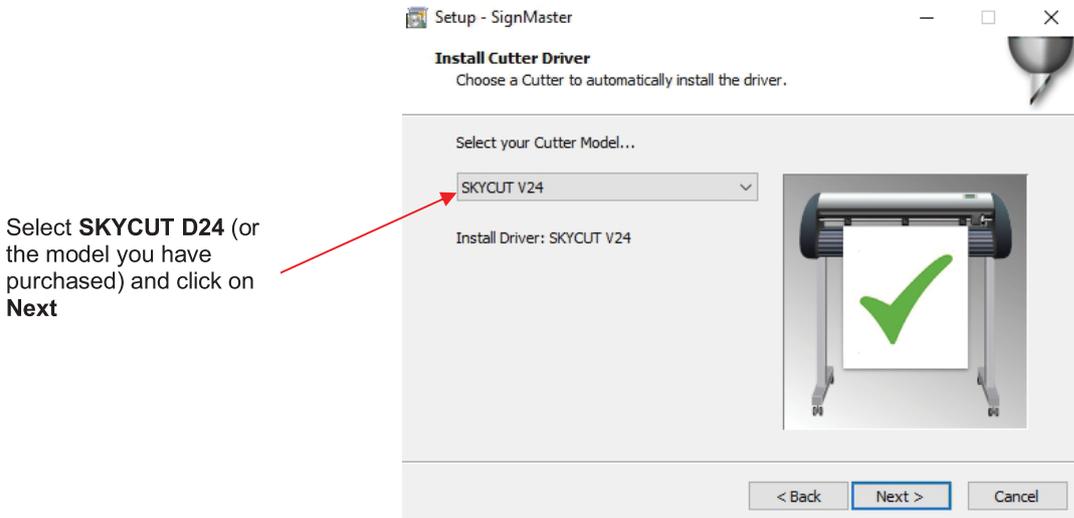
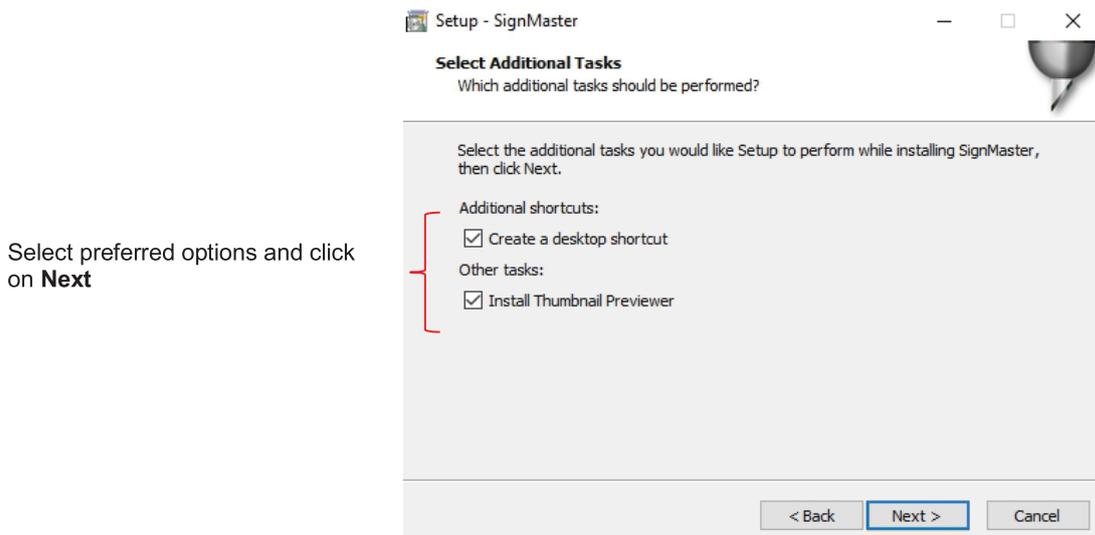


(9) Select **SKY CUT V24** (or the model you have purchased) from the drop-down menu:



Select **SKY CUT D24** (or the model you have purchased) and click on **Next**

(10) In the next window, you'll have the option to create a desktop icon and install a thumbnail previewer. Both are recommended.



Select preferred options and click on **Next**

(11) At this point, files will be extracted and installed. Wait for the **Installation Complete** message and click on **OK**:



(12) Then the final **Finish** message will appear and you can choose to open SignMaster or wait:



- If you run into any issues installing or activating the program, please visit this link:
<http://www.iifuture.net/faq/index.php?action=show&cat=44>
- You may wish to periodically visit the link provided for SignMaster at the beginning of *Section 1.11.1* to download and install any new updates.

1.12 Connecting the Skycut to Your Computer

Video

- Place your Skycut on a sturdy horizontal surface. If using the cutting mat, be sure to allow enough free room in both the front and the back for the mat to extend during cutting.
- Powering On:
 - ◇ Plug the power cord into a wall outlet or power strip. Connect the power cord to the Skycut V on the left side end cap.
 - ◇ Turn on the power using the power button that is also on the left side end cap. After several seconds, the light inside the Skycut will turn on and the head will do a slight jog.
- You have four options for sending files and information from your computer to the Skycut:
 - ◇ **Direct USB** using the included USB cable **Video**
 - ◇ **Wi-Fi** – adding the Skycut to a home/office network that is also accessed by your computer **Video**
 - ◇ **Wireless Standalone** – connecting wirelessly to your computer
 - ◇ **U_Disk** - Exporting PLT files from SignMaster onto a USB flash drive and then loading those files using the control panel on the Skycut. **Video**
- Review the information in the following table to understand the differences between these options. Note that implementing any of these options does not preclude you from changing to another one, as needed.

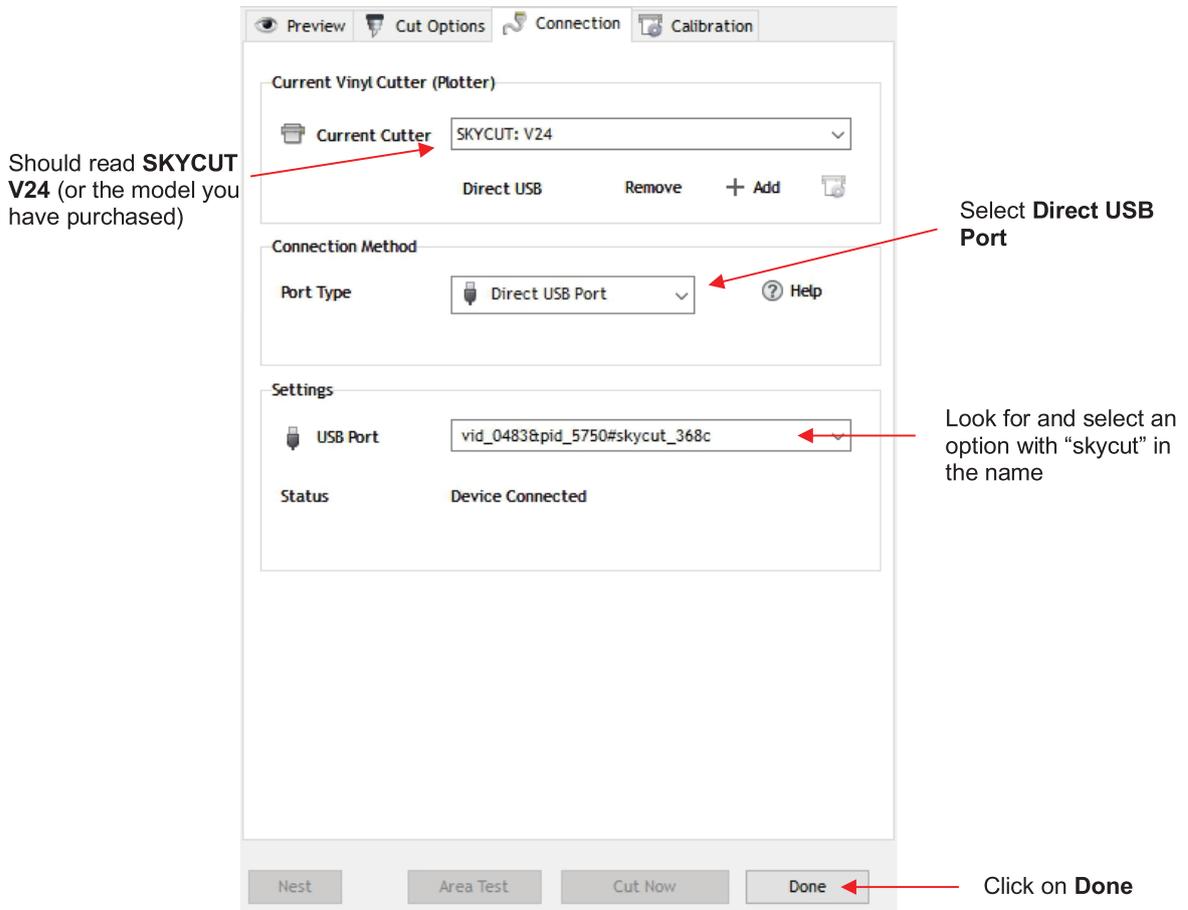
Connection Options for the Skycut with SignMaster Pro

<u>Option</u>	<u>USB</u>	<u>Wireless to Network (Wi-Fi)</u>	<u>Wireless Stand-Alone</u>	<u>USB Flash Drive</u>
<u>Description</u>	The Skycut is connected to the computer via a USB cable	The Skycut is wirelessly connected to a network router	The Skycut is wirelessly connected to the computer.	Files are saved in PLT format from SignMaster to a USB flash drive
<u>Requirements</u>	USB cable (included)	Wireless network router and knowledge of router's name and password	Computer must have wireless capability	USB flash drive
<u>Pros</u>	Easy to install; Reliable and fast form of communication.	Skycut can be located anywhere within range of the router; Other computers can cut to the Skycut	Skycut can be located anywhere within range of the computer; Other computers can cut to the Skycut	Skycut can be located anywhere
<u>Cons</u>	Skycut is physically connected to the computer; Cannot be accessed by other computers at the same time	Requires more steps to set up; Some routers may require setting changes in order to work with the Skycut	Computer is now connected to the Skycut, thus no <u>wireless</u> access to the Internet or to other wireless devices	More steps due to saving and then loading the file; Cannot adjust size and certain cut settings once saved

- The following sections present what steps are required for each type of connection. If you run into connectivity issues, please contact your dealer.

1.12.1 USB Connection Video

- Plug the small square end of the USB cable into the right end cap of the Skycut V. Plug the USB end into an available USB port on your computer.
- In SignMaster, click on the **Cut, Plot & Engrave Tools** icon  (6th from the left on the upper middle task bar) and select **Vinyl Spooler**. In the window which opens, click on the **Connection** tab.
- Verify that **Skycut V24** is selected under **Current Cutter**. If not, select it from the drop-down menu. Under **Port Type**, select **Direct USB Port**. In the drop-down menu next to **USB Port**, select an option that contains the word "skycut":



- If a USB Port option cannot be located, verify the connection at both the cutter and on the computer. Once connected, proceed to *Section 1.13*.

1.12.2 Wi-Fi Connection Video

- Note: Not all routers have the same signal strength. It's usually best to connect the Skycut while it is in the same room with the router. Once connectivity is established, you can then experiment to see how far from the router the Skycut can be located.
- What you'll need:
 - ◇ Name of your home/office network
 - ◇ The password for your network
- Carefully complete the following steps:

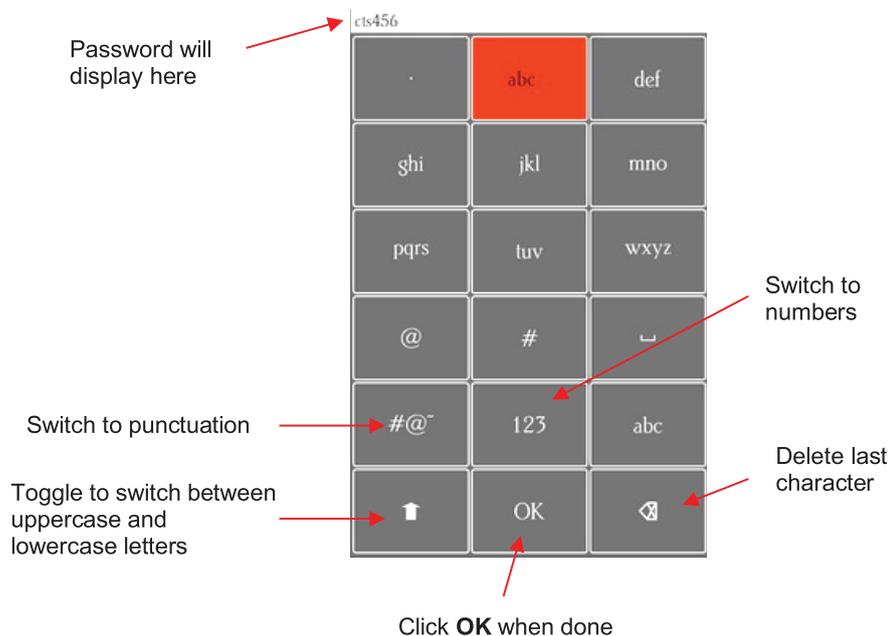
(1) On the Skycut's control panel, select **Set**  and then select **Wifi**. The **Wifi screen** will appear:



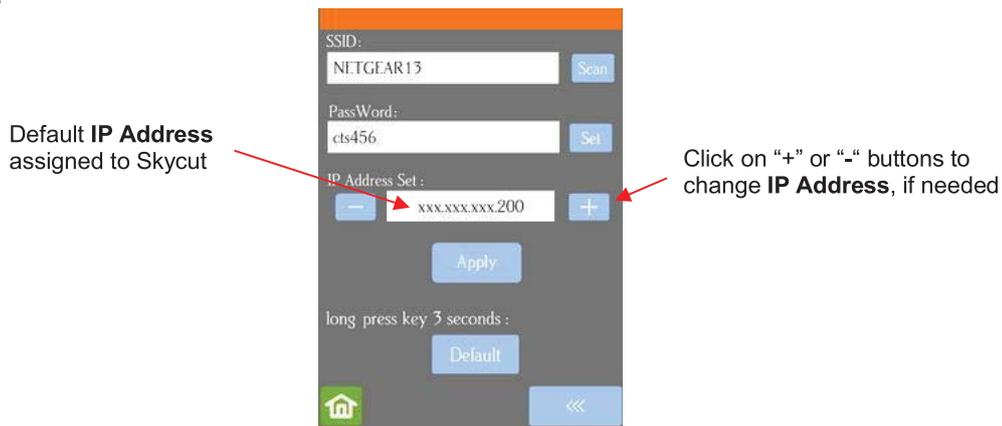
(2) Click on the **Scan** button and a list of the available networks will appear. Select your home/office network and click on **Apply**. You will then be returned to the **Wifi** screen:



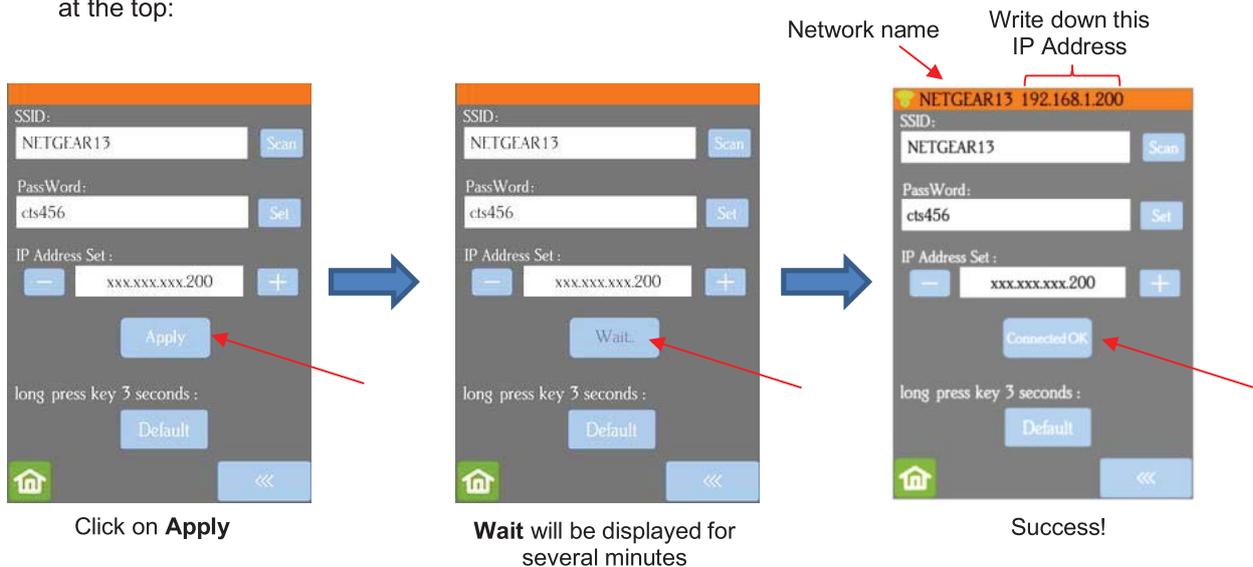
(3) Click on **Set** and the following screen will open:



- (4) To enter the password, use the following tips if you are unfamiliar with this type of screen:
- ◇ “Rapid tap” multiple times in succession to select a letter. For example, if your network password is *cts456*, then to enter “c”, you would tap three times on “abc” because “c” is the third letter in “abc”. Next you would proceed to “stu” and tap two times to enter “t”. Then you would only need to tap on “stu” once to enter the letter “s.”
 - ◇ To enter numbers, click on “123” to open the number entry screen.
 - ◇ For punctuation, click on “#@~” to open the extra characters screen.
 - ◇ To enter upper case letters, click on the up arrow in the lower left part of the screen.
- (5) Once you have the password entered in the display box at the top, click on **OK** to return to the **Wifi** screen:

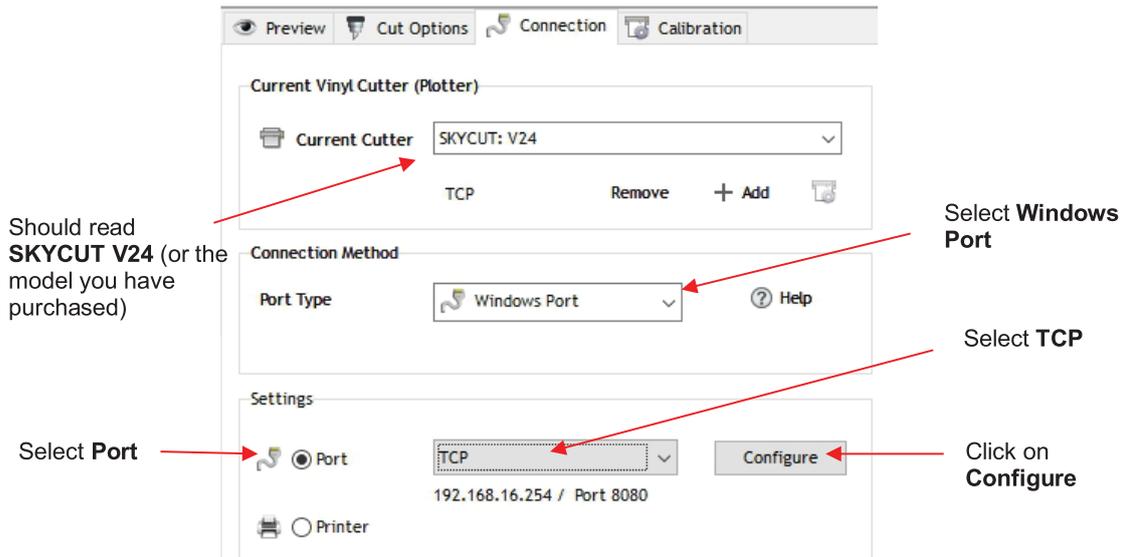


- (6) Next check the **IP Address** that will be assigned to the Skycut. The Skycut will automatically pick up the first three sets of digits from your router but will continue to display them as shown above. You only need to decide if the last set, which should be defaulting to “200”, can be used. Use the “+” or “-” buttons to make any needed changes.
- (7) Click on **Apply** and wait for several minutes while your router assigns this **IP Address** to the Skycut. Eventually, you will see **Connected OK** appear and your full **IP Address** will appear in the orange strip at the top:

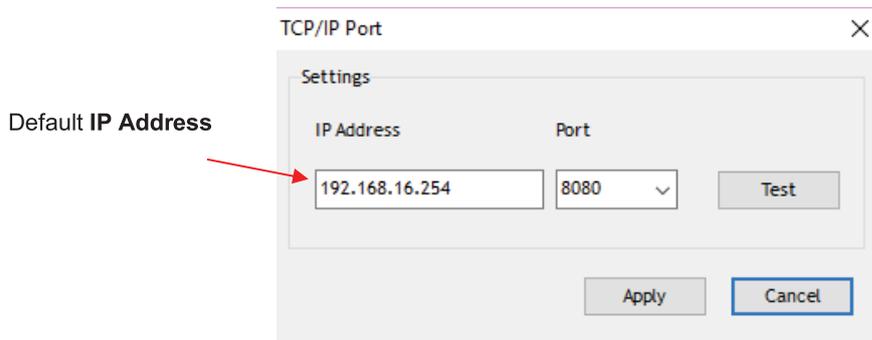


- (8) If instead of receiving a **Connected OK** display, you see **Password err**, again verify the network you selected and the password you entered. If it continues to fail to connect, confirm the **IP Address** you entered. Additional troubleshooting for Wi-Fi connections can be found in *Appendix A1*.
- (9) If you wish to reset and start again, press and hold the **Default** button for 3 seconds until the button turns red. Then click on **Scan** and repeat from *Step 3*.

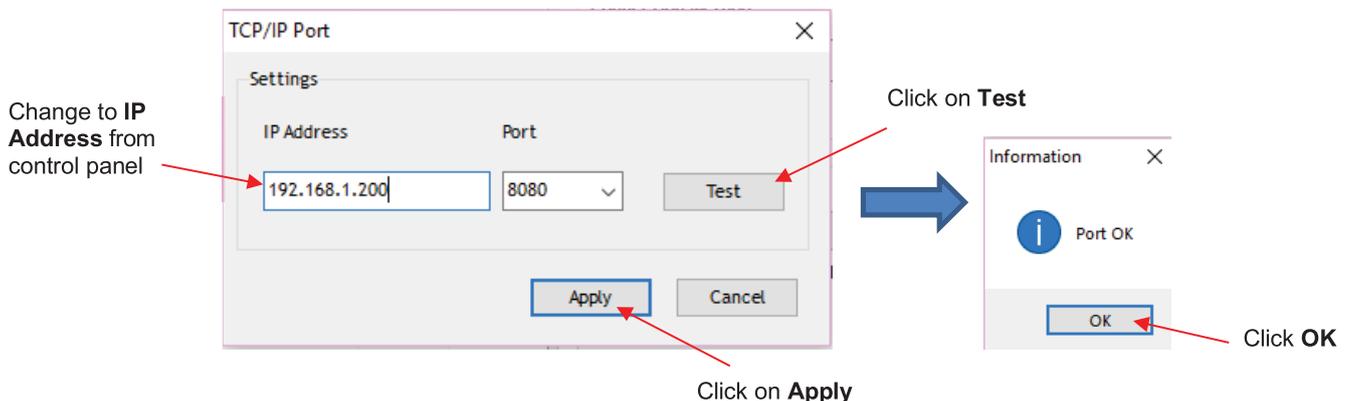
- Once you receive the **Connected OK** display, in SignMaster, click on the **Cut, Plot & Engrave Tools** icon  (6th from the left on the upper middle task bar) and select **Vinyl Spooler**. In the window which opens, verify that **Skycut V24** is selected under **Current Cutter**. If not, select it from the drop-down menu. Under **Port Type**, select **Windows Port**. Mark the option for **Port** and select **TCP** from the drop-down menu:



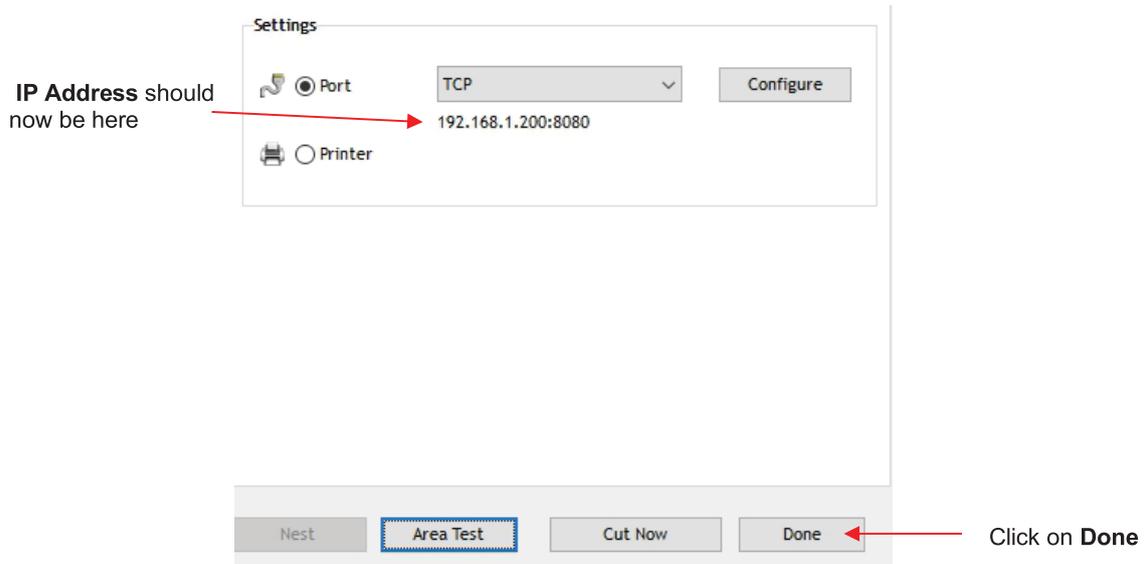
- Click on **Configure** and the following window opens:



- Change the **IP Address** to the one you set up on the Skycut control panel. Click on **Test**. A **Port OK** message should pop up. Click on **OK** and then click on **Apply**:



- The **IP Address** should now appear in the **Vinyl Spooler** window:



- Click on **Done** and proceed to *Section 1.13*.

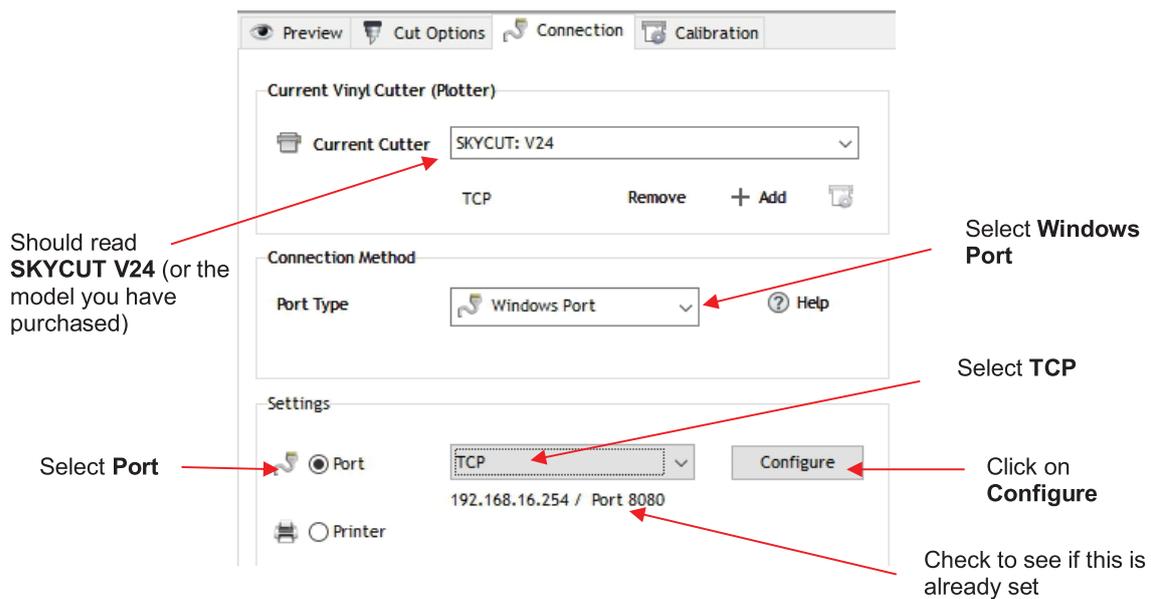
1.12.3 Wireless Stand-Alone

- It's usually best to connect the Skycut while it is next to the wireless computer. Once connectivity is established, you can then experiment to see how far from the computer the Skycut can be located.
- There are two situations to consider before getting started. If you are not sure which applies to your Skycut, then select *B* and go to that section first.

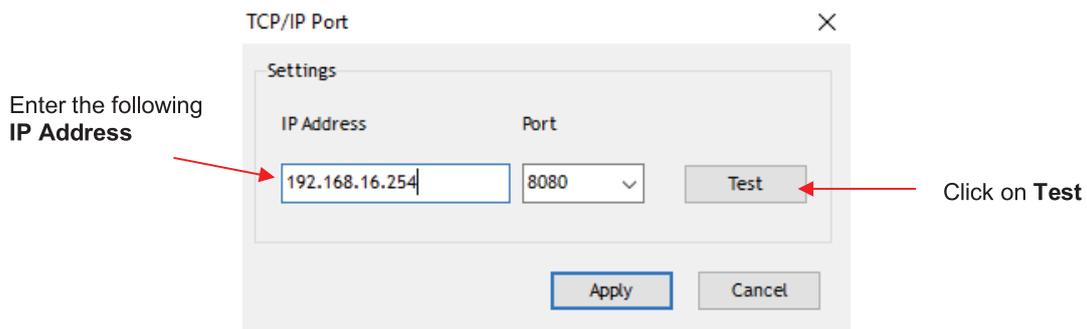
- The Skycut has never been set up wirelessly to a network.
- The Skycut has previously been connected to a wireless network.

A. The Skycut has never been set up wirelessly to a network

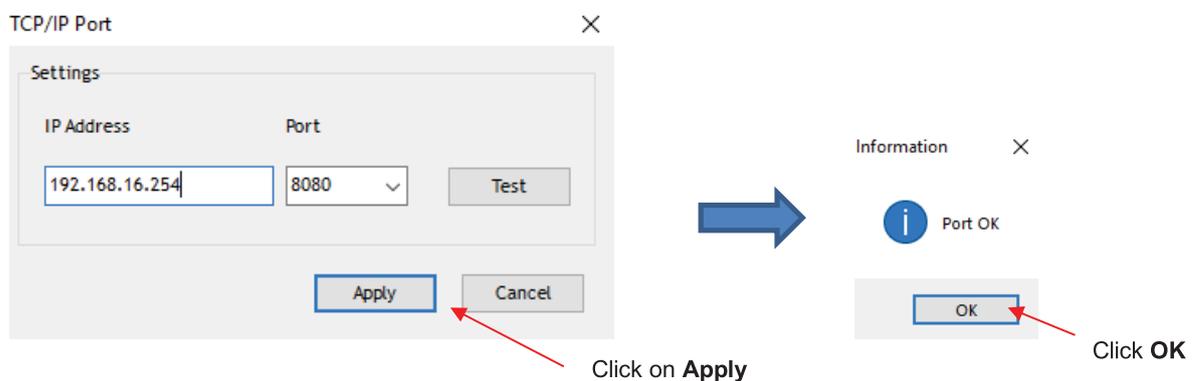
- Power on the Skycut and wait for the light to come on.
- On your computer, open your list of available networks. In the list, you should see one with this type of name format: *HI_LINK_XXXX* where "XXXX" can be any alphanumeric combination, such as "92BF" or "08A5".
- Select that network and enter the following **Network Key** when prompted: *12345678*.
- In SignMaster, click on the **Cut, Plot & Engrave Tools** icon  (6th from the left on the upper middle task bar) and select **Vinyl Spooler**. In the window which opens, verify that **Skycut V24** is selected under **Current Cutter**. If not, select it from the drop-down menu. Under **Port Type**, select **Windows Port**. Mark the option for **Port** and choose **TCP** from the drop-down menu:



- In the prior screenshot, the **IP Address** is already set to the correct **Stand-Alone IP Address:** 192.168.16.254. If this matches what you see, skip the next two steps. Otherwise, click on **Configure** and the following window opens:



- Change the **IP Address** to 192.168.16.254. Click on **Test**. A **Port OK** message should pop up. Click on **OK** and then click on **Apply**:



- The **IP Address** should now appear in the **Vinyl Spooler** window. Click on **Done** and proceed to *Section 1.13*. Remember that your computer will not have access to the Internet or other network devices while in **Wireless Stand-alone** mode.

B. The Skycut has previously been connected to a network

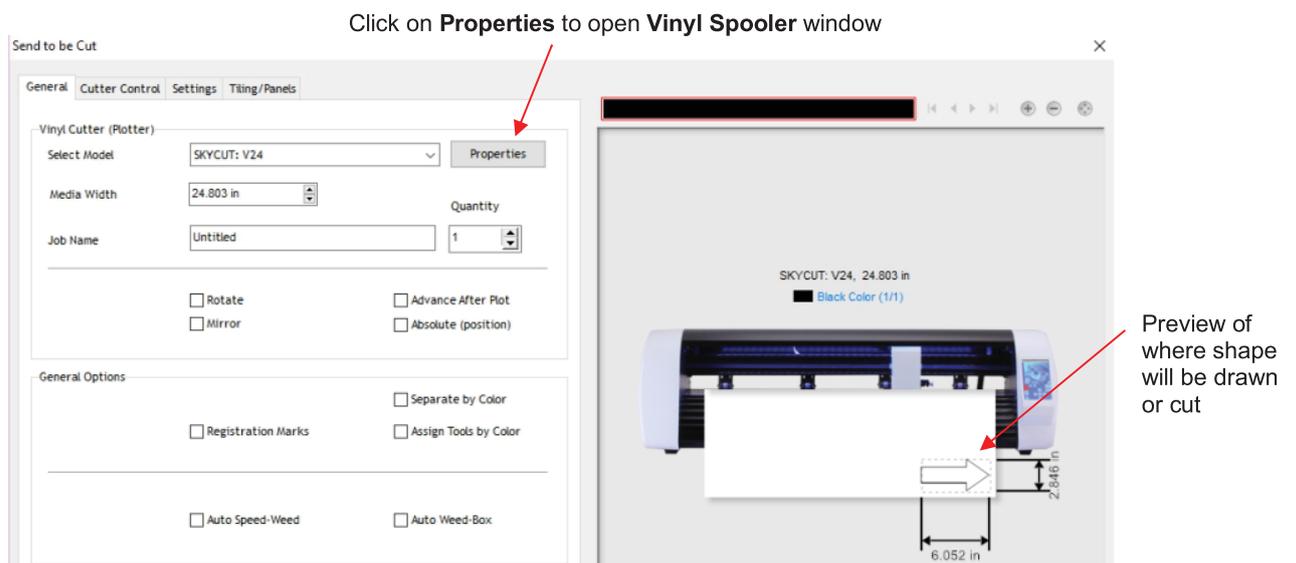
- On the Skycut's control panel, select **Set**  and then select **Wifi**. The **Wifi** screen will appear:



- To reset the Skycut so that it will be found as an available network, press and hold the **Default** button for 3 seconds. Release and you should see the **Apply** button now displays **Wait**. In a minute the **Apply** should return and you can then proceed back to A. The Skycut has never been set up wirelessly to a network and use the same procedure as if the Skycut was never set up on a network.

1.12.4 USB Flash Drive 

- With a USB Flash Drive connection, you will normally follow the steps presented in this section. If you are new to SignMaster and/or to your Skycut, it is recommended that you go to *Section 1.13* now to learn how to insert the mat and test pen, adjust settings on the control panel, and set up a test design. Then, when you are ready to cut, return to this section.
- Design or open a file in SignMaster. After making any changes to the design, click on the **Cut, Plot & Engrave Tools** icon  (6th from the left on the upper middle task bar) and select **Send to Cutter**. The following window opens:



- Click on the **Properties** button to open the **Vinyl Spooler** window. The **Cut Options** tab should automatically be selected. Verify that the **Pen Tool** is selected (assuming this is your first time testing your

Skycut). Also verify that the force and speed settings are not marked. At the current time, it is recommended that you always do these settings on the Skycut's control panel, instead:

The screenshot shows the 'Cut Options' tab of the SKY-CUT: V24 control panel. The interface is divided into several sections:

- Media Size:** Media Width (24.803 in), Media Length (0.000 in), and a 'Cut in Strips' checkbox.
- Cutting Options:** Preset Mode (dropdown), Blade Offset (0.35), Overcut (1.00), and Blade type (Pen Tool).
- Additional Options:** Tool Select (Default), Cutting Force (50 g), Cutting Speed (250 cm/s), and Travel Speed (250 cm/s).
- Bottom Section:** Advance after plot checkbox and Area Tests button.

Annotations with red arrows point to the following elements:

- 'Select **Cut Options** tab' points to the 'Cut Options' tab in the top navigation bar.
- 'Pen drawing: leave unchecked; Cutting: Check and enter settings' points to the 'Blade Offset' checkbox and its value field.
- 'Pen drawing: select **Pen Tool** Cutting: select blade type from menu' points to the 'Blade type' dropdown menu.
- 'Uncheck all three of these settings' points to the 'Cutting Force', 'Cutting Speed', and 'Travel Speed' checkboxes.
- 'Click on **Done**' points to the 'Done' button at the bottom right.

- **IMPORTANT:** For initial testing of your Skycut, it is highly recommended that the test pen be used until you know, with certainty, where shapes will draw.
- Click on the **Connection** tab and verify that **Skycut V24** is selected under **Current Cutter**. If not, select it from the drop-down menu. Under **Port Type**, select **Windows Port**. Mark the option for **Port** and then select **U_Disk** from the drop-down menu:

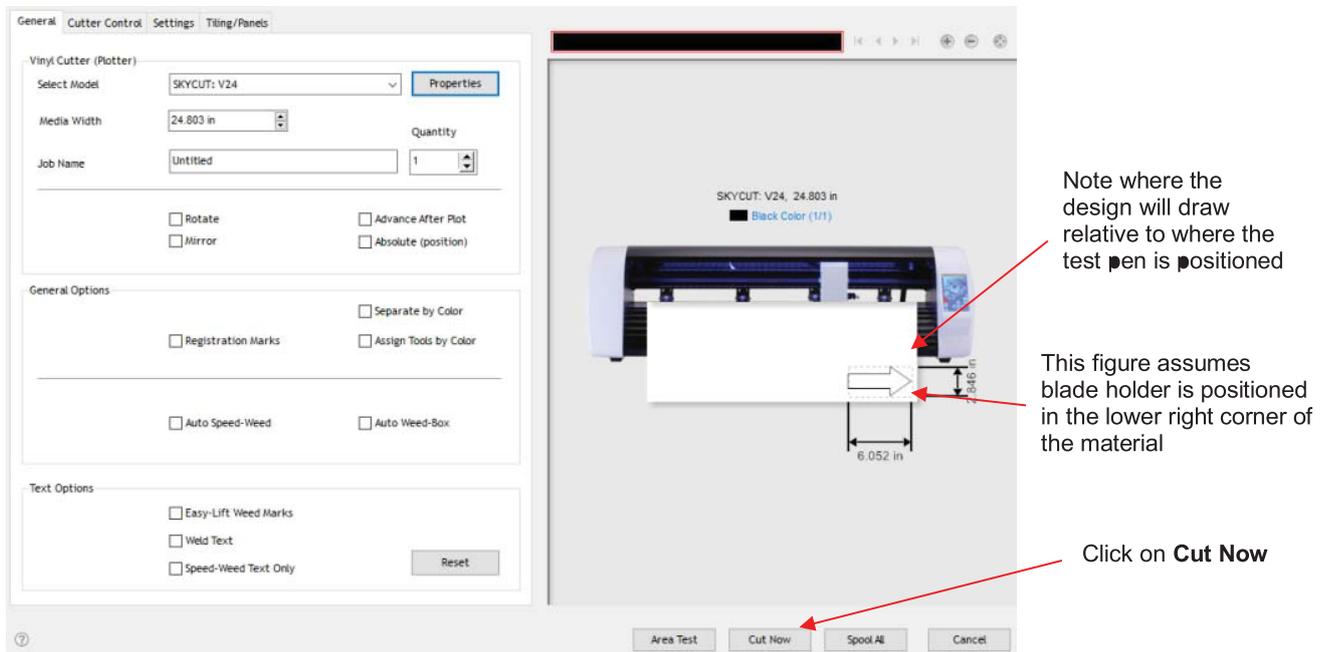
The screenshot shows the 'Connection' tab of the control panel. The interface includes:

- Current Vinyl Cutter (Plotter):** A dropdown menu for 'Current Cutter' showing 'SKY-CUT: V24'.
- Connection Method:** A dropdown menu for 'Port Type' showing 'Windows Port'.
- Settings:** A radio button for 'Port' and a dropdown menu for 'U_Disk'.

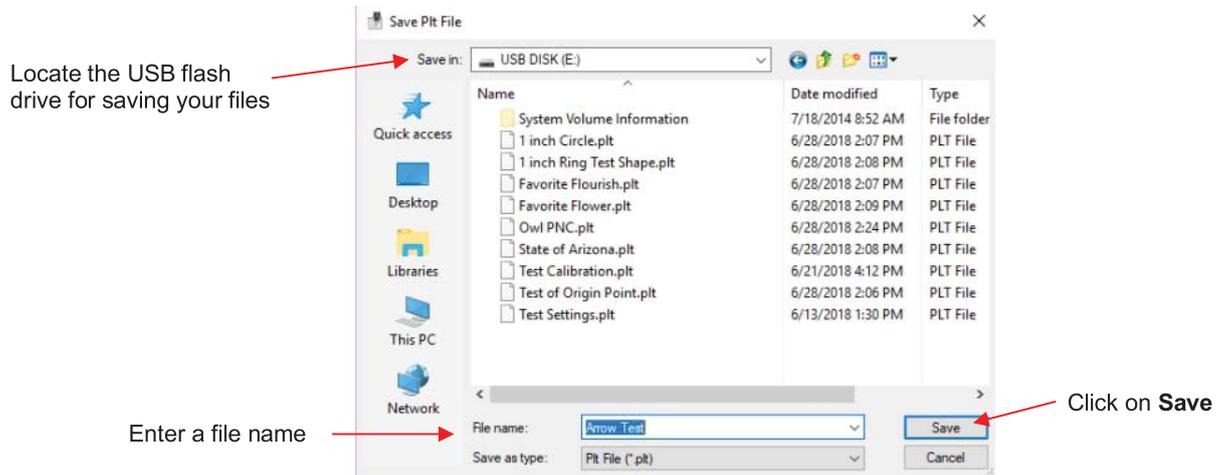
Annotations with red arrows point to the following elements:

- 'Select **Connection** tab' points to the 'Connection' tab in the top navigation bar.
- 'Should read **SKY-CUT V24** (or the model you have purchased)' points to the 'Current Cutter' dropdown menu.
- 'Select **Windows Port**' points to the 'Port Type' dropdown menu.
- 'Select **Port**' points to the 'Port' radio button.
- 'Select **U_Disk**' points to the 'U_Disk' dropdown menu.

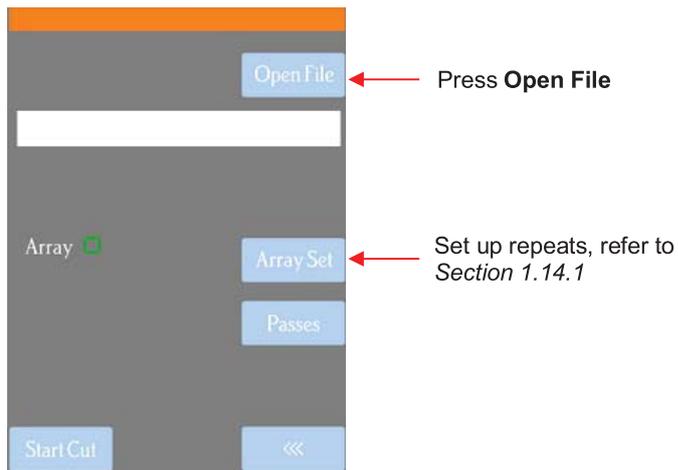
- Click on **Done** at the bottom of the **Vinyl Spooler** window and you will be returned to the **Send to be Cut** window. More about the settings on the left side of the window will be covered in *Section 2.03*. For now, just note where your shape will draw relative to the material and how to initiate the exporting of the PLT file:



- Insert a USB flash drive into your computer and allow Windows to find it. Note the drive letter assigned by Windows.
- Click on **Cut Now** and a **Save PLT File** window opens because earlier you had changed the connection type to **U_Disk**. Browse to locate the USB flash drive you plan to use and name your PLT file:



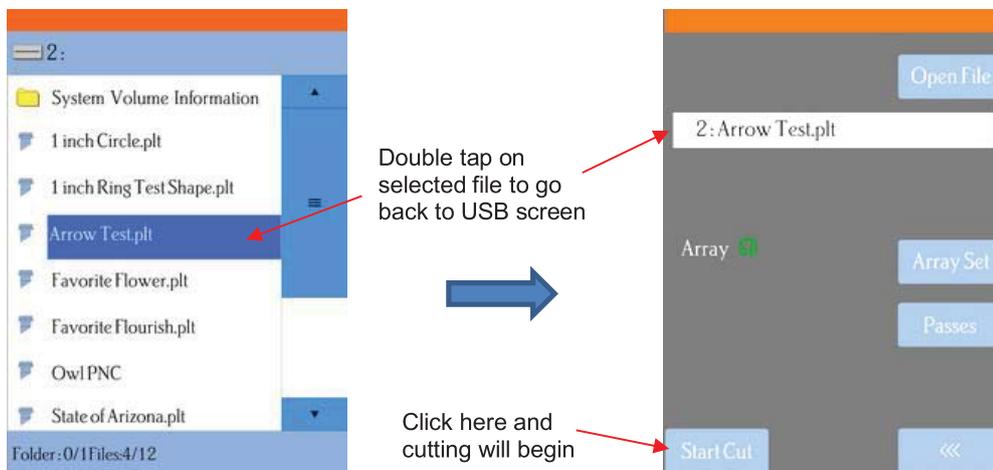
- After saving the file, eject the flash drive and insert it into the right side of the Skycut. On the control panel, select **USB** and then **Open File**:



- (1) Double tap on **USB DISK** and a screen will open showing any folders and PLT files on the flash drive. Double tap a folder to open it, as needed. Drag the scroll bar on the right to see more files:



- (2) Once you have located the PLT file you want to cut, double tap the name. You will be taken back to the USB screen and the selected file name will be displayed:

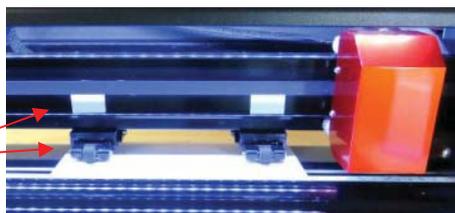


- (3) If you wish to cut repeats of the file, select **Array Set** and a screen will open where you can then select the number of rows and columns of repeats, along with the spacing between the repeats. Refer to *Section 1.14.1*.
- (4) If your project is a print and cut (aka contour cut) application, please refer to *Section 3.09*.
- (5) When you are ready to cut, click on **Start Cut**.

1.13 Test Draw Shapes

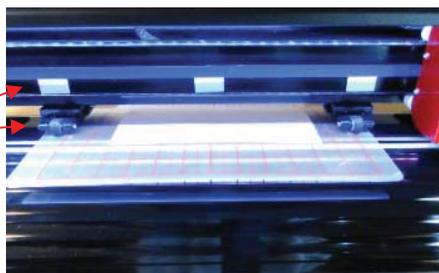
- New owners tend to be VERY eager to try out their Skycut. It's important to test your cutter to ensure that data is being sent properly from your computer to the cutter. The following steps will allow you to do some testing with the pen tool. But note that **the following steps are for DRAWING, not cutting**. Before inserting the blade holder into your cutter, please read the following *Sections 1.07.4, 1.07.5, 2.01, 2.02, and 2.03*.
- It is also very important to understand where shapes will cut based on various available options in SignMaster. This is partially addressed in the next section; complete details are covered in *Section 2.02.2*.
- Before setting up a file for testing, if you are new to SignMaster, it is recommended that you watch the following introductory video: [Video](#)
- You have two options when using the test pen:
 - ◇ Insert a sheet of paper directly into the cutter. Make sure the paper is past the ruler so that it doesn't catch when feeding the paper forward:

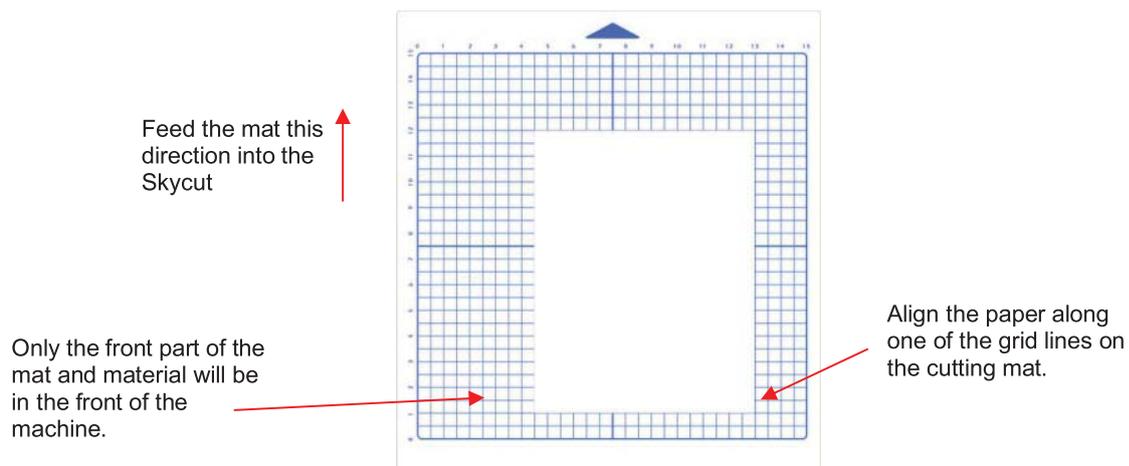
Observe how pinch wheels are centered with white rectangles



- ◇ Or...Place the paper onto the cutting mat and then insert the cutting mat into the cutter:

Observe how pinch wheels are centered with white rectangles

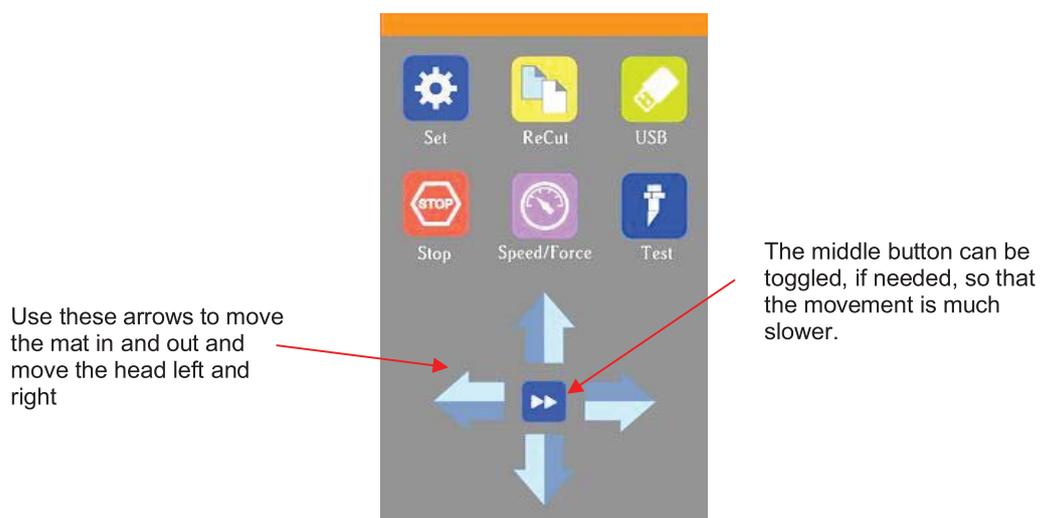




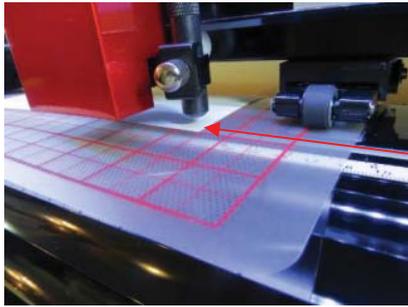
- Use any of the horizontal markings at the front of the Skycut (such as the ruler) to align the mat so that it's straight. Lift the pinch lever to drop the pinch wheels onto the cutting mat. Most of the mat and the paper should now be behind the cutter, not in the front.
- Before installing the test pen, make sure the pen will write by scribbling on scrap paper. Note that you will probably need to remove a tiny bit of wax on the end of the pen nib. Then follow these steps:
 - ◇ Loosen the screw on the blade holder seat.
 - ◇ Insert the test pen allowing it to freely rest on top of the paper.
 - ◇ Before tightening the front screw, raise the test pen up a little bit (~ 1/8" or several mm). You don't want the pen still touching the paper but you also don't want the pen too high above the paper either.
 - ◇ Tighten the front screw to lock in the test pen. Be careful not to push down on the blade holder seat while tightening.

IMPORTANT! This is NOT the recommended method for loading the blade holder into the cutter. This is presented as a quick way to insert the test pen so that it is in a good position for drawing. The instructions for inserting the blade holder will be covered in *Section 2.01.3*.

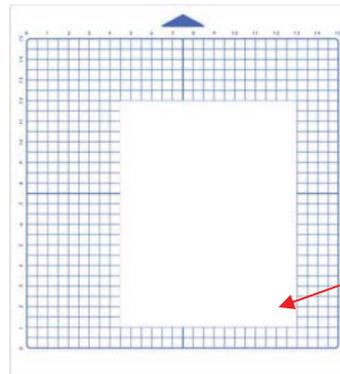
- The arrow keys on the Skycut's control panel will always be used to set the origin for cutting:



- ◇ Press the arrows on the control panel to move the head left or right and the mat in and out. The goal is to have the tip of the pen close to the lower right corner of the paper:



Move pen tip to this corner of the paper.



Feed the mat this direction into the Skycut

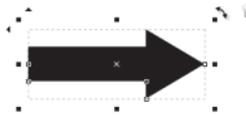
Move the pen tip to this corner of the paper

◇ Once the pen tip is near the lower right corner, you are ready to proceed with the test.

- The **Force** and **Speed** will also be set using the control panel. Press the **Speed/Force** button  and the following window opens where you can set the **Speed** and **Force** to the settings shown. Note that you can either press the + and – buttons or you can slide the orange bar with your finger or stylus:

- In SignMaster, on the left side tool panel, press and hold the **General Power Shapes** icon and, from the drop-down menu, select the **Arrow** option:

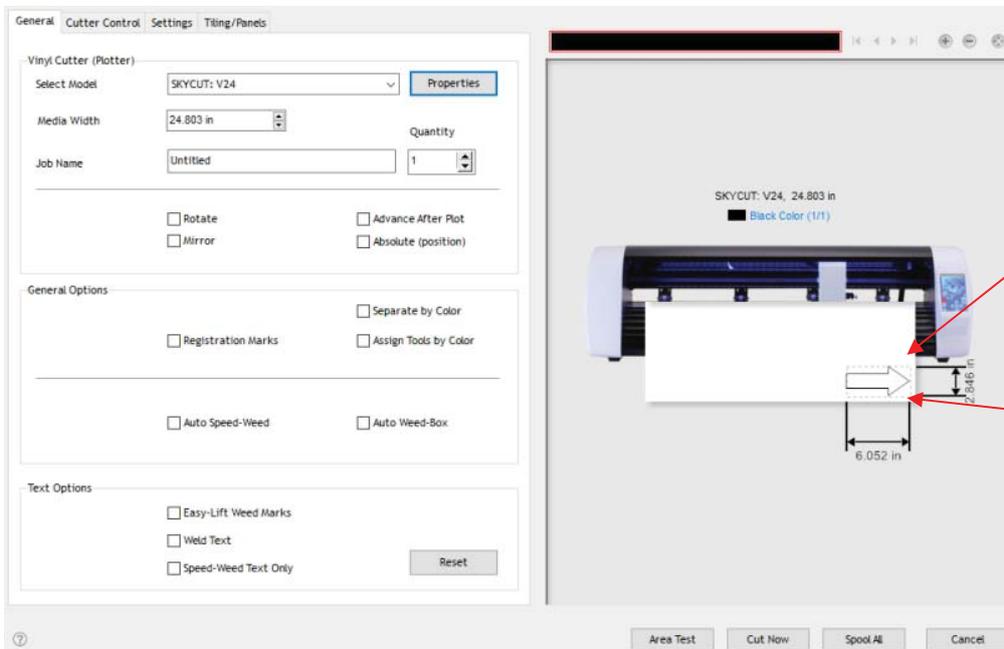
- Press and hold the left mouse button and drag the mouse in the **Drawing Area** to create the arrow shape. In this test, it doesn't matter where you place the arrow on SignMaster's **Drawing Area**, as it will be drawn at the origin you set on the machine.



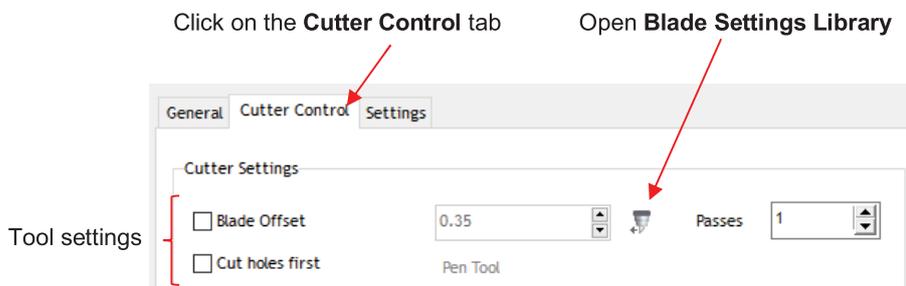
- If you wish to resize the arrow, either drag one of the square handles around the selected arrow or, in the settings above the **Drawing Area**, change the **Width** or **Height**, if desired:



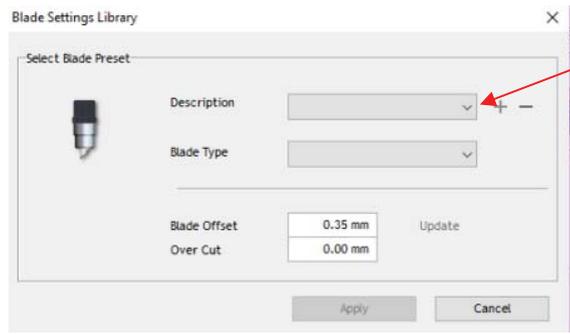
- At this point, if you plan to export this file to a USB flash drive, rather than cut directly to the Skycut from SignMaster, please go to *Section 1.12.4* for instructions.
- After making any changes to the design, click on the **Cut, Plot & Engrave Tools** icon  and select **Send to Cutter**. The following window opens. More about the settings on the left side of the window will be covered in *Section 2.06*. For now, just note where the shape will cut relative to the material:



- Before executing the cut/draw process, the **Pen** tool will be selected. Click on the **Cutter Control** tab and the following settings will be displayed:

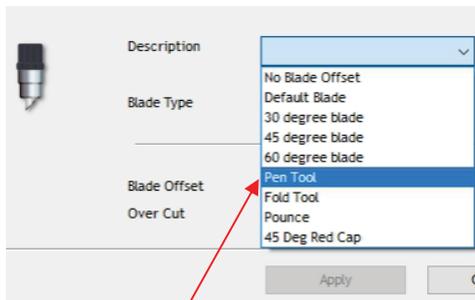


- Click on the small icon  to the left of **Passes** and the **Blade Settings Library** opens:

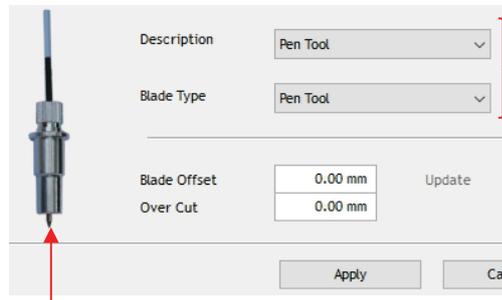


Click down arrow

- To switch to the test pen, click the down arrow to the right of **Description** and select **Pen Tool**:



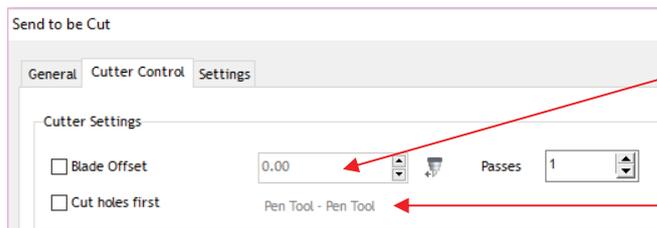
Select **Pen Tool**



Pen Tool now appears here

A test pen image appears

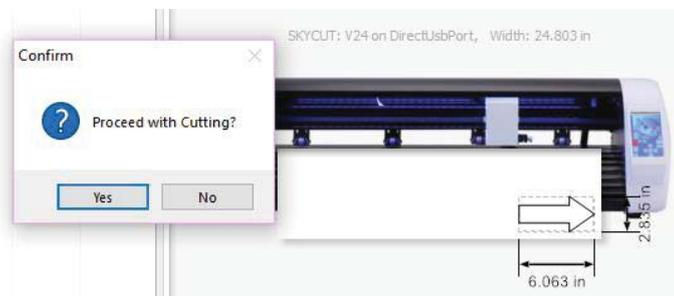
- Click on **Apply** and the **Cutter Settings (Tool settings)** will update showing a 0.00 setting for **Blade Offset** (more about this setting is covered in *Section 2.03.3*):



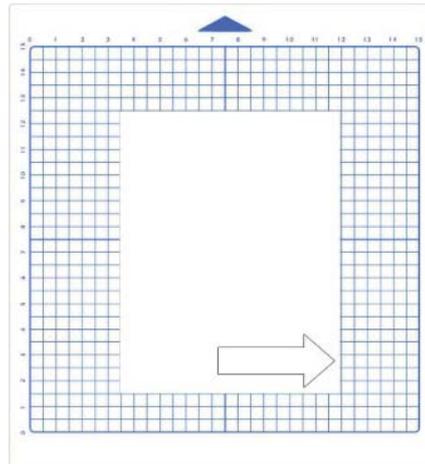
Blade Offset should now read 0.00

Pen Tool should now appear here

- Click on **Cut Now** and a confirmation window opens. Answer **Yes** to proceed, **No** to cancel:



- After selecting **Yes**, the Skycut will draw the arrow on your paper:

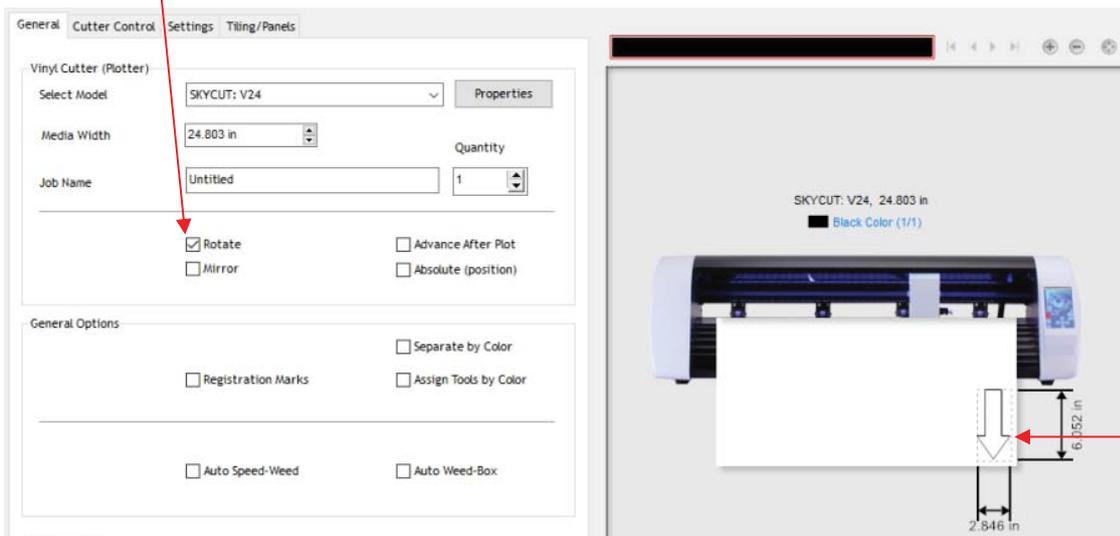


↑
Feed the mat this direction into the Skycut

→
The arrow is drawn at the origin and points to the right.

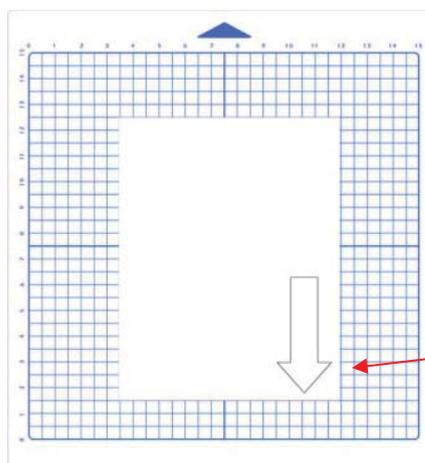
- To draw again, return to the cut window and choose a different origin. Practice moving the origin to different locations. If you want to have the arrow draw in a **Landscape** orientation, then mark the **Rotate** option. You will see the arrow rotate in the **Preview**:

Check **Rotate**



↓
Note arrow is now rotated

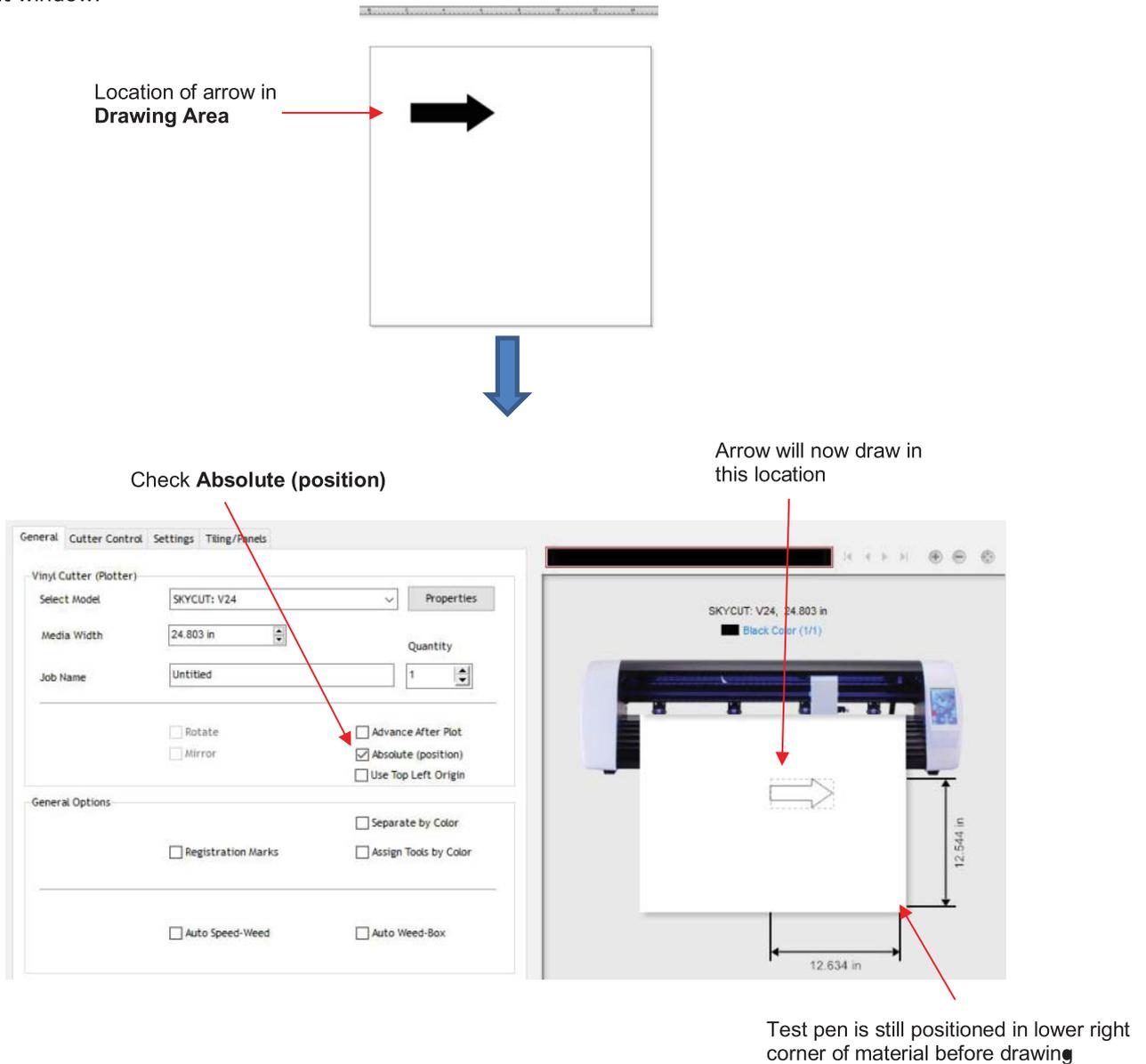
- Cutting with this setting results in the arrow pointing downwards as shown in the prior preview window:



↑
Feed the mat this direction into the Skycut

↓
The arrow is drawn at the origin and points down

- If you want the arrow to draw where you have it located on the **Drawing Area** in SignMaster's main screen, versus at the origin, then you need to mark the option called **Absolute (position)** in the same **Send to be Cut** window:



- Set the origin in the lower right corner of the mat's grid and then place the paper in the correct location on the mat to correspond to where the shape is positioned in SignMaster. Refer to *Section 2.02.2* for more details on controlling where images will cut.

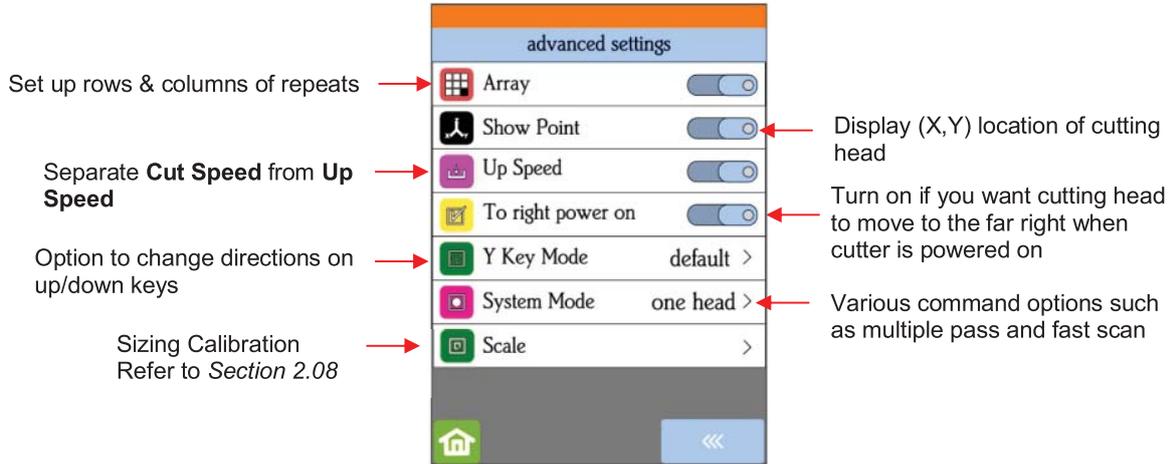
IMPORTANT: Please read *Section 2.01* before cutting!

1.14 Additional Control Panel Settings

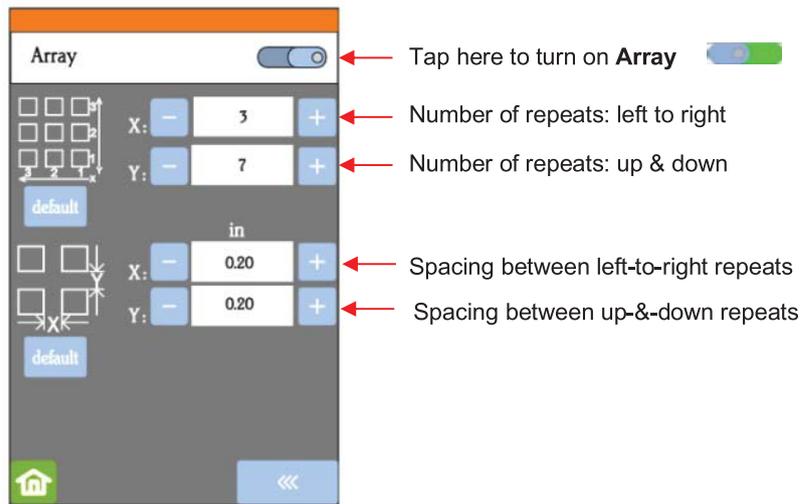
- The Skycut's control panel offers a number of default settings. Some of these may not be important at this point in the learning process. So, you may want to skip this section for now but remember that it's here and could provide you some options to improve your experience with the Skycut.
- Each of the following sections will refer to one of the settings in the **Set** screen.

1.14.1 Advanced Settings

- The optional settings in the **Advanced Settings** screen are:



- Array:** Tap the **Array** button to open the **Array** screen:

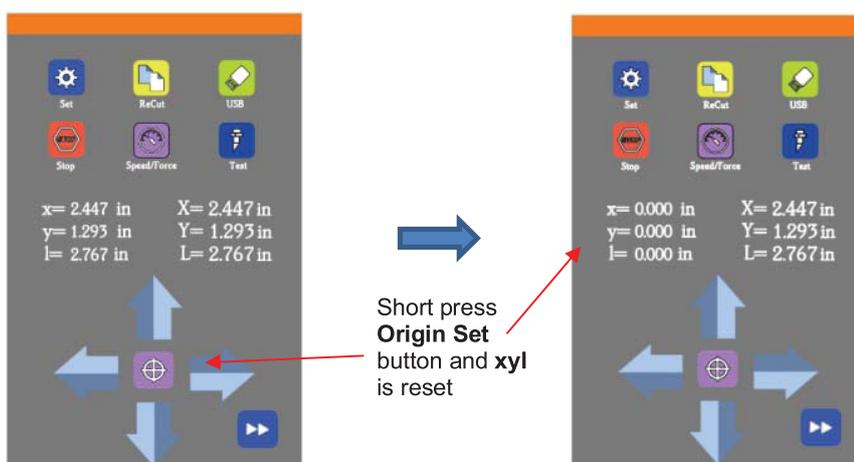


◇ In the above screenshot, the shape sent to the Skycut would cut 3 copies across and 7 up and down, for a total of 21 shapes. The spacing between each shape would be 0.20 inches (Note: to use mm instead of inches, switch the **Units** setting. Refer to *Section 1.14.2*).

- Show Point:** When toggled on, the **Main Screen** displays movement and location output based on the position of the cutting head:

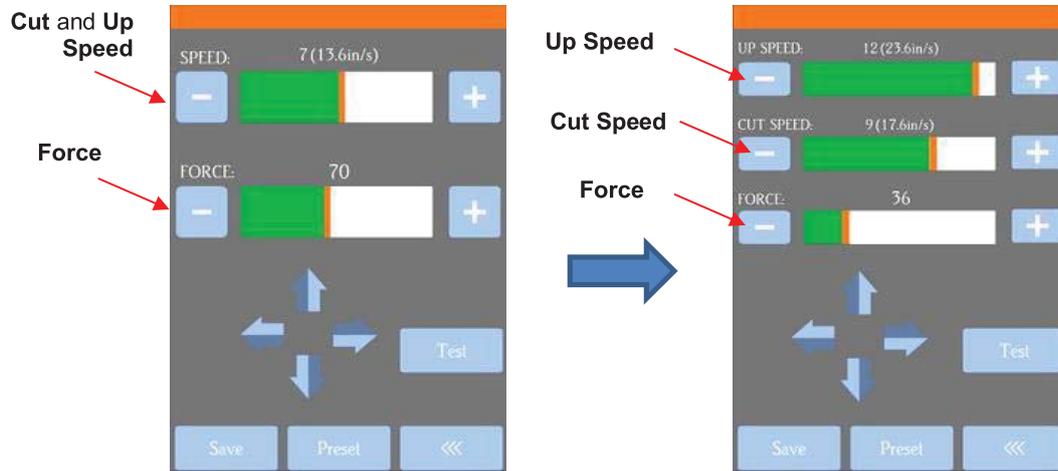


- ◇ **Absolute Location** displays the current location relative to a “power-on” location of (0,0):
 - **X** is the left-to-right location
 - **Y** is the up-&-down location
 - **L** is the straight-line distance from (0,0)
- ◇ **Relative location** displays the change in location currently being made as you press the arrow keys:
 - **x** is the current left-to-right distance moved from **X**
 - **y** is the current up-&-down distance moved from **Y**
 - **l** is the straight-line distance from the (**X,Y**) location
- At any time, if you press on top of the current location of either **XYL** or **xyl**, the blade carriage will return to its last origin.
- To set an origin for cutting that can be returned to after either finishing a cut or stopping a cut, press the **Origin Set** button before sending the cut.

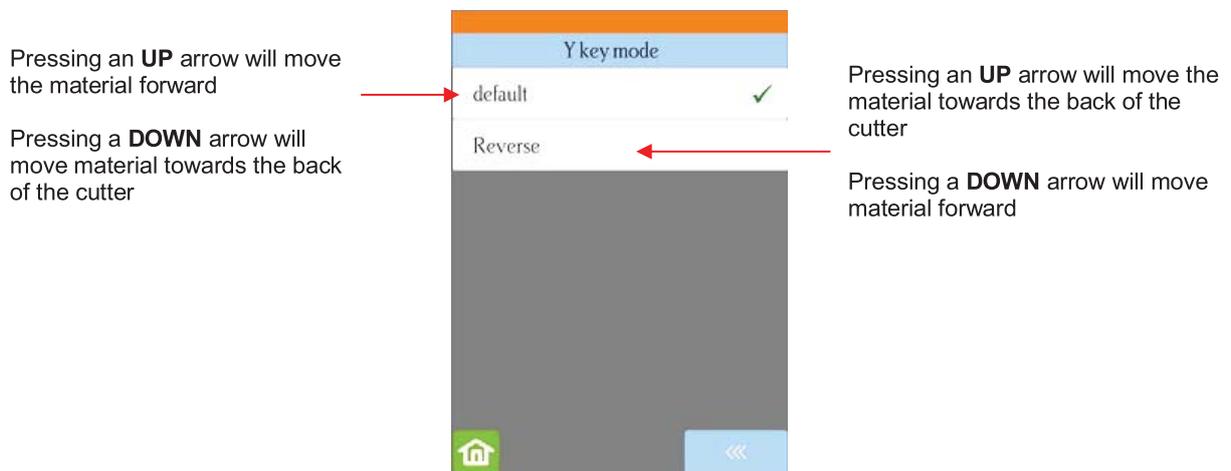


- ◇ After the cut, you can move the mat or material (using the arrows keys on the control panel) to check the quality of the cut. If needed, you can then press on top of the **xyl** displayed location (i.e., the **Secondary Location**) to return the blade carriage to its **Secondary Origin**. Then press **Re-Cut** on the control panel to repeat that same cut.
- ◇ This feature can also be useful for production processes, such as repeating the same **Print+Cut**.

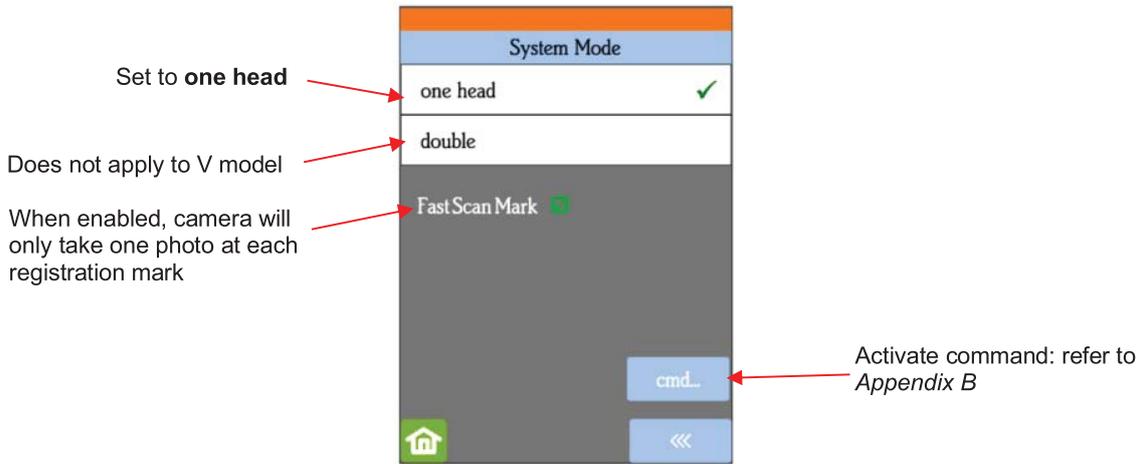
- **Up Speed** is how fast the blade travels while in the “up” position, such as when it is moving from the origin to the location of the first shape to cut or when moving from one cut shape to begin cutting another. When turned off, **Up Speed** will match the **SPEED** set for cutting. Turning on this setting will change the **Speed/Force** screen to display both speeds, allowing them to have different settings:



- **To right power on:** With this setting turned on, the cutting head will move to the far right whenever the Skycut is powered on.
- **Y Key Mode:** This setting controls the movement of the material or cutting mat when using the up and down arrows in the **Main Screen**:



- **System Mode** has the following options:



- **Scale** is used is used to input the sizing calibration. Refer to *Section 2.08*.

1.14.2 General Settings

- The optional settings in the **General Settings** screen are:



- **LED set** allows you to change the brightness of the light inside the Skycut or even turn it off:

