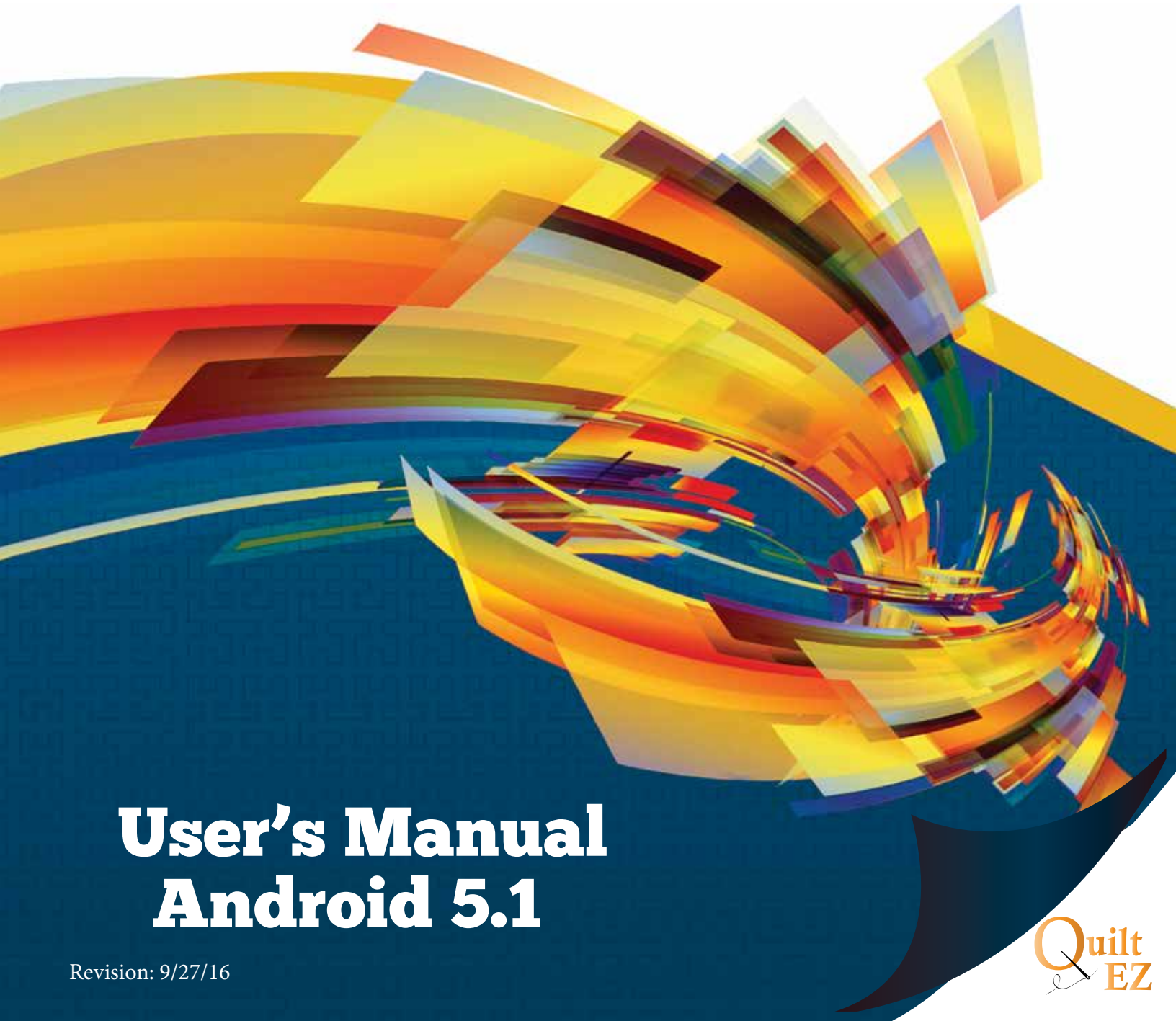
BUTLER

Quilting Robot



User's Manual
Android 5.1

Revision: 9/27/16

Quilt EZ

BUTLER
QUILTING ROBOT

About Butler

Butler is an easy-to-use robotic system that turns your quilting machine into a Quilting Machine! The servo-controlled system gives you power and function without needing awkward, space-eating computers. For Quilters looking to quilt simple or complex patterns with perfection. Quilt smoothly, quickly, and effortlessly.

About QuiltEZ

Located in Northern Utah, QuiltEZ was founded with a single goal: to simplify your life. What started as a friendly favor has now grown into an international company and a full-fledged manufacturer of quilting products. Our products have been designed in-house and sold under various names and for multiple companies since 2005. Our growth is a result of you, and our goal remains the same — to provide quilters everywhere with the products and knowledge that fulfill their wants and simplify their lives.

This Manual

This manual was written to help you understand how to use the features of Butler. The majority of the manual goes over each button and what it does with a brief description. See Appendix A at the back of this manual for How To tutorials to get started with your new Butler Robotic System. Be sure to check out support.quiltez.com to see frequently asked questions, video tutorials, and other helpful information about using Butler.

Table of Contents

7 **Getting to Know Butler**

7 The Black Motor Box

9 The 10” Android Tablet

10 The 7” Android Tablet

11 The Android Hub

12 Powering On/Off

13 Disengage for Free Motion

14 Navigating the Android Tablet

14 Getting to know the Android buttons

16 Getting to know the Android desktop

17 Adding a shortcut to the desktop

18 Connect the Android tablet to Wi-Fi

19 Getting to know the Butler Perfect Stitch Program

20 Butler Home

20 Go/Stop

24 Stitch Controller

24 SPI

24 Horizontal Lock

24 Vertical Lock

25 Angle Lock

25 Nest

27 Edit

27 Repeat

28 Move Pattern

29 Rotate

29 Scale

30 Crop

32 Pattern Layout Helper

34 Point to Point

35 Text Generator

36 Next Pattern

36 Duplicate Pattern

36 Remove Pattern

37 Save Pattern

37 Mirror

37 Merge

38 Reverse Stat/Stop Points

38 Undo/Redo

39 Patterns

39 Patterns

40 Recent

41 Import/Export

44 Tag/Remove Patterns

46 Layout

46 New Layout

46 Open Layout
46 Save Layout

47 Add Pattern Box

47 Remove Pattern Box

48 Adjust Pattern Box

48 Set Quilt Area

49 Free Motion

49 Record On/Off

50 Save Pattern

51 Appliqué

52 Settings

52 Updates

53 Parameters

55 Machine

57 Test

58 Advanced

59 Stitch Regulator

59 Stitcher User Interface

60 Information

60 Information

61 Bottom Icons

61 Pattern Box View

62 Zoom Out/In

63 Zoom to Crosshair

64 Pan

65 Appendix A: How To

65 Getting Started
67 Quilt a quad pattern quilt block

70 Quilt a pantograph-style clam pattern
72 Nest the daisies pantograph pattern

75 Perform an appliqué crop for a block

***76* Appendix B: Definitions**

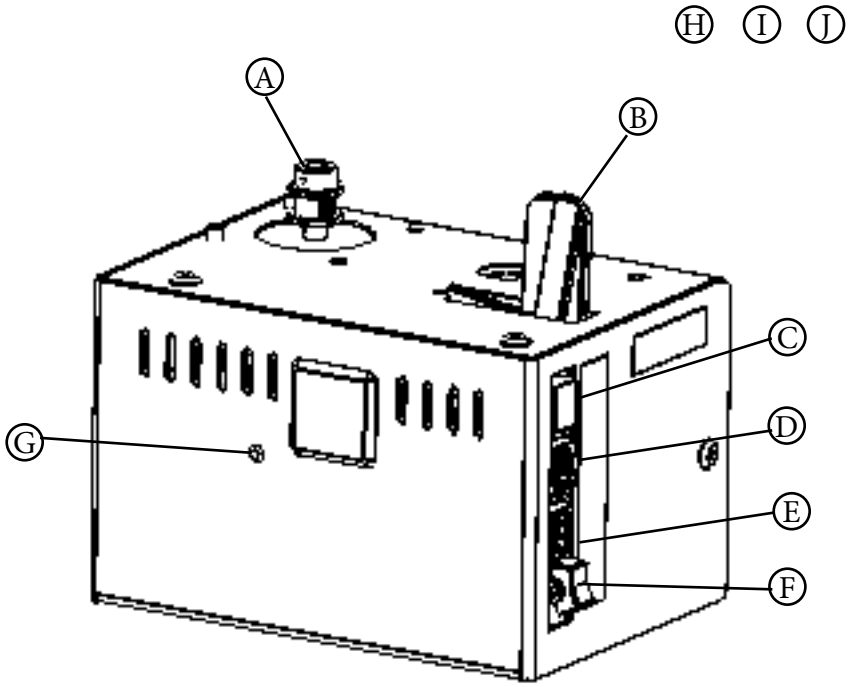
76 Definitions

***77* Appendix C: Machine Type**

77 Selecting Machine Type

Getting to Know Butler

The Black Motor Box



A. Y-motor pulley
This is used to control the front to back movement of the machine.

B. X-belt engaging lever
This is used to engage or disengage the white x-belt. Set the lever to the right when using robotics, or set it to the left when doing free motion.

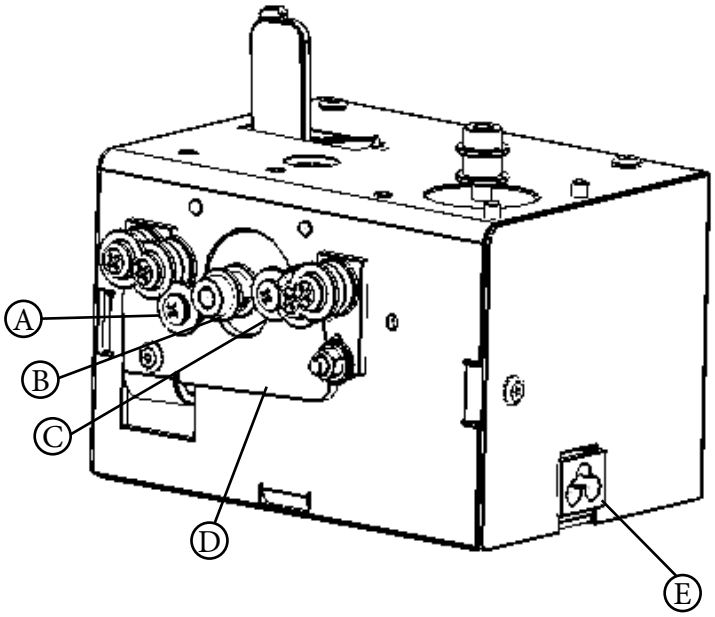
C. HandleBar port
The HandleBar port is only used on machines that do not have QuiltEZ electronics. Activates stitch regulation and needle up from the handlebars automatically.

D. Remote port
The Remote port is used with machines that do not have QuiltEZ electronics and will connect directly into the display or hub.

E. Stitcher Box port
The Stitcher Box port is used with machines that use QuiltEZ electronics. Cables coming from this port will go to the Robotics port on the control box at the back of the machine.

F. Power switch
The power switch is used to power the motor box on or off. Flip the switch in the up position for on, or the down position for off.

G. LED light port
The light behind this port will blink when the power is on and the software is running properly.



A. X-belt bearing A
Helps keep the x-belt secure.

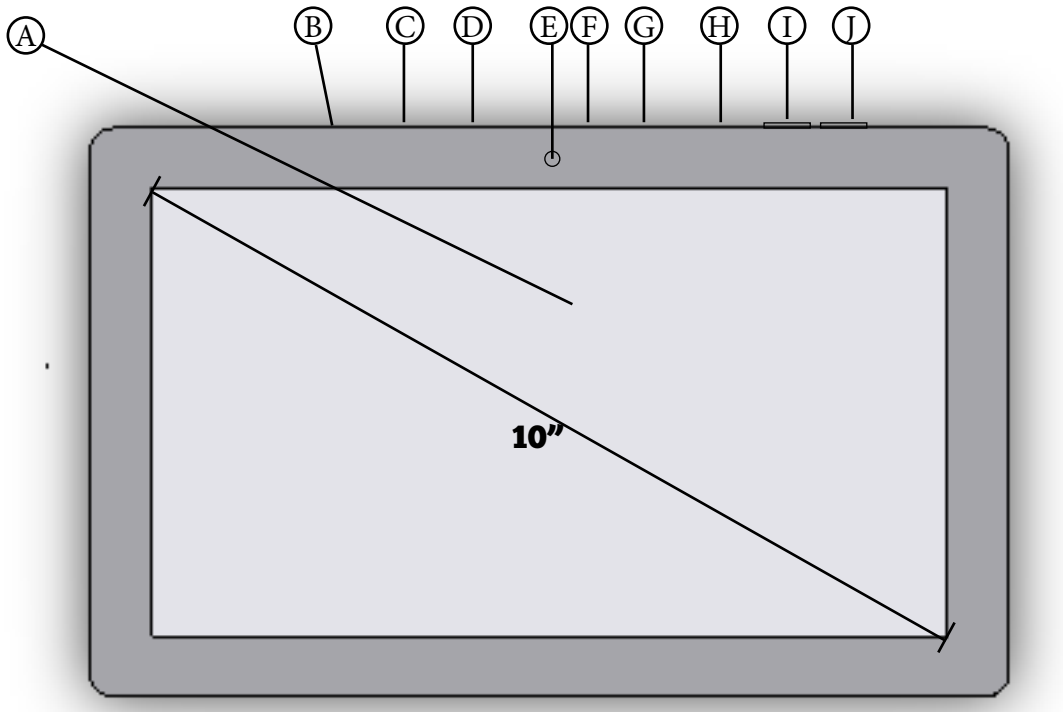
B. X-belt pulley
This is used to control the left and right movement of the machine.

C. X-belt bearing B
Helps keep the x-belt secure.

D. Locking arm
The locking arm keeps the x-belt secure when the locking lever is engaged or releases tension on the belt when the locking lever is disengaged for free motion.

E. Power supply port
The power supply port is where the power cable connects to provide power to the motor box.

The 10” Android Tablet



A. Touch screen display
This area of the tablet is where you touch to interact with objects on the display.

B. TF port
The TF port is where you can insert a TF card or a micro-SD card for additional storage.

C. Headphone jack
The headphone jack allows you to connect an external audio device such as a pair of headphones to listen to the system audio.

D. Host port
The primary input. Allows information to come into the tablet. Use this port when connecting the micro-USB cable coming from the hub.

E. Front facing camera
Allows the user to take images. Not used with the Butler system.

F. USB port
A micro-USB port. Not used with the Butler system. Can be used as an alternative charging method.

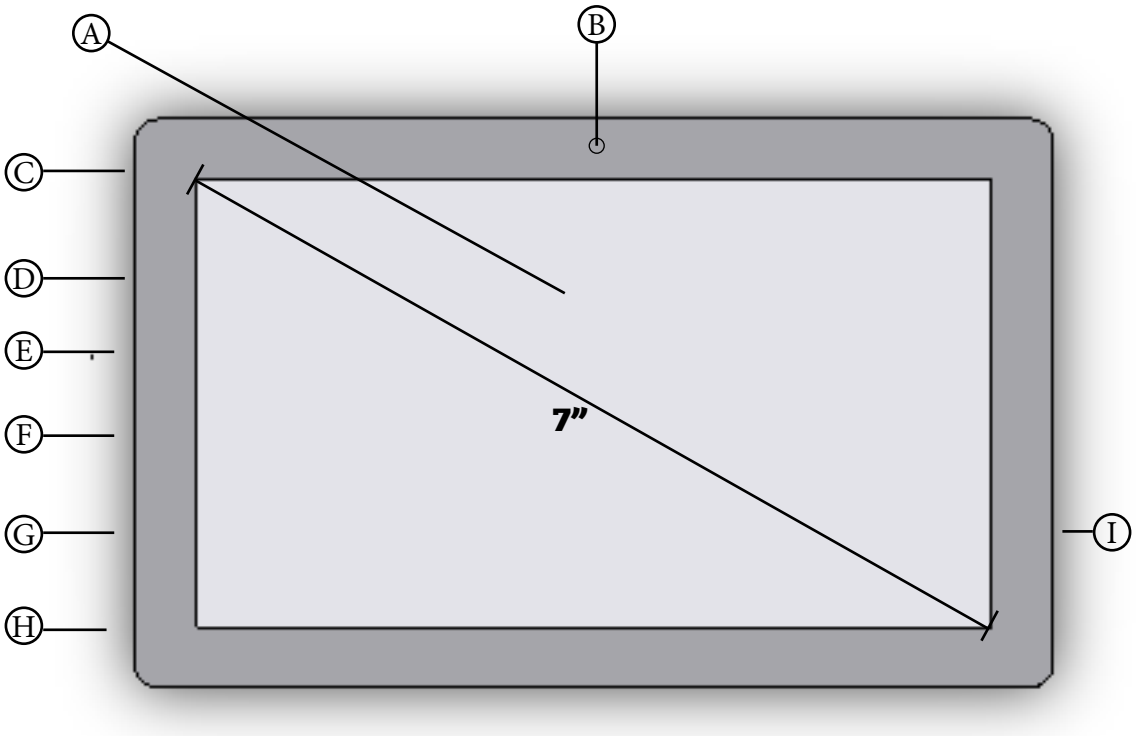
G. HDMI port
Allows connection to display what is on the tablet to an external display device. Requires a mini-HDMI cable. Not used with the Butler System.

H. DC 5V
The primary charging source. Connect the DC cable coming from the hub into this port to charge the system. The tablet will only charge if the machine is powered on for machines with QuiltEZ electronics, or if the motor box is powered on for robotics only systems.

I. Power/Sleep button
The power/sleep button allows you to put the display into a low power sleep mode, or turn the tablet off completely. **The tablet must be powered off last.** If it is receiving a charge from the machine or motor box, it will power back on and drain the battery.

J. Escape button
The escape button allows you to close programs running on the tablet. This feature is locked in the PerfectStitch software so you don’t loose your progress.

The 7” Android Tablet



A. Touch screen display
This area of the tablet is where you touch to interact with objects on the display.

B. Front facing camera
Allows the user to take images. Not used with the Butler system.

C. Power/Sleep button
The power/sleep button allows you to put the display into a low power sleep mode, or turn the tablet off completely. **The tablet must be powered off last.** If it is receiving a charge from the machine or motor box, it will power back on and drain the battery.

D. Volume control button
The volume control button allows you to adjust the levels of the system sounds. Tap the top of the button to increase volume, or tap the bottom of the button to decrease volume.

E. Headphone jack
The headphone jack allows you to connect an external audio device such as a pair of headphones to listen to the system audio.

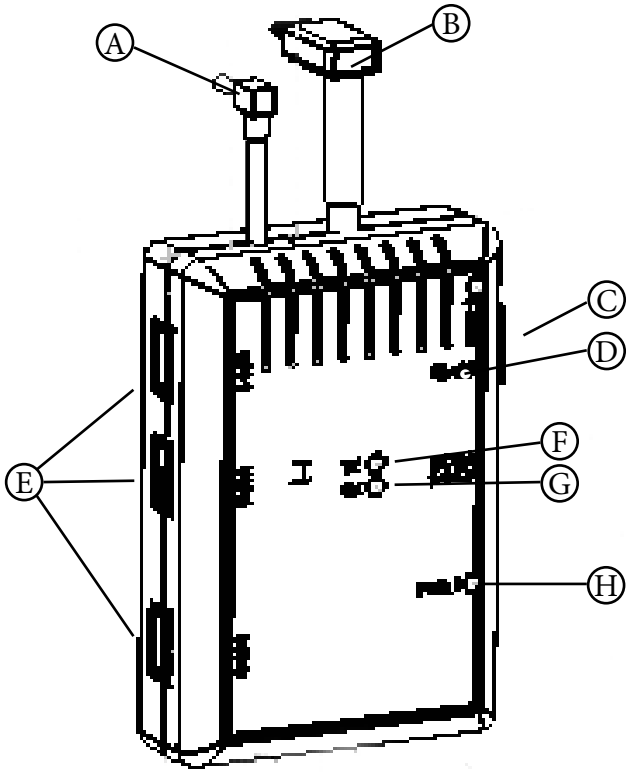
F. HDMI port
Allows connection to display what is on the tablet to an external display device. Requires a mini-HDMI cable. Not used with the Butler System.

G. USB/Host port
The primary input. Allows information to come into the tablet. Use this port when connecting the micro-USB cable coming from the hub.

H. TF port
The TF port is where you can insert a TF card or a micro-SD card for additional storage.

I. DC 5V
The primary charging source. Connect the DC cable coming from the hub into this port to charge the system. The tablet will only charge if the machine is powered on for machines with QuiltEZ electronics, or if the motor box is powered on for robotics only systems.

The Android Hub



A. DC cable
Used to charge the tablet. Plug into the DC 5V port on the tablet.

B. Micro-USB cable
Used to control communication between the Butler system. Plug into the Host port on the tablet.

C. RJ-45 Connection
Port for the Network style communication cable. This will connect to either the motor box or the machine depending on the machine.

D. Power 2 indicator light
This light will illuminate when the hub is receiving power from the robot or machine depending on the setup. If this light is off, the tablet will not receive a charge.

E. USB ports
Allow for a USB flash drive to be connected to the tablet. Insert a flash drive into any of these ports to import purchased patterns.

F. Transmitting indicator light
This light will blink whenever the tablet is attempting to send information.

G. Receiving indicator light
This light will blink whenever the tablet is receiving information.

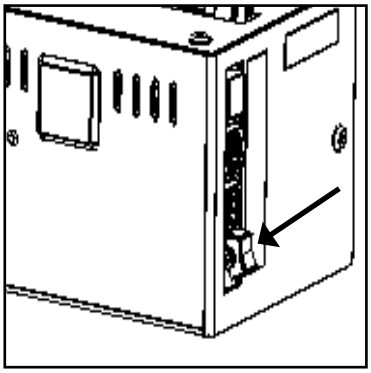
H. Power 1 indicator light
This light will illuminate when the hub is registering power from the tablet. The tablet must be powered on and the micro-USB cable must be in the host port in order for this light to illuminate.

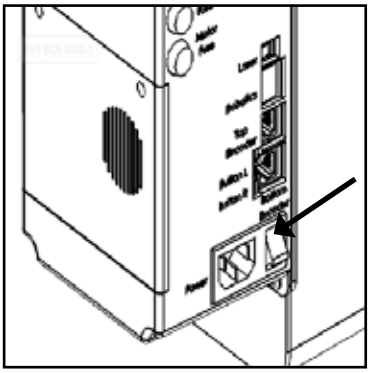
Powering On/Off

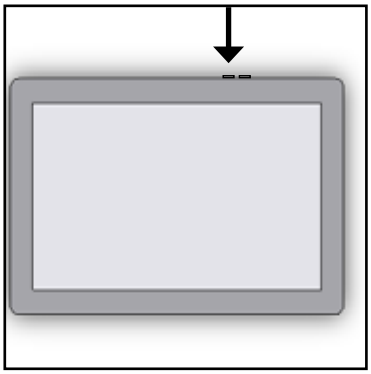
This guide assumes that installation has already taken place. Please refer to your model specific installation guide for information on installing the Butler system.

There are two variations for powering the system on. Use these steps when powering off to avoid communication issues. Power off in the same order.

If the tablet is not powered off last, it will still receive a charge from the machine or robot and will not power off. This will cause the battery to drain, and be dead the next time you try to power on.

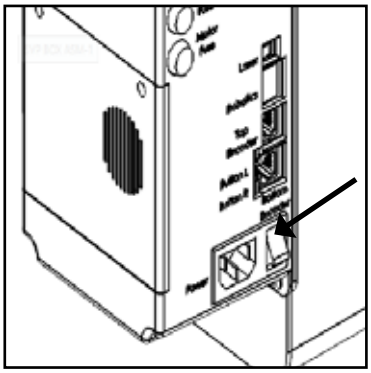


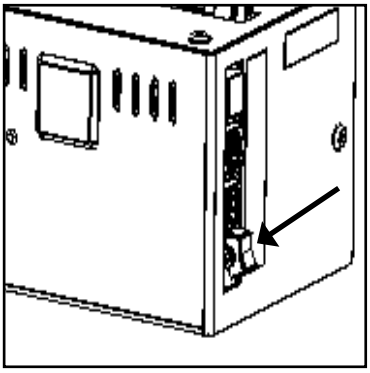


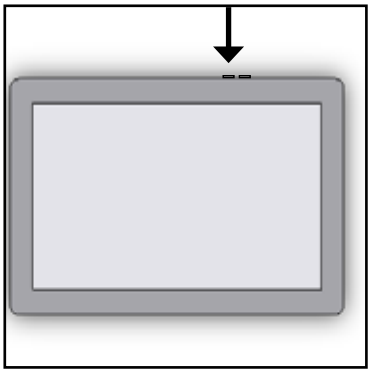


For setups using the Stitcher box port:

1. Power on the motor box
2. Power on the machine (image not representative of all machines)
3. Power on the tablet







For setups using the Remote port:

1. Power on the machine (image not representative of all machines)
2. Power on the motor box
3. Power on the tablet

Disengage for Free Motion

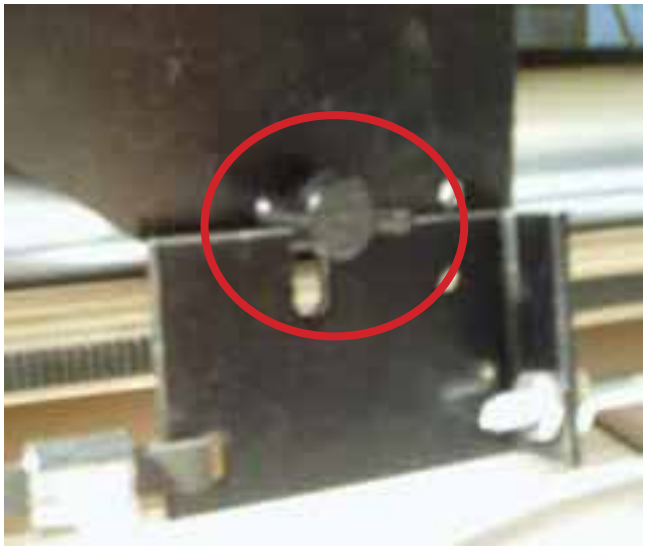
In order to start free motion quilting, the belts will need to be disengaged, or there will be too much resistance, and free motion quilting will be more difficult.

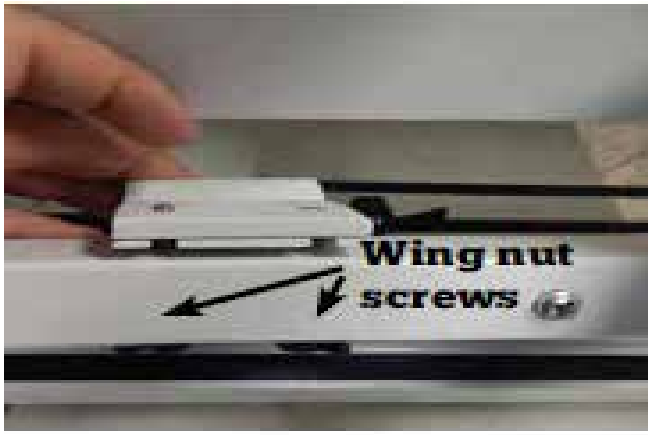
In order to disengage the x-belt, move the locking lever away from the edge of the motor-box. Pull the large lever back then simultaneously push the small lever forward to unlock.

In order to disengage the y-belt, loosen the wing nut located on the carriage bracket. The Phoenix frame will require the two wing-nut screws to be loosened in order to disengage.

Once both belts are disengaged the machine will be ready for free motion quilting.

Do not forget to reengage the belts before using the Butler robot again.





Navigating the Android Tablet

By default the system will open the PerfectStitch program automatically. The escape button and the back arrow are also locked, so that you do not accidentally exit your work in progress.

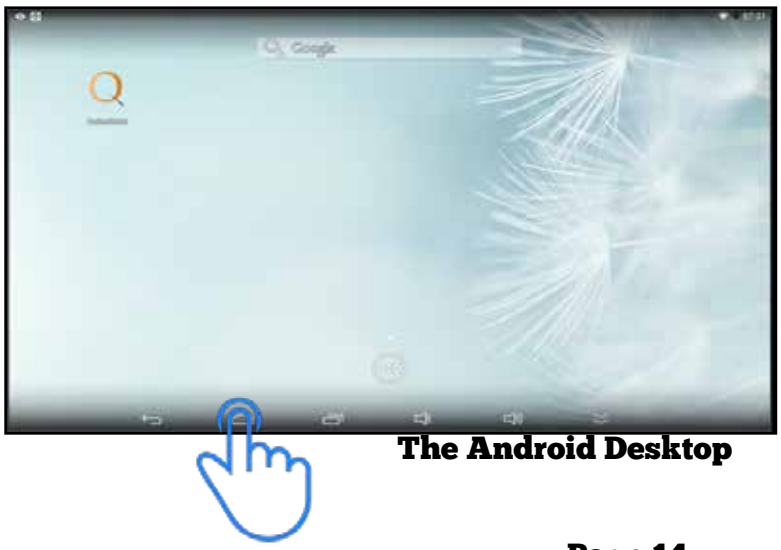
Note: Users with PerfectStitch regulation will see the PerfectStitch screen upon startup, while users with robotics only will see the robot screen (displayed to the right.)

Getting to know the Android buttons

Located at the bottom of the screen are the Android function buttons. These icons allow you to navigate the Android tablet as well as control system volume.

The Back Arrow will exit currently open programs. This has feature has been disabled in the PerfectStitch application to make sure that your work is not accidentally lost, but will work in all other applications.

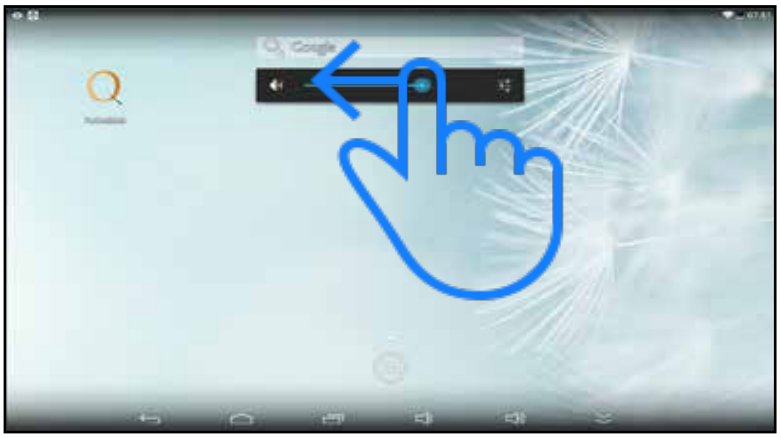
The Android Home icon will suspend the current application and take you to the desktop. Work will not be lost when you suspend PerfectStitch and return to the desktop. Like with a PC the desktop is your "home" location. From here you can access other areas of the tablet, open applications from shortcut icons, or brows the web. For more on the desktop see page 13.



The Android Desktop

The Overview icon allows you to see and manage the open applications. Open applications appear as minimized square tiles. If you want to open an application in the list simply tap on its tile. Holding your finger over one of these tiles will allow you to close the application by selecting "Remove from list" or view the App info. Conversely you can swipe tiles off the screen to close them. 10" models require you to swipe up or down, while 7" models require a left or right swipe to close applications. 10" models also allow you to close all applications at once if you select the Close All icon . It is wise to manage how many applications you have open at any given time. Too many open applications could potentially slow the system speed. To exit the overview screen tap anywhere on the screen or select the Back Arrow or Android Home icon.

The Volume Decrease button will bring up the volume control slider. You can lower the volume of the system sounds by tapping the Volume Decrease button until the levels are where you want, or drag your finger on the slider to the left.



The Volume Increase button will bring up the volume control slider. You can raise the volume of the system sounds by tapping the Volume Increase button until the levels are where you want, or drag your finger on the slider to the right. Selecting the Advanced Settings icon will allow you to adjust the volume of notifications. Drag your finger on the second slider to control the volume levels for notifications.

The Hide icon will hide the Android buttons for a full-screen view. Hiding the Android buttons is not recommended.

If you ever find that the Android buttons are missing, simply slide up from the bottom center of the screen with your finger to bring them back into view.

Slide from the bottom of the screen to make the Android buttons reappear.

Getting to know the Android desktop

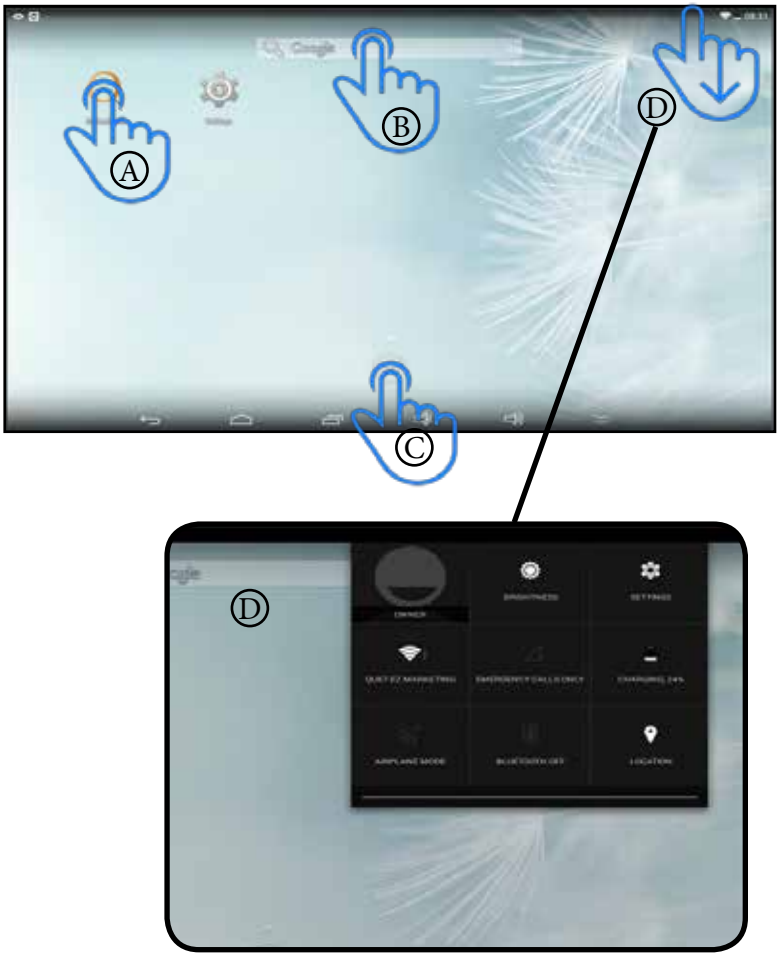
The Android desktop is where you can access many of the Android's features quickly.

A. Tap shortcut icons to open that application.

B. Tap the Google search bar to start an instant Internet search in the Browser.

C. Tap the Application icon to view all of the applications on the tablet (located at the top right corner for 7" models).

D. Slide down from the top right corner of the screen to gain instant access to select settings like Wi-Fi or to view the battery status (Slide up from the bottom right corner on 7" models).



Adding a shortcut to the desktop

You may want to add shortcuts of the applications to the desktop to make them quicker to access.

1. From the desktop Tap the Application icon to view all of the applications on the tablet (located at the top right corner for 7" models).

2. Press and hold your finger over the icon of the application that you wish to create a shortcut for.

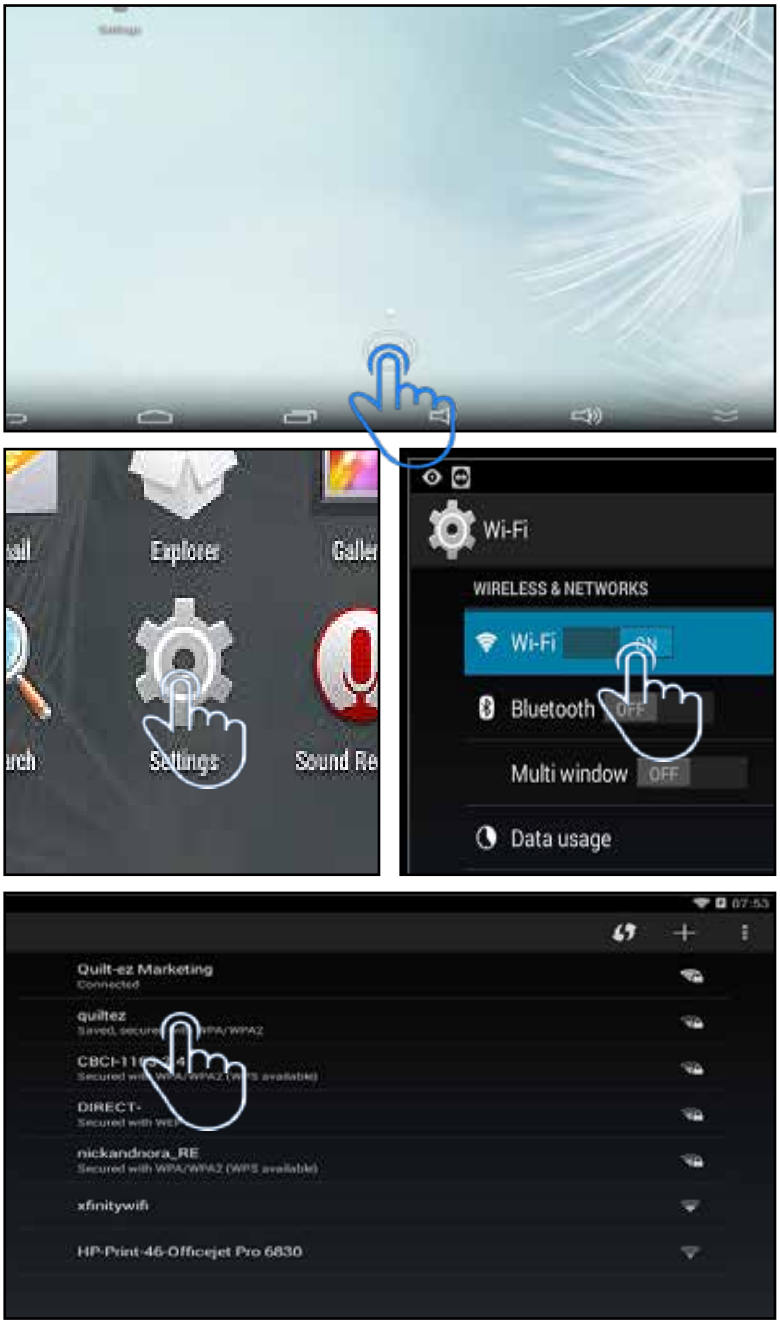
3. Drag your finger where you would like the icon to be placed on your desktop.

4. Release the icon to place the shortcut on the desktop.

Connect the Android tablet to Wi-Fi

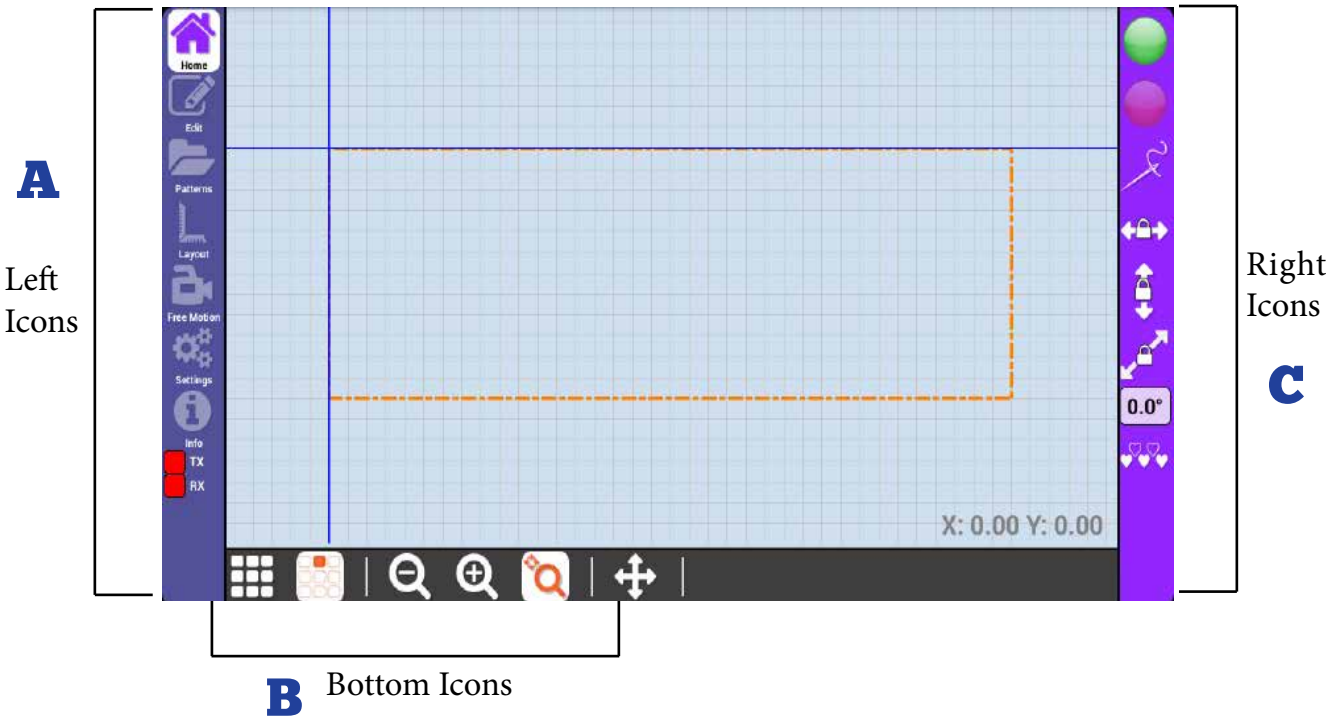
Connecting the tablet to Wi-Fi carries with it many benefits such as being able to connect to the Internet and download patterns, (Note: only pattern that are not zipped or compressed can be downloaded via the tablet) or to be able to connect directly to support technicians.

1. From the desktop Tap the Application icon to view all of the applications on the tablet (located at the top right corner for 7" models).
2. Select the settings application.
3. Make sure that Wi-Fi is set to on.
4. Select your router from the list and enter the security password for your Internet (either set yourself or given to you by your Internet service provider).



Getting to know the Butler PerfectStitch Program

Overview of the Screen Layout



A The left icons are used for main navigation.

B The right icons correspond with the currently selected tool on the left.

C The bottom icons are always available from any pattern view screen and allow you to customize how you view what is on the screen.

Butler Home

Start and Stop Butler, Set Stitch Regulation, Belt Locks, Nest

Go/Stop

The green Go button will engage the Butler robot and start following the pattern.

Select this to trace or stitch the pattern after edits have been made.

The red Stop button will immediately stop the pattern and return you to the pattern display screen.

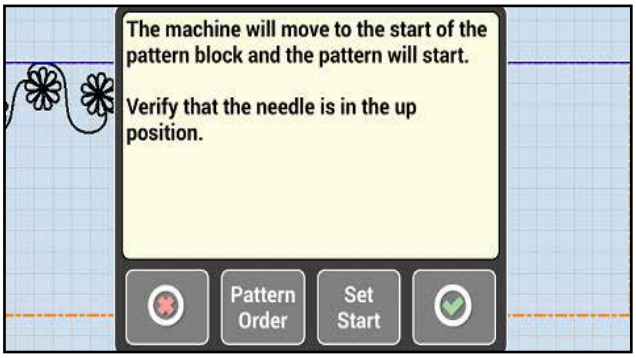
Select this to stop a currently running pattern if you need to make changes to the pattern or settings.

Stitch Controller (Not highlighted)

How to trace a pattern (no stitching)

If you press the Go button when the Stitch Controller is not highlighted, then your machine will run the pattern without stitching.

This can be used to make sure that the robotics will run the pattern properly and in the space designated.



How to stitch a pattern

If you press the Go button when the Stitch Controller is highlighted, then the stitch regulator will be engaged and the machine will stitch during the pattern trace.

A notification asking you to verify that the needle is in the up position will appear and display four options.

Note: In order for the robotics to stitch properly, the proper Machine Type must be set. (See Appendix C)

Cancel will return you the previous pattern view screen.

Pattern order will let you set the order each pattern will be stitched. (By default, the patterns are stitched in the order they are added.)

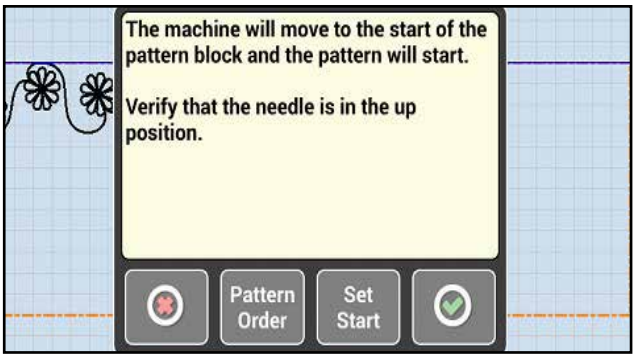
This feature can be used when there is more than one patten on the quilt area. When selected Pattern order will bring up a screen that will allow you to determine the order

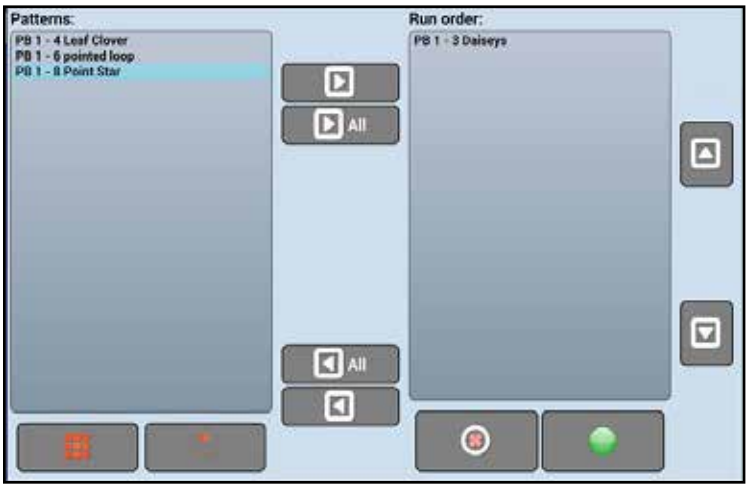
The list on the left displays the order that the patterns were loaded onto the quilt area, while the list on the right displays the new order in which the patterns will run.

Tap a pattern and use the arrows in the center to move patterns back and forth between two lists. All will move all the patterns between lists in the order that they are displaying.

You have the option to move patterns from the left to the right in the order that you want, or you can move all the patterns to the right list and then use the up and down arrows on the right to set the order. Select the pattern that you want and move it up or down the list using the up and down arrows. The order that the patterns are displayed in from top to bottom is the sequence in which they will run.

When you have patterns in the order that you want select the green Go button. If you change your mind, you can always use the red X to cancel. Canceling will keep the current run order.





Tips!

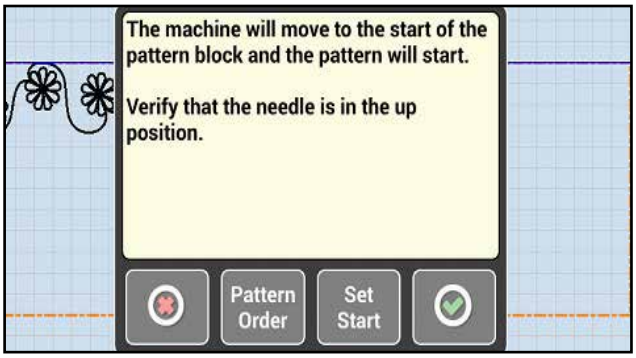
- If you have multiple pattern boxes you can use the pattern view icons to show all patterns, or only those in the currently selected pattern box.
- Whatever patterns are remaining in the left list will be added to the sequence in the order that they are in following the patterns in the right list.

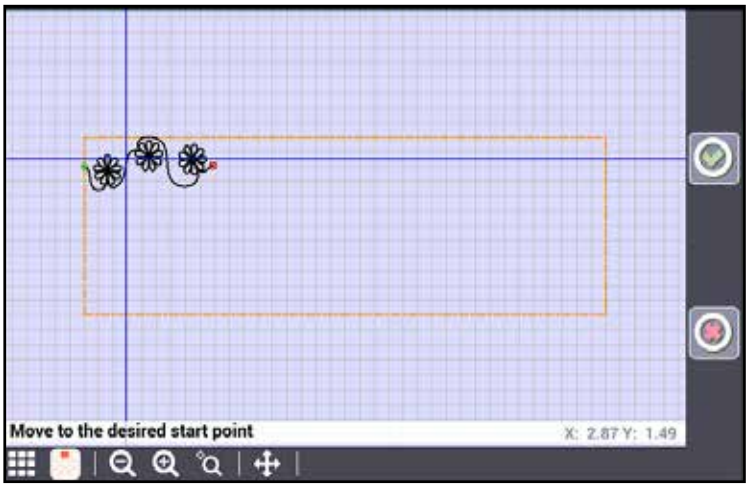
Set Start allows you to set the start position on the pattern. This is useful if you need to resume a pattern that has only been partially stitched, such as a pattern that had a thread break.

When you select the Set Start button the screen will display a prompt to "Move to the desired start point." This is the point where you want to start the machine again. For a thread break it is recommended to go back over about three of the last stitches to ensure that there are no gaps.

When the needle of the machine is over the location that you wish to start the pattern again, Select the Green check-mark to start the pattern. You will be prompted to pull up the bobbin thread as if starting from the beginning.

Select the Red X to cancel if needed.



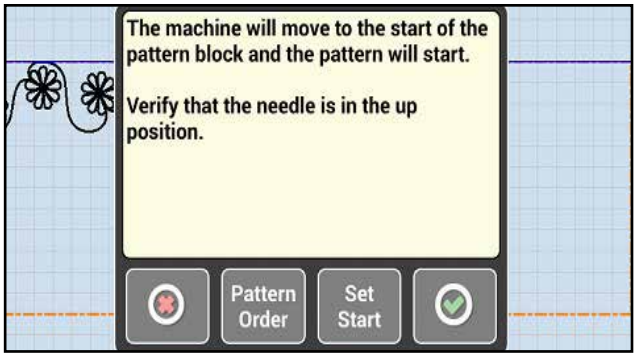


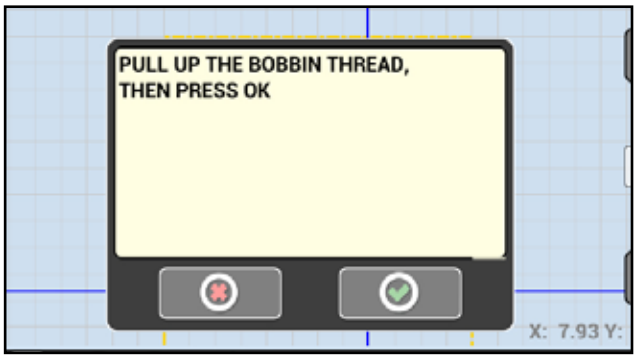
Tips!

- If two lines are very close together on the screen the machine will pick the line it thinks it is closer to. Zoom in to make sure you are on the correct line.
- Start about three stitches back to ensure that no gaps are left in your patterns.

The green check mark will always begin the pattern from the start point. To save time you may want to move your machine close to the start point so it does not have to move as far.

After you press OK, your machine will reposition the needle to be over the start position of the first pattern on the pattern box and perform a needle up. A notification will prompt you to pull up the bobbin thread. Press Cancel to return to the pattern view, or Press OK to have the machine begin following the pattern.

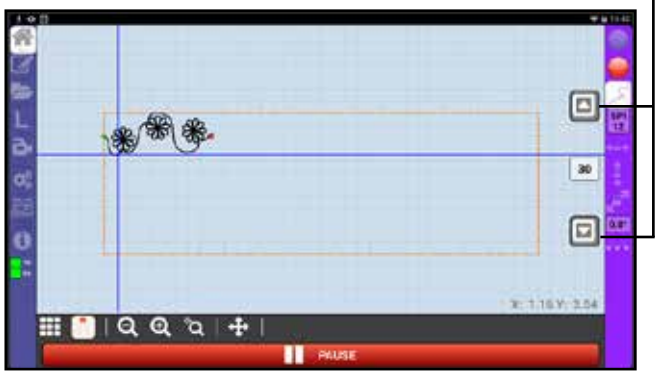




The speed adjustment arrows allow you to control how quickly the machine will run the pattern.

While the machine is following the pattern, you can adjust the speed by using the up and down arrows on the right of the screen. The lower the speed, the slower the system will move. *Be careful as in some cases moving too fast can cause thread breaks and irregular stitches.*

Speed Adjustment Arrows



During the trace, you may need to stop your machine. (For example, if you have a thread break or your bobbin runs out of thread.)

Pause will stop the machine where it is without loosing progress in the stitching.

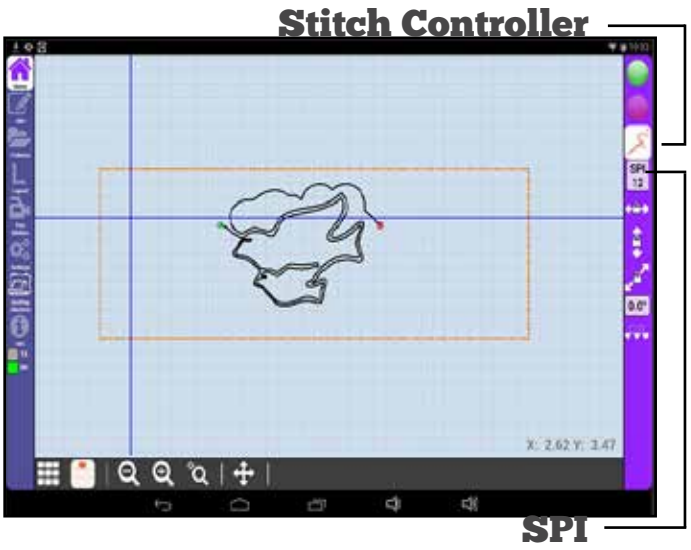
Start will start the running the machine again after being paused.

If you had a thread break, press thread break and follow the on-screen prompts to begin where the thread break left off. For best results, it is recommended to resume the trace just before the thread break.

Stitch Controller

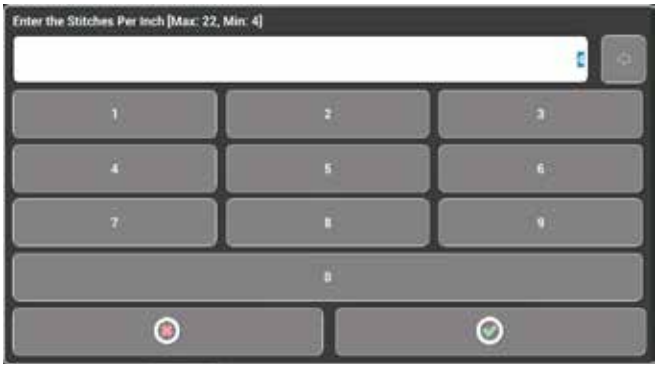
Highlight the stitch controller icon before selecting the green Go button to have the machine stitch the patterns loaded on the display

Selecting the green Go button without highlighting this icon will have machine trace the patterns loaded on the display



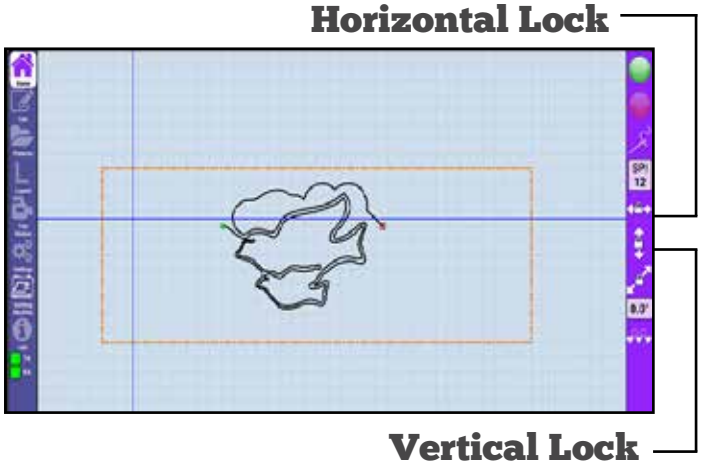
SPI

The SPI icon will only display on machines with QuiltEZ electronics or PerfectStitch regulation. This gives you direct control over the stitches per inch from the tablet interface. SPI can be changed before the pattern starts, or while it is paused, but not while it is running.



Horizontal Lock

Horizontal Lock will lock the horizontal, or left and right, movement of the carriage. This can be used, to help you draw straight horizontal lines.



Vertical Lock

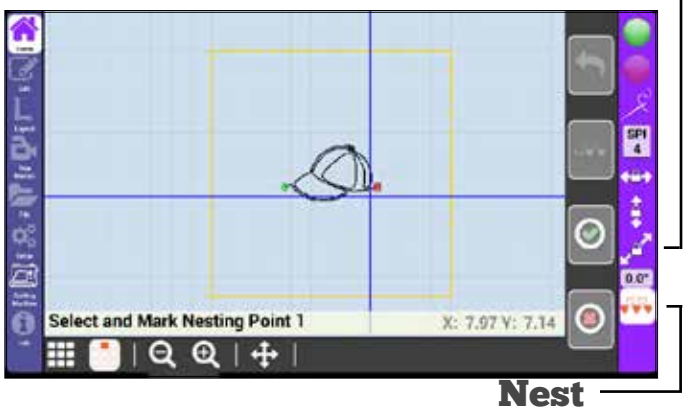
Vertical Lock will lock the vertical, or front and back, movement of the carriage. This can be used to help you draw straight vertical lines.

Tip!
Use locks to help sew the sides of the quilt.

Angle Lock

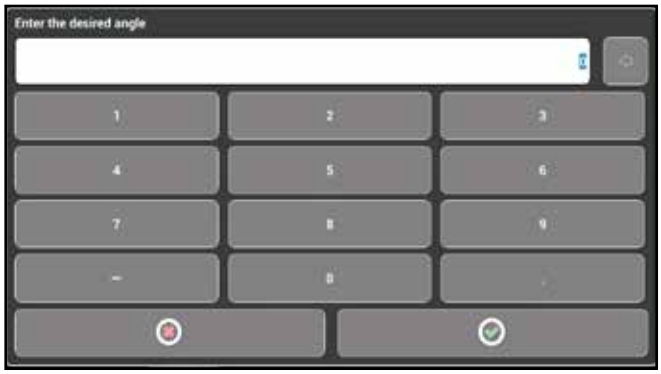
Angle lock allows you to set any angle, out of 360 degrees, that you would like to lock the machine.

Touch the 0.0° icon to set the angle at which you desire to lock the movement of the machine. (Note: negative values will create inverse degree angles.)



Nest

Nest allows you to nest a pattern below a stitched pattern on your quilt area. This involves rolling your quilt to make room for the new pattern.



How to nest a quilt pattern

1. To nest your pattern, Follow the on-screen prompts and move your machine to a point near the bottom of the pattern, mark the quilt top with fabric chalk or something similar, then, with the needle over that mark, press the green check mark.
2. Once the location has been marked, roll your quilt. Ensure the marked point remains on the quiltable area and does not go up into the roller bar.

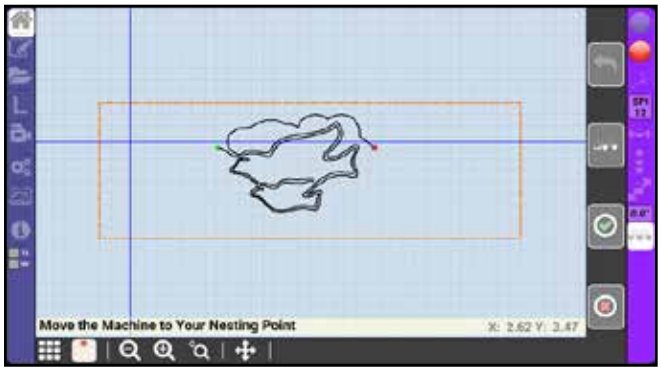
Tip!
Try dropping your needle in the fabric instead of marking the nesting point this way the machine is already at the nesting point when you roll the quilt.

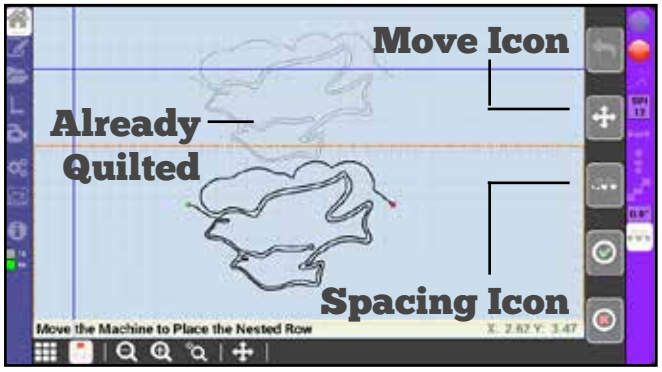
3. Once the quilt is rolled, follow the on-screen instructions to realign your machine with point marked in step 1, and press the green check mark.

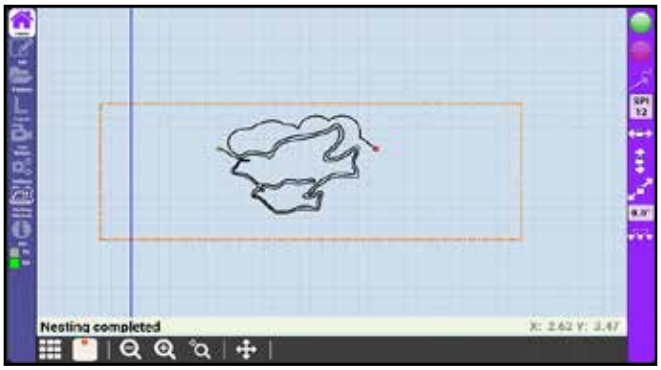
4. You should now see two patterns on the screen. The light gray patterns represents the pattern you have already quilted on your quilt top. You can nest the pattern in one of two ways. Either press the Move icon and use the machine to space the new row, or Select the Spacing icon and set the desired vertical distance between the quilted pattern and the to-be quilted pattern. Then, press the check mark button.

5. Press the green Go button on the home screen to stitch the pattern as normal.

See Appendix A for more help with nesting.







Tips!

- If you have set spacing with either Repeat (pg. 14) or the Pattern Layout Helper (pg. 19) the spacing set in those functions will carry over, and you will not need to change spacing.
- Make sure your nesting point does not get rolled up so far that you cannot move the machine to it after you roll the quilt.

Edit

Add, remove, and edit patterns for a layout.

Repeat

Repeat allows you to repeat the currently selected pattern vertically and horizontally. Repeated patterns are automatically merged into a single pattern.

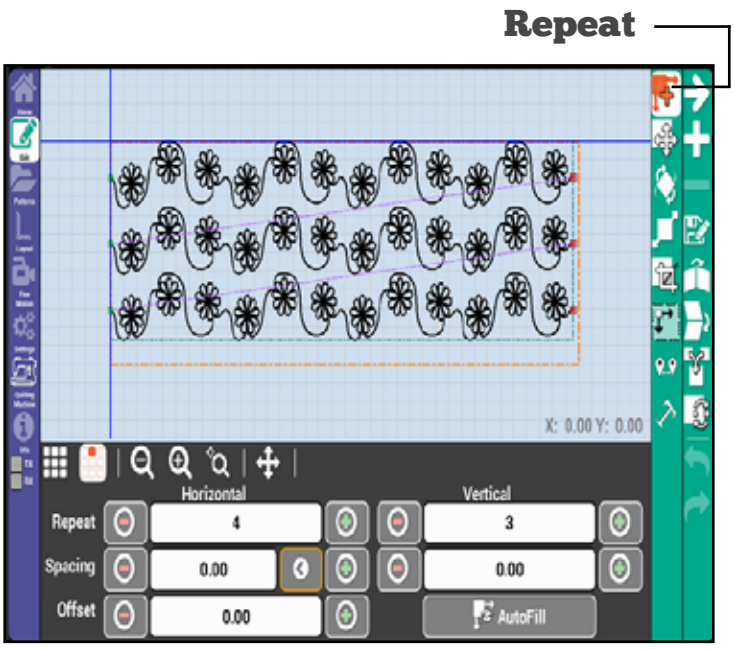
Use the plus and minus icons to increase and decrease the number of vertical or horizontal repeats.

Spacing will allow you to change the either the horizontal or vertical space between patterns. Increasing horizontal spacing will break up continuous patterns and insert a jump stitch. Entering a negative value for spacing will allow you move the pattern up inside the previous row or overlap horizontally with the last pattern.

Offset will change the horizontal alignment of even rows. As this value is increased the even rows will be indented by as many inches as is set. Use this feature if you want to indent even rows like the first line in a paragraph.

Auto-fill will automatically fill as many of the pattern, in its current state (size and all other edits), as possible into the pattern box. Spacing and offset are taken into account when using Auto-fill.

Select this after edits have been made to fill the box. The size of the pattern will determine how many repeats are made.



Tips!

- Tapping any of the white boxes will allow you to set specific values.
- The left arrow next to the horizontal spacing will take the spacing back to zero.
- Spacing and offset values are set in inches.

Move Pattern

Move will allow you to position the currently selected pattern anywhere you want it on the quilt area.

The arrows will move the currently selected pattern incrementally left or right.

The arrows will move the currently selected pattern incrementally up or down.

The arrows will align the selected pattern with either the left or right edge of the quilt area.

The arrows will align the selected pattern with either the top or bottom edge of the quilt area.

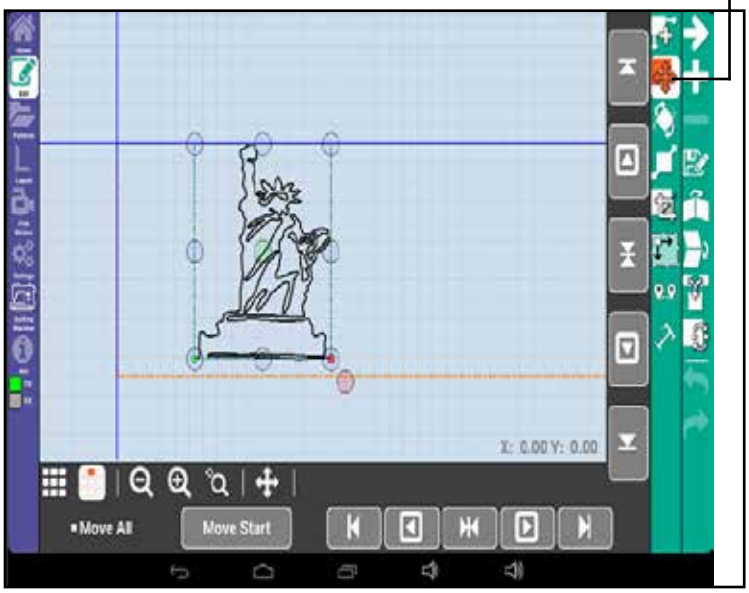
The arrows will center the selected pattern horizontally or vertically.

You can also touch and drag the center circle of the currently selected pattern to quickly move it.

Check move all to move all of the patterns and the pattern box at once.

Move start will move the start point (green dot) to where the cross-hair is on the screen, or where the needle is on the quilt. Use this if you want the pattern to start at a certain location on the quilt.

Move Pattern



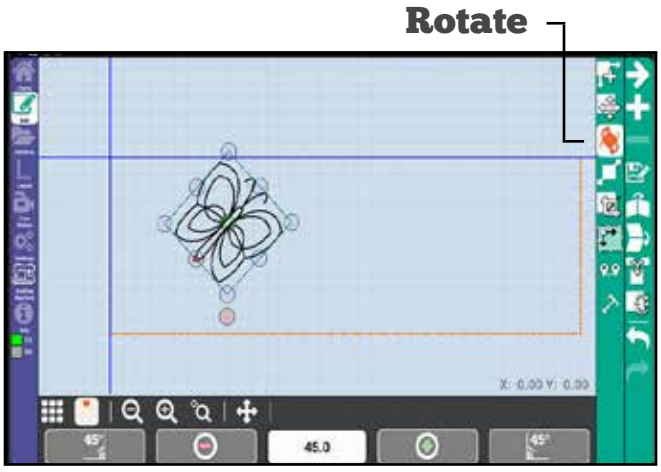
Tips!

- Use the centering icons in tandem with the alignment arrows to move patterns to different locations.
- Use settings to change the move increments, or how far the pattern will move with each press of the move arrows. (See page 39)
- Keep your screen clean. The oils from your finger can cause the screen to be unresponsive when moving patterns.

Rotate

Rotate allows you to rotate the currently selected pattern. Press the 45° icons to rotate left or right, press the plus and minus to rotate by single degrees, or press the numbers in the center to input a specific degree of rotation.

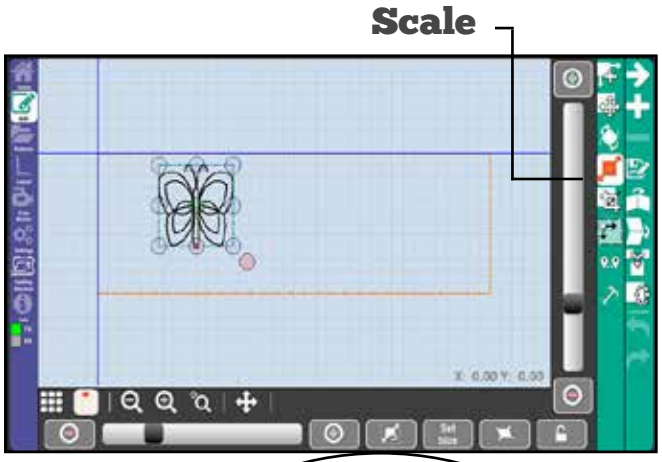
Alternatively, you can touch and drag the red circle at the lower right of the selected pattern.



Scale

Scale allows you to change the size of the currently selected pattern.

You can scale the pattern by using the plus and minus buttons or the scroll bars in the scale menu. You can scale the pattern by pressing the Set Size button, then enter the width and height when prompted, or touch and drag the corners of the currently selected pattern.



Smart Scale will automatically scale the pattern to as large as possible while staying inside the pattern box. Use this to fill the entire box.

Morph allows you to fill any four sided pattern box with the selected pattern. The pattern will distort to fill the pattern box if the pattern box isn't exactly square.

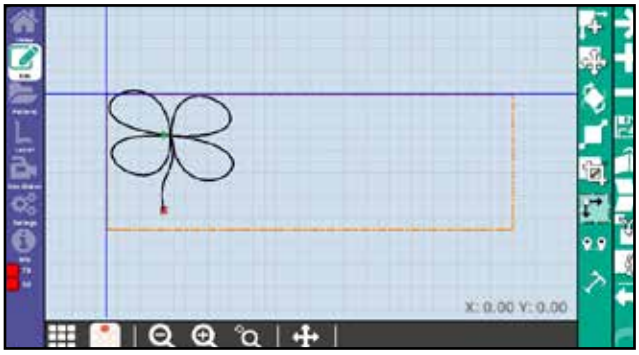
The lock icon will constrain pattern proportions while scaling. This does not apply to Morph.

Tips!

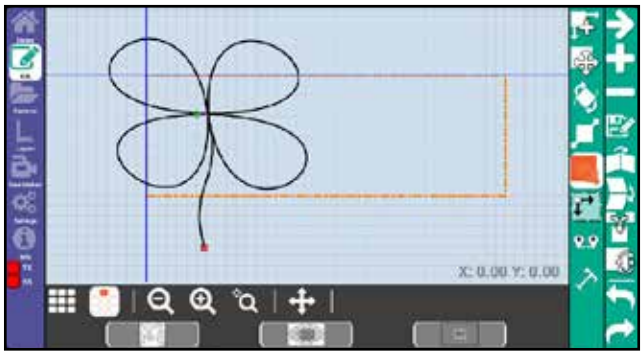
- Use Morph when you are trying to fit an irregular box.
- If the pattern box is irregular Smart scale will try to fit as much of the box as possible while keeping proportions.
- Use the two point method when creating pattern boxes to use with Smart Scale

Crop

Crop allows you to remove sections of a pattern, the crop feature offers three different ways to crop: Traditional Crop, Appliqué Inside, and Appliqué Outside.

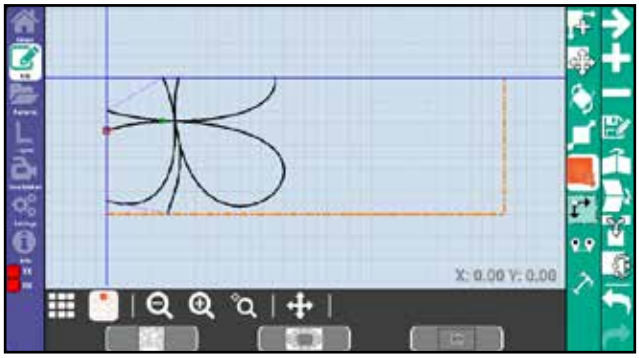


Traditional Crop



Traditional Crop will remove any excess portions of the pattern that are outside of the pattern box.

This can be used at the end of a quilt if you don't have enough space for a full pattern, and don't want to resize the pattern. You can instead cut everything outside of the space off.

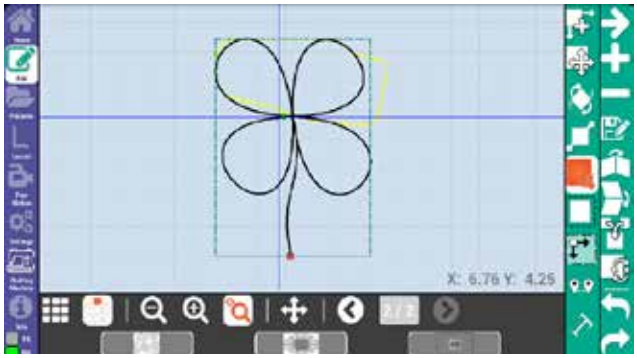


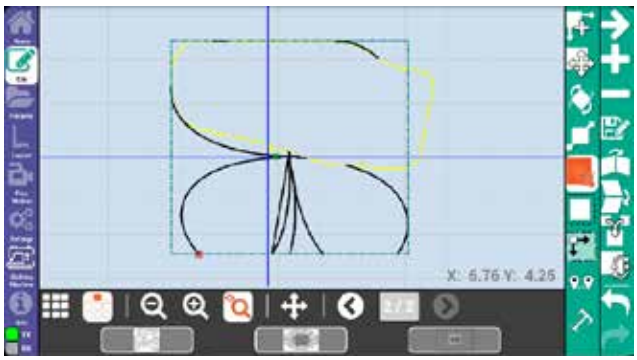
Appliqué Inside

Appliqué Inside requires at least two pattern boxes or a free motion appliqué and will crop everything inside the set pattern box.

You can use this feature with an appliqué using the free motion on the left tool bar or with.

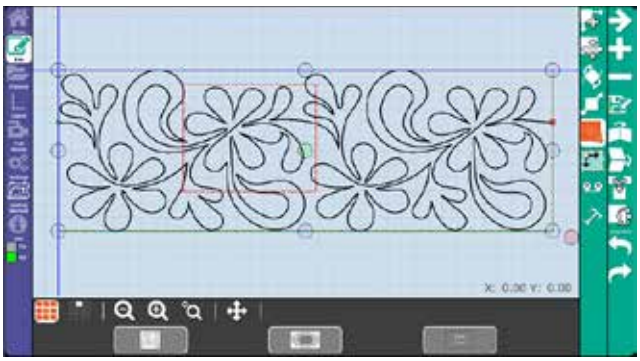
For more information on Free motion turn to page 36.

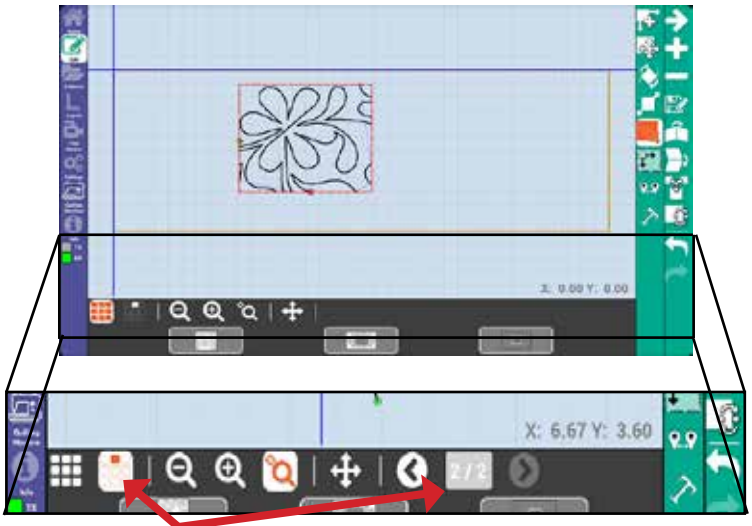




Appliqué Outside

Appliqué Outside also requires at least two pattern boxes or a free motion appliqué and will crop everything on the outside of the set pattern box.



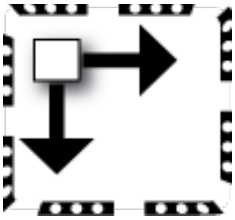


Use the single pattern box view, and the arrows to switch between pattern boxes.

Tips!

- Use Show All Icon when making a second pattern box to see the pattern while you create a new pattern box. (See Add Pattern box on pg. 31)
- Make sure that you have the pattern box with the pattern box with the pattern selected in order for an appliqué crop to work properly.

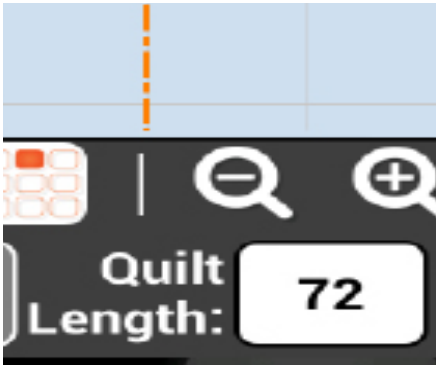
Pattern Layout Helper



This feature will help you prepare your quilt. It will allow you to set how large of a quilt and how many rows you would like. The patterns loaded will auto scale to fit the parameters you set.

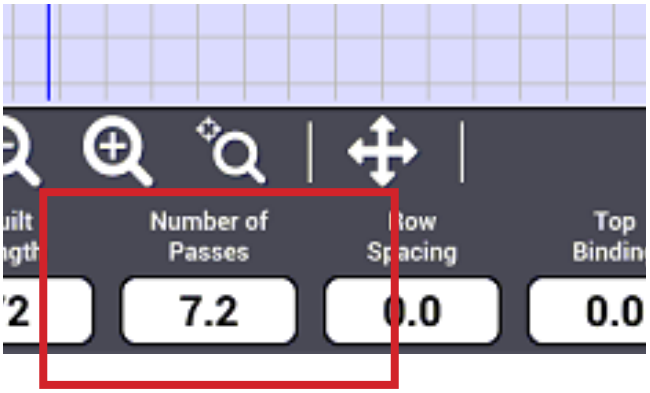
Note: This will not replace nesting, and it cannot be used to stitch out an entire quilt.

Quilt Length



Quilt length lets you set the size of the quilt for sizing purposes. Set this value to the length of the quilt you are working on.

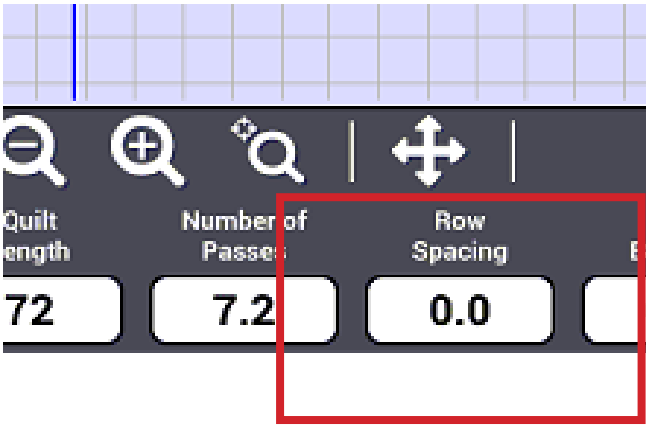
Number of passes



This number shows the number of passes required to reach the quilt length with the currently sized pattern. Changing the number of passes will automatically change the pattern height. Use this feature if you want to control the number of passes on the quilt.

If you want a whole number for this value set it after setting row spacing.

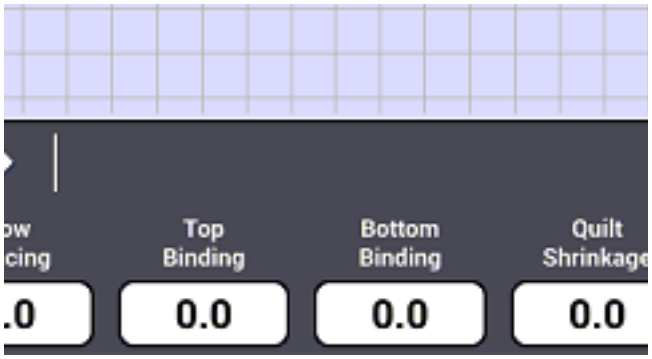
Row Spacing



Sets the spacing between rows, this function is also the equivalent to the spacing feature in the repeat patterns and nesting screen. *Note: the row spacing you set here will transfer over to Repeat and Nest.*

Binding

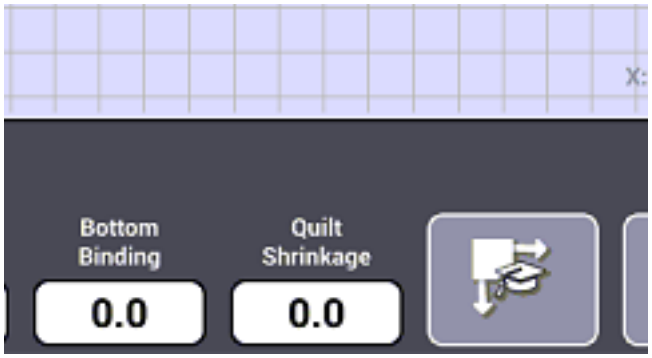
Binding lets you account for the space at the top and bottom of the quilt. If you are setting a half inch binding at the top and bottom set this value to 0.5” for each.



Quilt Shrinkage

Quilt Shrinkage is a value that accounts for how much the quilt is going to shrink when stitched. There is no hard and fast value.

This value is a best guess for how much the quilt will shrink. The thicker the padding the more the quilt will shrink.

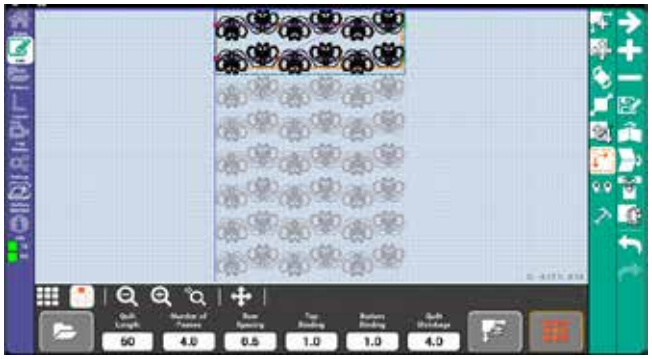


Auto Fill & Quilt Preview

Auto Fill will allow you to fill the pattern box or quilt area with repeats of the selected pattern. Use this feature if you have not already repeated the pattern and would like it to fill the pattern box.

Quilt Preview lets you preview the quilt design and how your patterns will look like all together. Subsequent patterns appear in gray as they are used for reference to show you what the passes and spacing will look like together. These gray spaces will not be stitched when the pattern is ran.

Auto Fill Quilt Preview

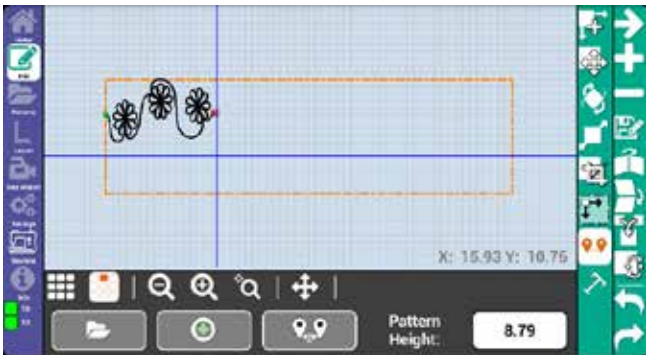


Point to Point

Point to Point gives you the option to customize the pattern placement by selecting key points on your quilt.

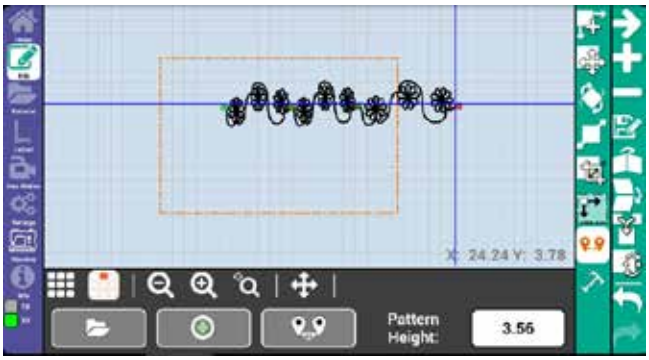
In order to use Point to Point a single pattern must be loaded onto the quilt area.

Point to Point can be used to create interesting borders or diagonal designs.



Add Control Point

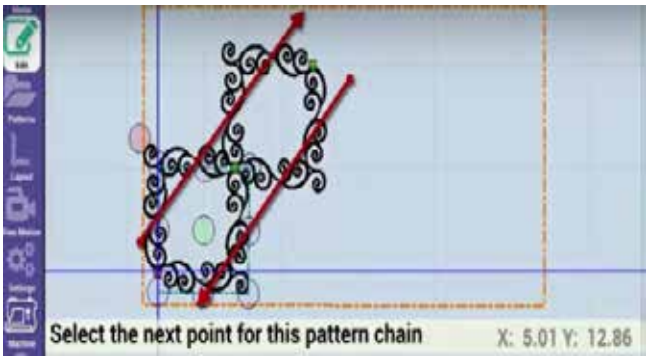
Use the Add Control Point icon to set the start point for the pattern. Do not worry about where the original pattern is, once you set the start point with the Add Control Point icon the initial pattern will disappear.



Move the machine to the place where you want your pattern to start. Set up the pattern height, and press the plus sign icon . Move your machine to point #2, press the Green plus sign icon , the pattern will scale it's width to the distance the machine moved.

You can also move up and down to run the pattern horizontally or vertically. Moving in a negative direction (up or left) will invert the pattern.

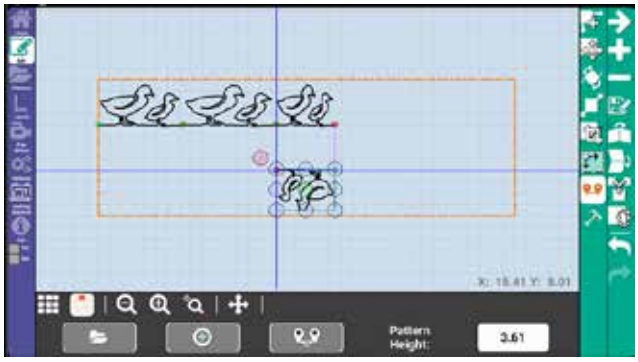
The file folder located on the bottom left of the display can be used to add a pattern, this is simply another way to add a pattern versus using the "Patterns" folder located on the left tool bar.



To create a diagonal pattern with Point to Point move set your first point then move diagonally upward, when you have the amount of boxes that you want come back down diagonally and set the control points at each of the stop points. (Shown above)

Reset Pattern Chain

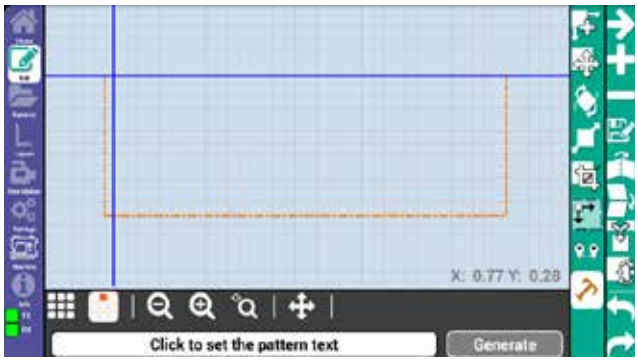
This feature breaks the link with the previously set pattern so you can set a new control point. Setting a new control point will allow you to start a new string of patterns.



Text Generator

This feature lets you create a pattern based on customized text.

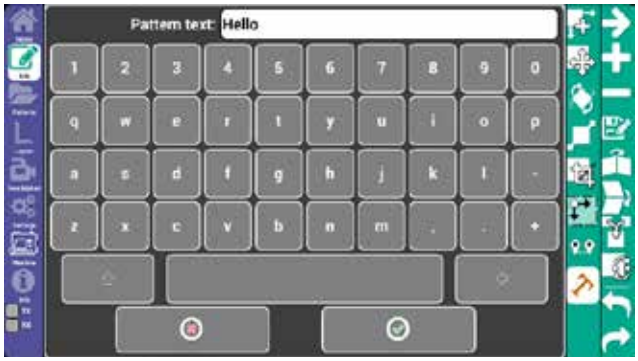
Use when you want to stitch a name or message.

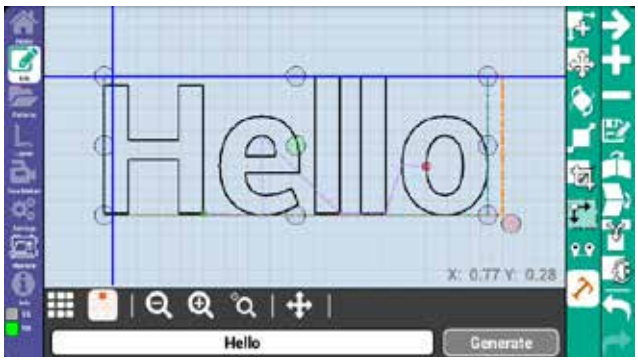


To make a text pattern simply click on the white text box.

Then enter the desired text using the on-screen keyboard.

Once complete click on the green check mark to load the digitized text pattern.





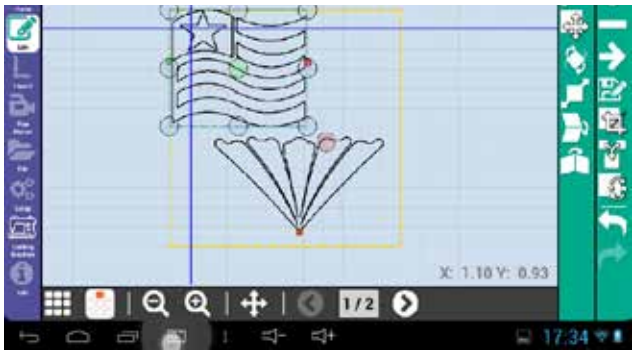
Next Pattern

Next will select the next available pattern. The patterns are selected in the order in which they are added to the pattern box.

You can also have multiple patterns within the same pattern box.

Alternatively you can tap the different patterns on the screen to switch between them.

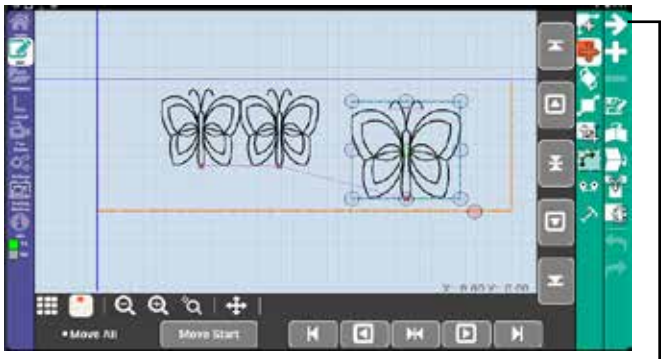
Next Pattern



Duplicate Pattern

Duplicate pattern will add an identical version of the selected pattern. Unlike a repeated pattern, this pattern is independent of the other patterns and can be edited freely.

Use this feature when you want to edit the same pattern independently from the others without needing to load the pattern again from the pattern screen.

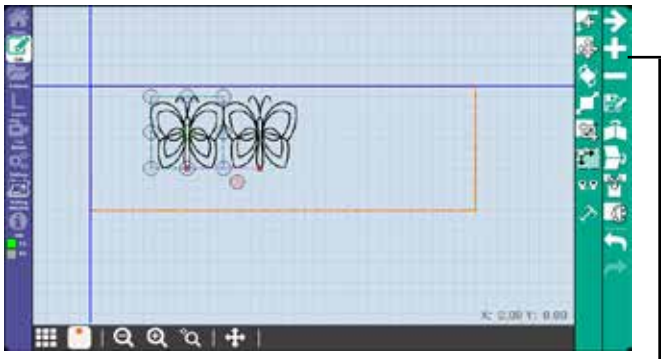


Duplicate Pattern

Remove Pattern

Remove pattern will remove the currently selected pattern from the pattern box.

No other tools can be selected when using the remove pattern tool. Tap the selected tool, or tap the edit icon again to deselect it.



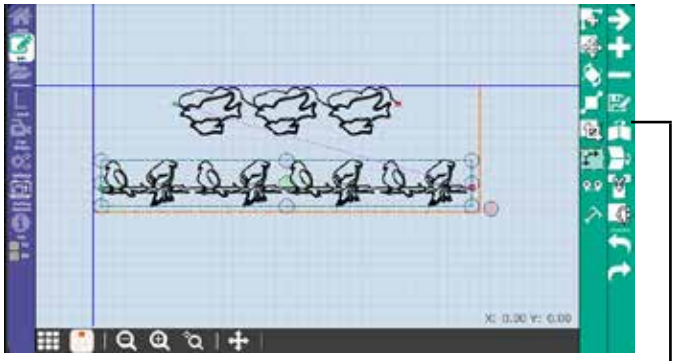
Remove Pattern

Save Pattern

Save allows you to save the currently selected pattern, and any changes you may have made, under a new name. **Saving a pattern with its original name overwrites the old pattern**. The pattern is saved under the "Saved" tag on the patterns list.

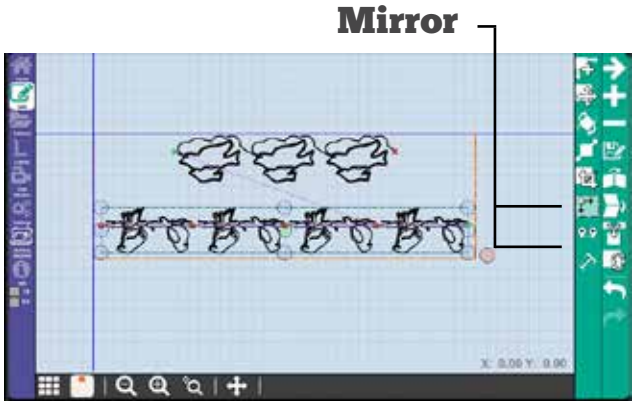
Saving a pattern will allow you to open the pattern with all the edits that you have made.

This can be useful when doing a lot of blocks with the same pattern. It makes it so you don't have to edit the pattern for each box. Open it as you would a normal pattern.



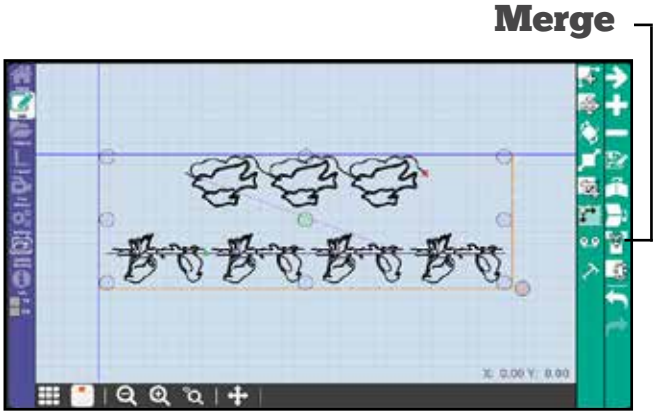
Mirror

Mirror allows you to flip the selected pattern vertically or horizontally. Use this when you want patterns to run the opposite direction.



Merge

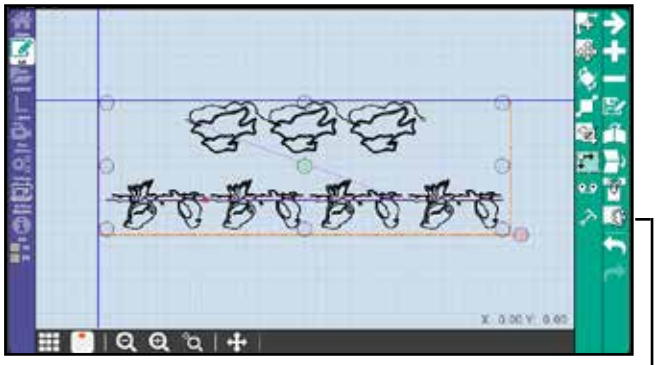
Merge allows you to merge all the patterns in the pattern box into one. This can be useful when saving a repeated pattern as a new, renamed pattern. Or if you want to edit all the patterns as one. Once merged a pattern cannot be unmerged without using the Undo button.



Reverse Start/ Stop Points

Reverse Start/Stop Points allows you to swap the start and end points of the currently selected pattern. This will reverse the direction in which the pattern is stitched.

This feature can be used to switch the start and stop points of the second row so that when the first row finishes stitching on the right it can drop straight down and start stitching right to left, instead of going all the way to the left and stitching to the right to save time.



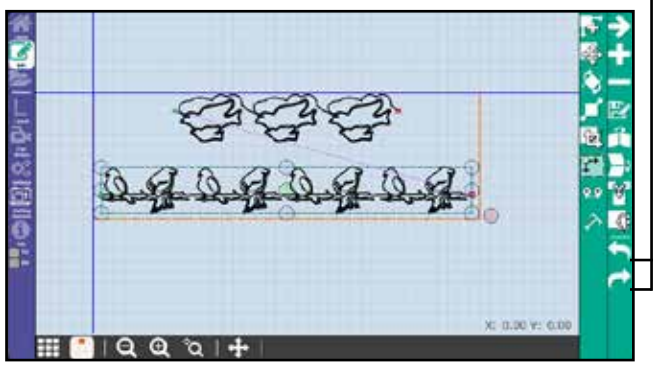
Reverse Start/Stop Points

Undo/Redo

Undo allows you to undo actions you take while designing your quilt, including moves, transformations, and repeats of your patterns.

Redo will restore any undone actions.

Undo/Redo

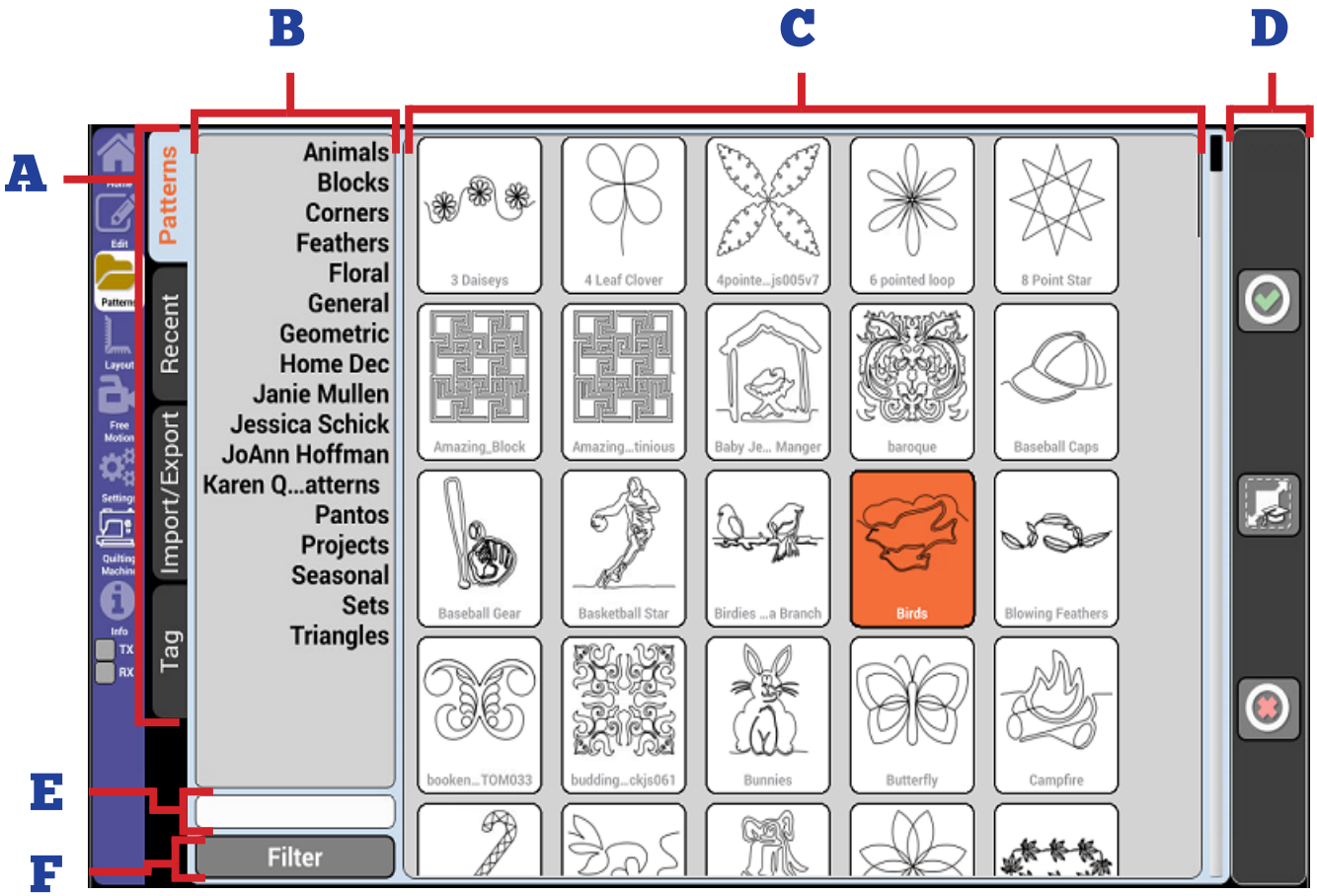


Patterns

Load patterns, import, export, or add a tag to patterns.

Patterns

From this screen you can select the patterns that you want to quilt.



A These tabs allow you to navigate the patterns section. Select a tab to go to that feature.

B This is the Tag section. Tags will allow you to search for patterns by narrowing the search by categories. When a tag is selected only patterns attributed with that tag will be shown. You can select multiple tags to further narrow down your search. Looking for floral blocks? Select floral to look at all patterns with the floral tag, and then select blocks to look at patterns with both floral and block tags. (See page 31 for more on tags.)

C This section of the screen allows you to select patterns. It shows you images of the patterns that are on the tablet to make selecting patterns easy. As you narrow down by tag, this section will display only patterns with the attributed tags. Slide your finger up and down to scroll through the patterns. Tap a pattern to select it.

D This section allows you to choose how the pattern will load onto the quilt area, or will allow you to cancel pattern selection. Select the green check mark to load the pattern on in its default format and size, select the Auto Scale icon to fit the pattern to the size of the quilt area or the pattern box, or select the red X to cancel.

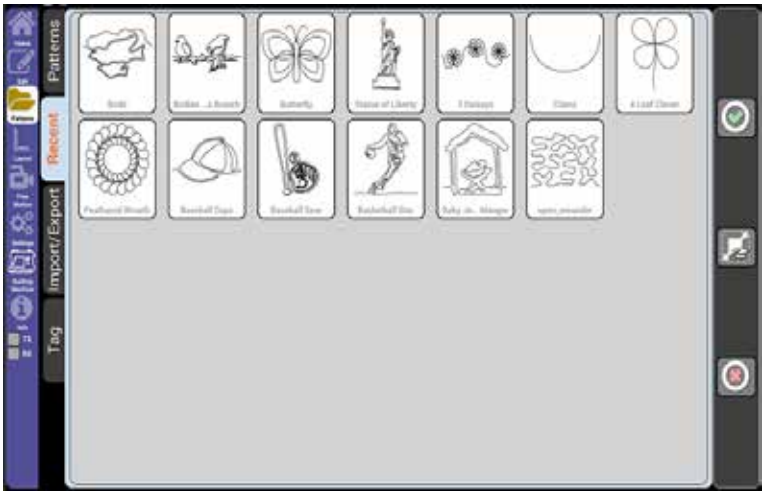
E This tool is the search bar. Select this box and a keyboard will come up that will allow you to search for patterns by name.

F Filter will allow you to clear any tag selections, and when selected will change the display to show all patterns again.

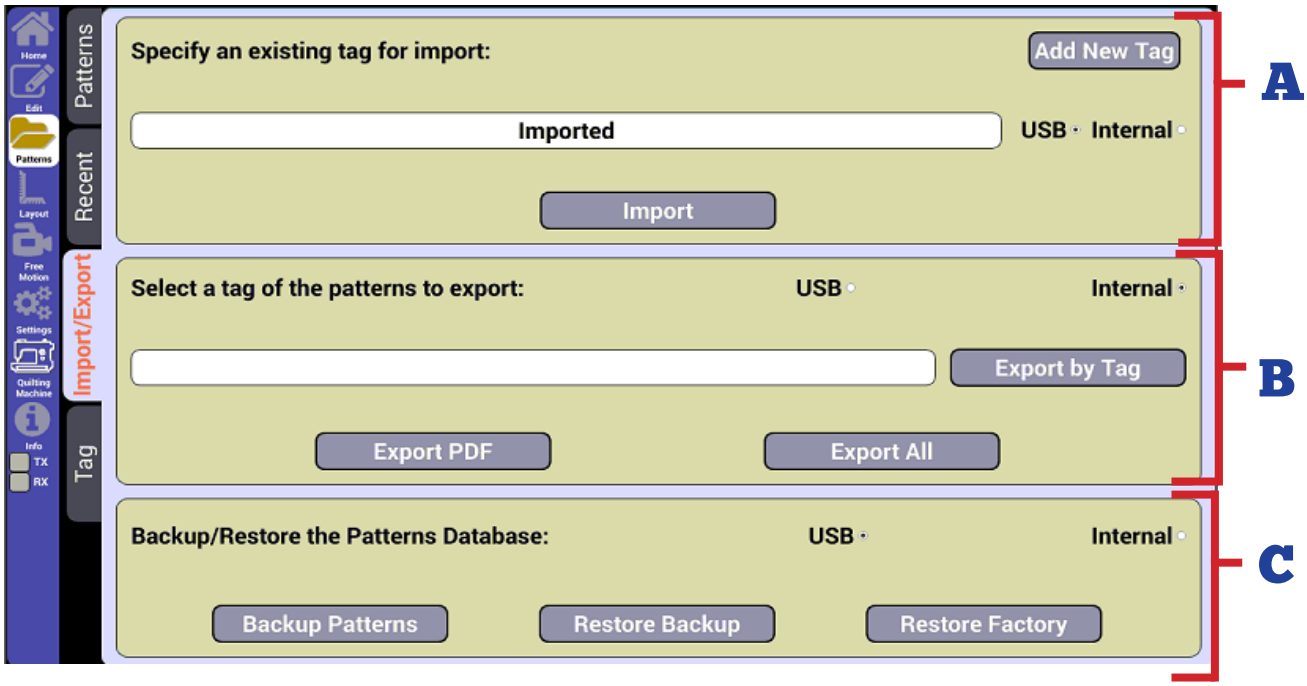
Recent

Recent will allow you to choose patterns that have been recently loaded onto the quilt area. Select these patterns as you would from the patterns tab.

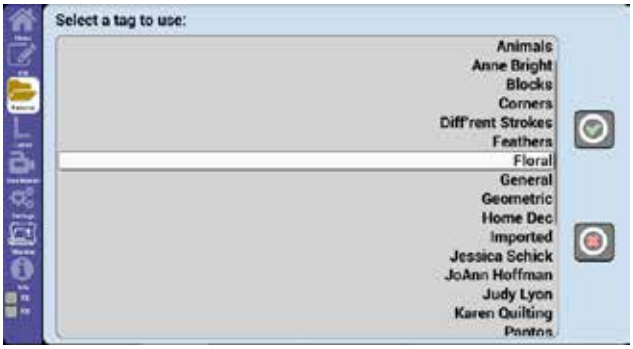
Use this feature to quickly find the patterns that you have loaded recently.



Import/Export



A The Import section is used to bring external pattern files onto the tablet.



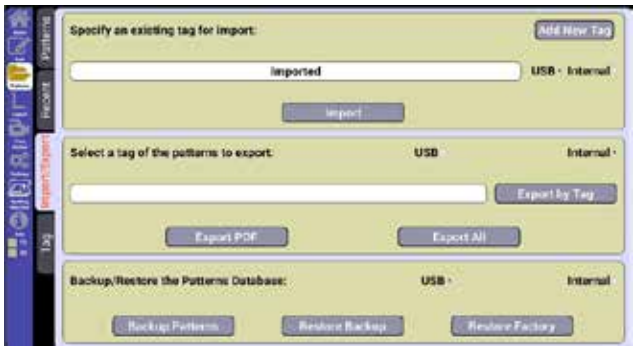
Begin by selecting a source to import from, either USB or Internal. After selecting a source you have the option to specify a tag for the pattern. The default tag is Imported. Tap the white box in the import section to select a tag.

You can also use the Add New Tag feature to create a new tag to add the pattern to.

Once you have specified a tag and source for the pattern, select the Import button. This will bring up a file explorer that will allow you to locate the patterns you wish to import. You can select as many patterns for import as you wish. Select the Green check mark to import the patterns. The file explorer will only display folders and readable pattern files.

Tip!
Press the green check-mark without a selection to import all patterns that are on the USB or tablet.

B The Export section is used to take patterns off of the tablet and put them onto a USB. This is useful if you want to take the pattern and edit it in a digitizing software like Quilt Manager. Select the Internal option to get started.

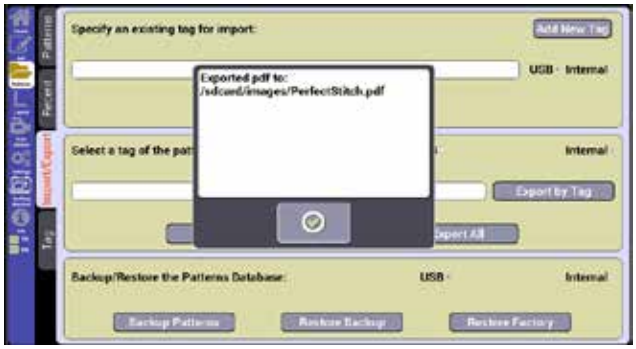


Export PDF

Export PDF lets you export all your patterns into a PDF file which can be saved to a USB Drive or the Internal memory of the Tablet. You can press Export PDF to generate a PDF with all the patterns but if you want to specify a tag select the white box and specify the tag before pressing Export PDF.

The PDF is stored on your USB drive in a folder that the software creates called 'images'.

This is a helpful tool if you would like to print out a list of your patterns. There are two ways of exporting the patterns you can do all of the patterns at once or you can have your patterns exported and saved by individual tags.



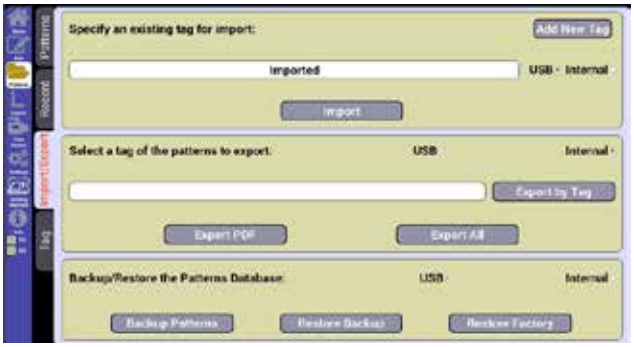
Export by Tag

Export by Tag Will export patterns of a certain tags to your USB Drive in the standard QCC format. To export by tag you have to select a tag. Tap the white box in the export section to specify a tag then select Export by Tag and follow the on screen prompts.

Export All

Export All will export all patterns to your USB Drive in the standard QCC format. Tap Export All and follow the on screen prompts.

The Backup and Restore section is used to save a database of your patterns or to restore lost patterns.



Backup Patterns

Backup Patterns gives you the option to backup the current patterns loaded on your display. This will create a database of all the patterns that are on your tablet. It can be saved to either the internal memory or to a USB. Creating a backup of your patterns is a good idea just in case you ever lose your patterns or break the tablet. It is recommended to backup your patterns often.

Restore Backup

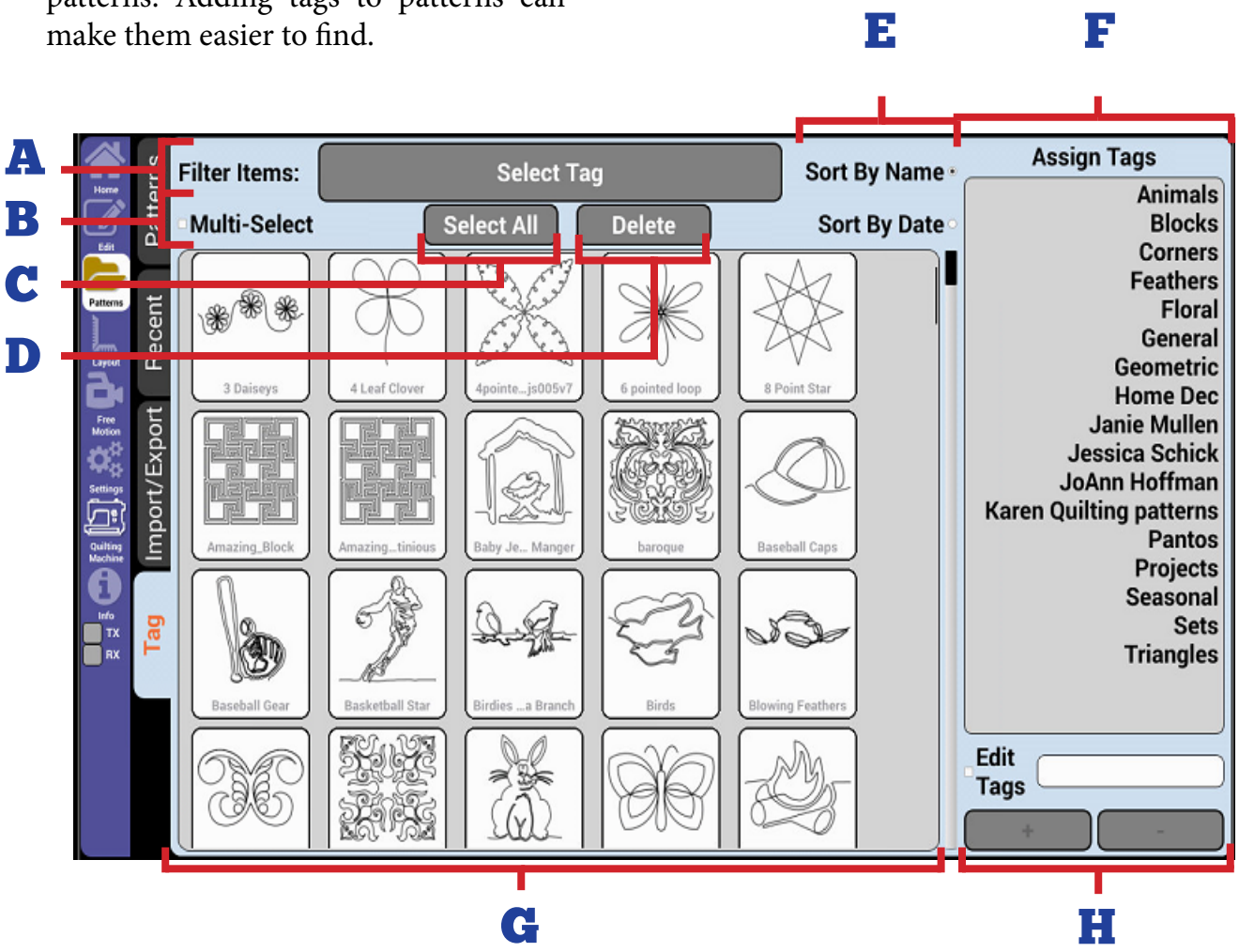
Restore Backup will allow you to restore the backed up database. Restore backup will erase the current database, so any patterns added after the restore will be lost.

Restore Factory

Restore Factory lets you restore your patterns to the original received pattern from the factory. Use this feature if you loose your patterns, and do not have a backup created. You will loose any patterns that did not come with the tablet.

Tag /Remove Patterns

This screen will allow you to attribute tags to patterns or delete tags or patterns. Tags are similar to an index for your patterns. Adding tags to patterns can make them easier to find.



A Filter Items allows you to narrow down your search by selecting tags. Press the Select Tag button and select the tag from the list. Press Select Tag again if you wish to add another tag to further narrow your search.

B When checked, Multi-Select will allow you to choose multiple tags at once to either add a tag, or to delete permanently.

C Select all will select all of the patterns that are displayed. If a tag is selected all the patterns with that tag or tags will be selected.

D Delete will allow you to remove selected patterns from the tablet. Use this feature with caution as any deletion is permanent and cannot be undone.

E Check one of the selections to either sort patterns by name or by the date that they were added.

F This section allows you to assign tags to the selected pattern(s). Assigned tags appear to be highlighted in white. Tap the name of the tag that you wish to attribute, or tap any highlighted tag to remove it from the pattern. When a tag is given to a pattern that pattern will show up when that tag is selected from the pattern menu.

G This section of the screen shows you images of the patterns that are on the tablet. As you narrow down by tag, this section will display only patterns with the attributed tags. Slide your finger up and down to scroll through the patterns. Tap a pattern to select it. You can only select multiple patterns if Multi-Select is checked.

H Edit tags allows you to add or remove tags from the tablet. To use this the Edit Tags box must be checked. To add a tag, enter the name in the white text box, and then select the plus sign. To remove a tag select it from the list, and then select the minus sign. Deleting tags will only remove the tag itself, all patterns attributed to that tag will remain on the tablet. Deleting tags cannot be undone.

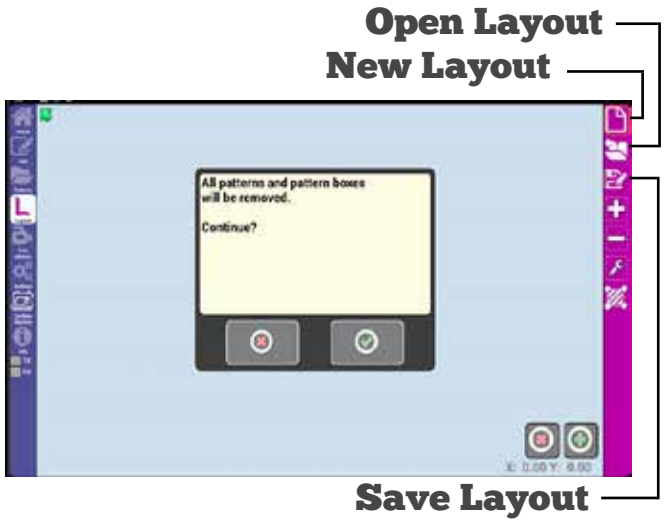
Adding tags can be useful if you want to have a location for a specific job or holiday. You could make a Christmas tag if you wanted a place for just Christmas patterns.

Layout

Create, save, and open layouts. Adjust quilt area and pattern boxes.

New Layout

New Layout creates a new, clear layout to which you can add patterns and pattern boxes. A layout is usually used to save all the work on your current quilt project. A layout consists of all pattern boxes, and patterns used in a project, and saves their relative size and spacing. Use this to start over from scratch.



Open Layout

Open Layout lets you open saved layouts which contain pattern boxes and patterns.

After opening a layout, you will be prompted to move the machine head to the top left corner of your quilt frame quilt area and press OK. (To keep the layout consistent, this home position should be the same position that was used for the layout when it was originally created.)

Save Layout

Save Layout lets you save the current layout. Saving a layout will save all of the patterns and pattern boxes in the current layout. (If you save the layout with it's old name, it will overwrite the existing layout file.)

Add Pattern Box

Add pattern box will add a new pattern box to the layout.

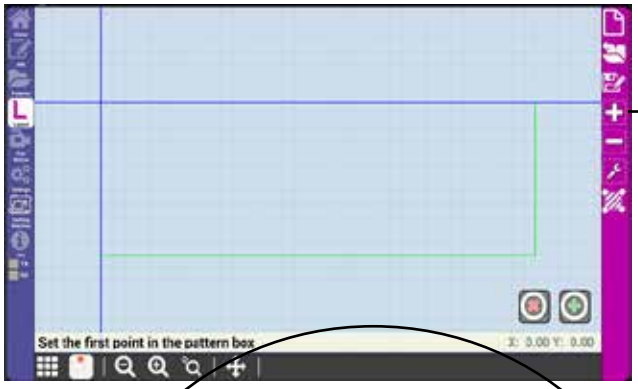
When you press add pattern box, you will see three buttons: a red "X" to cancel, a green plus to add a point to define the pattern box, and a green check mark to place the last pattern box point, finishing the pattern box.

After you place the first point, a red minus button will appear that can be used to remove points that define the pattern box, starting with the most recently placed.

How to make a two-point pattern box

Rather than mark each point of a square or rectangle pattern box, you can simply mark the two diagonal corners. This will produce a perfectly square pattern box with even lengths and heights. While this is a quick solution, if your quilt block isn't exactly square, the stitched pattern may not line up properly.

Add Pattern Box



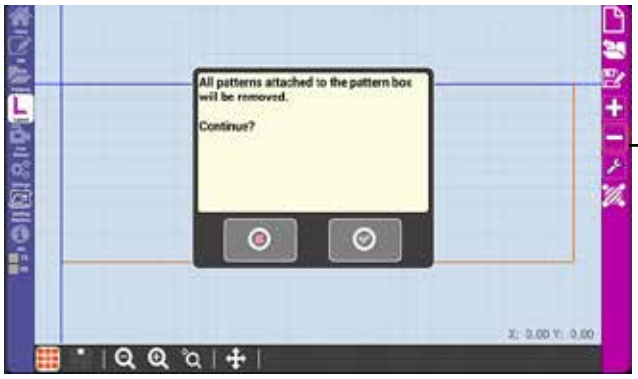
Tips!

- Pattern boxes can be used to keep your quilt area organized.
- Use pattern boxes to separate different blocks on your quilt.
- When creating pattern boxes you can set as many points as you wish. This means you can make triangle or pentagon shaped boxes.

Remove Pattern Box

Remove Pattern Box will remove the selected pattern box from the layout and all patterns inside of it.

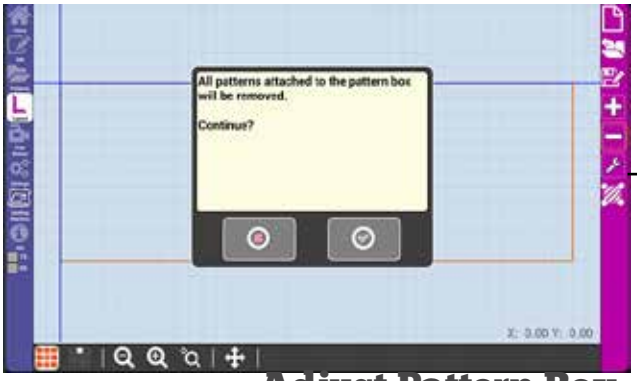
Remove Pattern Box



Adjust Pattern Box

Adjust Pattern Box allows you to redefine the borders of the currently selected pattern box. Press the Adjust Pattern Box icon, then follow the same procedure of adding a new pattern box to redefine the pattern box.

Patterns are not affected when adjusting a pattern box. Use this feature if your pattern box doesn't line up correctly with the quilt and you want to keep your pattern the way it is.

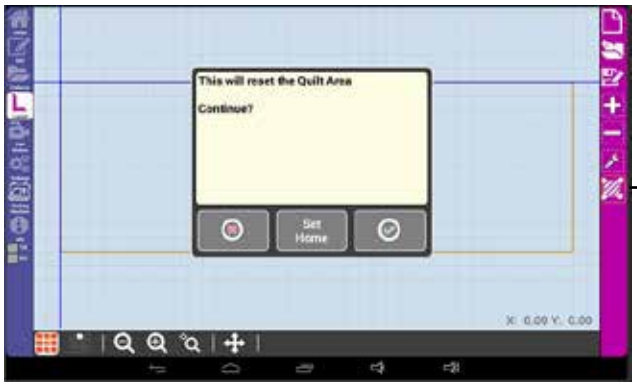


Adjust Pattern Box

Set Quilt Area

Set quilt area will reset your quilt area without removing loaded patterns. Pressing the green check mark will let you reset the dimensions of your quilt area. This is commonly used when you need to stitch the last row of a quilt that has slightly different dimensions than the previously stitched rows.

Set Home will keep the current dimensions of the quilt, but let you reset the origin, or top left corner, of the quilt. Selecting this function will move the origin to where the needle is on the quilt. Can be used if the quilt area on the tablet gets off from where it should be on the quilt.



Set Quilt Area

Free Motion

Record and Save Free Motion Quilting

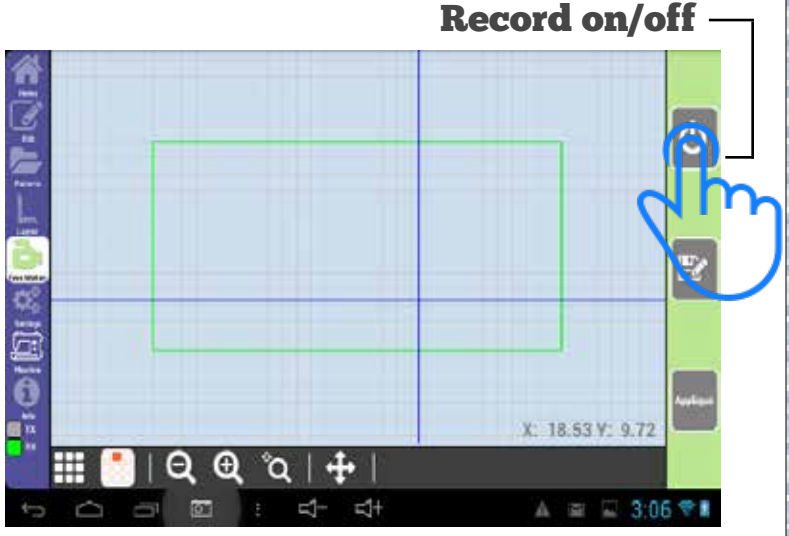
Record on/off

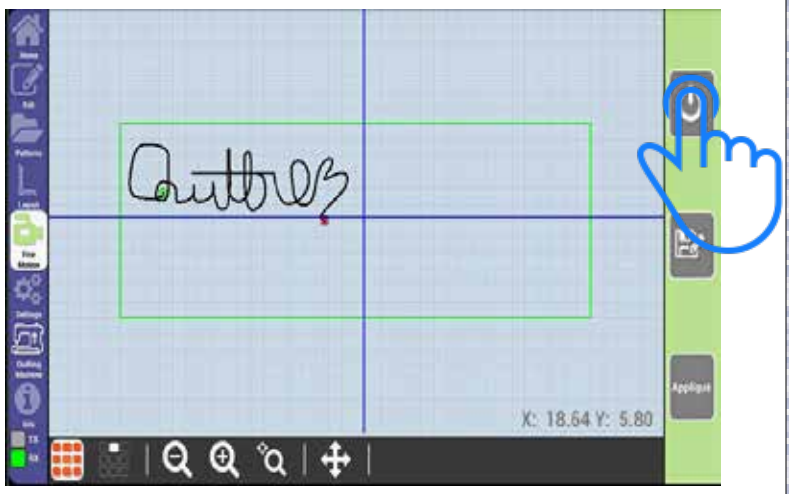
Record on/off toggles the record feature of Butler. Press once to activate free motion record.

Move the machine head to draw your recorded free motion design, then press it again to stop recording. This will allow you create a custom pattern from free motion.

The system will track your movement and transfer it into a pattern that can be run from the Butler Robot.

Press again to stop recording.



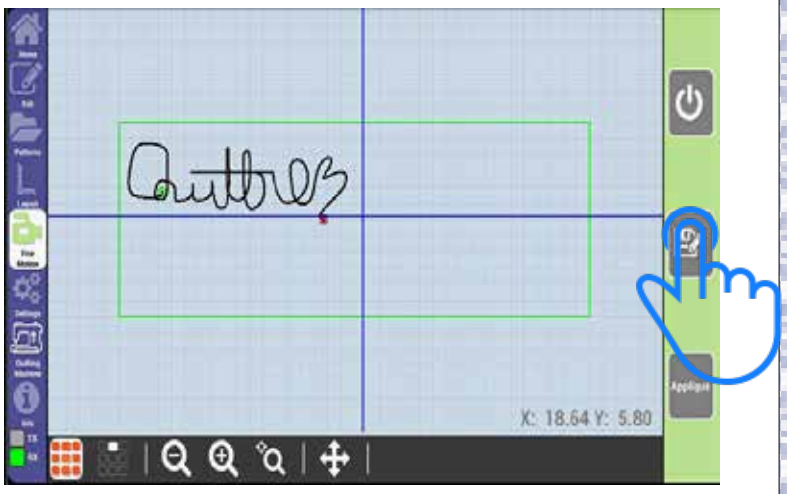


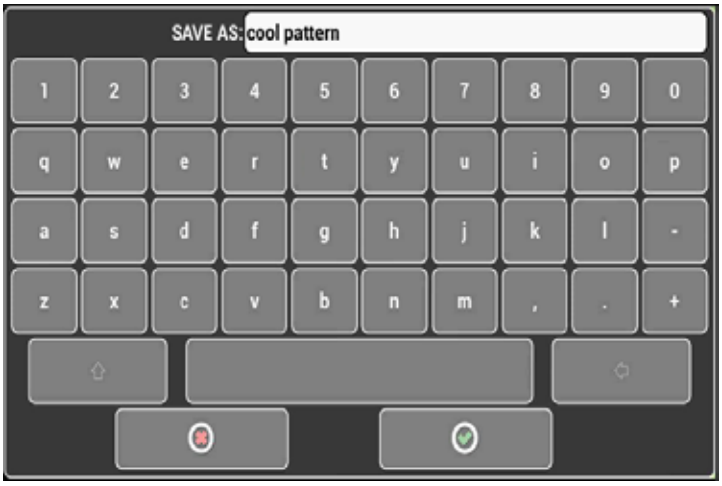
Save Pattern

Save pattern will save your recorded pattern to be used as a pattern in quilting.

Select the Save Pattern icon to and enter an name in the on screen keyboard to save it as a pattern.

Saved patterns will be given the tag 'Saved' when complete.



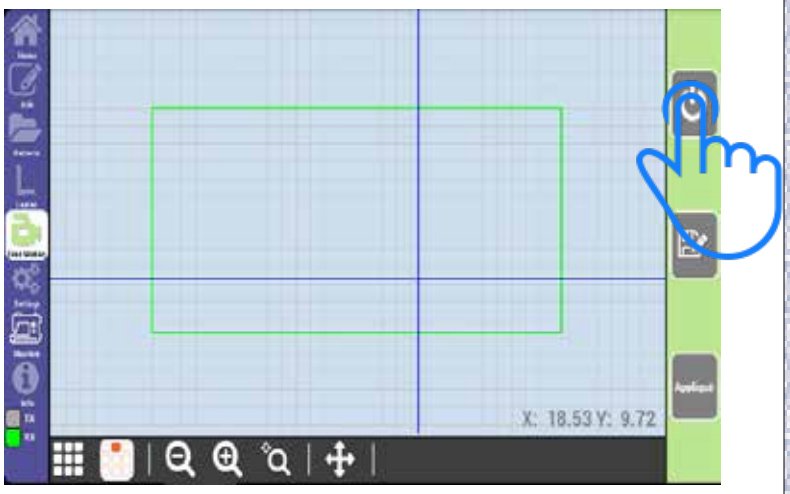


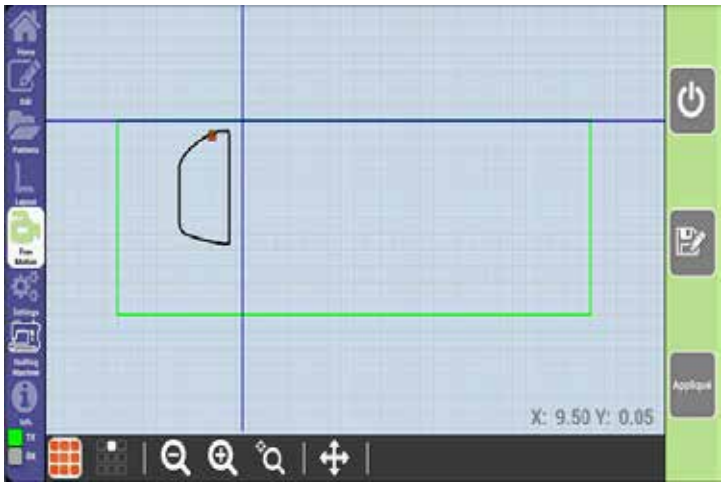
Appliqué

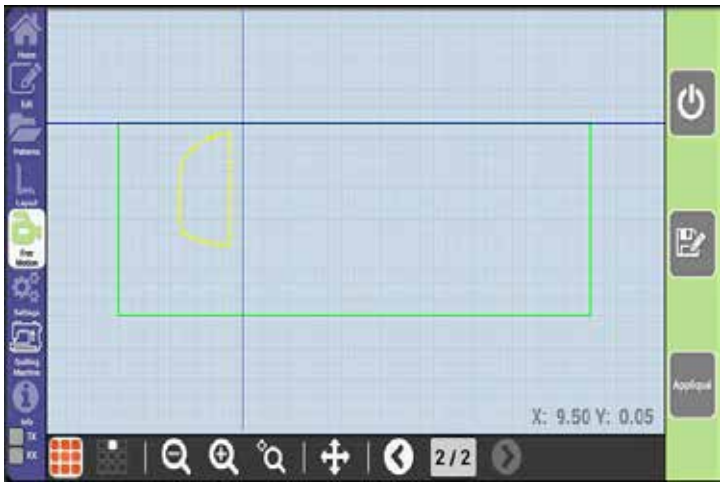
This feature lets you make a pattern box of any given shape. You will simply press the record button , you will draw the shape of the pattern box you want.

Once you are done, select the power button again to stop recording and then select the appliqué button .

Once pressed the recording will turn yellow signifying that it is now an appliqué pattern box.







Tip!
Appliqué is often used in cropping patterns.

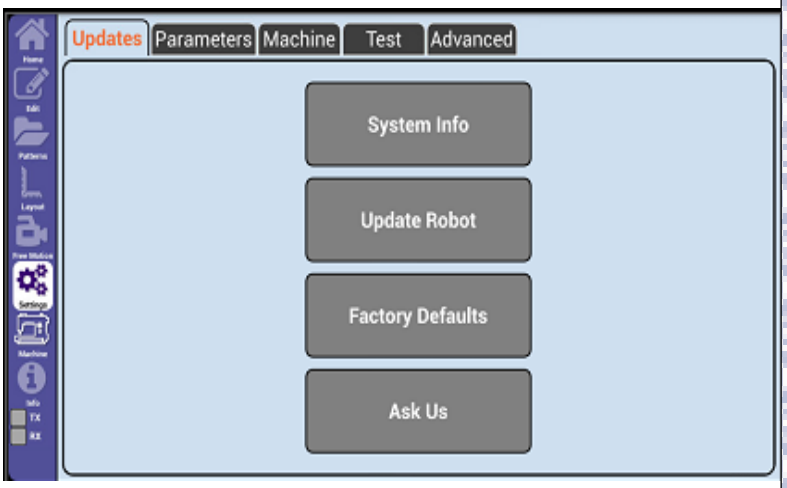
Settings

Manage updates, constants, and machine specific settings

Updates

System Info

System Info shows you your current display, robot, and machine versions, as well as other licensing information.



Update Robot

Update robot allows you to run the update that is currently saved on the system. When you download an update Online it carries with it the update file for the robot. This button will not search for new updates, it will just reinstall the current version. Often used in troubleshooting.

Factory Defaults

Resets the system settings to factory defaults.

Factory Defaults does not affect files or folders stored in the internal or external memory it will just reset the settings found on the tablet. Often used in Troubleshooting.

Ask Us

Sends an email to customer support with your question and a copy of the layout. This feature requires a Gmail account and a Wi-Fi connection. If you do not have a Gmail account you will be prompted to create one.

Tips!

- The system does not prompt you when a new update comes out, so check for new updates about once a month.
- Have a pattern that is not running as it should? Use Ask Us to have our technicians evaluate the pattern.

Parameters

Min Speed

Min Speed sets the minimum speed at which Butler will run. We recommend that this setting only be changed under the direction of an authorized QuiltEZ dealer.

Margin

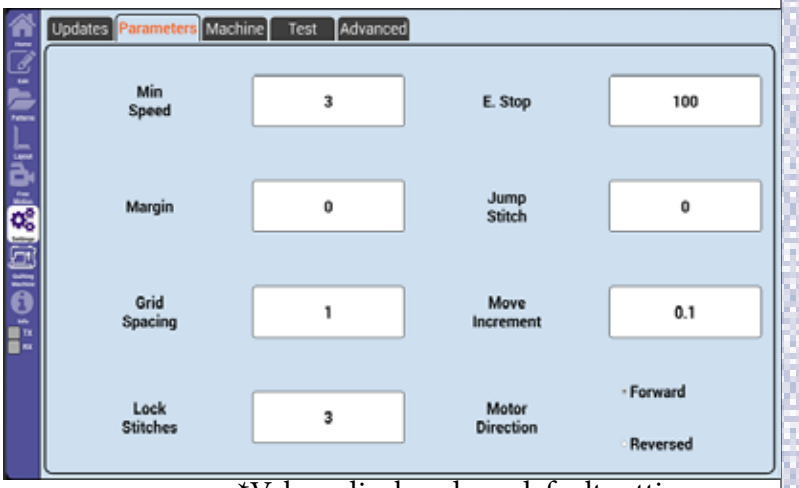
Margin behaves just like margins on a page. When a margin is set patterns will provide that amount of spacing from the edge of the pattern box. Set in increments of inches. Use this feature if you want to keep patterns a certain distance from the edge of a block.

Grid Spacing

Changes the distance between the grids shown in the program in increments of inches. Set this to your preference. If you want to make sure you have a repeat every 5” set this value to 5.

Lock Stitches

Controls how many lock stitches are performed at the start of the pattern. Raise or lower this value depending on how many lock stitches you want the system to perform.



*Values displayed are default settings.

E. Stop

Determines how quickly the machine will disengage and throw a motor error when its path becomes obstructed. This value may vary from quilt to quilt. If you receive too many motor errors, raise this value; If your needle is tearing the quilt lower this value.

Jump Stitch

Controls the distance the system gives a prompt when it is performing a jump stitch in increments of inches. Jump stitches are displayed as a purple dashed lines on the tablet. These lines will not be stitched.

If this value is set to 6 then any jump 6" and lower will run without a prompt. You will still need to go back and cut the thread after a jump stitch.

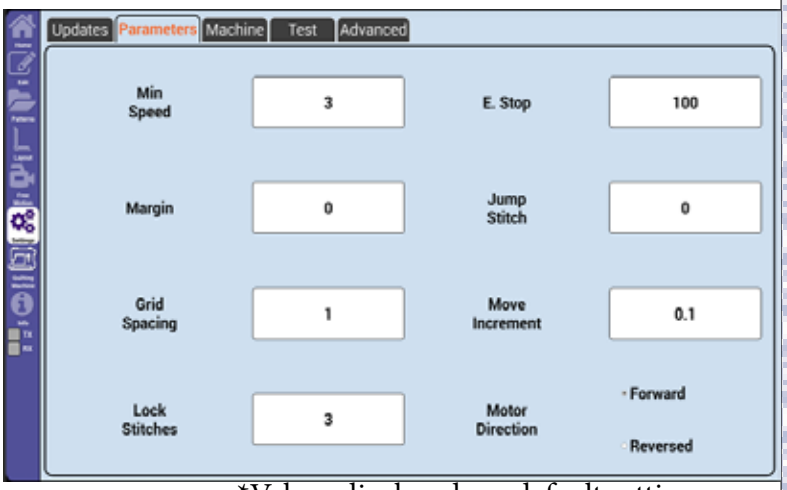
Move Increment

Move Increment sets the distance a pattern will travel when moved with the directional buttons.

Default is one-tenth of an inch. Change this if you want patterns to move more or less with each button press.

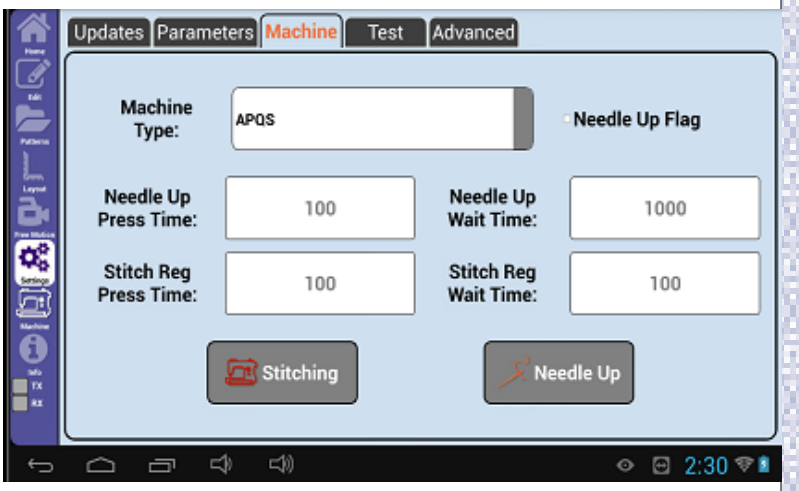
Motor Direction

Reverses the motors. Set to forward if the motor box is at the front of the machine, and reverse if the motor box is at the rear.



*Values displayed are default settings.

Machine



Machine Type

Machine Type ensures that Butler can properly communicate with your specific quilting machine. See Appendix C for help selecting the proper machine type.

Needle Up Flag

Needle Up Flag value is set automatically, if required, when selecting Machine Type.

NdlUp Press

NdlUp Press sets the amount of time that Butler sends a signal that the needle up button has been pressed to your quilting machine to Needle Up, and should not need to be changed.

NdlUp Wait

NdlUp Wait sets the amount of time that Butler waits after sending the needle up signal to your quilting machine. This should not need to be changed.

SReg Press

SReg Press sets the amount of time that Butler sends the signal that the stitch regulator button has been pressed to your quilting machine. This should not need to be changed.

SReg Wait

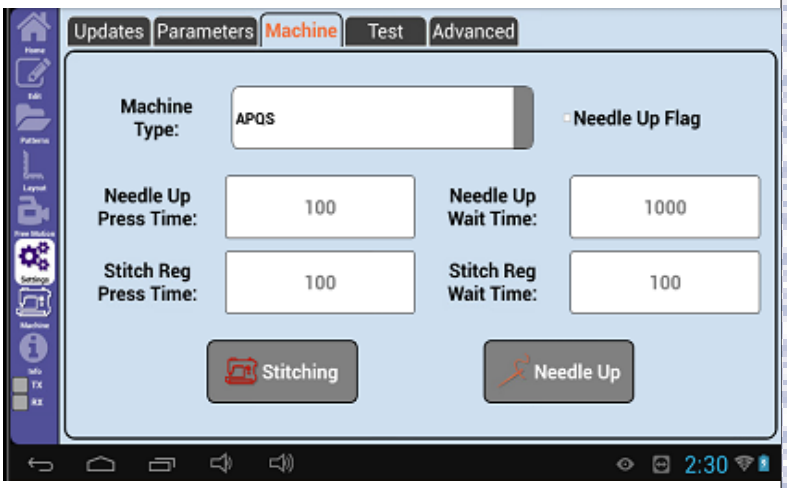
SReg Wait sets the amount of time that Butler waits after sending the signal to your quilting machine to begin stitching. This should not need to be changed.

Needle Up

Needle Up tests your needle up by performing a full cycle of needle up and needle down.

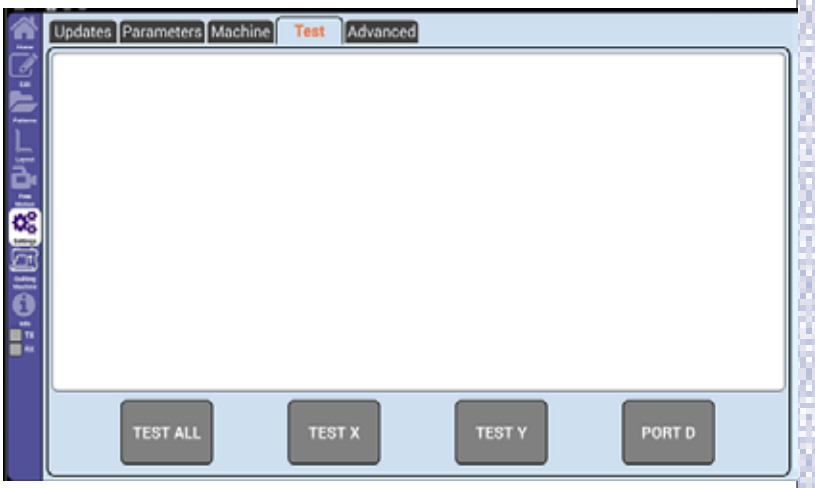
Stitching

Stitching tests the stitch regulator by activating it for a short period of time.



Test

Test is used to test if the Butler motor box is communicating properly with the quilting machine and if the motors are running to factory specifications. These tests are mostly for use in factory and troubleshooting.



TEST ALL

Test All will test the communication of Butler to your stitch regulator, as well as the encoder counts for both the X and Y motors.

If your setup does not have PerfectStitch regulation, then stitcher communication will fail every time. This is not bad it just means the robot did not receive a signal back from the PerfectStitch regulator.

TEST X

Test X will test the encoder counts of the X motor only.

TEST Y

Test Y will test the encoder counts of the Y motor only.

PORT D

The handlebars on some machines will plug into the Butler motor box. Port D tests the communication between Butler and the handlebars for machines that do not plug into the Stitcher box port of the Butler motor box.

When pressed, Port D Sends the needle up and stitching commands to the handlebars to verify functionality. Used in the factory only.

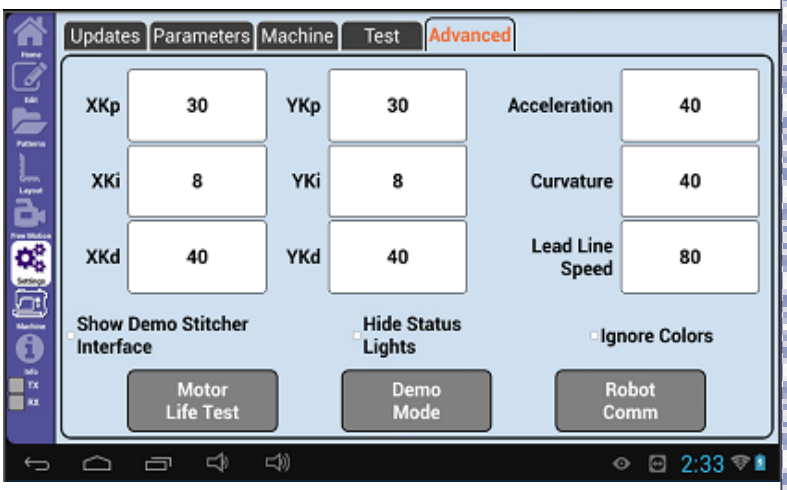
Tips!

- Move the machine to the center of the frame when running a test. The motors will move the machine diagonally when testing.
- Running Test All will revert the machine type to Default. This will need to be changed back if your machine type is set to anything besides Default.

Advanced

Advanced allows you to adjust settings for your machine.

These settings are vital for proper machine performance. Do not change these values unless told by a support representative.



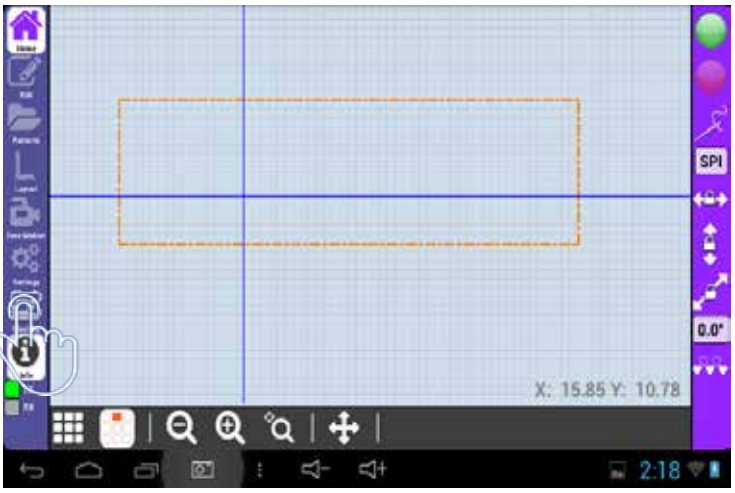
Stitch Regulator

Access the stitch regulator user interface.

Stitcher User Interface

Pressing the sewing machine icon will show the PerfectStitch user interface on Butler's display.

This icon will only display on systems that have QuiltEZ electronics or the PerfectStitch upgrade installed. This will give you allow you to switch over to the stitch regulator for free motion quilting.



Information

Help with icons

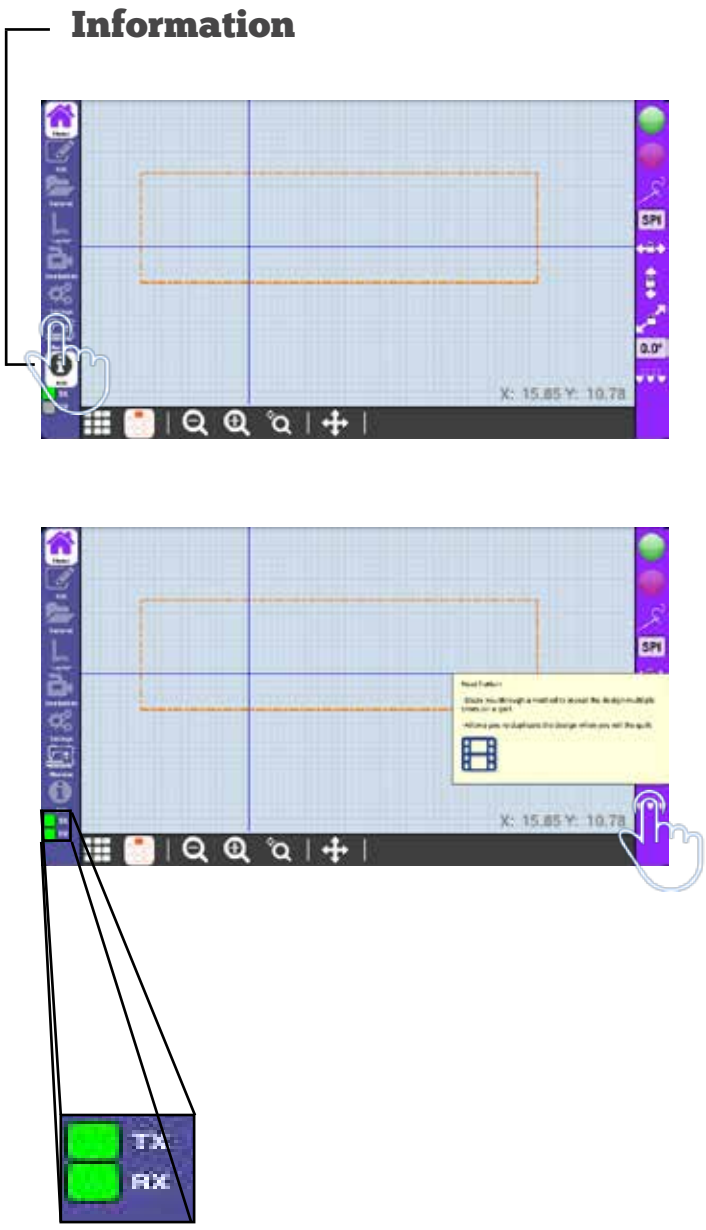
Information

Information Mode is used to explain the interface of Butler on the spot.

Press the Information icon, then press any icon you would like to learn more about. (An example of pressing the Nesting button on the right.)

A window will appear with a brief description of the feature and the option to view a video explanation of the icon.

Pressing the video icon located inside the text box will open a window and play a video and explain what that particular feature does.



Communication lights

The TX and RX boxes will blink to show if the tablet and robot are communicating properly. If they are blinking green communication is fine, if they are either or both are red or one is gray there is a communication error.

If you encounter a communication error check out the troubleshooting guide for communication located at support.quiltez.com

Bottom Icons

Pattern View, Zoom, Pan and Zoom to Cross Hair

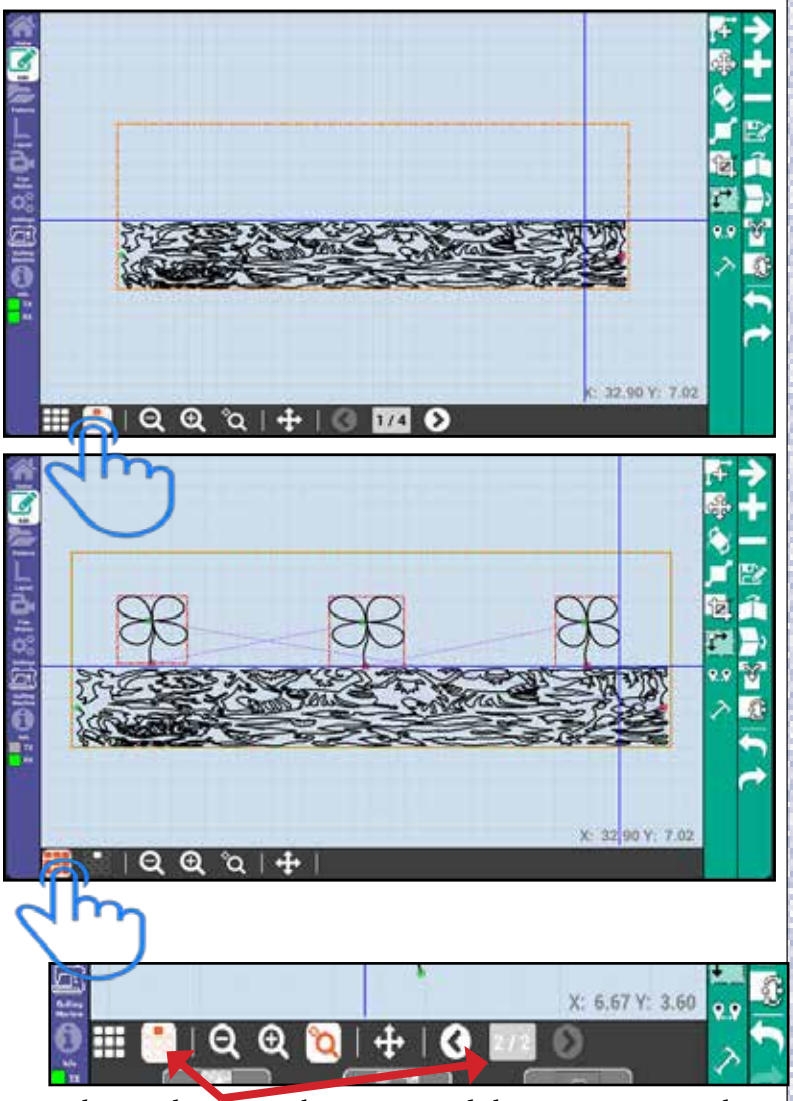
Pattern Box View

The Pattern Box View lets you choose to see one pattern box at a time or all current pattern boxes if you have loaded more than one.

Select Single Pattern Box icon, the icon with only one box highlighted to see only the currently selected pattern box with its loaded patterns.

Select Show All, the icon with all nine boxes highlighted to show all pattern boxes and patterns.

Switching between views will let you narrow in on the patterns in a single box or to get a feel of how all the patterns across all the pattern boxes will look together.



Use the single pattern box view, and the arrows to switch between pattern boxes.

Zoom Out/In

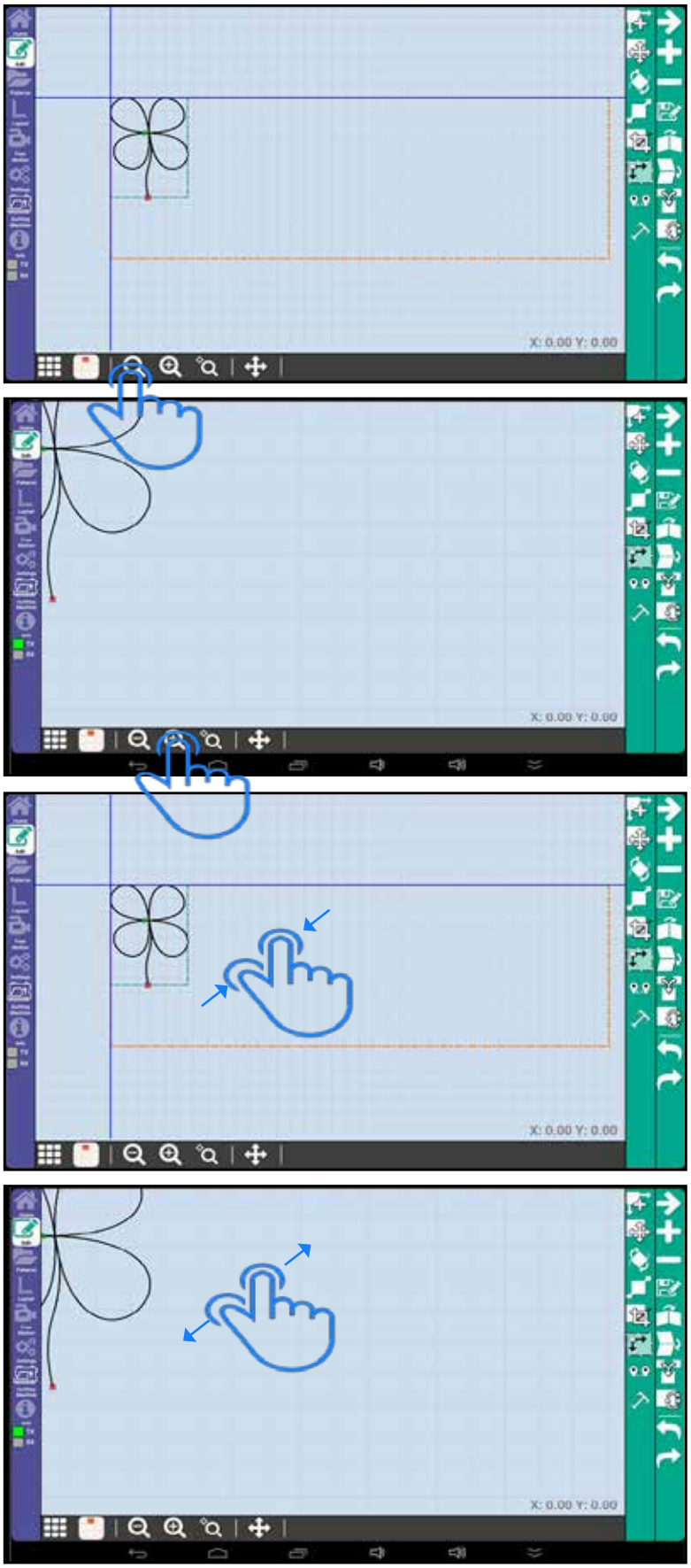
Zoom Out/In lets you control the zoom level of the pattern view screen.

Tap the magnifying glass with the minus button

You can use android pinch gestures to zoom in and out.

Use this feature to get a closer look at patterns.

This is also useful when you are trying to use the Set Start feature to continue a pattern in the middle. If two lines are close together, the system will pick the closer of the two lines. Zoom can help you make sure you start on the correct line.



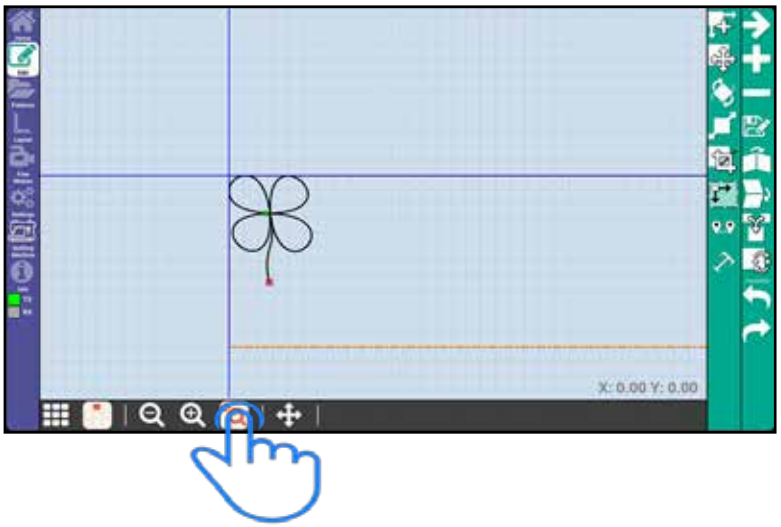
Zoom to Crosshair

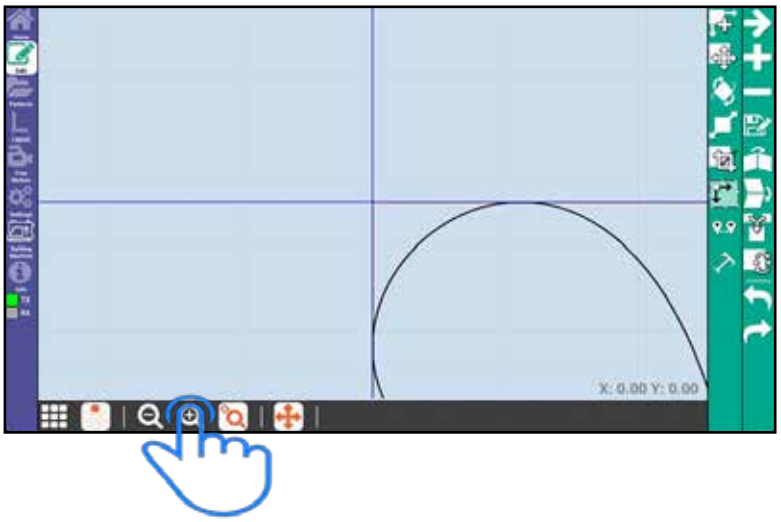
Zoom to Cross Hair lets you zoom where ever the cross hair is located, where the two blue lines intersect.

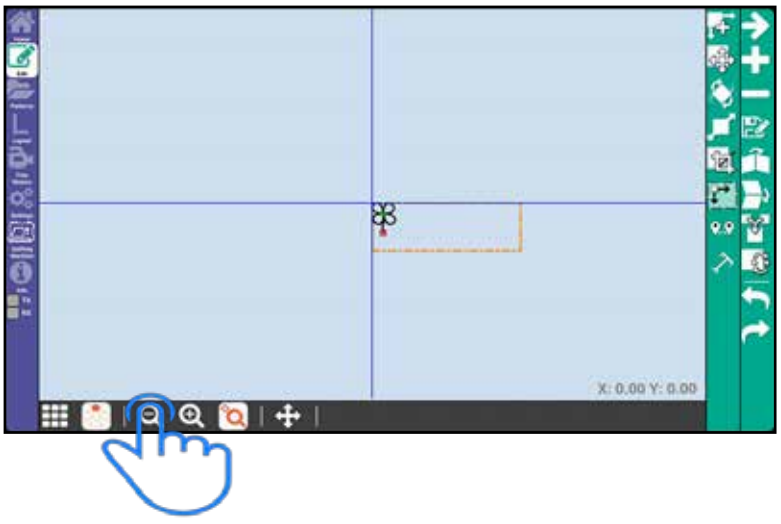
To use this feature simply highlight the magnifying glass and press the zoom in or zoom out button on the display. The screen will zoom in or out with the crosshair in the middle of the screen.

This feature can be used to zoom in on a certain location.

Using the pinch method to zoom will not zoom to crosshair







Pan

Pan lets you pan the pattern view screen.

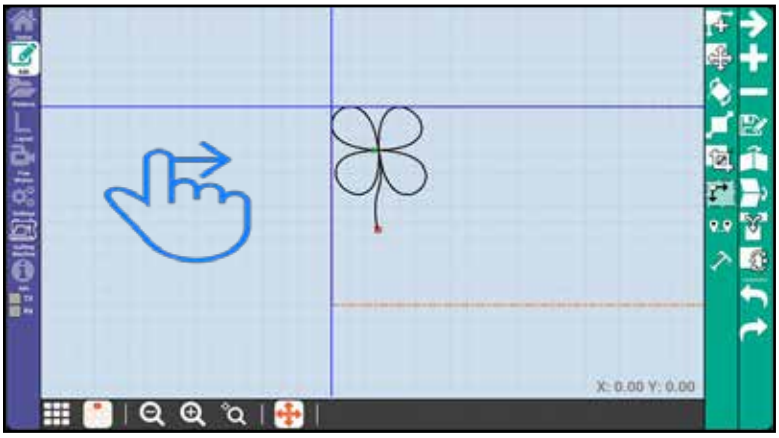
To Pan, touch the pan icon to highlight it, and then press and drag your finger across the screen.

Swipe from the direction that you want to move the screen. If you swipe from the left, the screen will move left.

Press the Pan icon again to disable Pan.

Use pan to help you see areas of the quilt area that may be off screen. This is commonly used when using the zoom functions.

Pan doesn't work on the Show All view.

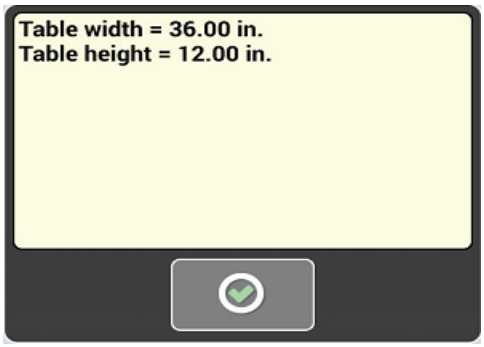


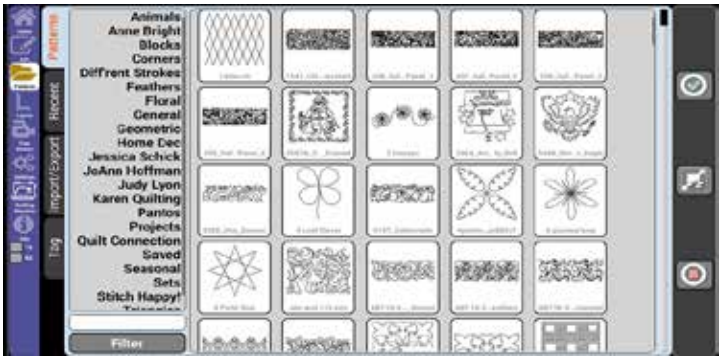
Appendix A: How To

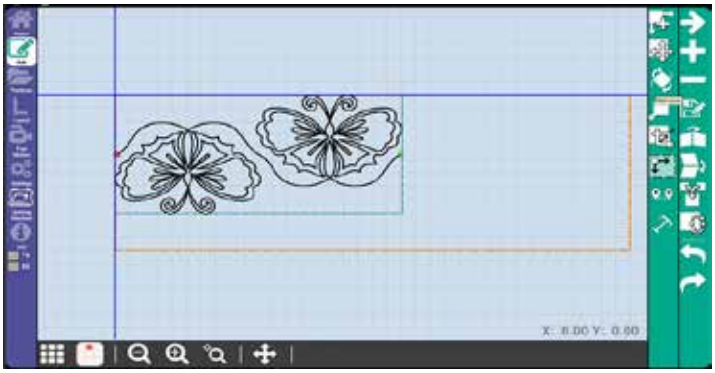
Get started quilting quilt blocks and pantograph-style patterns

Getting Started: Set a quilt area and load a pattern

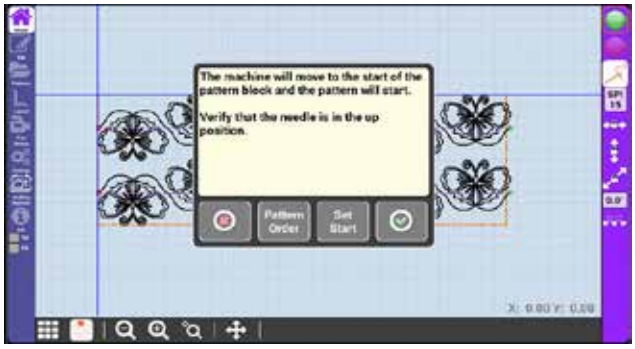
1. Before you can access any other feature you must set a quilt area. The screen will prompt you to move your machine to the back left corner of the quilting area.
2. Move your machine as prompted and select the green plus sign.
3. The screen will then prompt you to move to the lower right corner. Follow the prompt and select the green plus sign again.
4. You will then be shown the quilt size and asked to continue. Select the green check mark to continue.
5. The quilt area will be set and you will be able to access the other menus.
6. Select the patterns menu from the list on the left.
7. Search for the pattern you would like to use.
8. Once you find the pattern select it and load it on to the quilt area. Notice that once you load the pattern onto the quilt area the system has automatically entered the Edit screen.
9. Use the tools on the right to edit the pattern how you would like it to stitch out on the quilt. (Refer to the Edit section starting on page 14)
10. After the pattern is edited to your liking select the Butler Home icon at the top left.







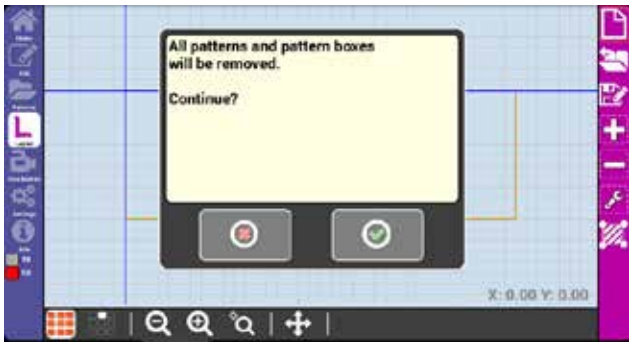
11. Optional: Select the green Go button without the Needle icon highlighted and run the machine without stitching to verify that it will run properly.
12. Select the Needle icon.
13. Optional: PerfectStitch users may change their SPI before stitching to control the Stitches Per Inch.
14. Select the green Go button.
15. Choose to start from the beginning with the green check mark button, star from a certain point with the Set Start button, or choose the order of stitching with Pattern Order.
16. Let the Robot do its job and watch the patterns stitch.

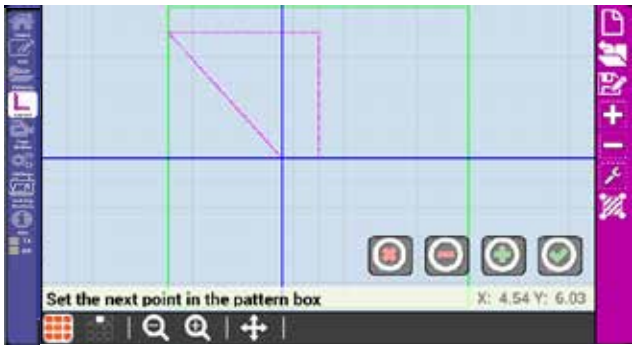


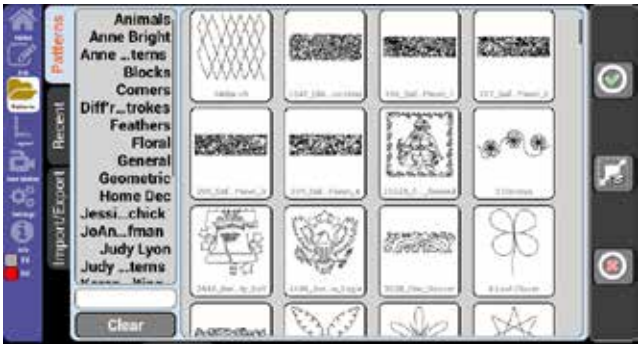
Quilt a quad pattern quilt block

1. Go to layout on left navigation.
2. Press new layout .
3. Press green check on notification screen.
4. Move machine to top-left corner of quilt area and press green plus .
5. Move machine to bottom-right corner of the quilt area and press green plus .
6. For the dialog box that pops up, press the Green check mark .
7. Press add pattern box .
8. Draw a pattern box 12 inches by 12 inches. (A pattern box is usually a traced quilt block. For more about pattern boxes, see page 34.)

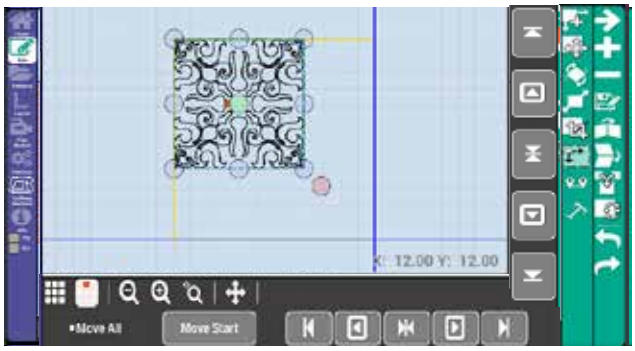
   8a. To draw a pattern box, position the machine at the first corner of the block, and press the green plus . Move in a counter clockwise motion to create each corner of the square pattern box. At each corner, press the green plus . At the last corner, press the green check mark . (The coordinates at the bottom right of the screen show your needle position in inches. You can use the coordinates to help you measure the square box.)
9. Ensure that the single pattern box view is selected at bottom left of screen.
10. Navigate to pattern box 2/2 .

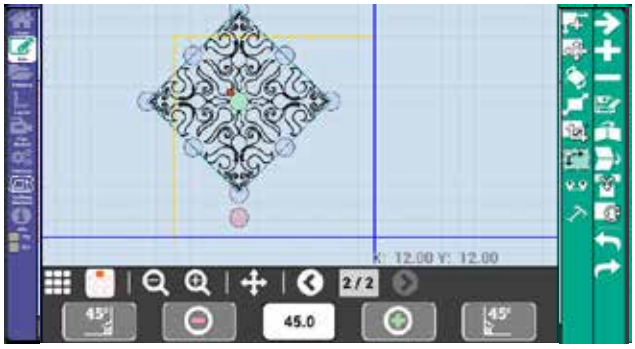


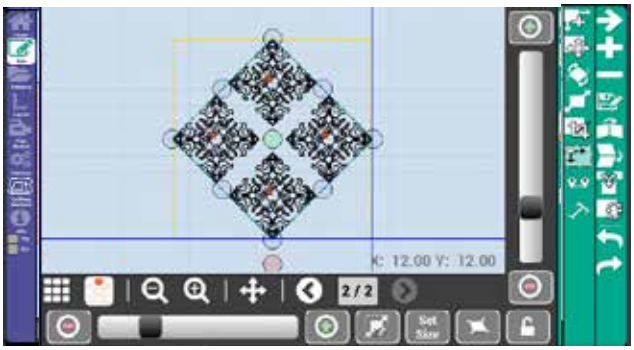




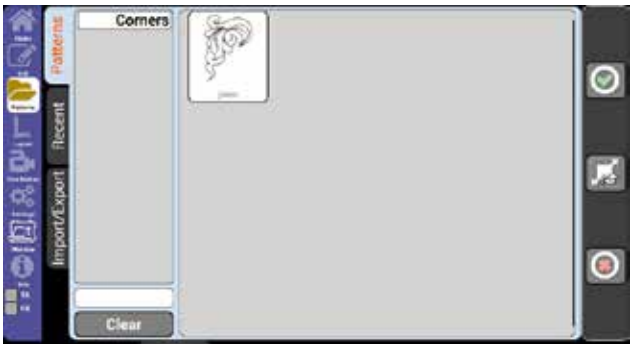
11. Go to Patterns on left navigation.
12. Open the blocks Tag.
13. Select the budding blocksjs061 pattern.
14. Press the green check mark. (You should see large circles around the edges.)
15. You should see large circles around the edges.(If not, touch the pattern.) Touch the center circle of the pattern and drag it to the top left corner of the pattern box.
    15a. If you need to fine tune the placement, press move and use the movement arrows to get it just right.
16. Press rotate.
17. Press 45° to the right.
    17a. You can also fine tune the rotation using the green plus and red minus buttons .
18. Press repeat.
19. Press the horizontal green plus and the vertical green plus to repeat the pattern 2x2.
20. Touch the 0.0 number box for horizontal spacing and set it to 1.0 and then press the Green check mark.
21. Touch the 0.0 number box for vertical spacing and set it to 1.0.
22. Press scale.
23. Press the smart scale button proportions will be unlocked. (Found at the bottom of the screen.1)
24. Press scale again to deselect the scale menu.
25. Press add pattern Folder.

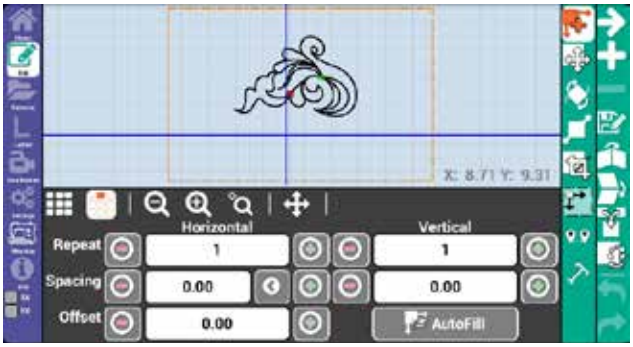






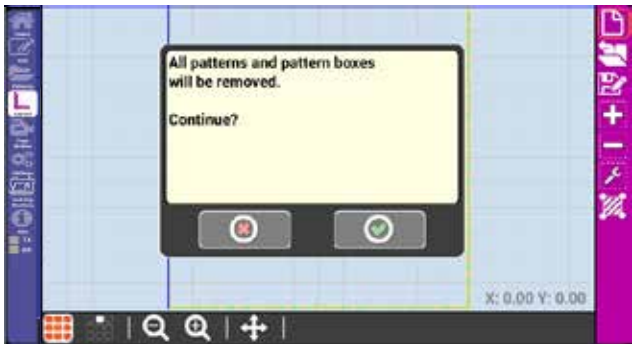
26. Select Corners > JSM6 and press green check mark.
27. Resize and rotate the corner pattern to fit into a corner of the pattern box.
28. Repeat steps 25-27 until all corners are filled.
29. Go to home on the left navigation.
30. Press the green go button.
31. After verifying that the needle is in the up position, press the green check mark.
32. You will get a prompting message saying "The machine will move to the start of the pattern block and the pattern will start", Click on the Green check mark.
33. . The pattern should now trace without stitching. (This is a trial run to make sure that the pattern stitches where desired.)
34. Press the red stop button.
35. Press the stitch controller to highlight it.
36. Press the green Go button you will get a prompting message saying "The machine will move to the start of the pattern block and the pattern will start".
37. Press the green check mark . Pull up the bobbin thread, then press the green check mark.

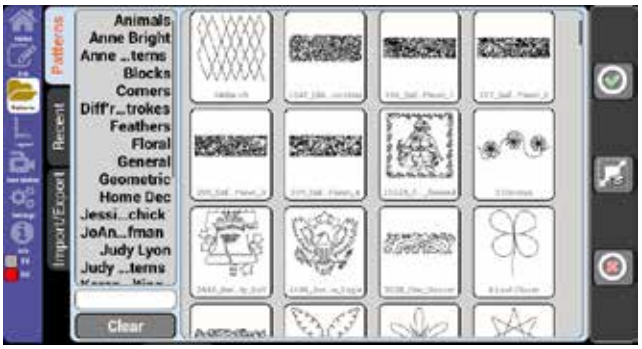


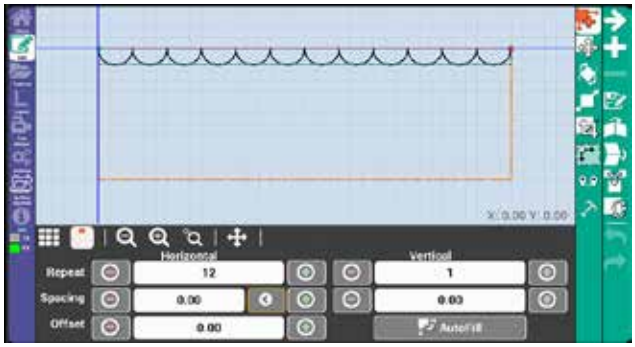


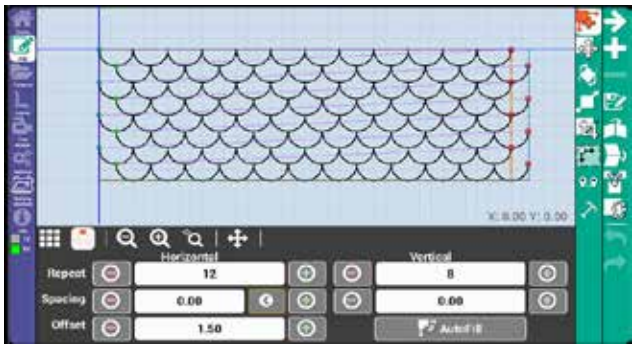
Quilt a pantograph style clam pattern

1. Go to layout on left navigation.
2. Press new layout .
3. Press OK at notification screen.
4. Move machine to top-left corner of quilt area and press green plus .
5. Move machine to bottom-right corner of the quilt area and press green plus .
6. Go to the Patterns on left navigation.
7. Go to Pantos > Clams and press the green check mark.
8. Press repeat .
9. Repeat the pattern horizontally (press the horizontal repeat plus) until it spans just past the right edge of the pattern.
10. Repeat the clams vertically (press the vertical repeat plus) until just before the bottom edge of the pattern box.
11. Press the offset green plus as desired to stagger the clam rows.

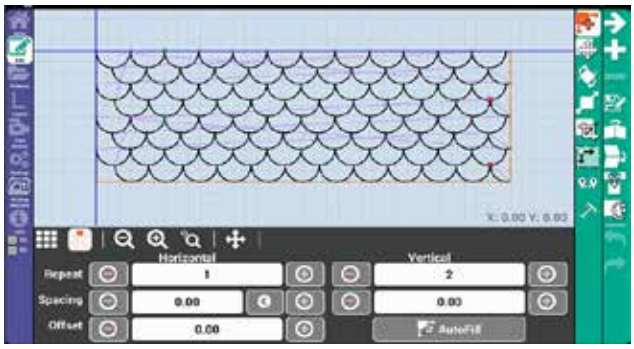


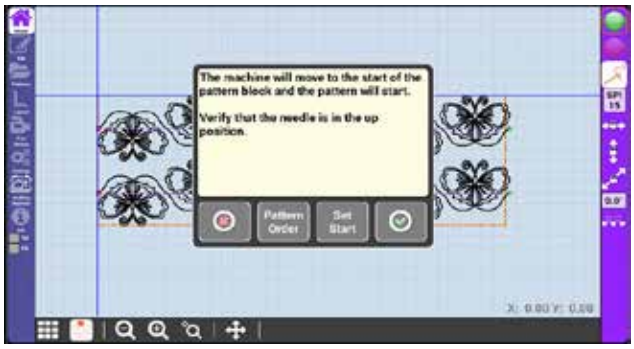






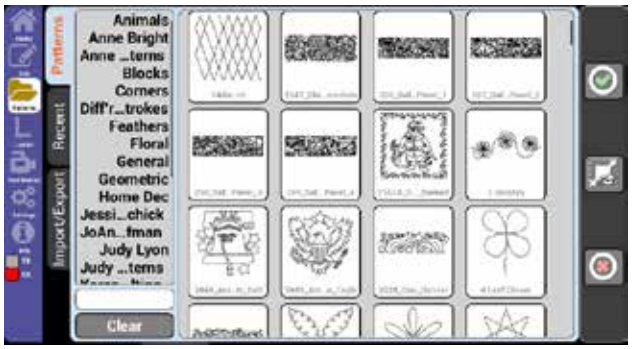
12. **Notice all of the even rows are hanging outside of the quilt area select the crop icon.**
13. Select the Traditional Crop Icon to cut out everything that is outside of the quilt area.
14. **Go to home on the left navigation.**
15. **Check to make sure the needle is not selected.**
16. **Press the green go button, check that your needle is in the up position, then press the green check mark. (This is an optional trial run to ensure the pattern is positioned correctly and will stitch exactly where you would like.)**
17. **When you are satisfied that the placement is correct, press the red stop button.**
18. **Touch the stitch controller to highlight it.**
19. **Press the green go button, check that your needle is in the up position, then the green check mark.**
20. **Pull up the bobbin thread, and press the green check mark.**
21. **Stay with the machine to cut the thread at each endpoint on the edges of the pattern box.**

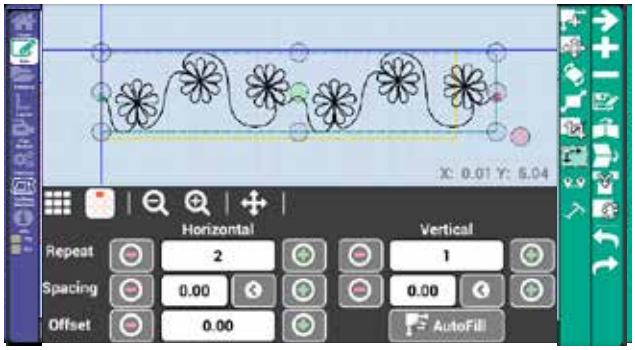


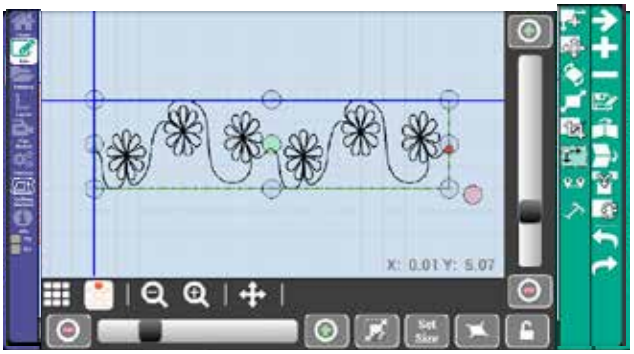


Nest the daisies pantograph pattern

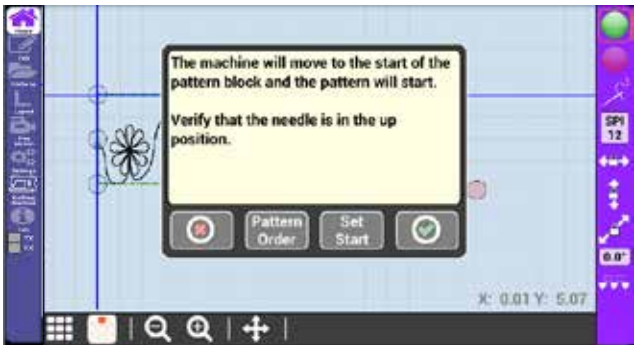
1. Go to layout on left navigation.
2. Press new layout.
3. Press OK at notification screen.
4. Move machine to top-left corner of quilt area and press green plus.
5. Move machine to bottom-right corner of the quilt area and press green plus.
6. The system will display the height and width, press the Green Check mark.
7. Go to Patterns on left navigation.
8. Go to Pantos > 3 Daiseys and press the green check mark.
9. Press repeat.
10. Repeat the pattern horizontally (press the horizontal repeat plus) until it spans just past the right edge of the pattern. (Note that you will probably repeat it many more times than shown at right.)
11. Press scale and press smart scale to stretch the pattern to fill the quilt area. (If you wish to prevent distortions of the pattern, press the lock button at the bottom right of the scale menu.)

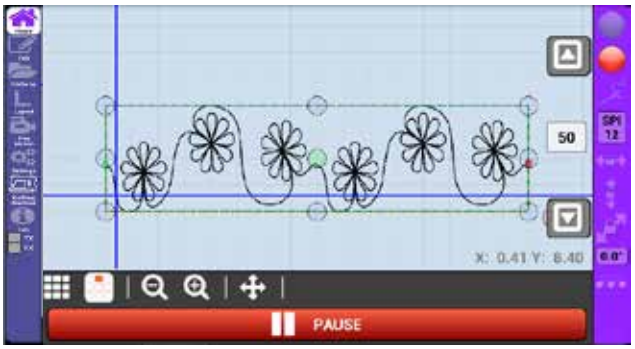


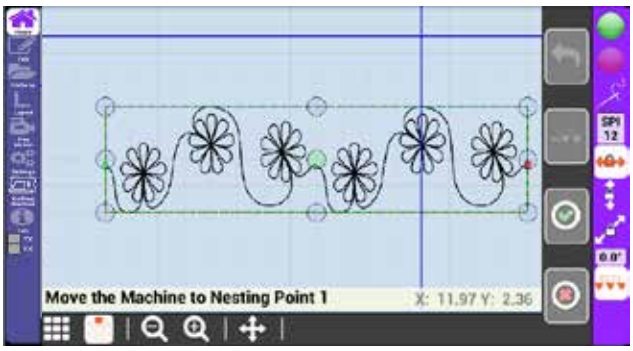


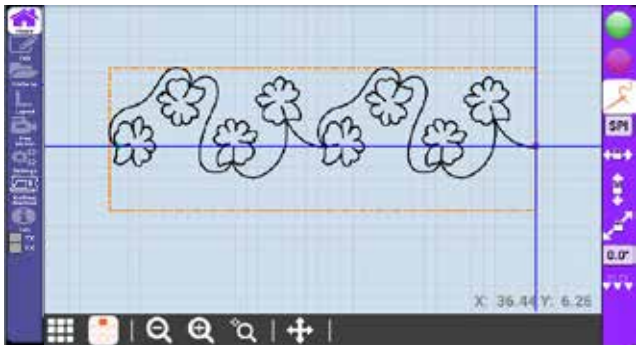


1. Go to home on the left navigation.
2. Turn off the needle with thread if it was previously selected. Press the green go button, check that your needle is in the up position, then press the green check mark. (This is an optional trial run to ensure the pattern is positioned correctly and will stitch exactly where you would like.)
3. When you are satisfied that the placement is correct, press the red stop button.
4. Touch the stitch controller to highlight it.
5. Press the green go button and check that your needle is in the up position, then the green check mark.
6. Pull up the bobbin thread, and press the green check mark.
7. Once that pattern is stitched, go to Home and press nest.
8. You will now select one nesting point. Move your machine so that the needle is directly above any point on the just stitched pattern (Normally this is the lowest point on the pattern.
9. Mark this point on the fabric (with quilters chalk or something similar) and then press the green check mark.
10. Roll your quilt, then press the green check mark.

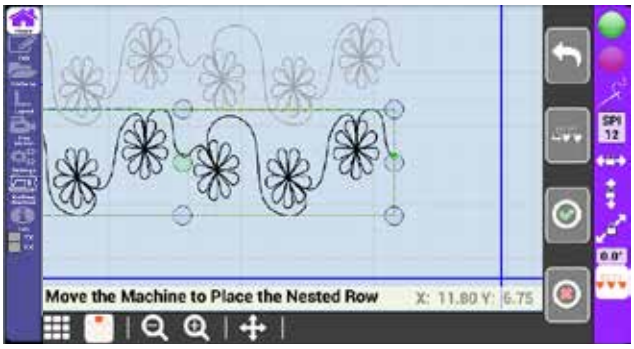






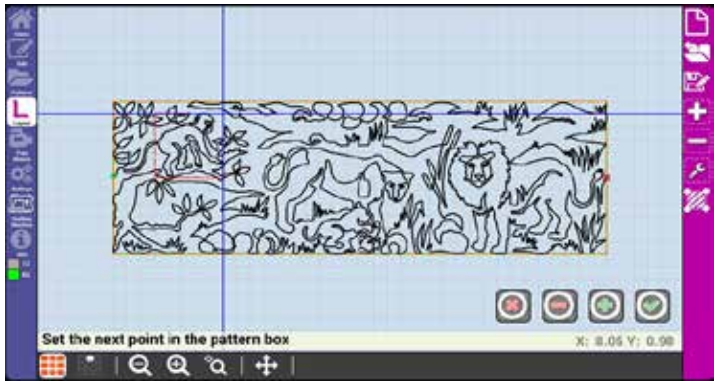


11. Select either the Move icon or Spacing icon to adjust the nest space, then press the green check mark . (The bottom pattern represents where the new pattern will be stitched and the gray pattern represents where the pattern has already been stitched.)
12. The pattern is now nested and ready to be stitched. When you move your machine, this will move the pattern on the screen.

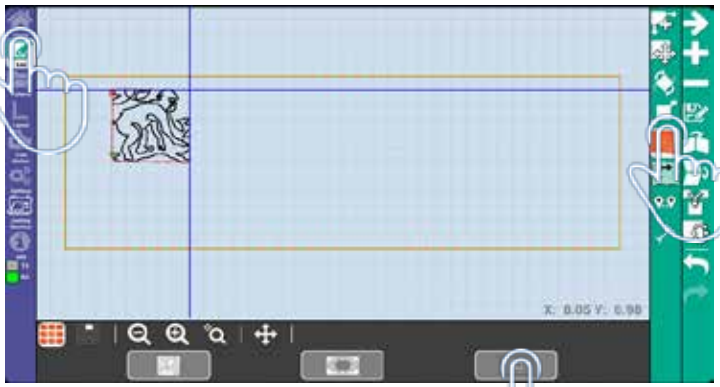


Perform an appliqué crop for a block

1. **Go to the layout screen and select add pattern box.**
2. **Select Show all to see the pattern as a reference on the screen.**
3. **Move the machine to the top left corner of the block and select the green plus sign to set the first corner.**
4. **Move the machine counter clockwise using to set each corner in the block.**
5. **When you get to the fourth corner in the box select the green check mark instead of the plus sign to tell the system you are done setting points.**
6. **Select Single Pattern Box to switch to pattern box 1 (or the box containing the pattern you wish to crop.)**
7. **Select Edit from the left menu, then select crop from the right tool-bar.**
8. **If you want to see where the pattern box is you can select Show All again.**
9. **Select** Appliqué Outside to remove what is outside of the pattern box.
10. Alternatively, you could use Appliqué Inside to remove what is inside of the pattern box.
11. Then you are done!



Use the single pattern box view, and the arrows to switch between pattern boxes.



Appendix B: Definitions

Home Location The top left corner of the Quilt Area or Pattern Box. This is also known as zero/zero or point of origin.

Layout A Layout consists of the quilt area, Pattern Boxes, and all the patterns seen in the pattern view.

Pattern Box A Pattern Box is a portion of the quilt area used to contain patterns.

Though commonly used to represent different quilt blocks, Pattern Boxes can be any shape or dimension.

Pattern View The Pattern View is the screen used to view the patterns and pattern boxes of the layout.

If a Layout contains more than one Pattern Box, navigation arrows will appear on the pattern view screen to switch between pattern boxes.

Quilt Area The Quilt Area is the entire quiltable area of your quilting machine, or the area inside the top left, top right, bottom left, and bottom right corners of your machine's reach.

By default, the quilt area is the same dimensions of the first pattern box in a layout.

Tag A tag is a like an index. It is a category that you can patterns under. Consider the four leaf clover pattern. It is tagged under both floral and blocks. You can locate it by selecting floral or blocks from the tag screen, or you can select both tags to find it quicker.

Appendix C: Machine Type

Use this chart to help select the proper machine type. The cable configuration refers to where the cables are plugged into on the black motor box.

Cable Configuration	Machine Type Setting
Stitcher Box port only	Default
Remote and Stitcher Box ports	SC 3.0 or Default
Remote and Handlebar ports	Set to respective machine type i.e. Juki= “Juki”

Quilt EZ

For answers to questions and video tutorials check out our support page at support.quiltez.com