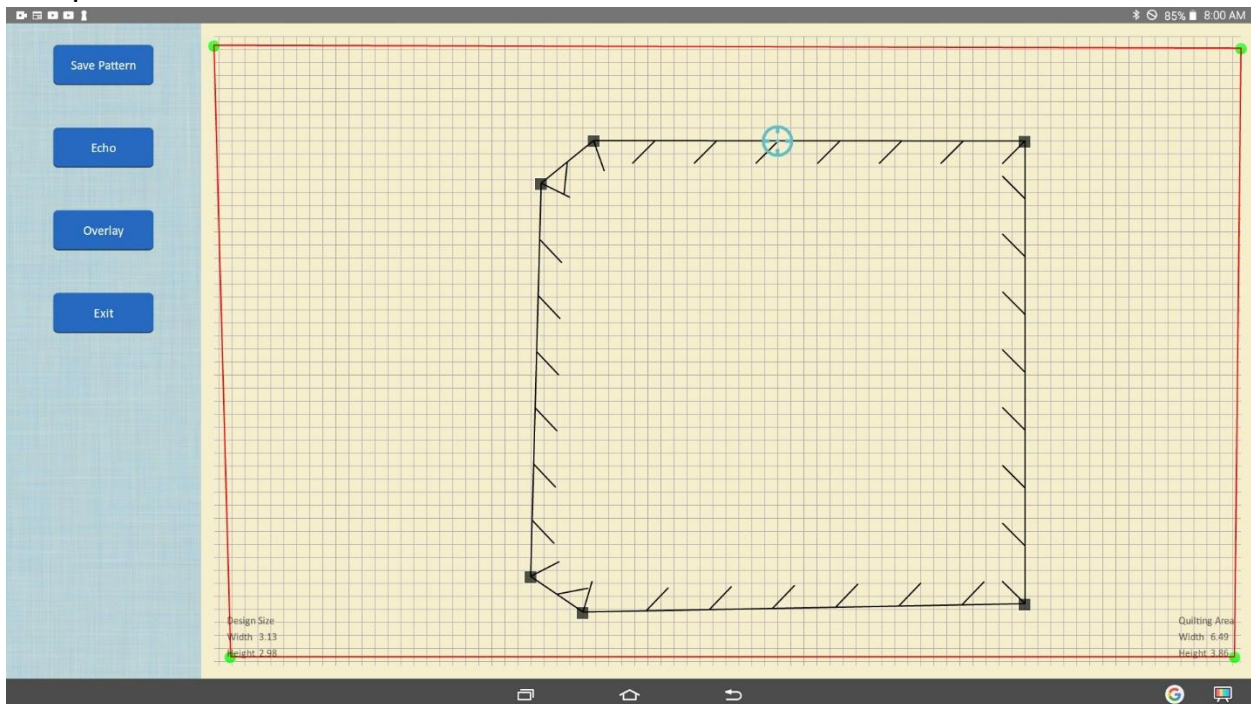
You will be presented with the Start Stitching screen.



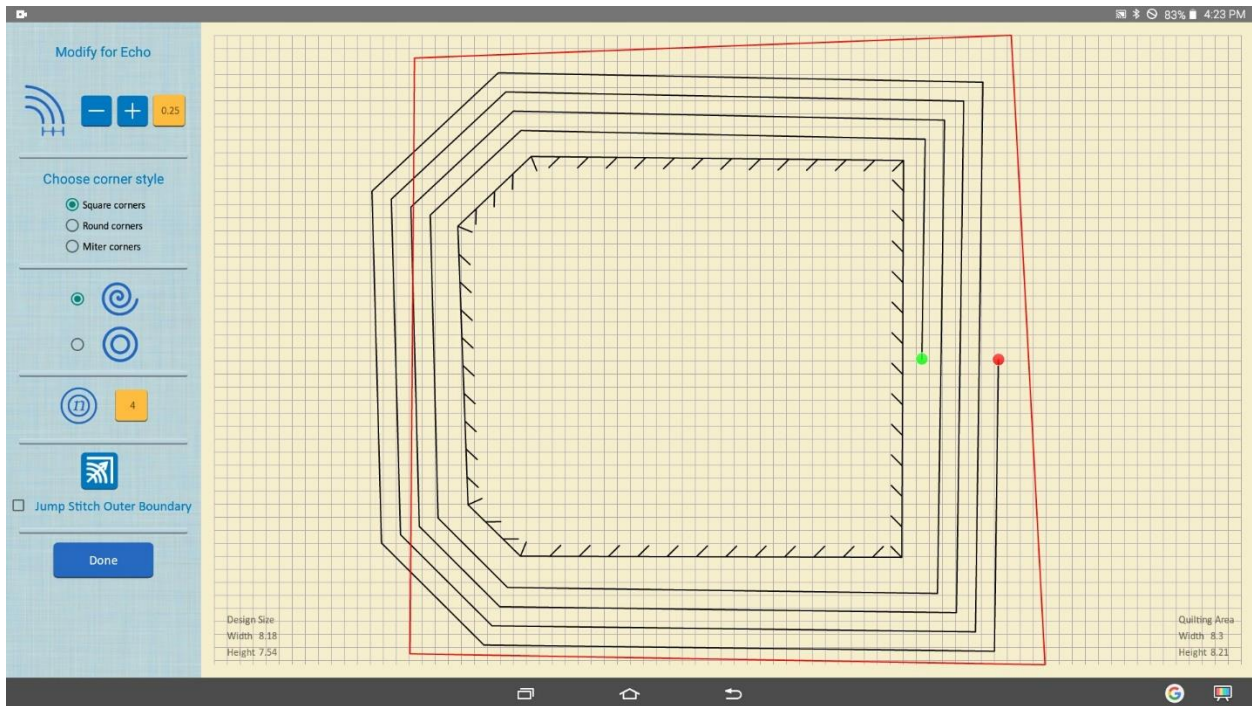
As the stitching starts you will have the usual in progress screen with the option to pause.



Once the stitching is completed you will be presented with the stitching completed screen.



You again have another chance to save the design, do an overlay (directly on top of the previous, and an opportunity to add an echo to the outside boundary.



See Echo section for options from this point.

## ECHO

Purpose of the echo section allows you to echo the selected area. There are a number of options for distance, number and placement of the echoes.

There are two ways to get to the echo section.

1. Select echo after completing an applique stitch.
2. Select skip to echo from the applique / Echo Boundary screen INSTEAD of selecting the "Done" button.
  - a. This is important if you do NOT want to do an applique stitch and only wish to use the echo function. If you select "Done" you MUST go through the applique section to get to the echo function. Selecting "Done" by mistake at this point will necessitate starting over again.

As with the applique section you will set an outer boundary (that can NOT be stitched beyond) and "Applique Boundary" even if not doing an applique.

If you wish to do an echo around a design element or a print portion on the fabric or inside/outside a block border, you will outline that area as if it was an applique. This tells QBOT where to create the echo.

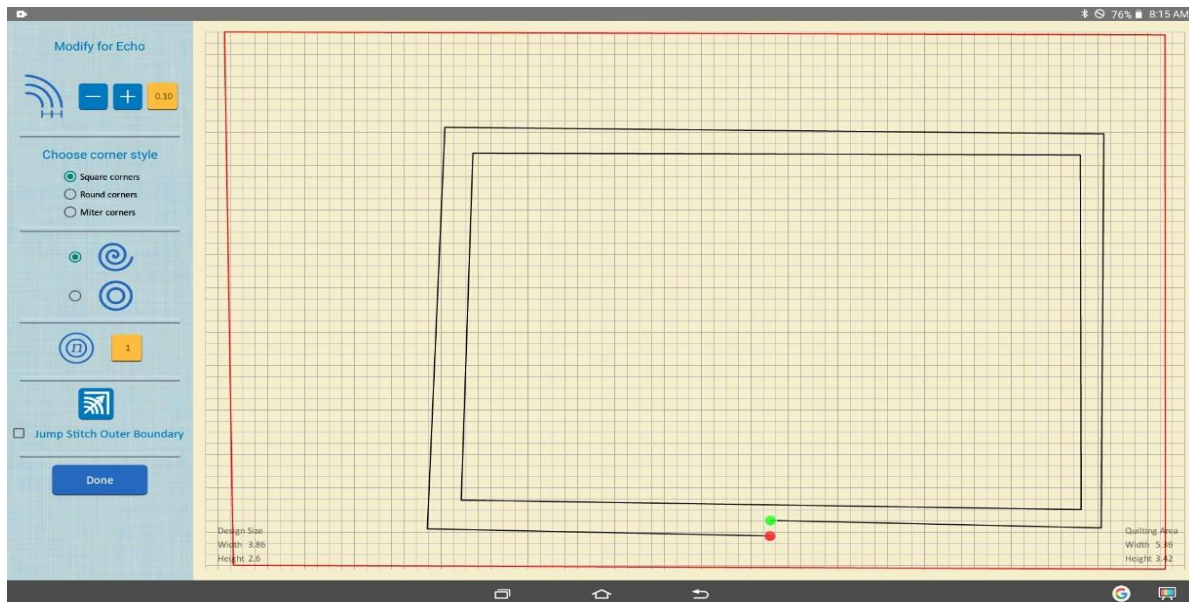
**IMPORTANT:** If you are NOT doing an applique DO NOT select "Done" after the boundaries" Select the button "Skip to Echo".



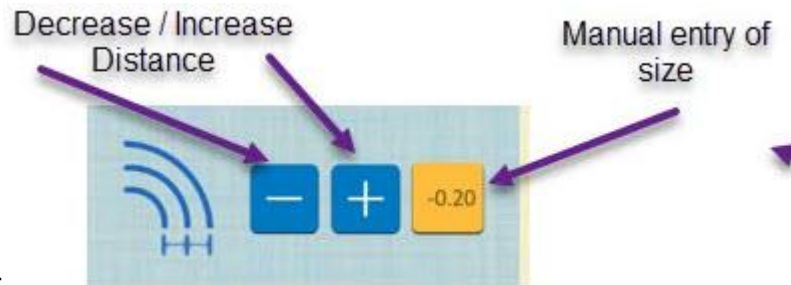
First step in Echo is to select the outer boundary, keep in mind that QBot will NOT stitch beyond this boundary and will eliminate anything beyond this boundary.

Next set points around the area or item you want to complete an echo. Although there is an open and closed path button the echo will completely surround the area you selected (as if you selected "closed path"), although the area selected will remain as open path.

Once you have outlined the design or area you want to echo selecting done will present the "Modify for Echo" screen.



This screen allows you to make the modifications to the echo. You can change the placement of the echo's (inside or outside), the type of echo (continuous line. Non continuous echo(s), distance between echo's, number of echoes, and echo fill.

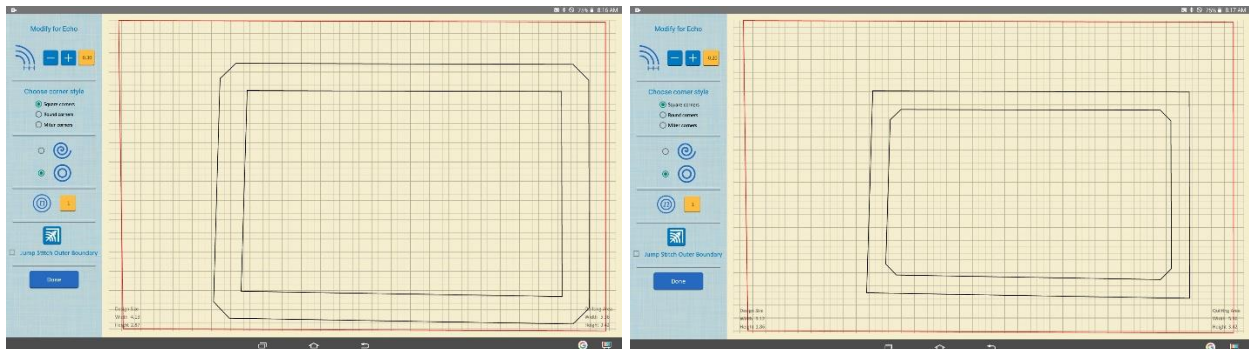


Distance of the echo(s)

Selecting the Plus or Minus signs will incrementally increase or decrease the distance between the design and the echo's.

Selecting the Yellow button will allow you to enter the distance in decimal inches in both positive and negative numbers.

Positive numbers will result in the echo being outside the selected item. Negative numbers will result the echo(s) being inside the selected item.

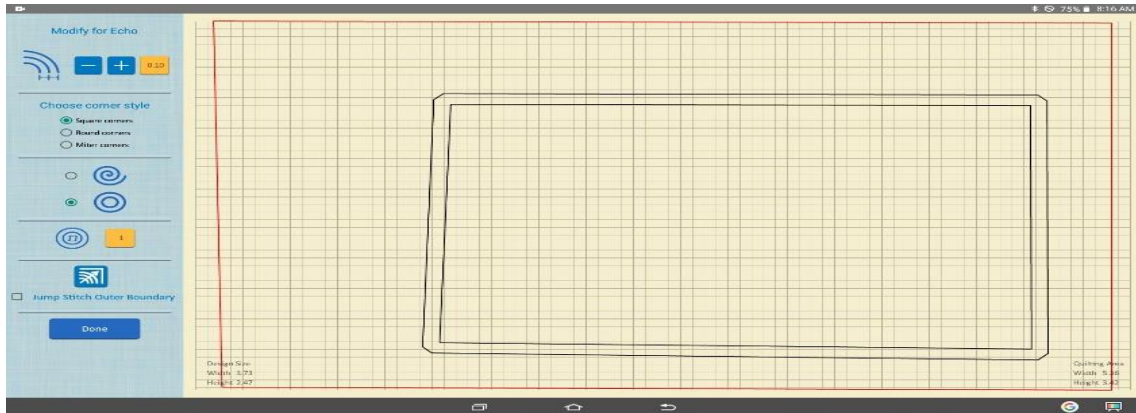


Corner style

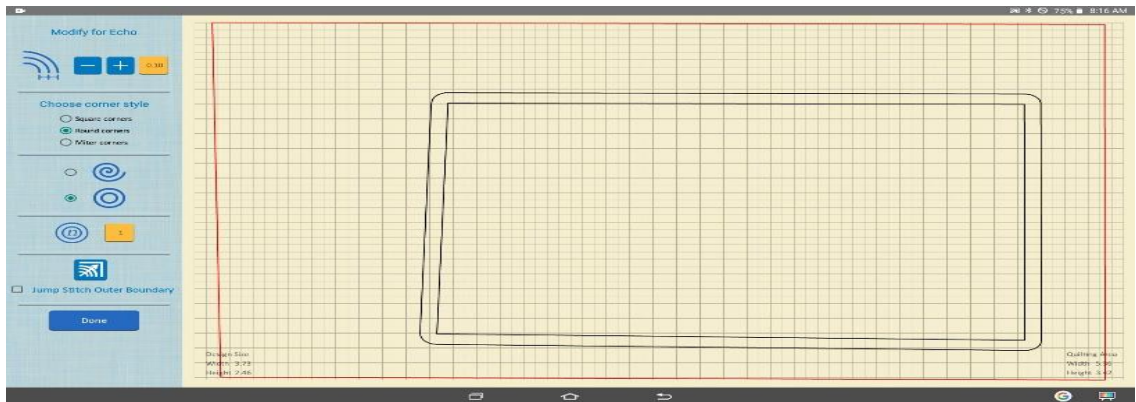


Allows you the option of how you want the corners of the echo to appear.

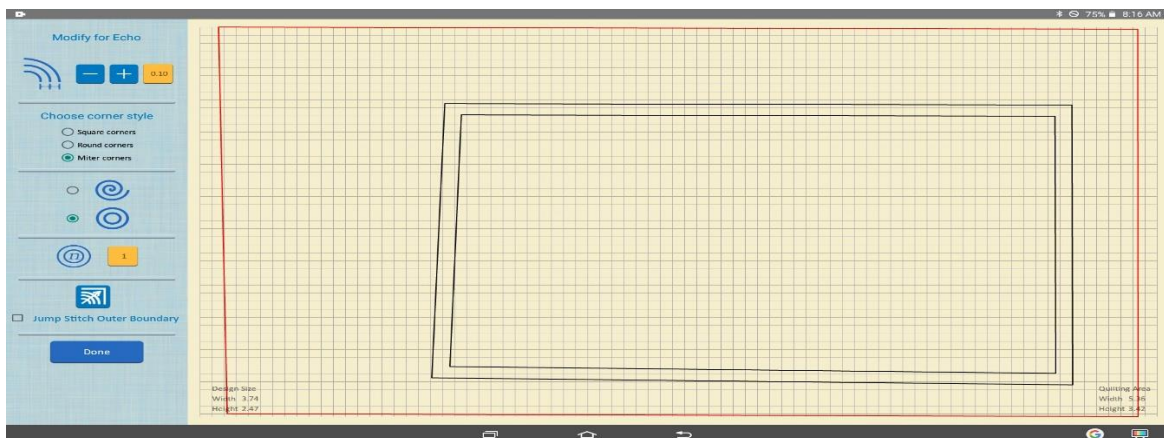
Square:

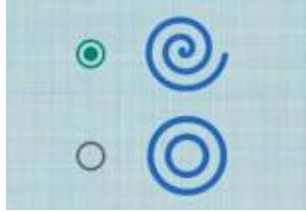


Rounded:



Mitered:



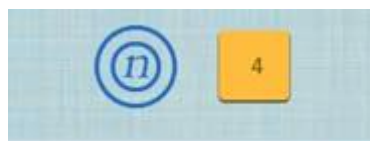
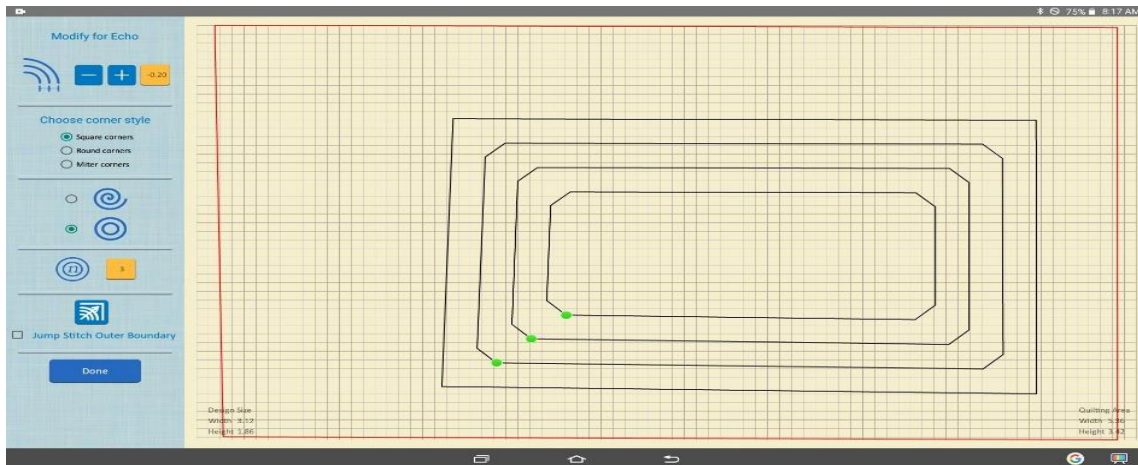


### Continuous or Concentric:

Multiple Continuous will be a single stitch from beginning to end.

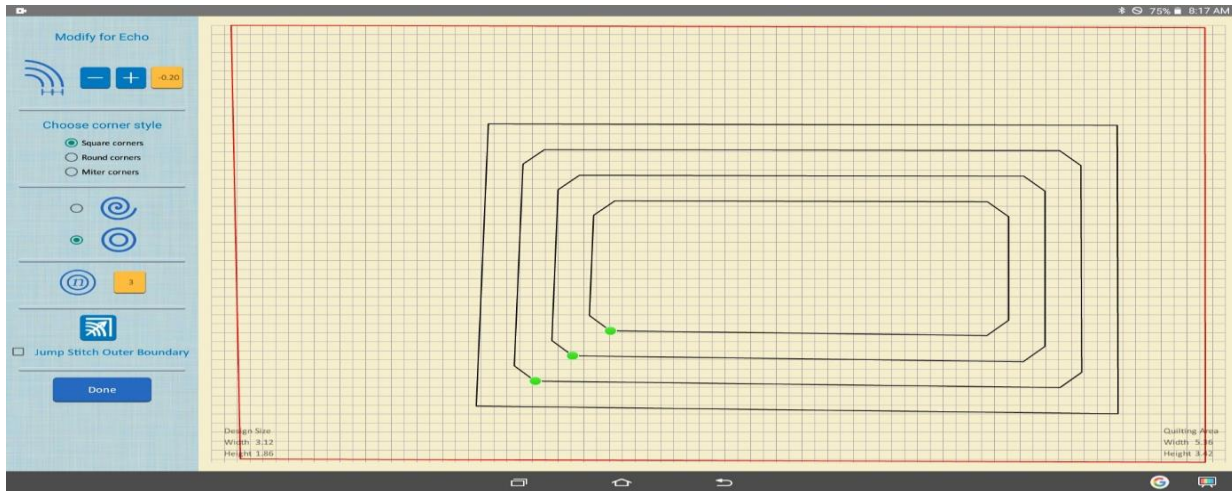


Multiple concentric echo's will be separate for each other (multi segment) and will stitch with a jump stitch between each echo.



### Number of Echo's

Selecting this button will allow you to enter the number of echo's you would like.

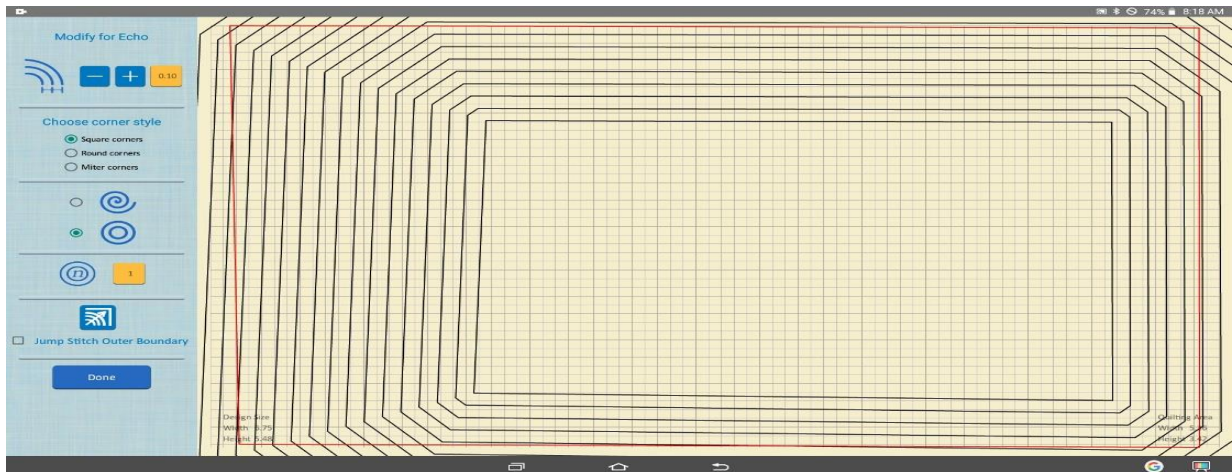


**Echo Fill button:**

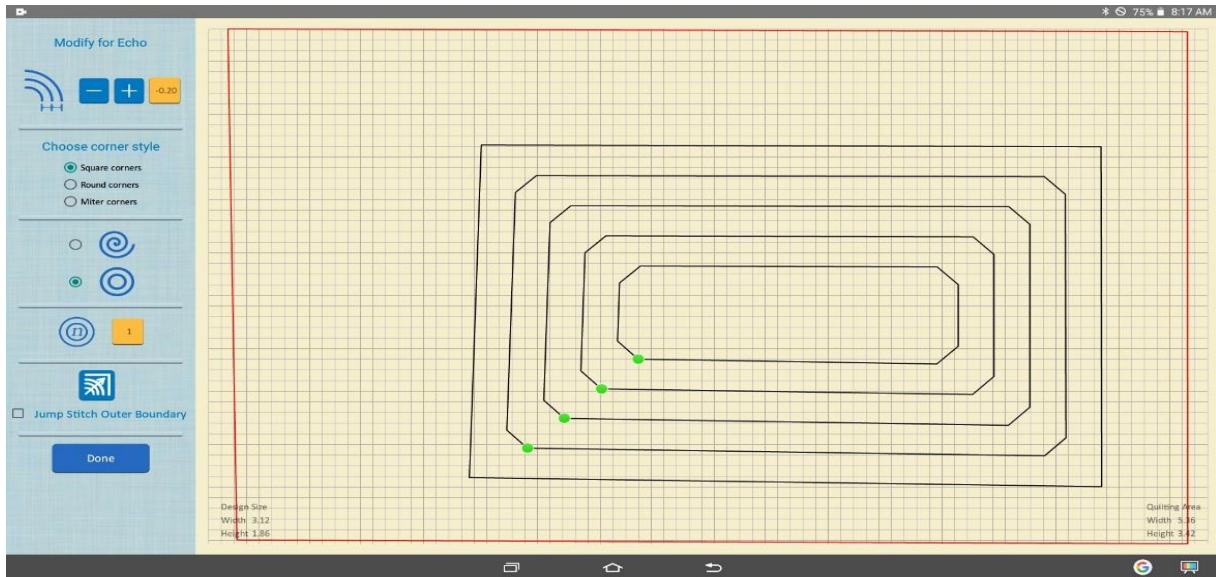
Selecting this button will result in QBot increasing the number of echoes to fill the space. This works for both inside and outside echoes.

Inside echo (negative number) attempting to enter a number of echo's that will not fit will result in them not appearing or being stitched.

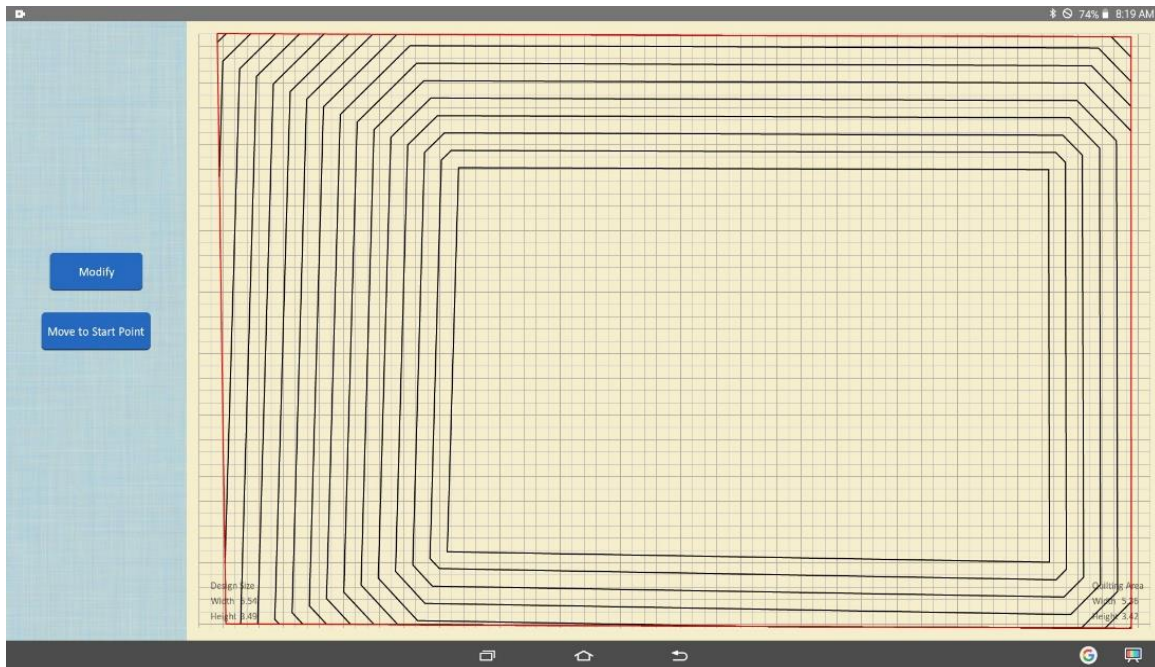
Outside echo is outside: (echo's outside the boundary will NOT be stitched (see jump stitch)).



## If your echo is Negative (inside)



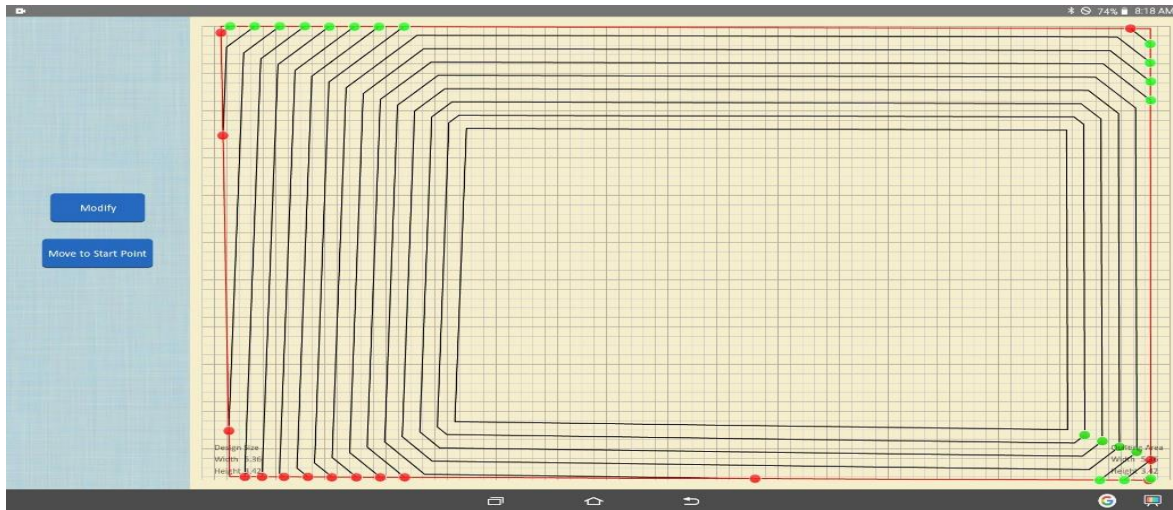
If the echo exceeds the outer boundary, that part of the echo will not be stitched. If Jump stitch is NOT selected, QBot will stitch along the outer boundary to the next part of the stitch that does not go beyond the boundary.





### Jump Stitch button

If you select the check box for Jump Stitch, after selecting “Done” you will be presented with a window showing the placement of the jump stitches.

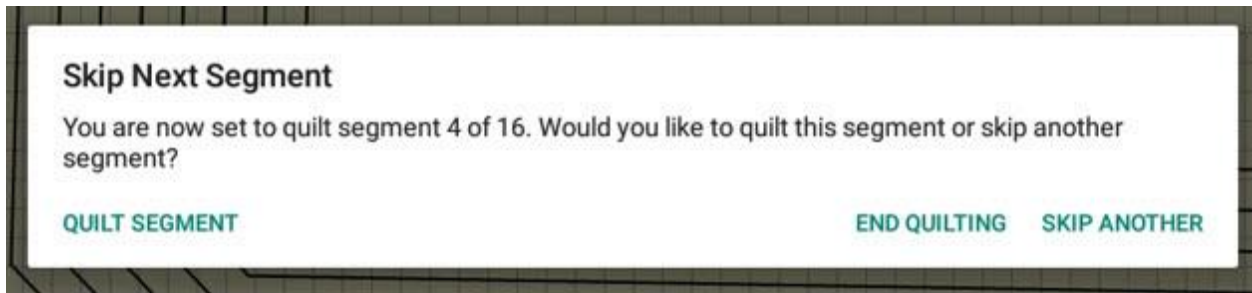


Selecting the Jump Stitch Outer Boundary will result in QBot pausing once it gets to a portion of the echo that exceeds the boundary. You will be presented with the / % Restart / Continue / Skip Next Segment.



You can tie off the stitch and then select “Continue” and the quit head will move to the next start point, where you can pull up the bobbin thread and select “GO” to continue stitching.

If you wish to skip this segment select the Skip Next segment button. If this the case you will get another option:

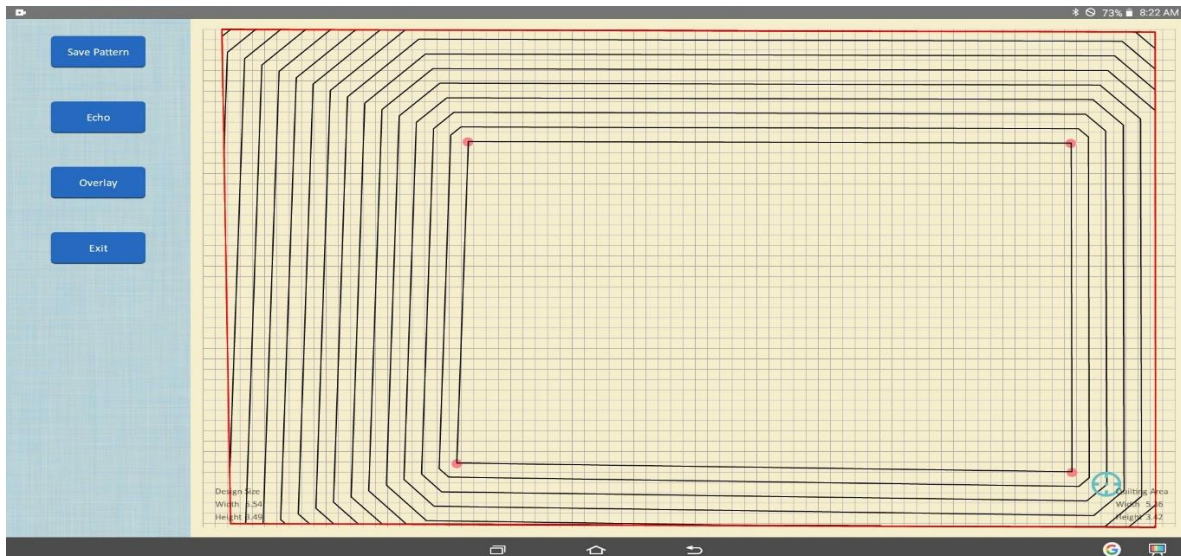


Selecting Quilt Segment will move to the next start point.

Skip Another will skip the next segment and allow you to quilt it or skip another. In this window it will show you the current segment number and the total number of segments.

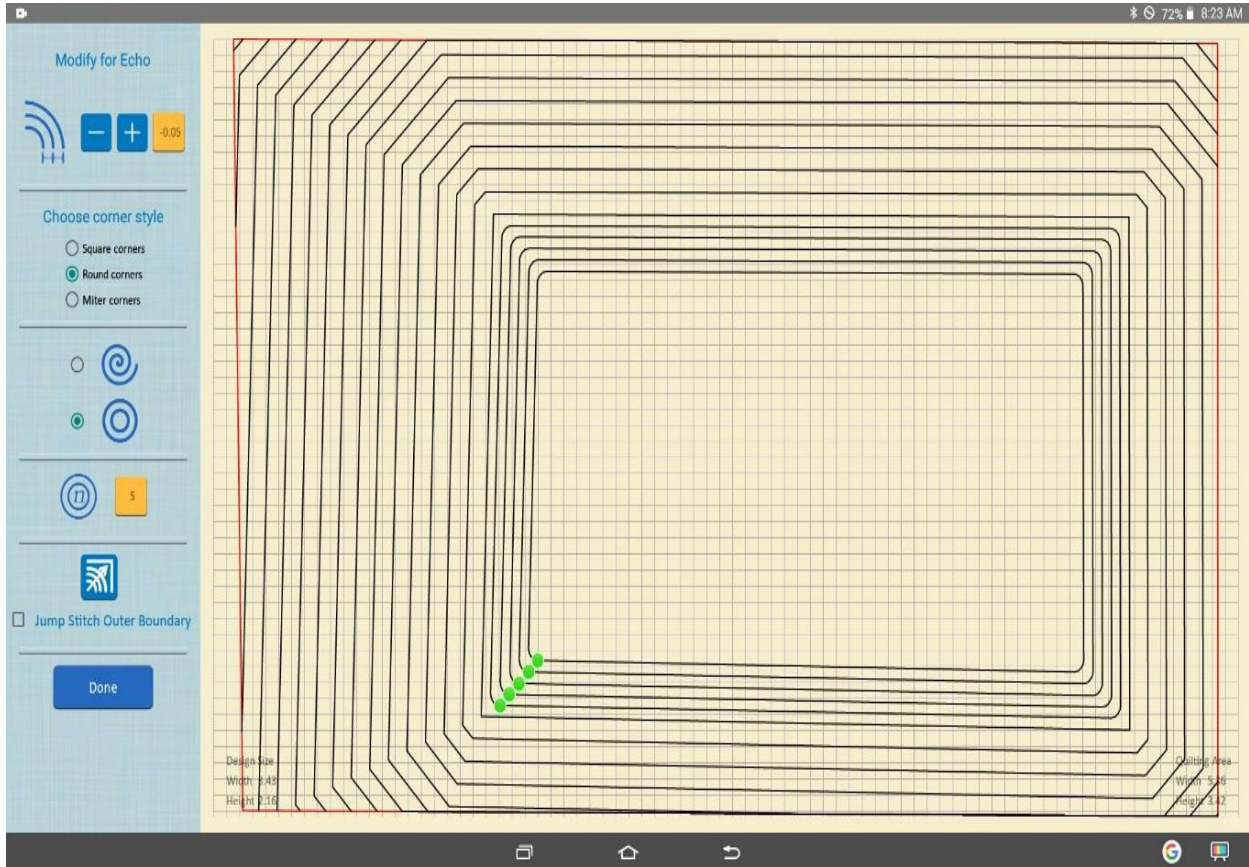
You can also End Stitching by selecting the "End Quilting" button which present a screen to allow you to save the pattern, Echo (see below) Overlay (duplicate the pattern on top of it self (double stitch) or Exit to the main QBot Window.

This is also the screen you will get when the stitching is completed.



You can only do an Echo inside or outside the area you selected at a time. You can't echo both inside and outside in a single set. After completing one you can add the other. At the point you have the option to Echo again and place another echo inside

the design you selected or add additional echoes you have already done. Below is an example of the outside was stitched. Once complete the “Echo” button was used to add another Echo to the inside of the selected area. Notice the inside echoes were done closer together than the outside echoes.



## Part IV

### Line Quilting

Although Pattern Quilting in is likely the most used portion of V3. Line Quilting is likely the most flexible of all the functions. It would be impossible to show all the possibilities of Line Quilting.

At its core, Line Quilting simply stitches along a path that you select. This path can be a straight line or a much more complex shape. It is its simplicity that makes it so powerful.

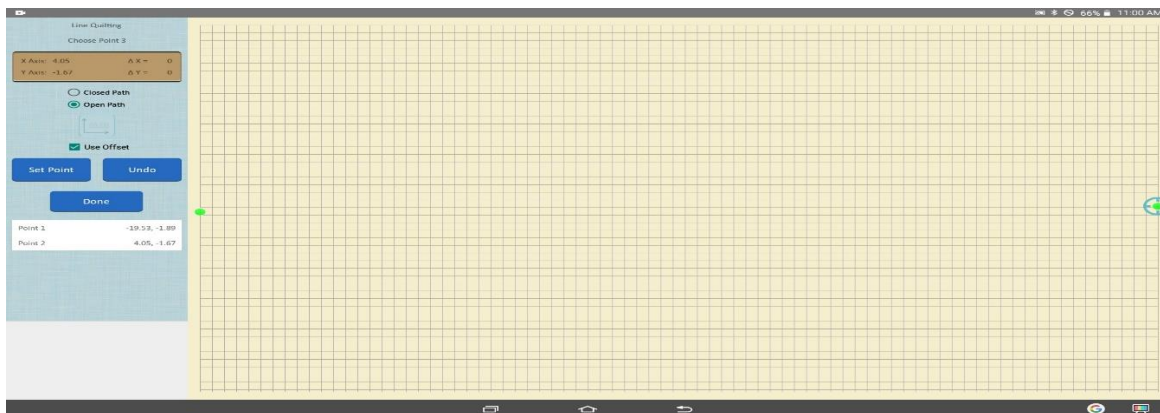
You have the ability to have the stitch a straight line, only across the X axis or the Y axis.

Line Quilting has an additional capability to connect points by drawing a curved lines between all the points you have created. These curves can be manipulated as to length, quantity, inside the line, outside the line, both sides and alternating between inside and outside.

Line Quilting can be used to outline an object or a block or used like a “stitch in the ditch” so the item will be recognizable on the back side of the quilt.

Line Quilting can also be used to create a new design from scratch without the need for additional software, much like the Record Free Motion function, except you can see where you have drawn to allow you the ability to correct mistake without starting over.

Line Quilting can be used to stitch a straight line across either the X or Y axis.

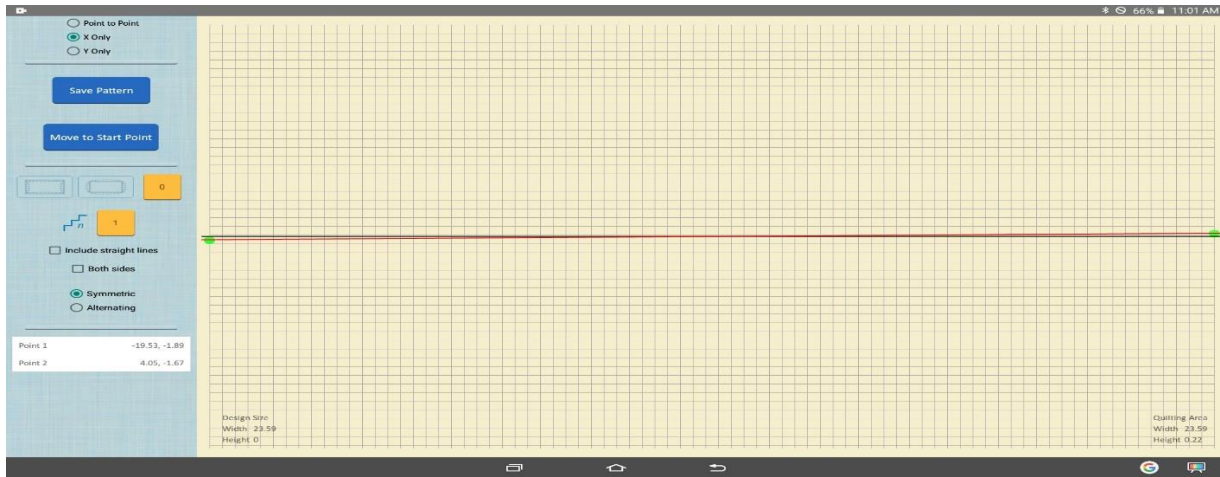


Select the point for the beginning of the horizontal line and set a point.

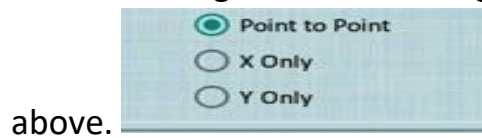


Move to the point you want to end the line and set a point.

Select "Done".



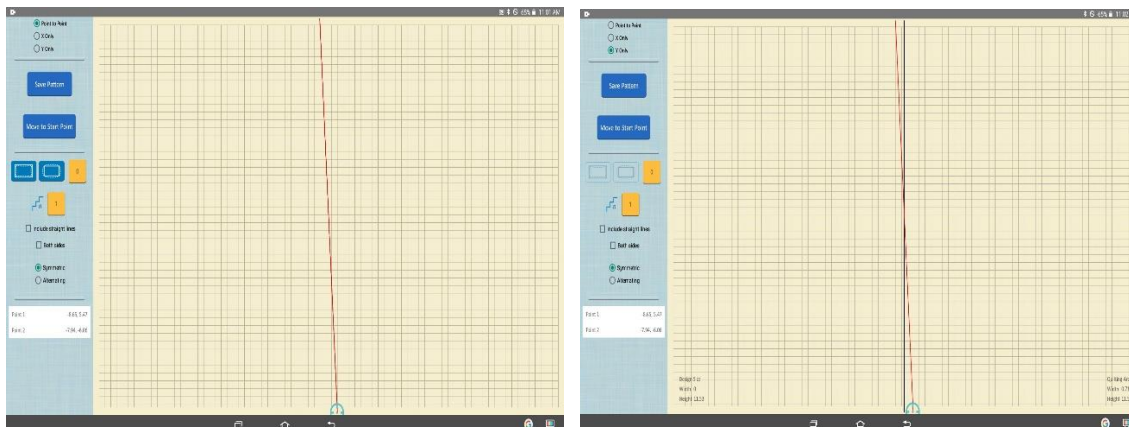
After selecting "Done" checking the radio button next to "X Only" will result in the



above.

If the two points are not directly on the same X axis, QBot will split the difference and calculate a level line between the two points that is directly on the same X axis. As you can see in the screen shot above the selected points are not directly across from each other. (The red line in the screen shot). The line QBot will create is the black line on the screen shots).

The same is true for the "Y" axis. See the screen shots below. In this case the points selected are a fair bit off from each other to illustrate QBot creating the line directly along the "Y" axis.

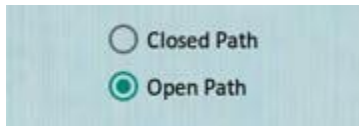


Selecting “Move to Start” will begin the normal stitching process.

To use Line Quilting to stitch a continuous line (either straight or much more complex) select the points you want the stitch to go along.

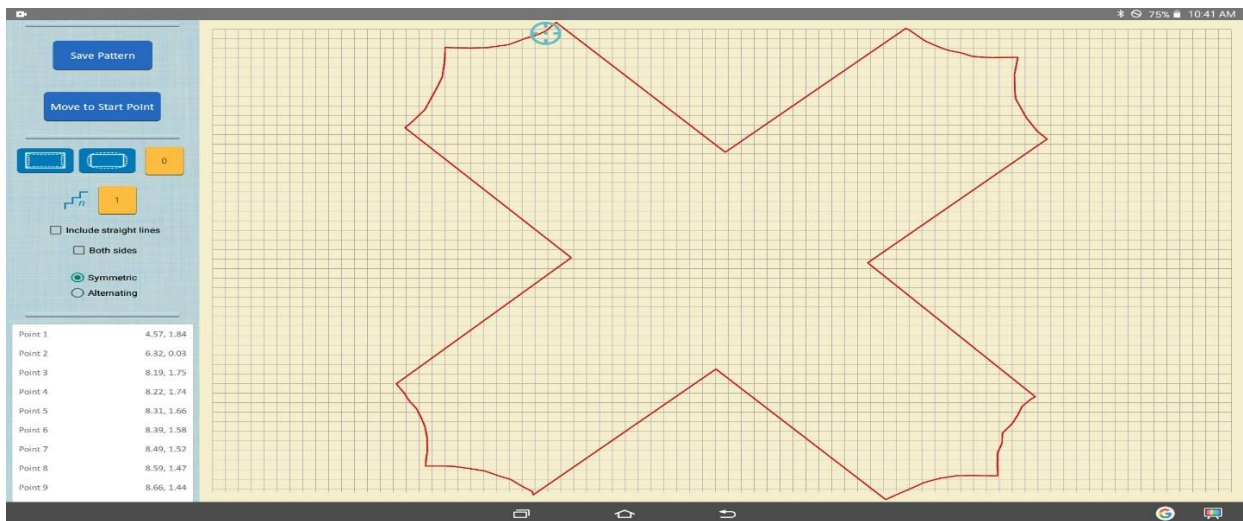
Outline a design or block (stitch in the ditch type)

Select either the Open or Closed Path radio buttons.



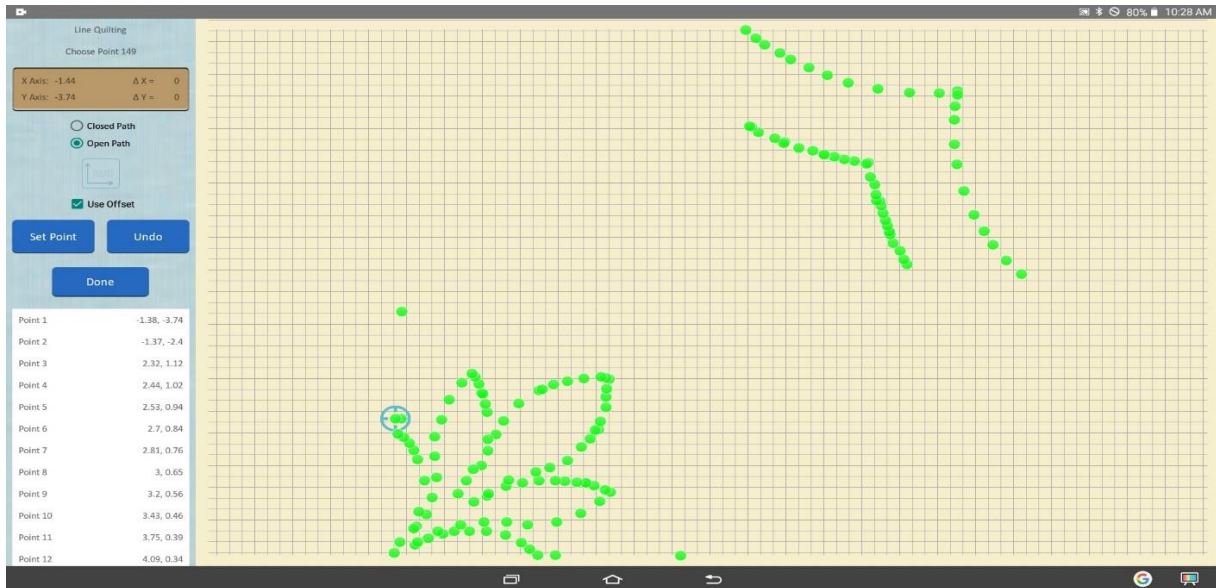
Open if you want the line not to connect the start to the end.

Closed if you want the line to be connected between the first and last point.



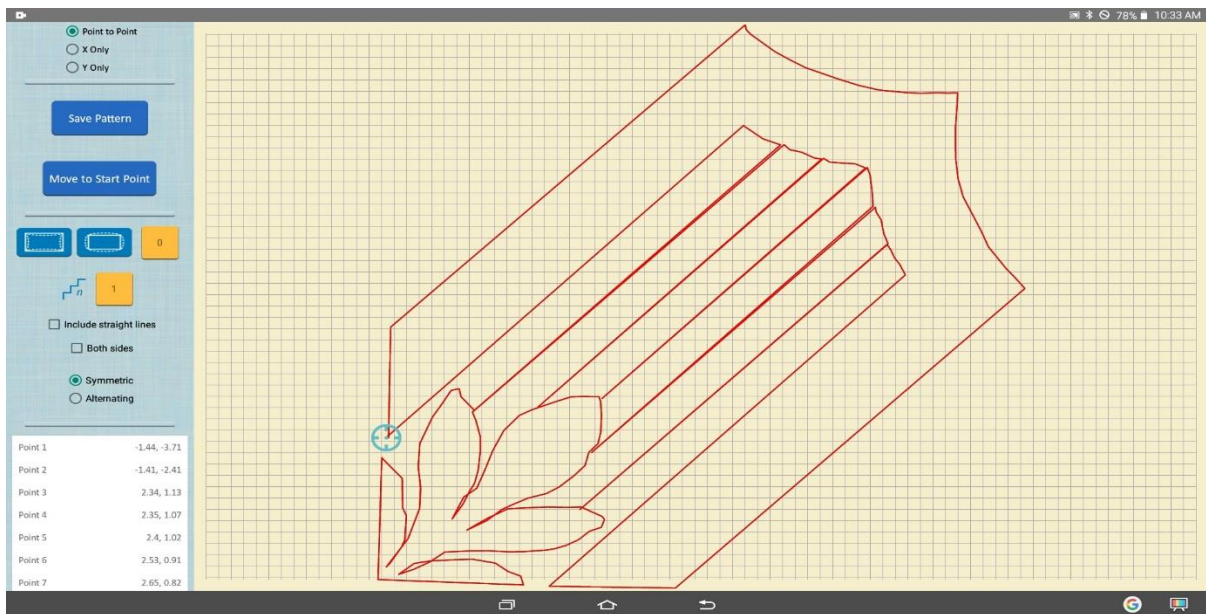
Once complete select “Done”. The above screen will be presented and you will have the option to “Save Pattern” for future use or “Move to Start Point” to begin the stitching process.

To use Line Quilting to create a design from scratch, select points to create the design. You can select the open or closed path at any time before selecting “Done”



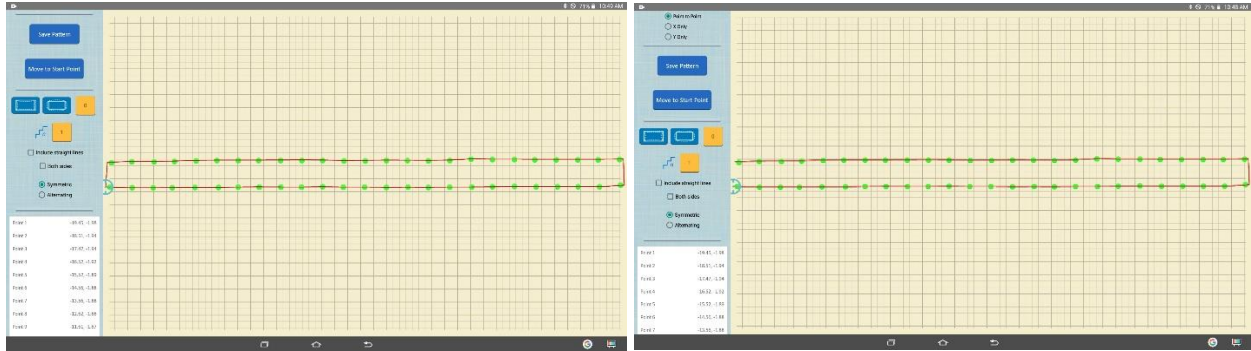
You can see the design points as you select them and have the ability to use the “Undo” button for any errors.

Once complete Selecting “Done” will present the following screen.



Using Line Quilting for filling blocks, sashes or borders is just as simple except with many more options.

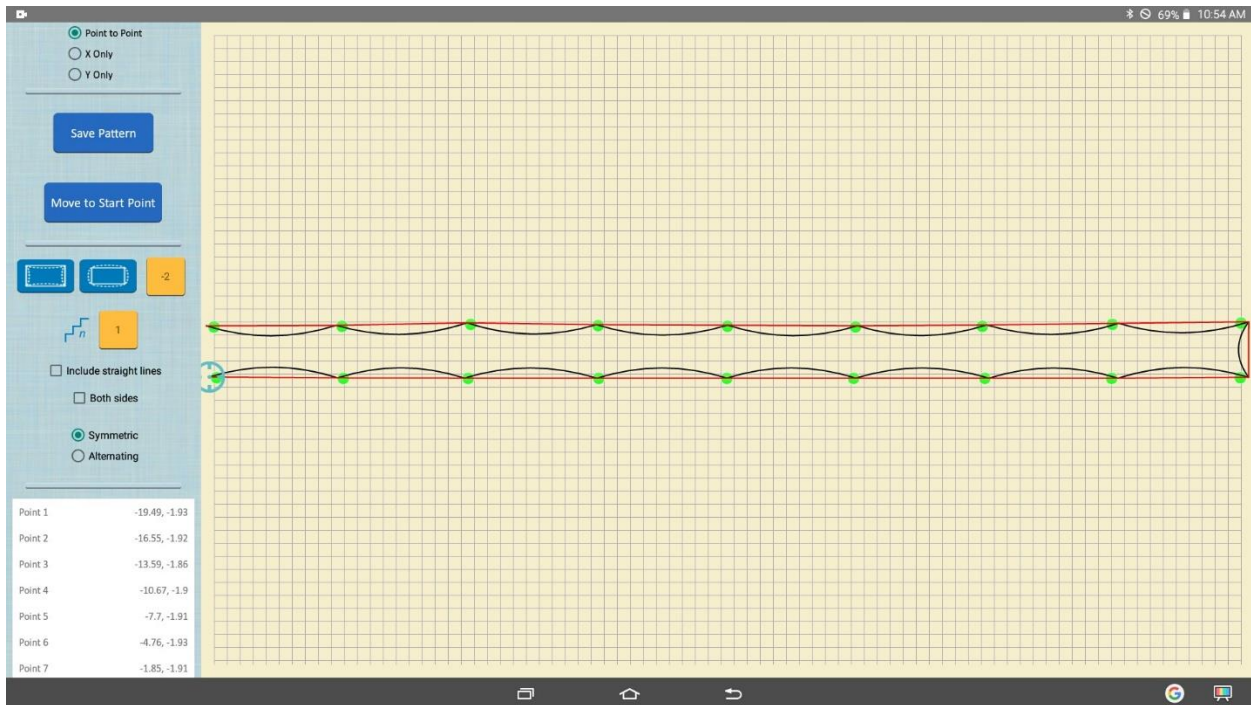
To show the possibilities we will use a sash as an example.



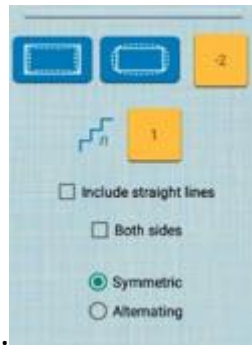
(Note the left side of the above right example is open).

At every set point QBot will create a curved line connecting these points (if you choose). It is best to determine how you would like the completed stich to appear as everyone of these points will be used. If you want a symmetrical appearance, it often helps to use a piece of paper with points where you want the curves to start and stop to lay along the line while you are marking the points.

Once complete the above screen will appear. In the left column are the options.



allow you to determine the number of curves, if the curves will be inside, outside,



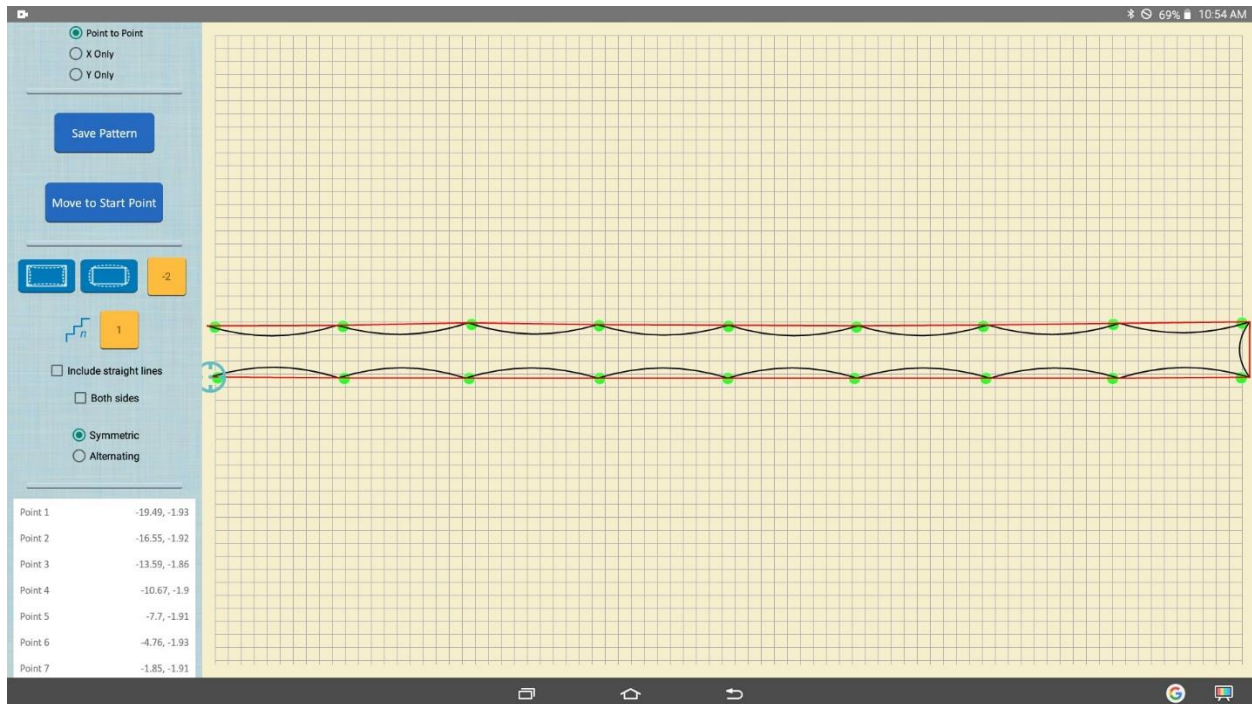
both or alternating.



Selecting the inside curve box: will add curves to the inside of the line from each selection point to the next selection point.



Selecting the outside curve box: will add curves to the line from each selection point to the next selection point.



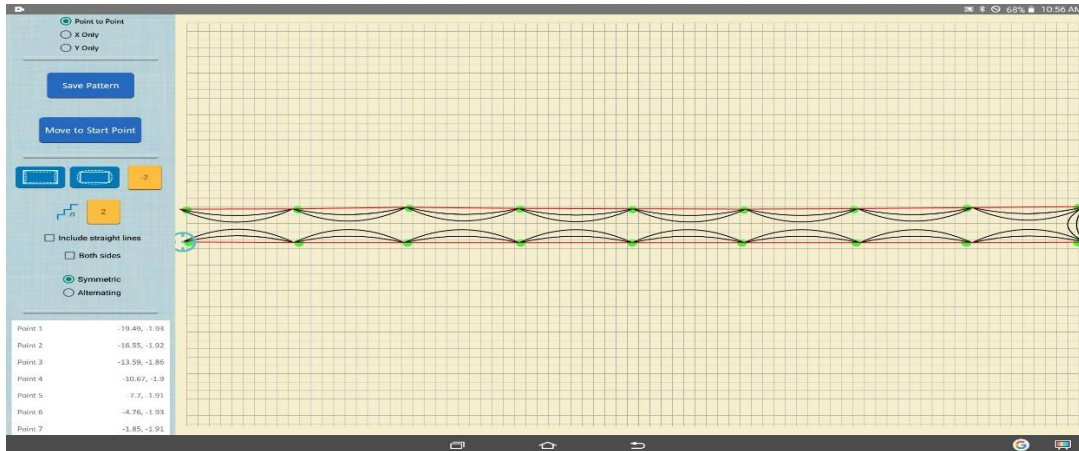
The yellow box next to the Inside/Outside boxes is used to select the number of



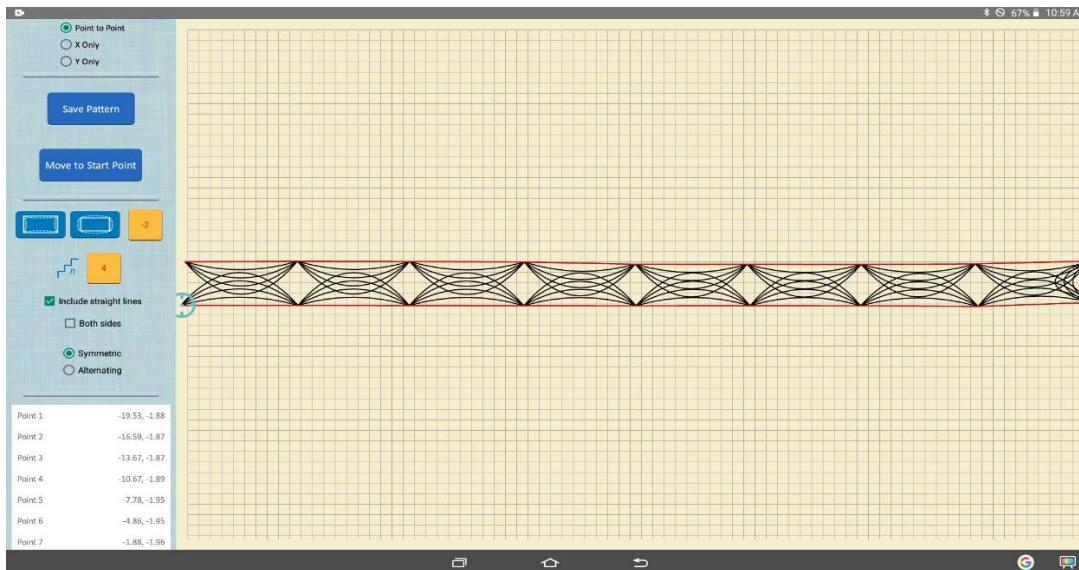
curves you want. Positive numbers represent outside curves, negative number represent inside curves. Each time you select the blue inside/outside curve boxes will increase the number of curves. Selecting the inside button after

selecting the outside button will decrease the number of inside curves. The same situation occurs if you have inside curves and select the inside curve box. Selecting the yellow box allows you to enter either a positive or negative number to determine the number of curvess.

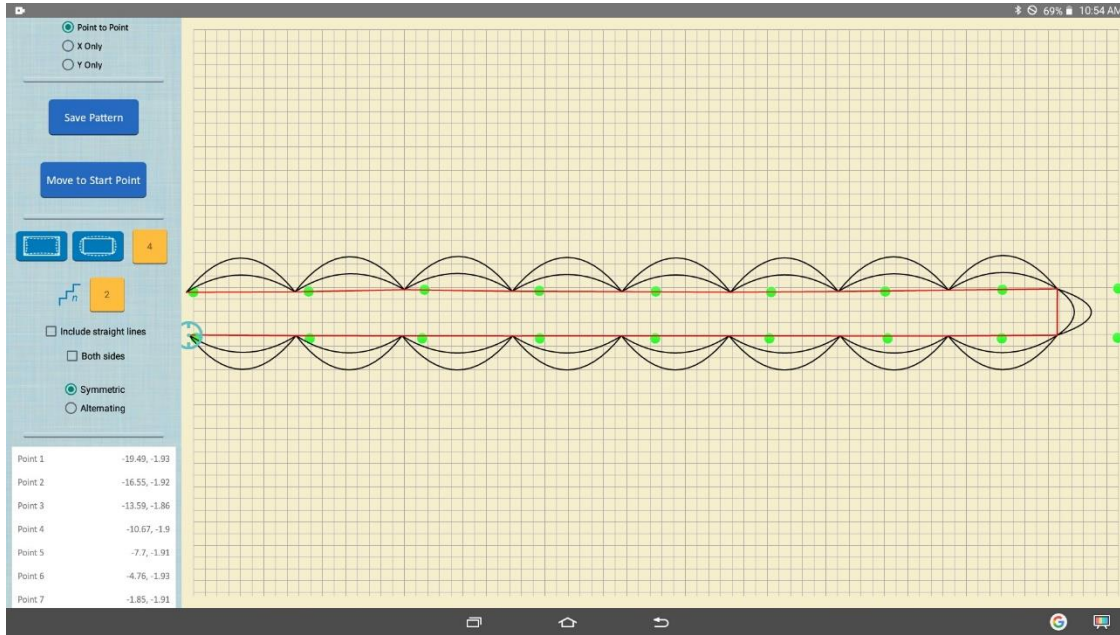
Increasing the number from of curves from 1 to 2:



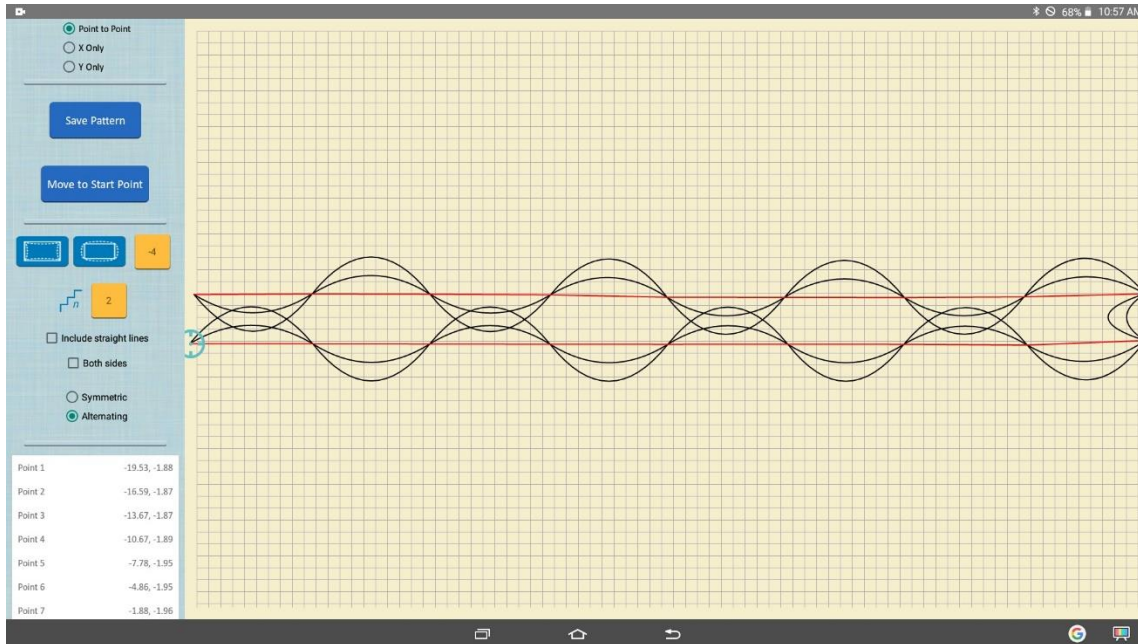
Increasing the number of curves from 2 to 4:



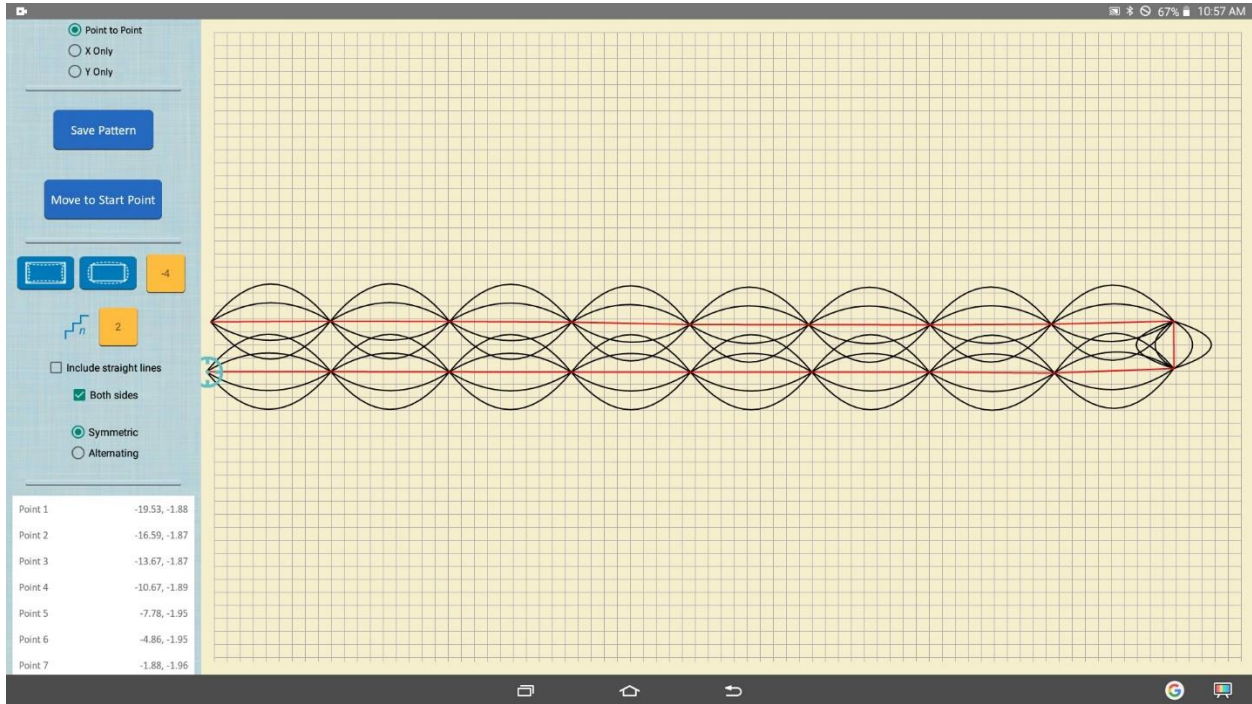
Selecting the outside box will result in the curves calculated outside the lines:



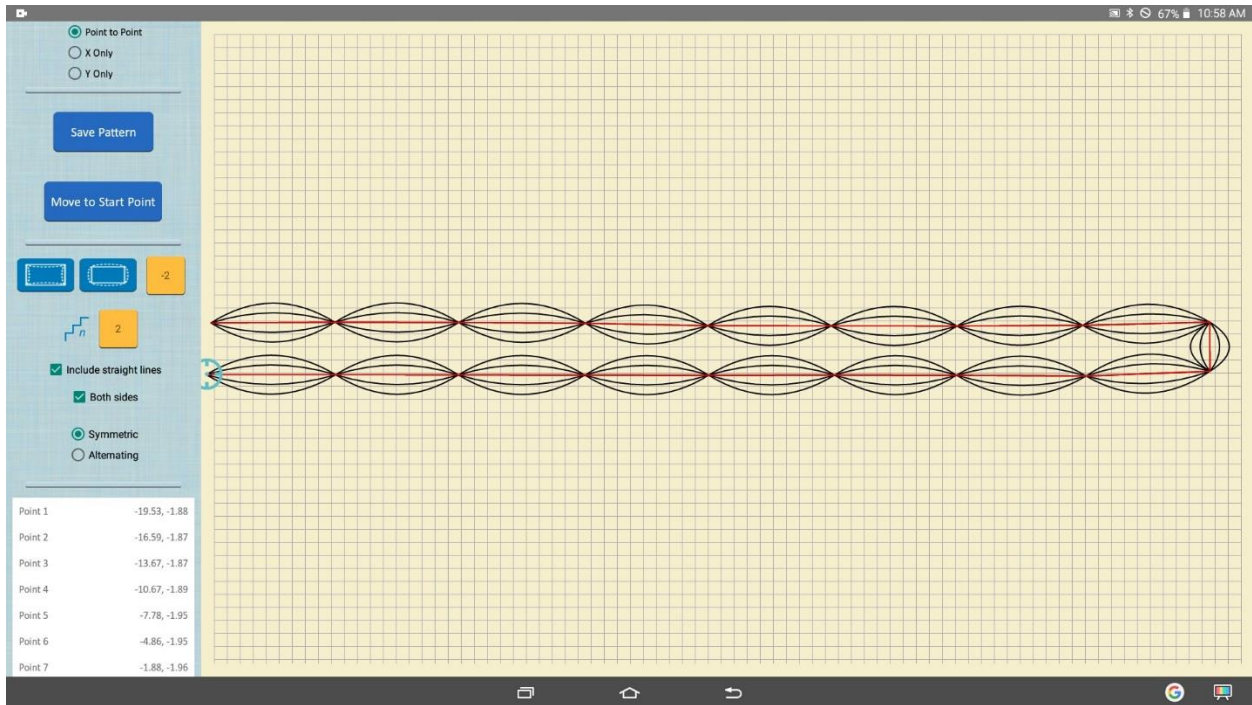
Selecting Alternating:



### Selecting Both Sides:



If you want QBot to stitch the straight lines select the box “Include Straight Lines”.





You have to ability to change the size of the curves, the number as well as position. Change them as much as you wish until you get a design you like. Once you get a design you are happy with select "Save Pattern" for use later if you wish or "Move to Start Point" to start the stitching process. You will have the same Pause, Percent Restart and continue screens as with the other QBot functions.

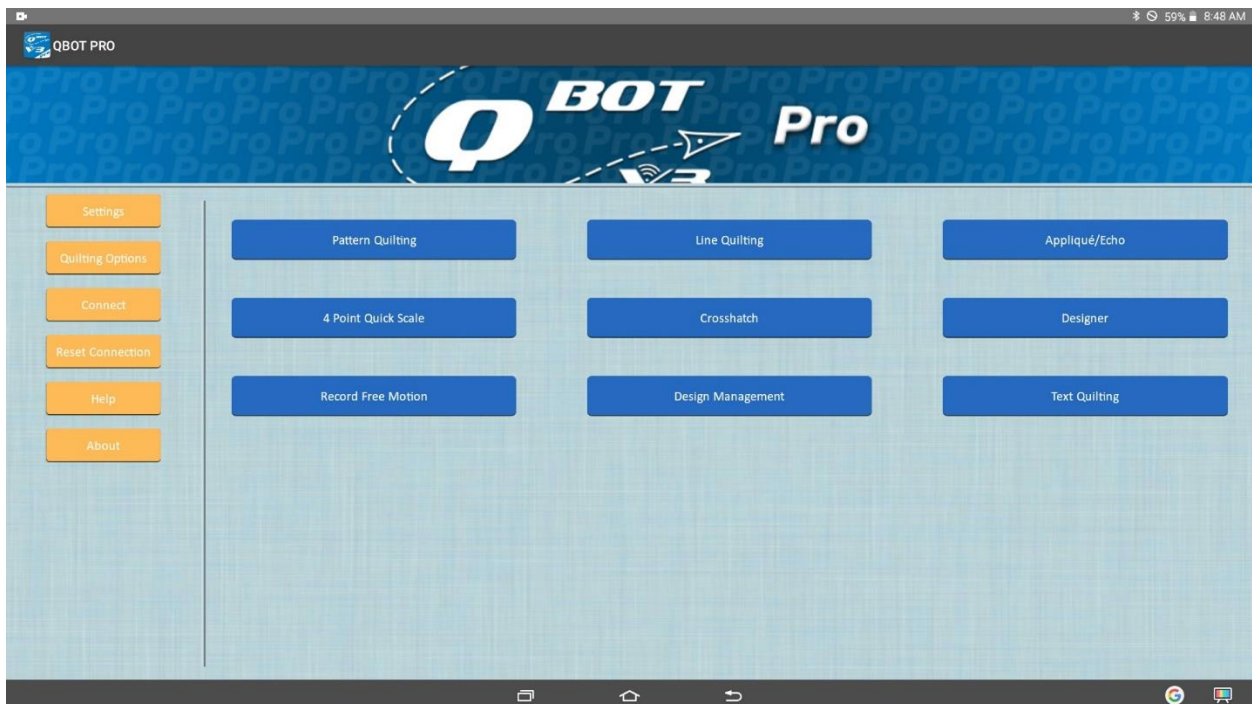
Line Quilting is ONLY limited by your imagination and trials.

## PART V

V3 and V3 Pro can both reside on the same tablet, although there is little if any advantage for both as V3 Pro has all the capabilities of V3 (except the center function in Pattern Quilting). Each of these two variations are separate on your tablet and do NOT share the same saved patterns or directories. Patterns existing in the V3 section can be imported into V3 Pro.

What is the difference between V3 and V3 Pro?

V3 Pro has two additional Options not found in V3 and one additional selection in the Pattern Quilting section (smart fit) not found in V3. They are “Designer” and “Text Quilting”.



The additional function in Pattern Quilting not found in V3, gives you the ability for QBot to modify a design to fit a non-rectangular boundary. This is especially useful for “wonky” sashes. This additional function selection is “Smart Fit”. This selection in V3 Pro replaces the “Center” choice on the Edit screen. This will be covered later in this document.



V3 Pro also includes the ability to create text-based designs (Text Quilting) using any True Type fonts for use alone or in a quilt design.

The “Designer” function found only in V3 Pro is an enhanced version of Pattern Quilting (which is still included in V3 Pro).

An additional feature within Designer is that it can be used off-line (QBot not powered on) to allow designing while not at the Quilting Frame. This capability is very useful for testing before actual design placement, creating multi segment designs. Off-line work can be saved for use on the quilting frame when desired.

The function included in Designer but not found in Pattern Quilting is the ability to combine more than one designs in the same quilting segment. Pattern Quilting only allows one design at a time (not considering the chain function as it is still only one design duplicated). These designs can be set for jump stitches or connected into a single stitched element with included linking function. This ability to include multiple different designs in a single row is very powerful and simple to use. You can use different existing designs to create a new single design, and save them for use later. You can use designs that would not chain into a usable fashion. This ability to include separate designs also allows you to create multi segment designs that you cannot do with Line Quilting. An additional benefit is that you can select and setup multiple rows at a time, up to the amount of throat space you have available. Doing so can make multi row E2E designs easy and convenient, reducing eliminating the necessity to use the Overlay command for the next row then editing the position before quilting. It is also possible to stitch multiple rows in a single non-stop stitching process.

## Text Quilting:

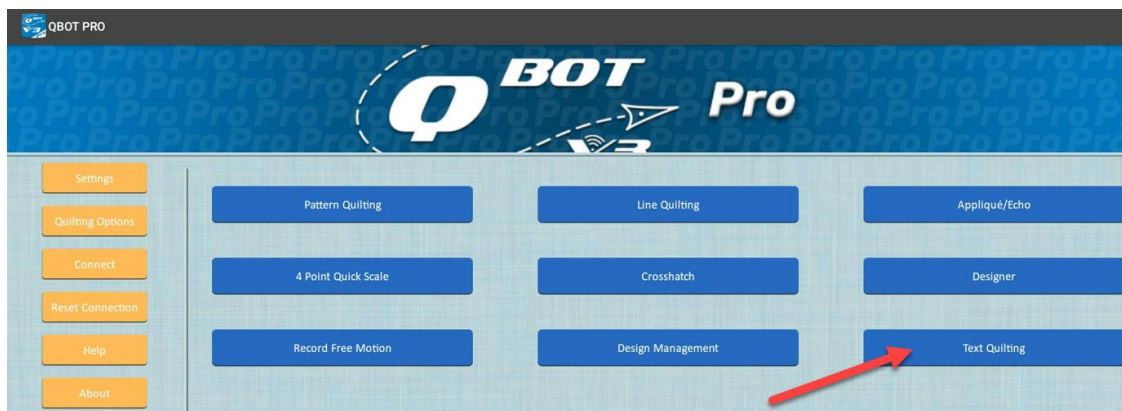
Text Quilting allow you to stitch any text you wish using any True Type font.

Text quilting is done off line. This function is a setup function rather than a stitching function. You do not even need to have QBot powered up to set up text to be quilted. Simply start V3 and select Text Quilting.

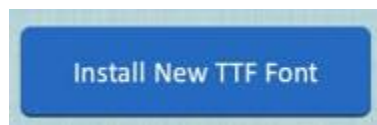
Text quilting uses standard True Type fonts. You can import any True Type font. These fonts have a “.ttf ” extension. Unlike other programs, you must import the fonts rather than simply adding them to a specific directory. The import process is like importing “.plt ” files except it is imported from the Text Quilting main menu. Also, unlike the other portions of V3 Pro, Text quilting section does not do any stitching. The function is for creating the text you wish to stitch. Once you have entered the text using the font you prefer, and saved it, you use Designer or Pattern Quilting to quilt the text. The saved text file will be a convention “.plt ” file you can use or modify the same as any other quotable file.

True Type fonts are available from a number of sources, both free and paid. Copy the fonts to a directory of your choice ( i.e. Downloads).

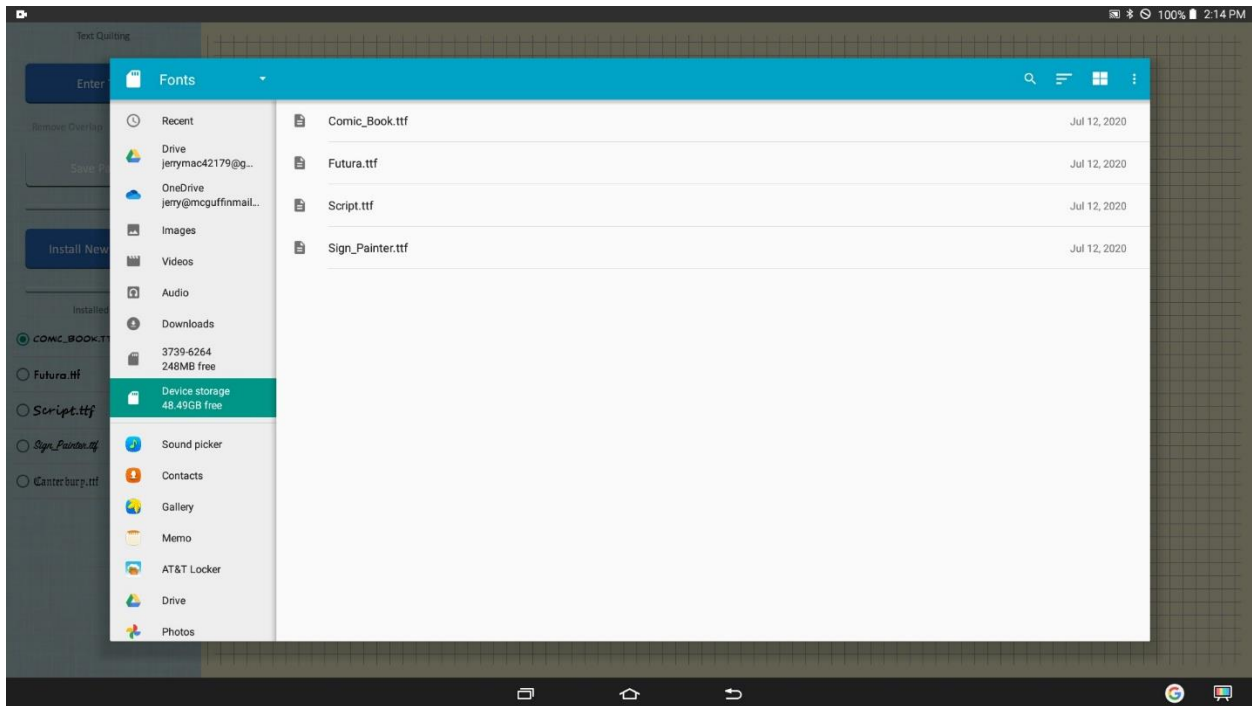
Select the “Text Quilting” button from the V3 Pro main menu.



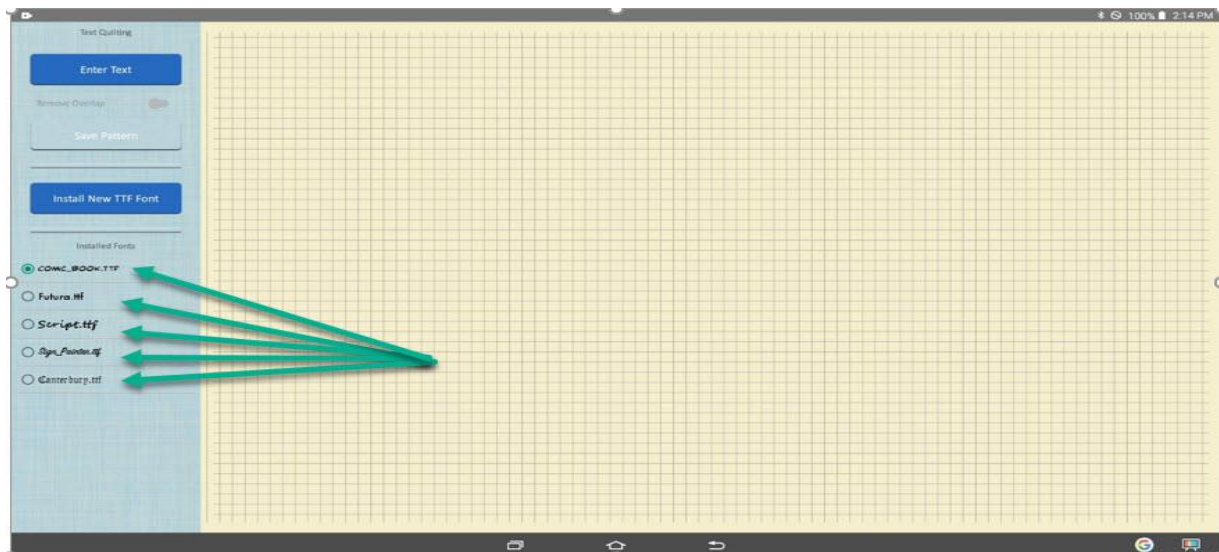
From the text quilting window, select the “Install New TTF Font”, you will need to navigate to the folder that contains your true type font want to import.



From your file manager navigate to the folder that contains the font you wish to add to QBot.



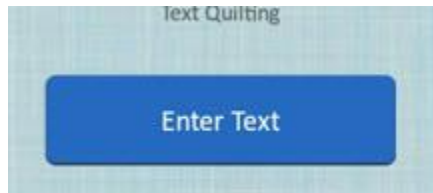
The font should now appear in the "Installed Fonts" list on the Text Quilting window.



Select the radio button for the font you wish to use. You can change to any of the available fonts to preview how it will appear. You cannot change the size at this time, although you have size modification capabilities later. QBot will provide

the screen space needed as you type. You do not need nor are you able to select the height and width of the input space, it will be auto adjusted to fit your text. No need for a boundary.

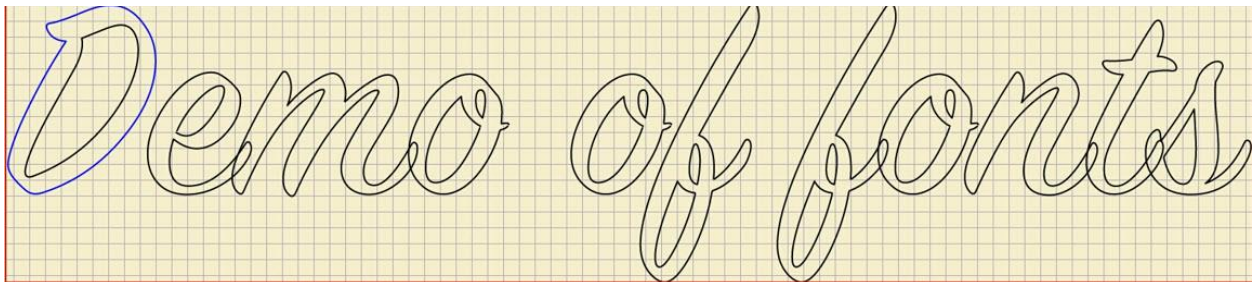
Select "Enter Text " Button



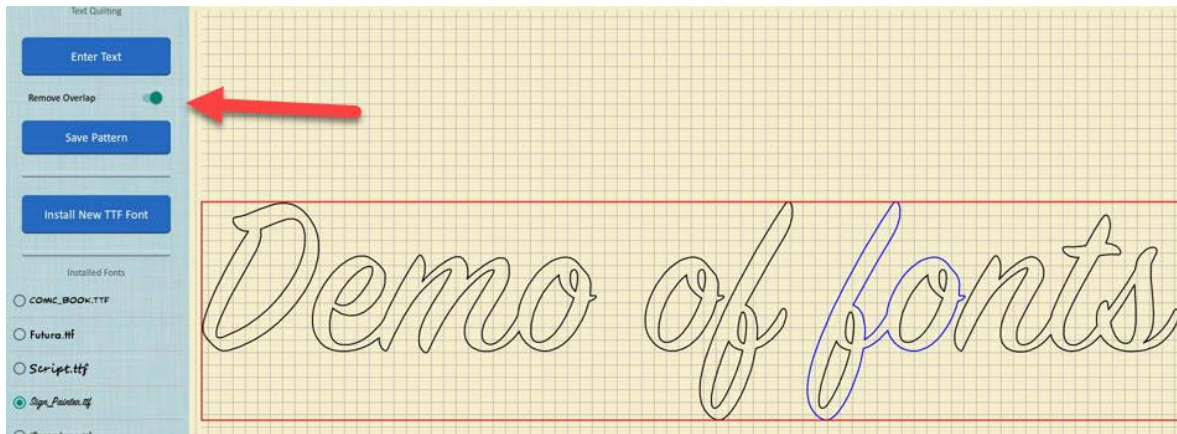
Enter the text you wish to use (window below)



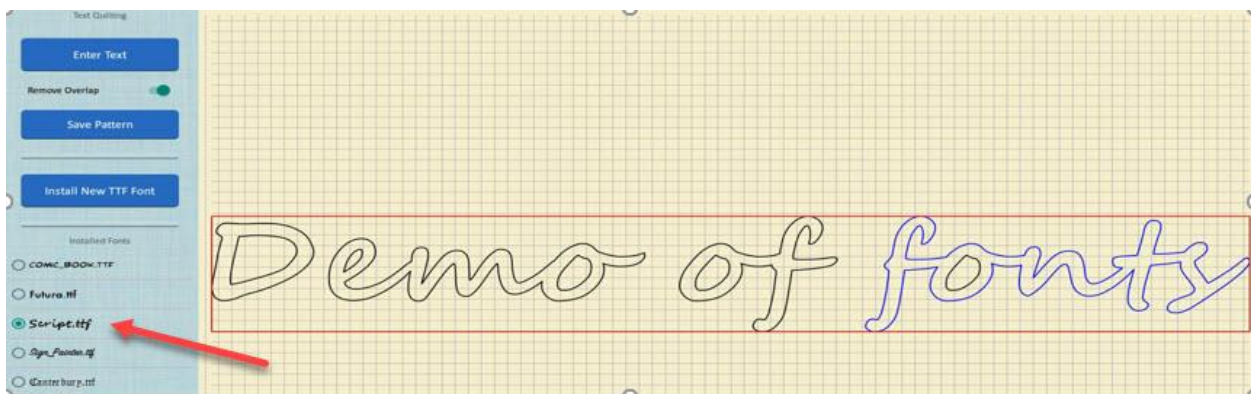
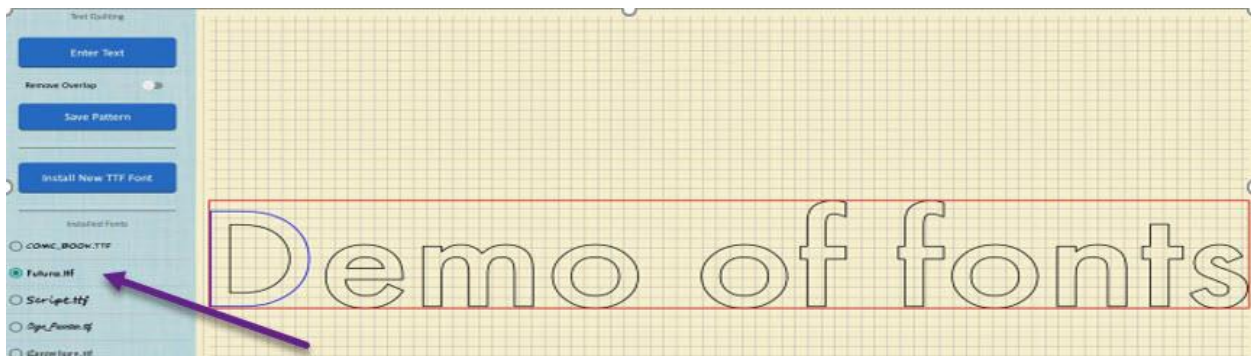
Select "OK" when done entering text.



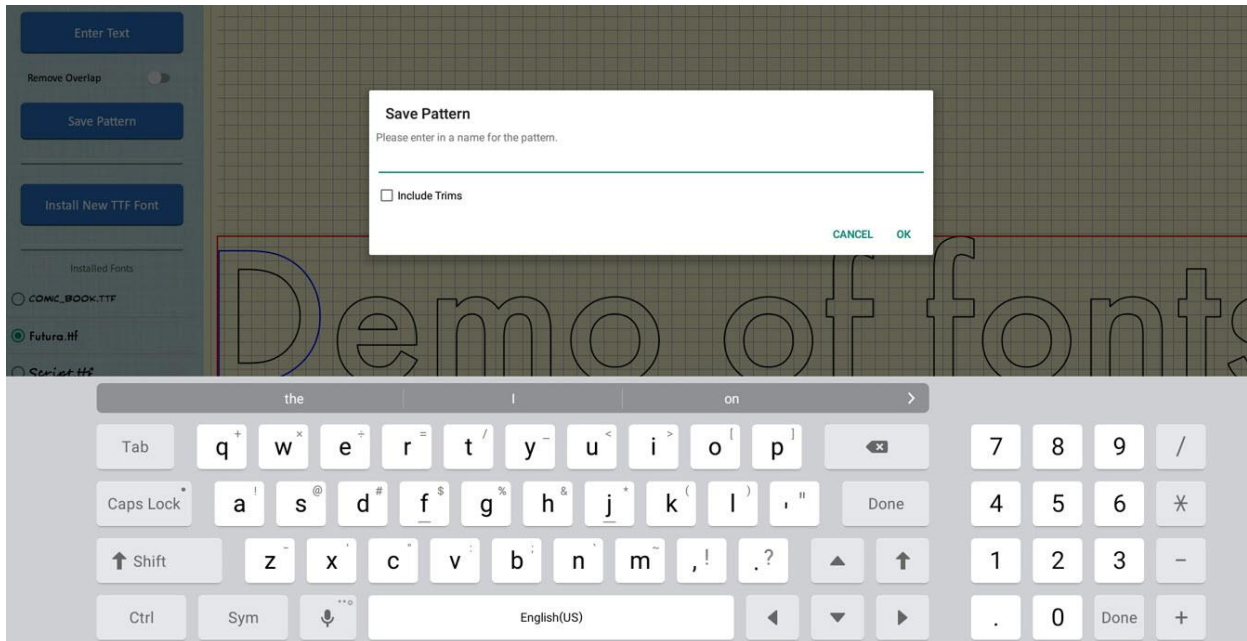
With this particular font you will notice that the tails of some of the letters overrun the next letter. On the top of the screen there is a switch to remove overlaps.



You can view other font choices by selecting a different font radio button without having to re-enter the text.

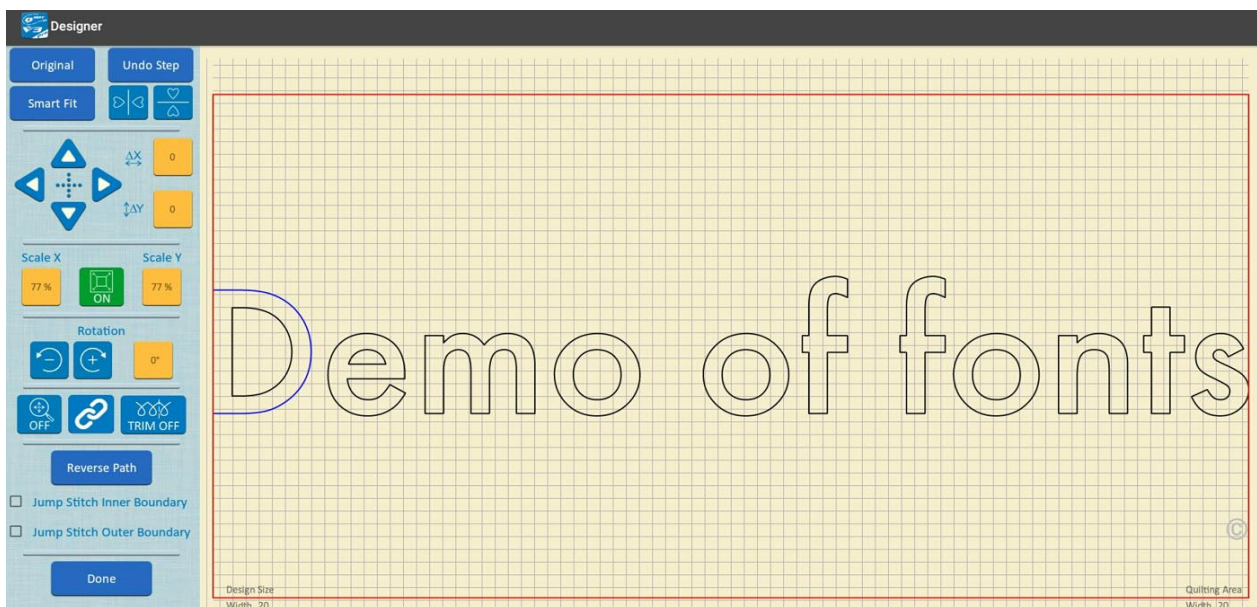


Once you have selected the font and entered the text the “Save Pattern” button will be available. Once selected you will have the opportunity to enter a name for your newly created text pattern.



The text design is handled like any other switchable design within “Pattern Quilting or Designer”.

Below is the saved text in “Designer” modify or “Pattern Quilting” modify window.





Below is same text modified. You can only modify the text as a single item and cannot modify the individual letters.



Beyond this point the text pattern is quilted as any other design. In the case in this example, you can see the jump stitch points. The individual letters that are not connected are stitched separately. The order the letters are stitched is NOT necessarily left to right. QBot will move to the next point each time you select “Continue’ during the process. Letters that are connected will be stitched together. In the case above the inside portions of the letters are also jump stitched. The letters “D”, “E” and “O” will be stitched in two parts each (jump stitch).

## Smart Fit:

Smart Fit is an additional function within Pattern Quilting and included in Designer. The button to activate the smart fit function replaces the “Center” button in the Modify window of Pattern Quilting and Designer within V3 Pro.



Smart fit will resize the selected design to fit within the boundary set non-proportionally. After selecting the boundary and design, the modify screen has the above set of choices. Once you have modified your design including any chaining necessary, you have the option to have QBot fit the design within the boundary. QBot will change the X and Y sizes to fit the boundary non-proportionally. The boundary can be any shape or size. Make any modifications you feel are appropriate then select the “Smart Fit” button. Once selected you will have the opportunity to tell QBot what size margin you desire. Enter the margin size in decimal inches. Not entering any value will result in the design being expanded up to the boundary lines with no gap. Also select if the smart fit is for either a Horizontal (default) or Vertical orientation.

### Smart Fit

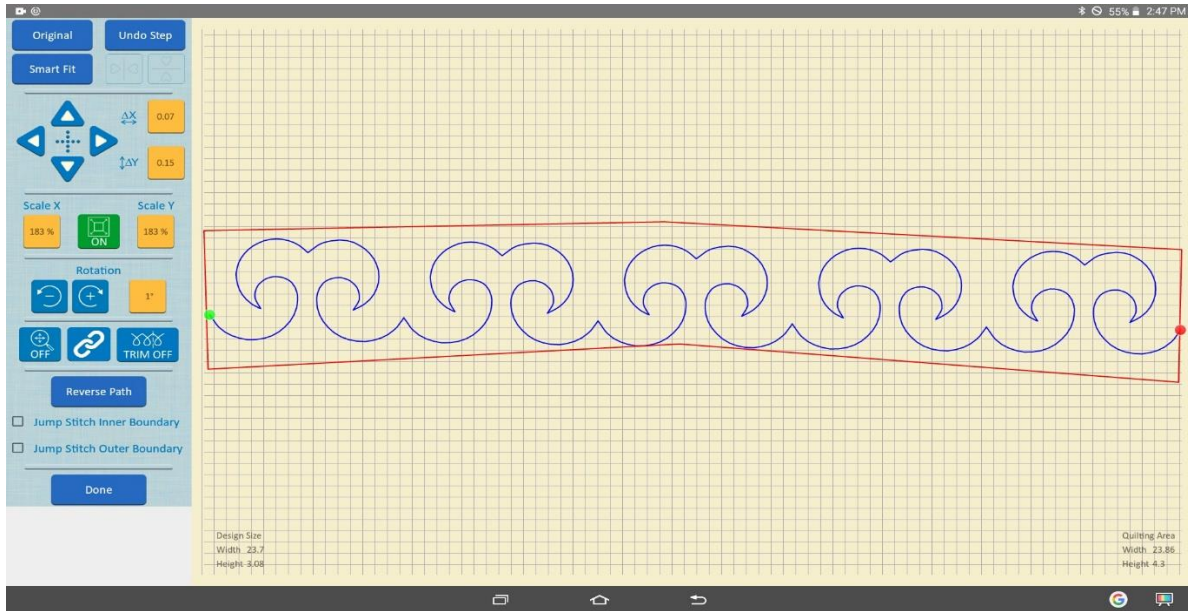
Enter Smart Fit boundary margin

0

Horizontal Orientation  Vertical Orientation

CANCEL OK

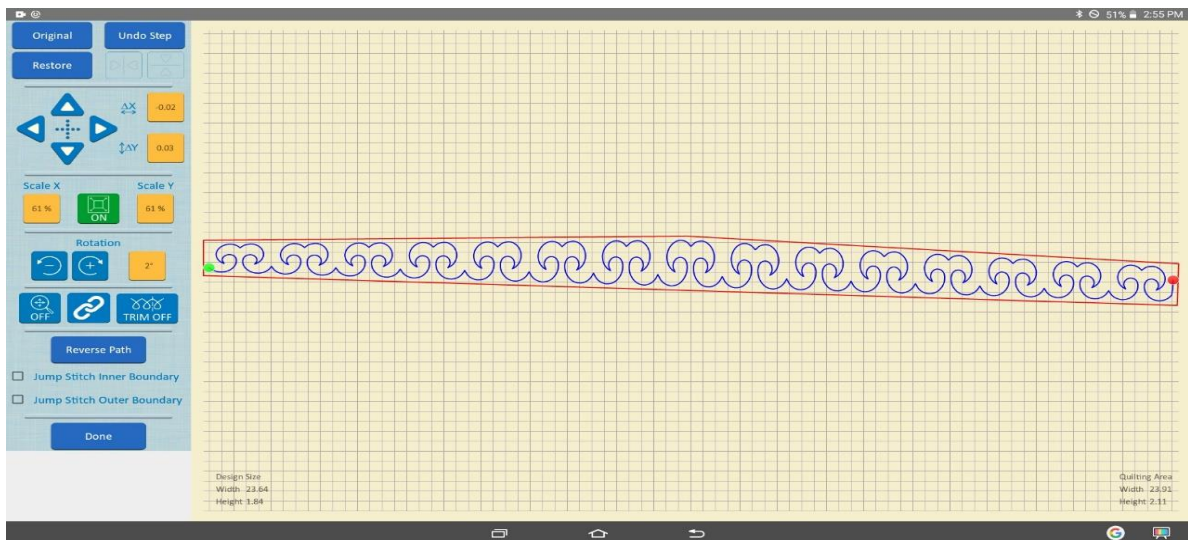
This feature works well with sashes or borders that are not rectangular (wonky). Below is an example of an uneven sash or border. As illustrated a regular chained design does not fit well. Changing the angle does not resolve the problem.



Selecting the “Smart Fit” button presents the boundary entry screen.

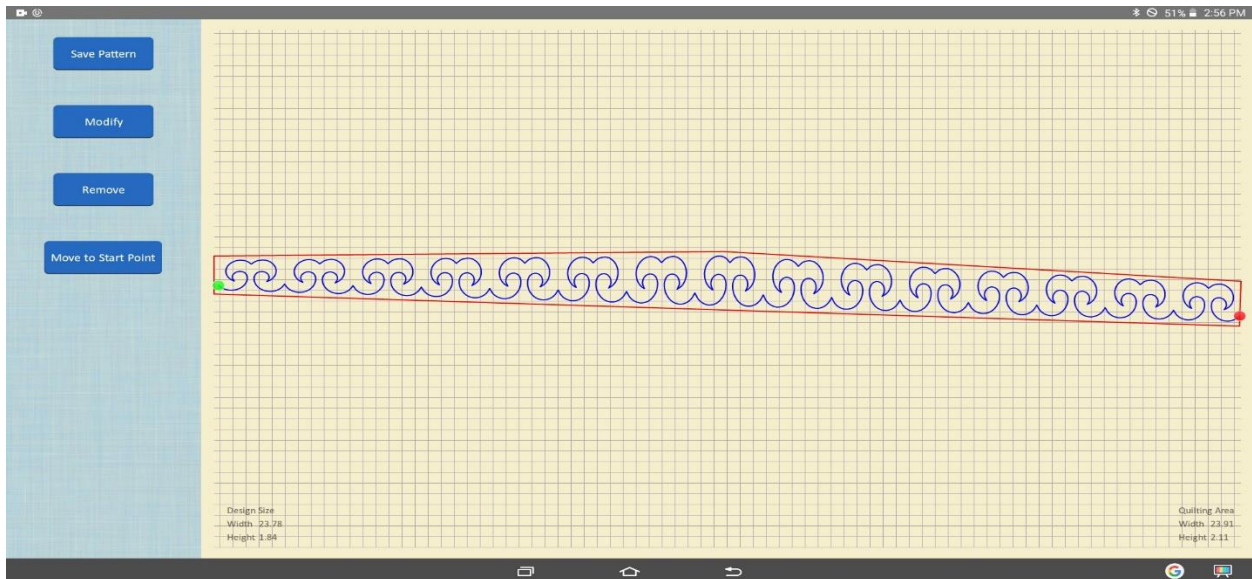


Leaving the margin at “0” will result in the design sized to fill the boundary. Entering a decimal number will provide that much margin between the design and the boundary (in example .125 was used). Notice the items in the center in relation to the sizes on the ends.



If the vertical boundaries are not parallel and 90 degrees to the horizontal lines you MAY get these unusual line(s) at the beginning or end of the design (artifacts). These are a result of the way QBot has to calculate how to fit the design. The closer parallel and 90-degree corners the less the artifacts. There are a few ways to eliminate these in some cases. One method is to stretch the X value so the artifact is just beyond the vertical boundary.

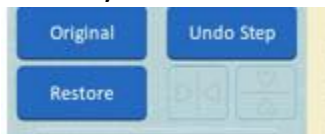
Select “Trim Boundary” at the appropriate screen before stitching (you can return to the modify screen if you do not like the fix).



As you can see in the above illustration the “artifacts” have been trimmed off at the boundary.

It is best to make all modifications before selecting the Smart Fix (angle change, X and Y changes etc.)

When you select the “Smart Fix” button the button will toggle to “Restore”

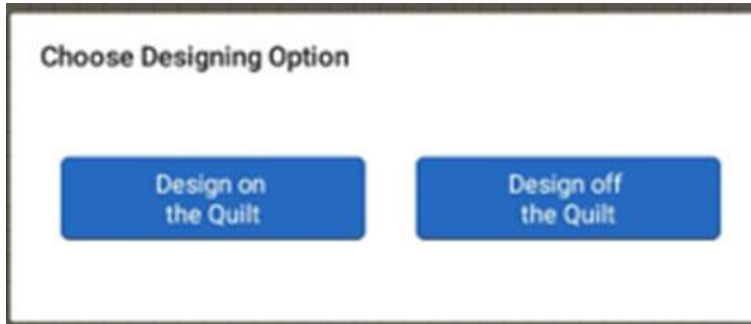


This will undo the smart fix and allow you any other modifications you prefer. You can toggle back and forth as you need to.

This is a very powerful and useful function and can be used in a number of occasions.

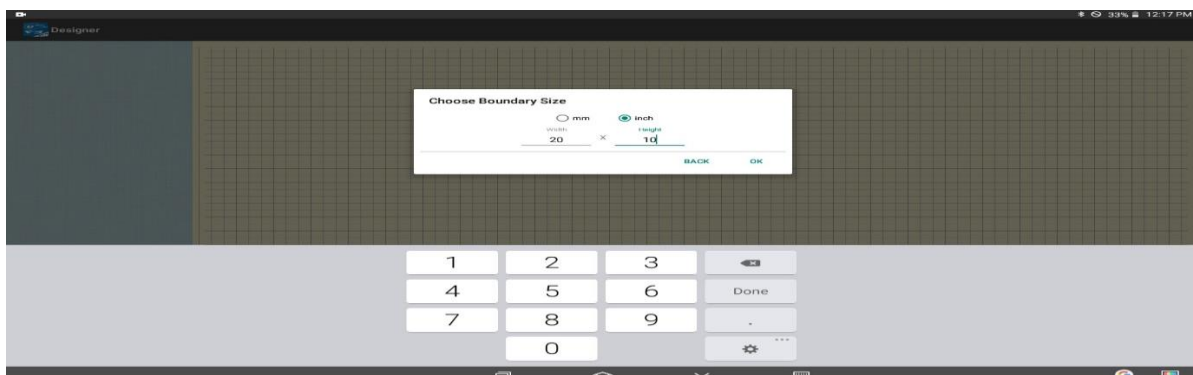
## Designer:

As previously mentioned, Designer can be run in either On or Off the quilt mode.

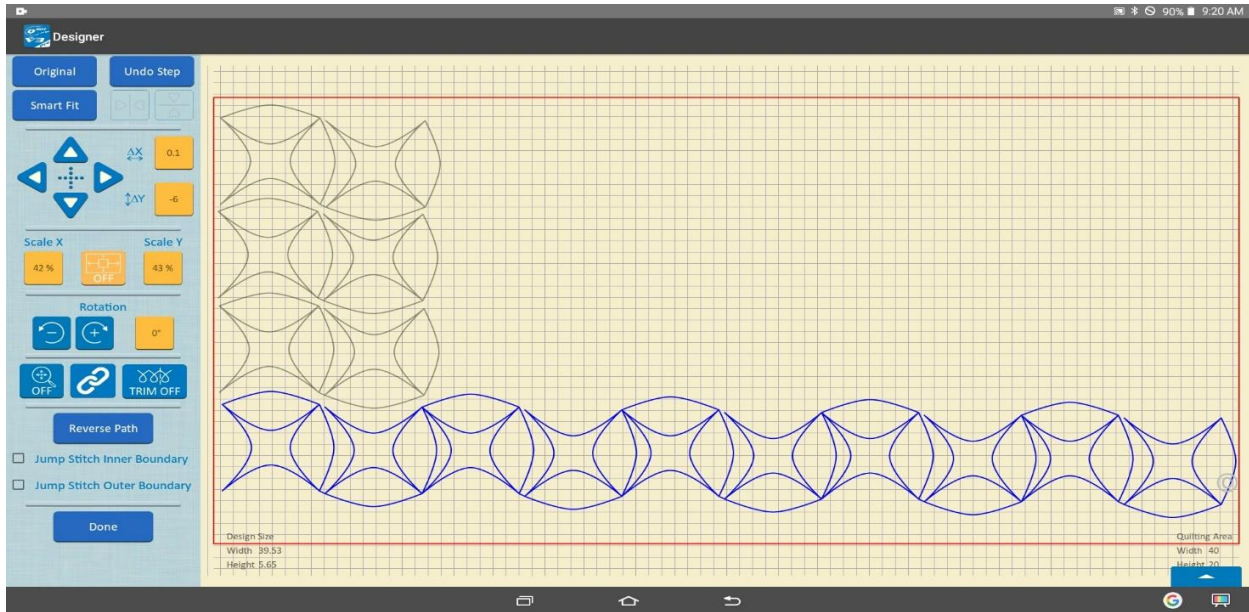


Once selecting “Designer” from the main menu the above choices will be presented. You do NOT need the QBot head to be powered on to use Designer in the “Design off the Quilt” mode. This is handy for creating single or multi segments, or for prototyping designs for use later. The important thing to remember if you do not have the QBot head powered up is, DO NOT select “Design on the Quilt”. This option will not affect QBot or damage anything, but will be VERY annoying and continue until you resolve it. Selecting this in error will result in QBot continuously attempting to connect to the QBot head. If this occurs the only way to resolve it is to exit QBot and restart V3 pro.

Selecting off the quilt button will present the Choose Boundary Size Screen. Since you will not be using the quilt head to create an outer boundary, QBot needs to know how much room to make. This boundary must be 4 sided (you only enter the width and length only) and will be rectangular. It is not critical as to what size to enter but generally use the amount of room you normally select when setting up a design.



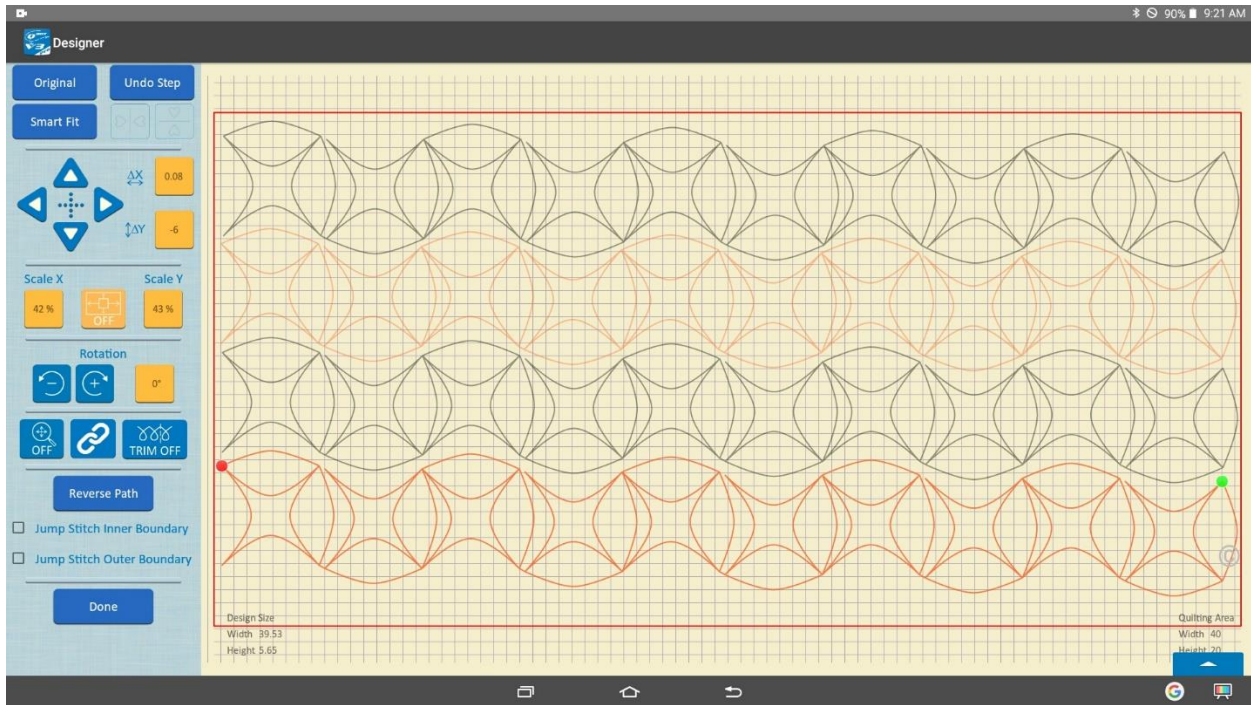
You may select mm or inches for the numbers you are going to enter. You will need to enter both the width and height of the proposed space. Selectin "O.K." Will allow you to choose the design(s) you want. What is different than in Pattern Quilting is that you may choose as many different designs as you wish. Multiple designs on the same row do NOT need to be chainable.



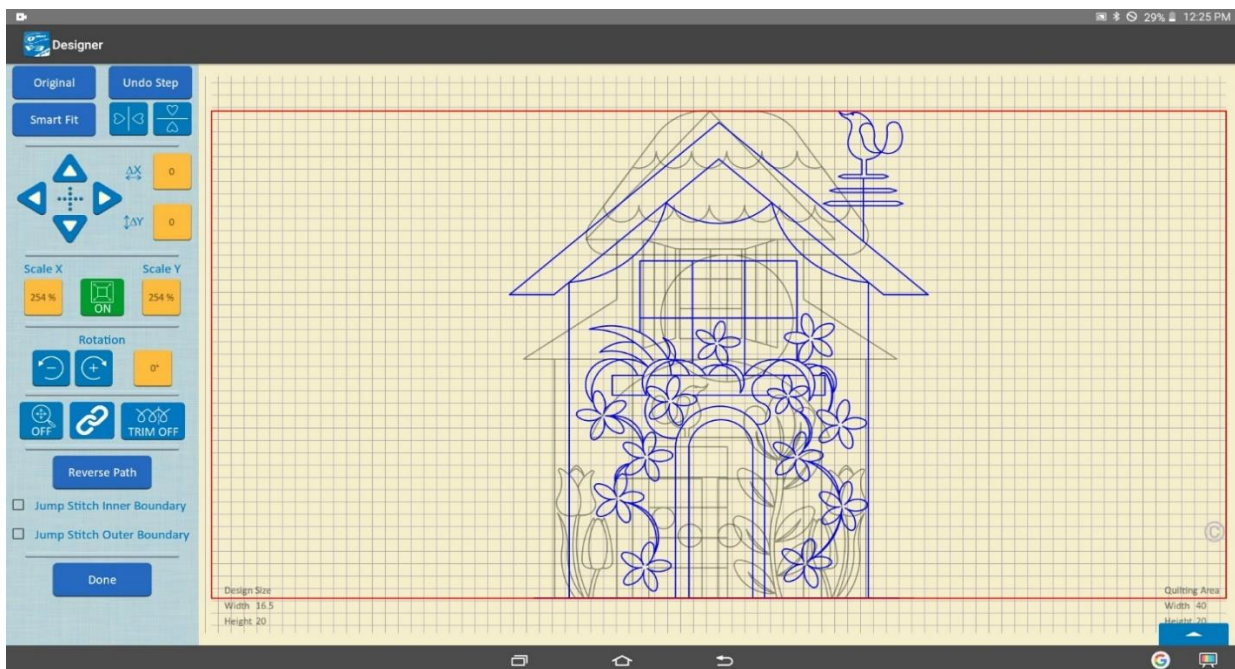
If you want to design multiple rows of the same design you can do this by choosing same design as many times as there are room for rows (4 rows before advancing quilt, choose the design 4 times, each individual design will be chained to cover the width of the quilt).



Once all rows are chained and sized you can reverse the stitching order so that in this case the 2<sup>nd</sup> and 4<sup>th</sup> rows will be stitched right to left while the 1<sup>st</sup> and 3<sup>rd</sup> will be stitched left to right. (reversed rows will be shown in RED).

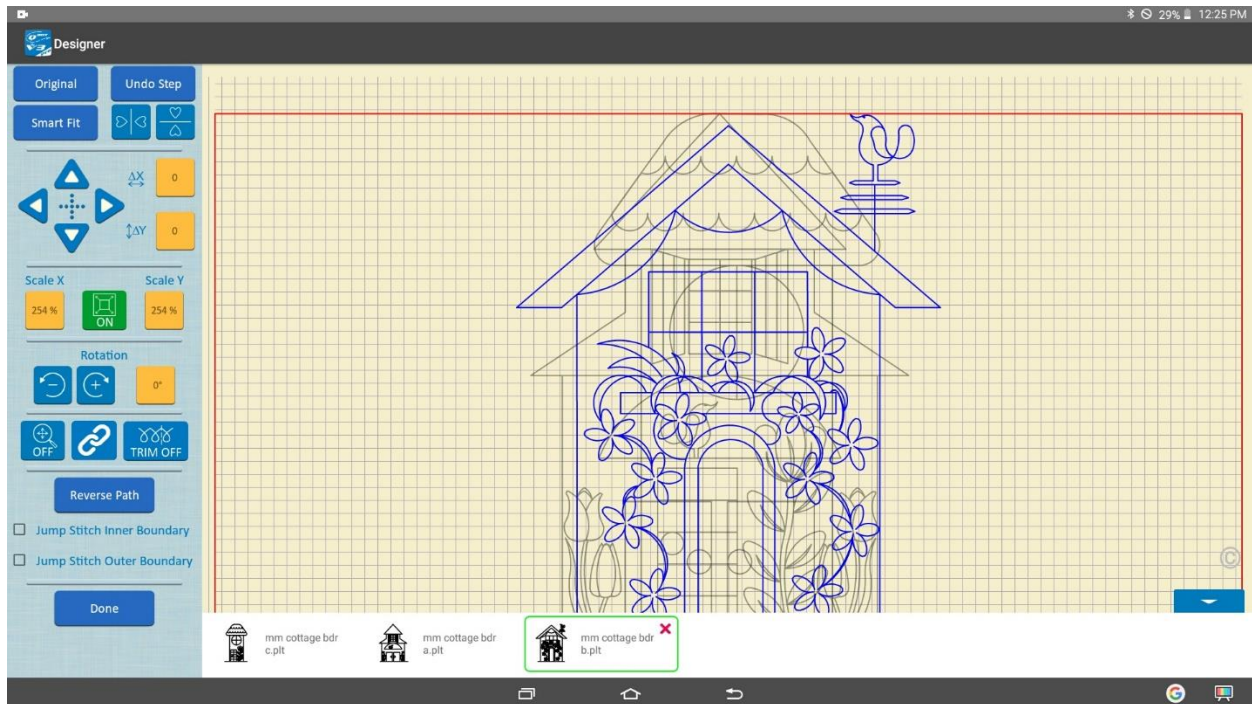


If these rows were linked the entire 4 rows could be stitched as a single design (and savable for subsequent rows after you advance the quilt).



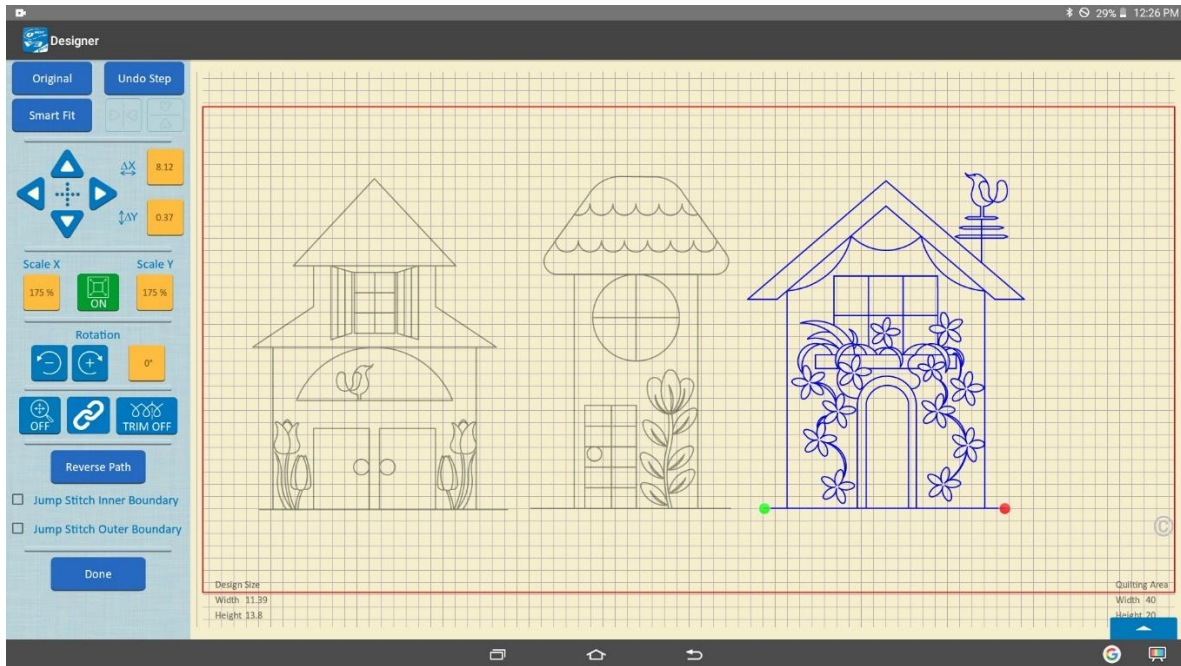
In the above illustration three different house designs have been selected. You can see one design is outlined in blue; the others are outlined in black. Also new is the small blue arrow in the bottom right of the screen. This arrow opens a

window on the bottom to allow you to see and select the individual designs you have chosen. Selecting this arrow will toggle the selection window on or off.



You can see in the illustration that 3 different designs are shown. The one with the **RED X** is the one that currently is being modified. Selecting any of the available designs will make that design the active design for modification. If there are more designs selected than can fit on the width of the window you can scroll through the designs by sliding the selection window left or right. The order you select your designs in is the same order they will be stitched. Selecting the designs in the stitch order will result in a normal left to right stitching order. Selecting them out of the order will still stitch properly but will jump back and forth during the stitching process. Moving the designs will NOT affect the stitching order. In the illustration above the house with the red X will be the third design stitched. If you are going to use the “Link” function this order is even more important.

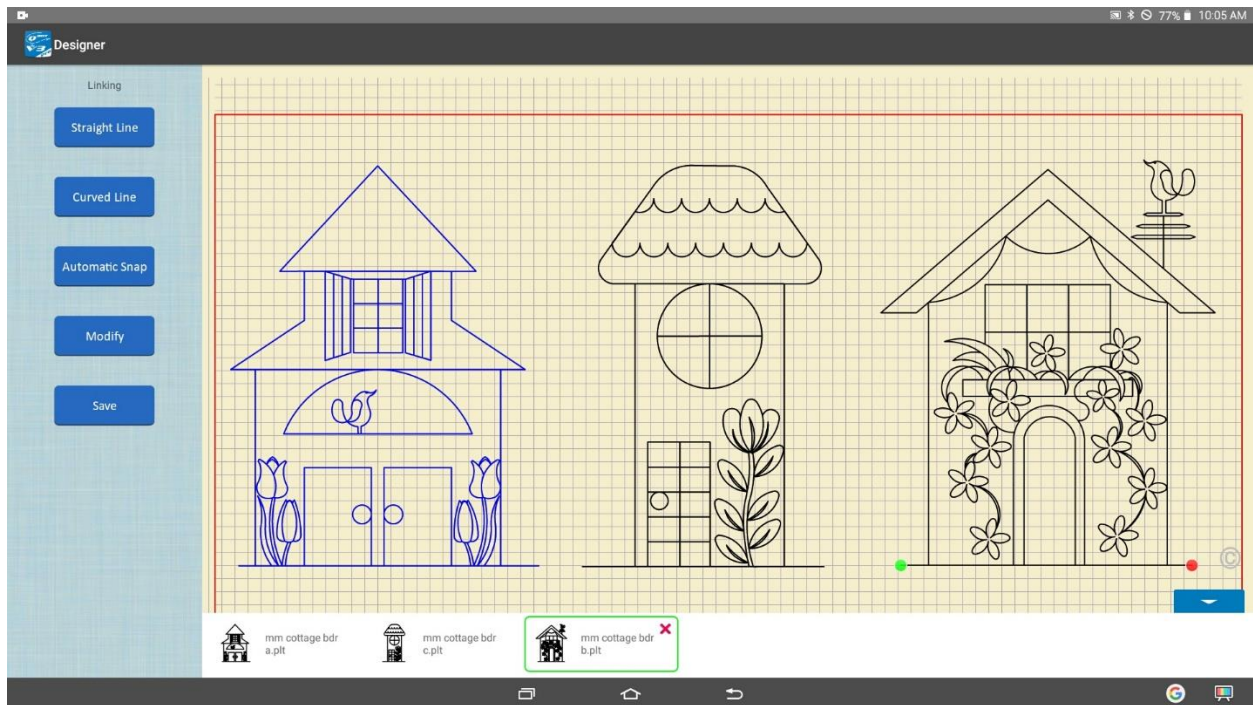




Each design is modifiable individually. Above the 3 houses have been lined up on a single horizontal line. You will note the start and stop points on the currently selected design (far right in BLUE). Also available is a “Reverse Path” button.

All other modify selections work the same as in Pattern Quilting.

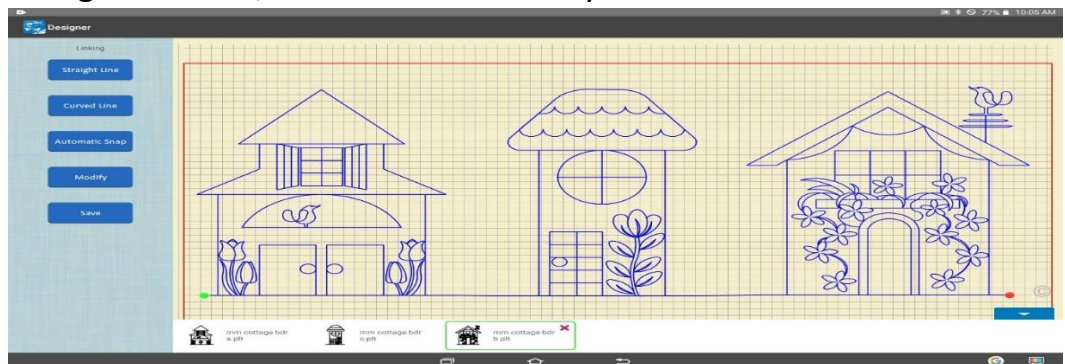
Multiple designs can be linked together creating a single continuous design. Once you select “Done”, you will be presented with the “Linking” window.



This window provides the opportunity to link individual designs together into a single design. You have 3 different link choices

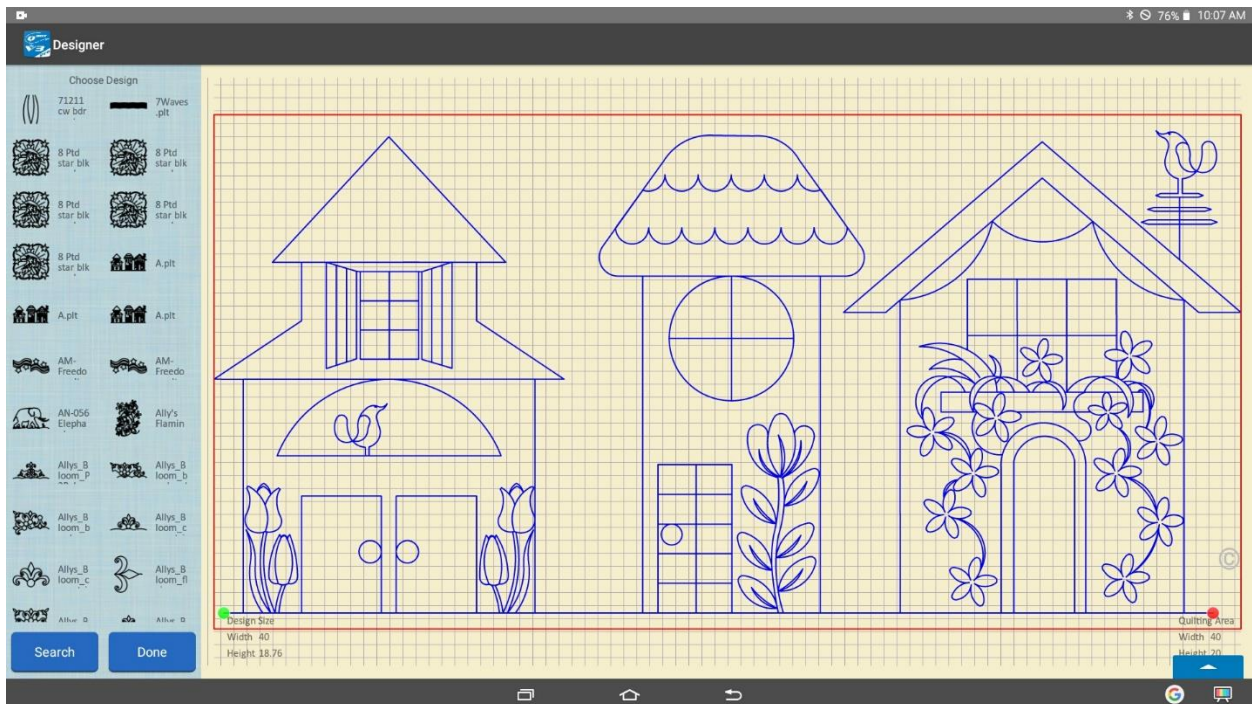
### 1. Straight Line

- a. This will connect the stop point on the design on the left to the start point of the design on its right with a straight line. If you have multiple designs, each will be linked in the same fashion. You can NOT link only a portion of the designs. All will be linked. If the stop point is on the left side of the design to its left, a link line will cross over the previous design to complete the link. This is an Important consideration in the location of the elements and the order of initial selection. Once done the elements will become a single element, stitched continuously.



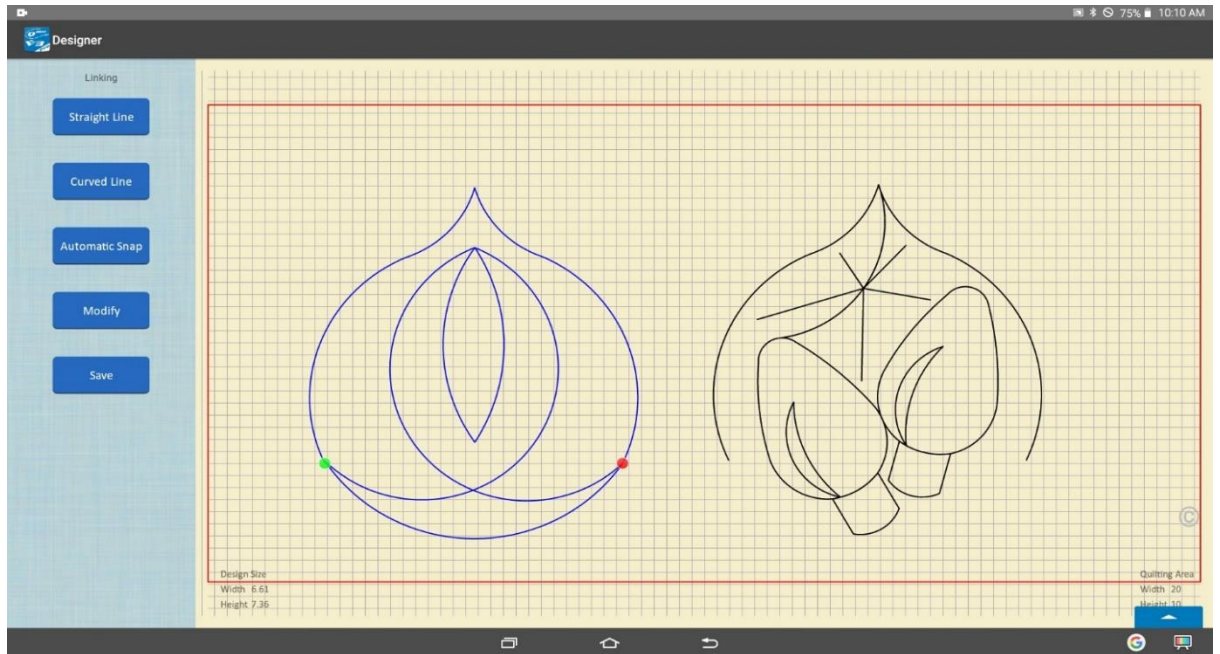
## 2. Automatic Snap.

- a. This will move your individual elements so that the start point of the element to right of the previous element is touching the stop point of the previous element. This will occur regardless of where the points fall. This can result in unacceptable results unless the designs are placed properly. It is like the Straight Line function except rather than creating a straight line between the two (or more) it will actually move the next element until the two points touch. Notice how the house on the right has been moved closer to the middle house than in the above Straight Line link illustration.

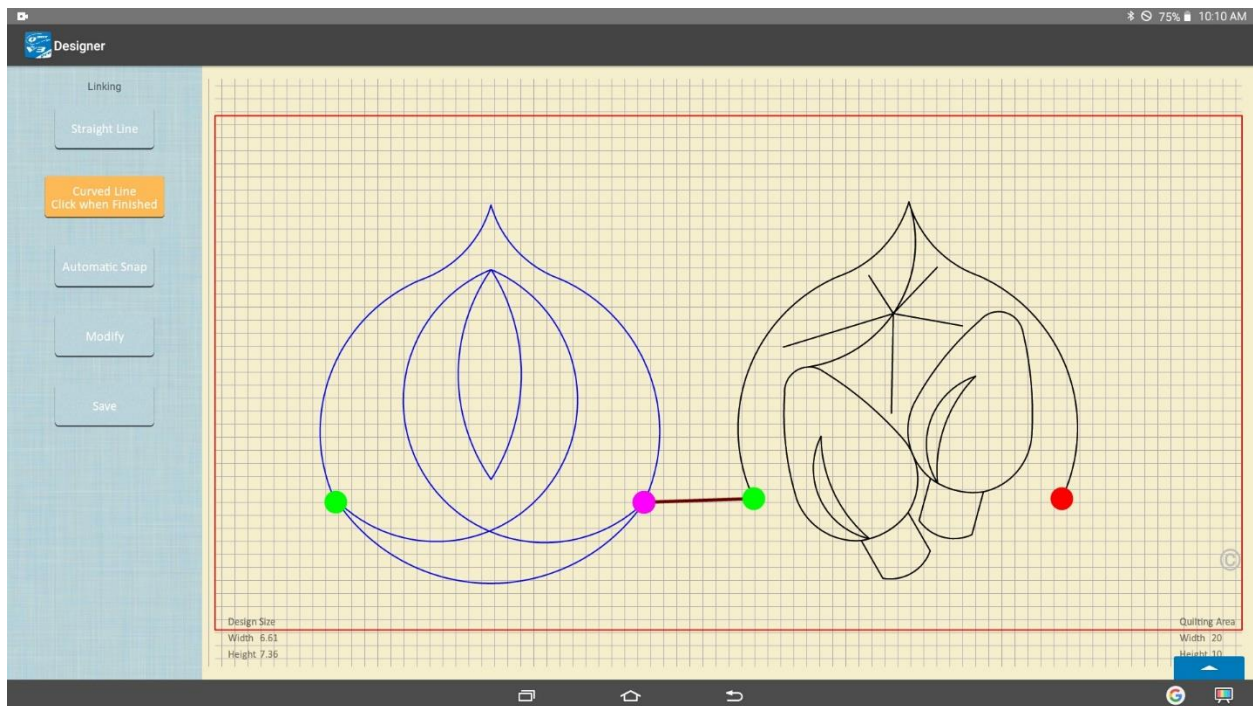


## 3.

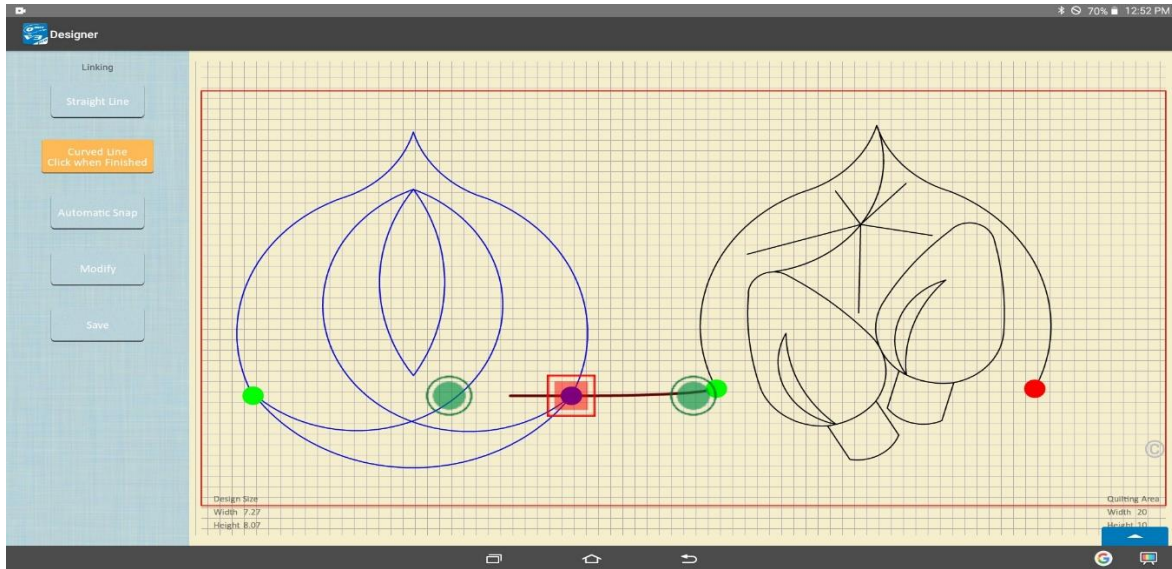
#### 4. Curved Line.



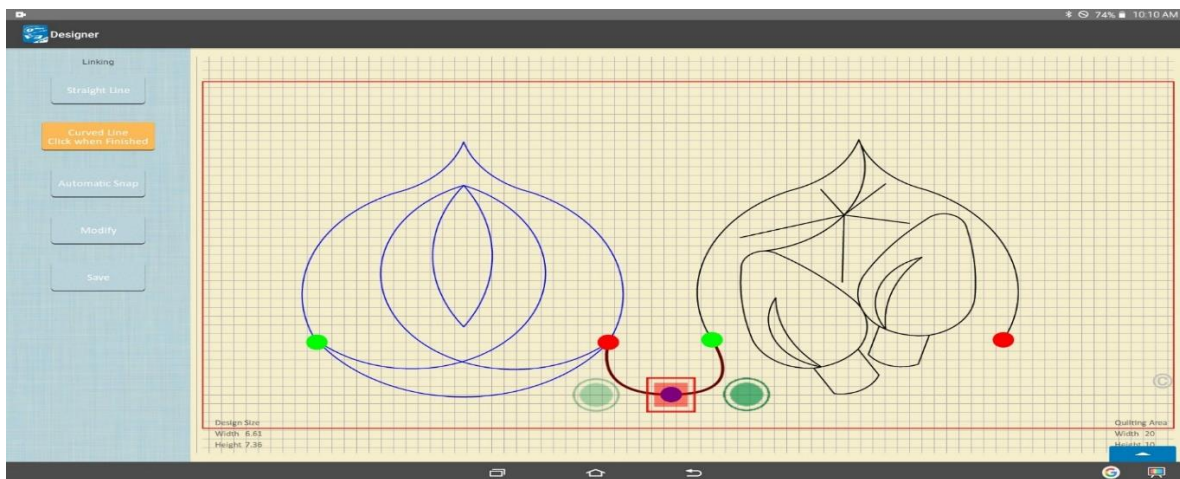
- a. This will allow you to link 2 elements together using a curved line that you can manipulate. Although limited in its capability it is a very powerful function. This can ONLY be used for 2 elements. More than 2 elements can not be linked in this manner. Although you can link 2 items, save the design then use the saved design to add another of the same and link them together etc..



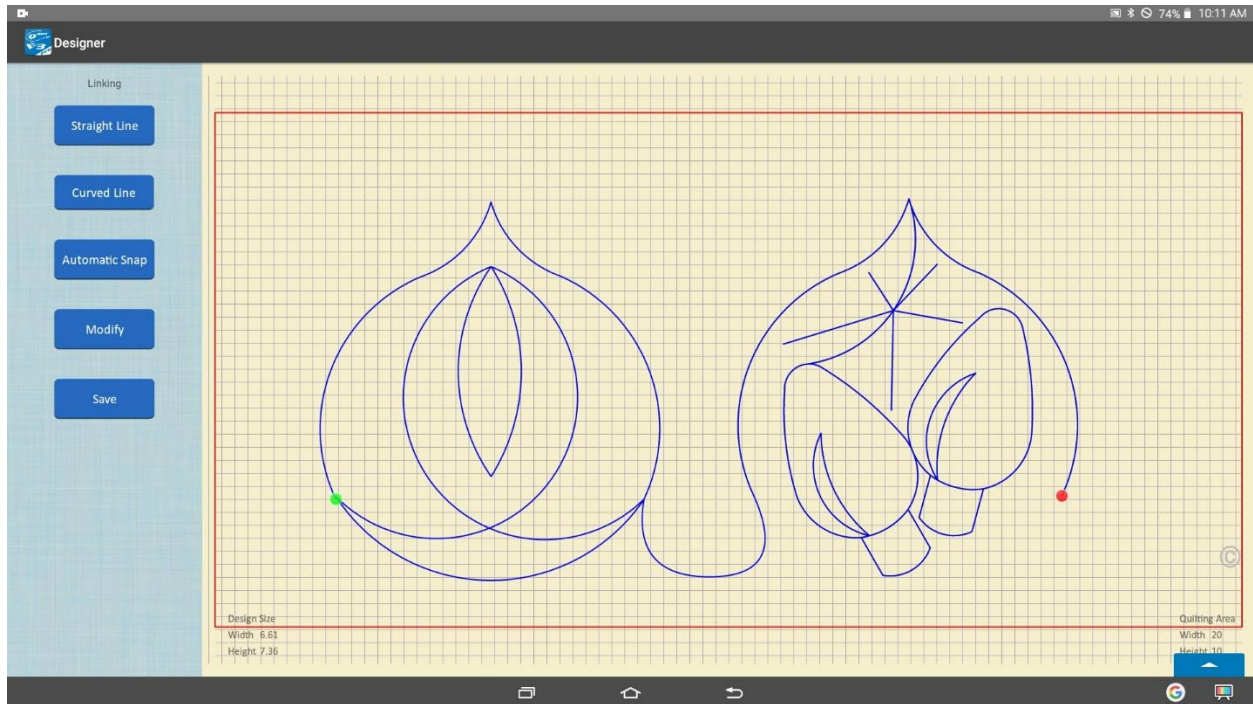
- b. Selecting this option will create a line between the end of one element and the beginning of the next element. Three dots will appear along this line. Two dots will be green and one is Purple. Double tapping on the purple dot will change the dots so they now will have boxes around them.



- c. . The green dots control the curve lines between the purple dot and the end of the curved line. Moving them with your finger will change the curve of the line before and after the purple dot. The purple dot now with a box around it controls the aperture of the line. Moving this dot affects where the lead in and lead out curves occur.



Selecting the “Curved Line Click When Finished” button will take you back to the previous screen and create the curved line you just made. Re-selecting any of the link buttons will revert to the original designs and undo any changes to the link.



If you are using the Design Off the Quilt function you will now have the ability to save the design for future use and returned to the QBot main menu screen.

If you are using the Design on the Quilt function you will also have an additional button “Quilt Now” that will take you to the regular Save, Modify, Move to Start window where you can begin the stitching process.

Selecting “Done” will not move you to the stitching menu but will return you to the QBot main menu. If you selected “Done” in error and wanted to go to the stitch window, you will need to either use the Pattern Quilting process, or Designer process and select the new design you just created. If you failed to save the new pattern at either of the two opportunities you will need to start the process over again from the beginning.

This process can save a lot of time and effort if you are doing a E2E design as you can design and save an entire quilt advance of quilting into a single design. This will eliminate the “Overlay” function and aligning subsequent rows each time you finish a row.

With the tools included in QBot V3 Pro you are truly only limited by your imagination and creativity.