

Notes:

This is not the full manual, the assembly instructions have been removed.
The 17" wide double pages have been spit to a screen readable 8.5 x 11".

LASERPOINT II

User Manual & Assembly Instructions



USCutter 

Connecting The Cutter To A Computer

Attach the power cord to the cutter and then plug in the unit and turn on the power.



If using the Serial Cable to connect your cutter to a computer:

If you are using a Serial Cable to connect your cutter to a computer then no further setup is necessary. Simply connect one end of the cable to the cutter and the other end to a computer and setup is complete. If you have more than one serial connection on your computer or you are experiencing communication issues between your cutter and computer then you may wish to verify that the correct COM port is being used in your software setup, but for most users the COM port will be COM1.



If using the USB Cable to connect your cutter to a computer:

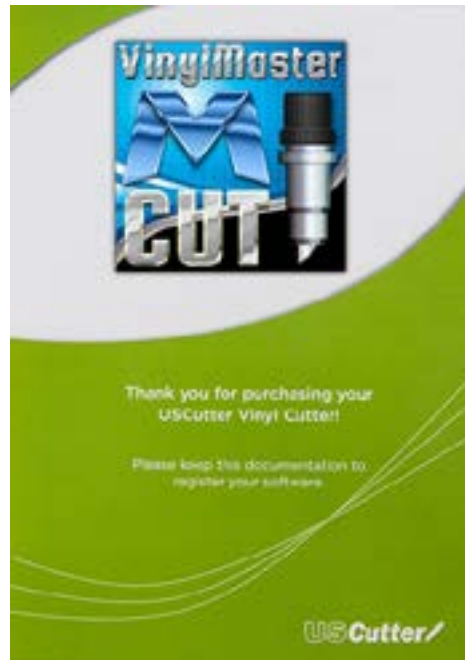
You will need to download and install drivers for the USB connection to work properly. Go to www.uscuttersupport.com/mh-support-page and select the driver that supports your Windows version.

INSTALLING VINYL MASTER SOFTWARE

Your Titan Vinyl Cutter comes bundled with VinylMaster Cut software, an easy to use software with the tools to help you take your projects from concept to a ready to cut computer image file.

You can download and install the VinylMaster Cut software at www.uscutter.com/download, and you will need the key code packaged with this cutter to activate the software. You may need to download drivers to support your operating system. Drivers are available at <http://support.uscutter.com>

Training for VinylMaster is all done via short videos accessed through the software. To access the videos, click on the [SUPPORT](#) link, then [HELP TOPICS](#).



If you are going to cut from a scrap or single sheet instead of a roll, then skip the next step on placing a vinyl roll. All other steps will be the same.

1

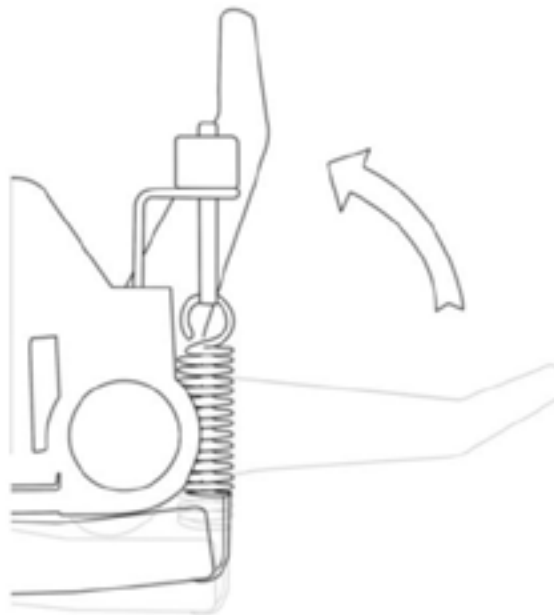
Place the roll on top of the stand rollers.

For heat press vinyl, please flip the roll.



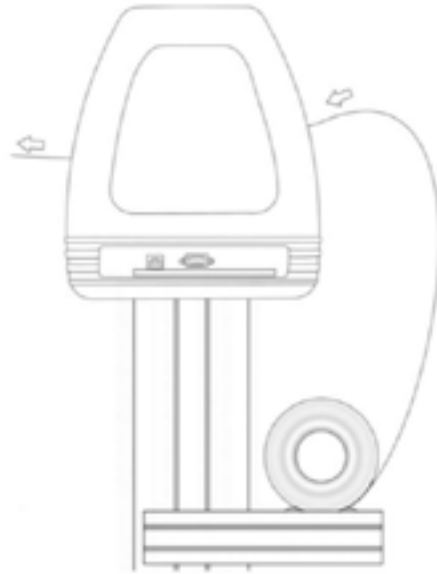
2

Release the pinch rollers release levers.



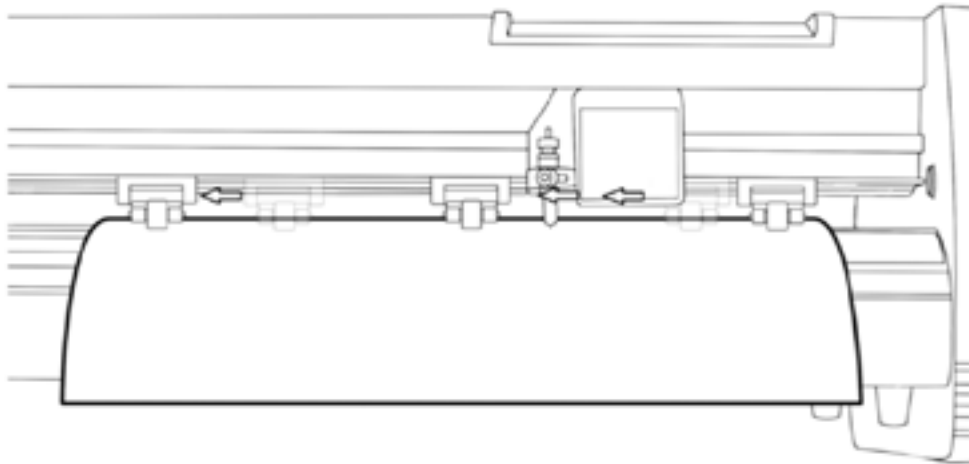
3

Feed the vinyl underneath the pinch rollers (if working from a single sheet instead of a roll, the vinyl can also be feed from the front).



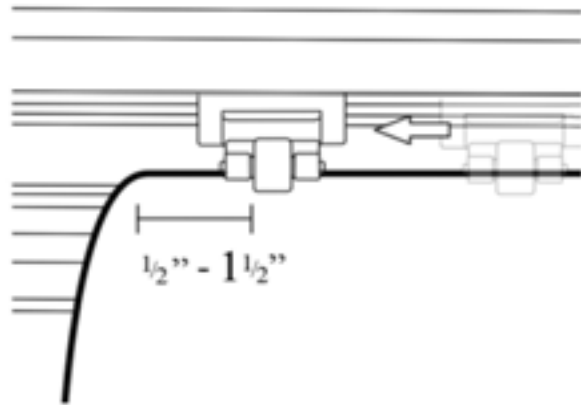
4

Adjust the pinch rollers so there is one roller located on each side of the vinyl (and, on models with 3 or more rollers, one roller near the center). Avoid lowering a pinch roller to the gap between the two feed rollers.



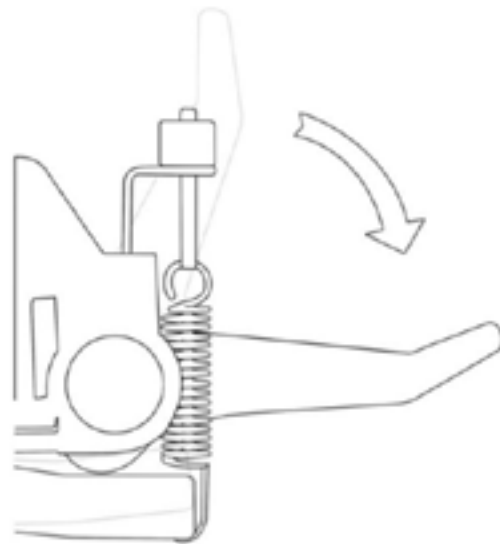
5

Leave a gap of between $\frac{1}{2}$ "- $1\frac{1}{2}$ " from the edge of the roller and the edge of the vinyl on both sides.



6

Engage the Pinch Rollers by pushing down on the Pinch Roller Release Levers.



If the cutter is not already on, turn it on now.

Blade Set Up

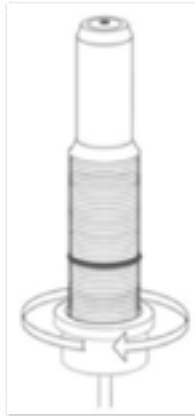
1

Unscrew the cap from the Blade Carriage.



2

Set Brass Ring on Blade Carriage to the fully down position.



3

Remove the protective cover from a new blade.



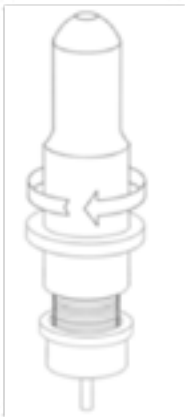
4

Insert the blade into the top of the Blade Carriage.



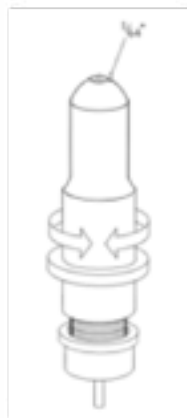
5

Screw the cap back onto the Blade Carriage.



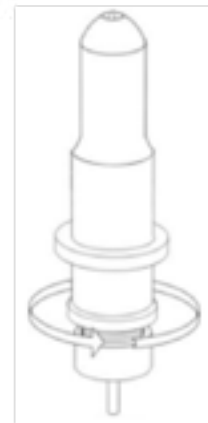
6

Adjust the carriage cap until the blade is protruding approximately 1/64th of an inch.



7

Adjust the Brass Ring until it fits snug against the Cap. This will help keep the cap in place during operation.



Blades should be replaced every 6 months. Your blade may need to be replaced more often if you are cutting thicker material such as flock, glitter, or reflectives.

Setting the Origin for LaserPoint2

To set the Origin of where the LaserPoint2 cutter will begin cutting from press the “Enter” button on “Local” while on the Home Screen using the “Select” button to highlight it if needed. This will enter the cutter into “Jog Mode” where the left and right arrows of the control pad adjust the position of the carriage and the up and down arrows advance and retreat the media via the feed rollers. Once you have your media and carriage in position press the “Select” button, while in the Local Screen, to move the cursor to “Current” then press “Enter” and the origin is set.

Changing LaserPoint2 Speed and Force

To set speed and force of the LaserPoint2, make sure you are back in the “Home” screen with “Local” highlighted. Press “Enter”. Use the up and down arrows to adjust the speed and the left and right arrows to adjust the cutting force. A typical cutting speed is 500mm/s, and a typical cutting force is 100.

Home Screen



Local Screen



A Basic Guide To Vinyl Cutting

Now that you've got your system fully assembled let's take a moment to test it and also take moment to learn a bit about how to "fine tune" the machine so that it will do quality cuts on the different materials you'll be cutting. To do this we'll do a standard test cut, which when completed will a simple triangle inside of a square. Load the material roll and adjust the pinch rollers. Remember to make sure the top roller is placed so that there is a bottom roller (called the "grit roller") beneath it. Remember to line the material up so that it is moving straight through the feed area, and resist the temptation to run the material close to the edge of the cutter feed area or you increase the risk of a mis-feed that will wrinkle your vinyl. (See the graphic on the top of pg.

21 for an example.)

Assuming you're cutting standard signage vinyl, you'll want to use your 45° blade. If you received vinyl along with your cutter package, chances are very good it's a standard GreenStar or Oracal signage vinyl. Now, find the TEST button on the cutter control pad and press it. It should cut a pattern that looks like this:

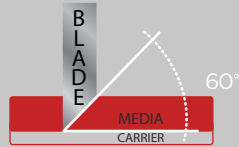


This Test Cut will help you to calibrate the machine for this material. Examine this cut and use a weeding tool or exacto knife to weed the square out while keeping the triangle on the paper. ("Weeding" is the word for removing the cut vinyl in the design.)

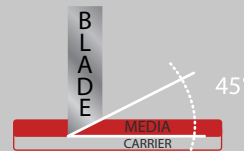
Use this simple diagram to make adjustments. There's a certain amount of trial and error to it at first, but you'll quickly get a feel for it.

CHOOSE BLADE

For thin and regular sized media, use a 45° blade.



For thicker materials, such as Siser StripFlock, Siser Glitter, and Hexis CutFlex 600 Reflective, a 60° blade is needed.



Load the blade so that the length of the blade shown is not longer than the media is thick.



LOAD MATERIAL



Most vinyl products are loaded from over the top.



CUT SPEED

This setting determines how fast the design is cut out and is usually measured in centimeters per second.

small intricate designs



DECREASE CUT SPEED

large simpler designs



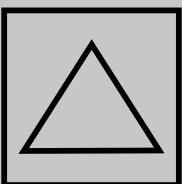
INCREASE CUT SPEED

3

4

FORCE/PRESSURE

This setting determines how hard the blade comes down onto the material.



Test Cut

outer square won't weed



INCREASE FORCE

blade digging too far into carrier



DECREASE FORCE

weeds easily with a lightly scored carrier

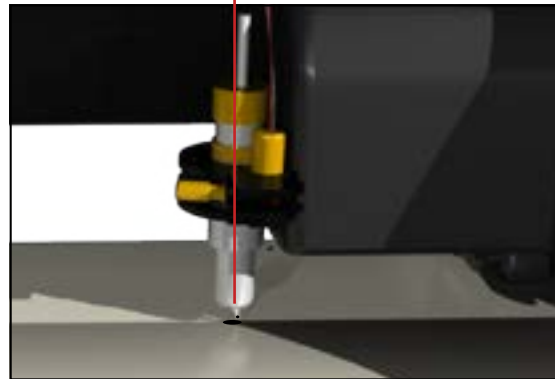


PERFECT!

1 Calibrating the laser

Press “Enter” and use the arrow buttons to place the carriage over a piece of paper. Insert plotter pen and make an impact on the paper by pressing down and twisting the pen cartridge.

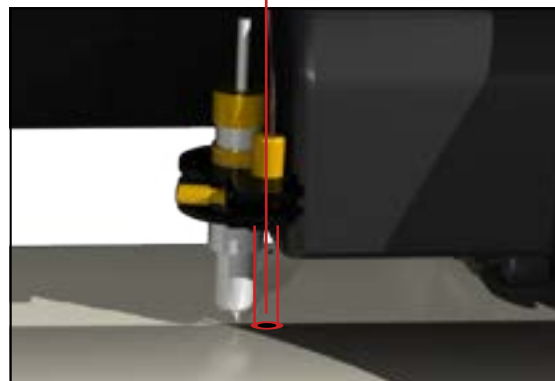
Pen Mark



2 Testing the laser offset

Turn the cutter's laser on by pressing the “Select” button to highlight the word “On” and press “Enter”. The carriage and the paper should move immediately and the laser should be exactly centered on your pen mark. This shows that the offset between the laser and the pen/blade is properly calibrated. If your laser doesn't line up exactly with the mark, your cuts will not land in the proper location and you will need to adjust the offset.

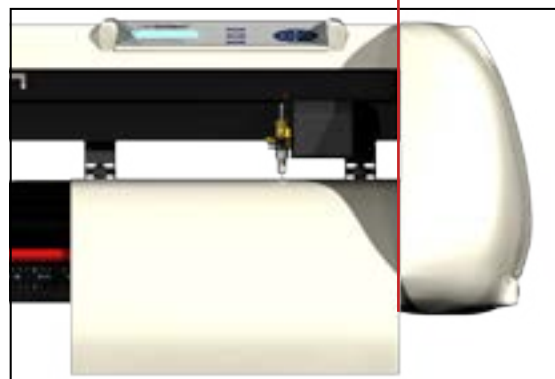
Laser centered



3 Adjusting the offset

Start by placing the test paper flush against the right side of the cutter and secure the pinch rollers. Hold down the “Right” arrow and press the “Reset” button or simply turn the power off and then back on. If you are successful you should see the word “OK” on the start up screen. If you do not see the word “OK” repeat resetting the machine until you do. Next, make a new impact mark with the pen. Use the arrows to center the laser directly over the pen mark and press the “Enter” button. Re-test the laser offset by repeating step 2. Once you have finished calibrating your laser it's time to print your image.

Flush on right edge



4 Printing your image

Load your image into the “Sure-Cuts_Allot” software. Make sure your art is centered and the size of the cutting mat in your software is the same size as the media you are going to be using. Double check that you have the correct printer selected by going to “File”, and select “Print”. Select your printer and make sure you have checked the box that says “Print Registration Marks”. Press “OK” to send the job to your printer. You should now have your printed image with three numbered registration marks at the corners. Now back to your cutter for the final step.



5 Registering prints with the cutter

Load your image with the registration mark number “1” in the upper-left hand corner. Now set the position of the pen/blade in front of, and to the right of your printed image. Specifically in front of the registration mark. This insures the cutter has enough room to find all the registration marks located on the media. To set the position, press “Enter” with “Local” highlighted and use the “Arrow” keys to position the carriage. When the pen is in it’s proper place press “Select” to highlight the word “On”, and press “Enter”. Now use the “Select” button to highlight the word “Current” and press “Enter”. The laser will now be on and the cutter is ready. In the Sure-Cuts-Allot software, click on the scissors icon to open your cut settings window. Click on “Print and Cut” option and click the “Next” tab twice. The cutter will move from it’s current position to registration mark number “1”. Don’t be alarmed if it stops short. Using the keys on your computer’s keyboard, center the laser over the dot in the registration mark, then click “Next”. The cutter will move towards registration mark number “2”. Again, center the laser over the dot using your computer’s keyboard and click “Next”. Repeat this process for registration mark number “3”. Click the “Cut” button and the cutter will briefly return to it’s home position and complete the cut.

Laser centered on registration dot



PROBLEM

SOLUTION

The cutter performs erratically during cuts, stops cutting before the cut is finished, or cuts lines that do not appear in the design.

Some computers do not work well when connected via the USB port of the cutters. If you are having problems while cutting and are using the USB cable to connect from your cutter to computer, you may wish to try the serial cable connection to avoid further problems. If a serial cable connection is not available on your computer, you can try a third party USB to serial connector or a PCI card serial adapter for your computer.

After the first cut is made, subsequent cuts are made over the top of the original, or vinyl is fed backwards until it loses contact with the rollers.

After a cut is made, you will need to reset the origin of the cutter. If the origin is not set again, the first origin will remain in the cutter and the cutter will return to this position before making any further cuts. To reset the origin; from the main screen of the cutter, press the Offline/Pause button on and then press the Origin button.

Cuts are jagged or inconsistent.

The Blade may be dulled or damaged. Replace with a new blade and try again. Make sure that the blade can turn freely (by attempting to turn it with your fingers while the release button of the Blade Carriage is pressed).

Adjust the blade depth of the Blade Carriage (page 17) and Force setting on the cutter (page 8) until you are getting solid, uniform cuts. Start with a blade depth of around 1/64th of an inch and a pressure setting of 100g and try an increased pressure setting before attempting to increase the blade depth.

Slashes are made across the vinyl from the blade movement during cutting.

If the blade is protruding too far from the Blade Carriage then it can score and cut material during normal operations. If this is occurring, the blade needs to be adjusted so that it is protruding a minimal distance from the carriage.

Vinyl not feeding straight and the rightmost Pinch Roller will not move.

Sometimes, during shipping or movement of the machine, the right pinch roller will become stuck on a screw located on the back of the machine. If this occurs and is affecting your cutting, press forcefully against the pinch roller until it becomes dislodged from its position. If needed, remove the screw to reposition the pinch roller in the desired position.

Cuts are warped and inconsistent.

Sometimes, during shipping or movement of the machine, the Carriage Arm can be dislodged from its track. Make sure that the 2 white wheels behind the carriage arm are both resting securely on top of (not in front) of the track. If the wheels are not on the track, gently lift the carriage arm and press back until both wheels are resting on the track.

ISSUE

Cut has dashes or looks perforated.

EXAMPLE



CAUSE

Damaged cutting strip (groove in strip) or too much blade is exposed (friction build up).

SOLUTION

Replace the cutting strip or decrease the blade depth.

ISSUE

Cut line tapers and not cutting towards the end.

EXAMPLE



CAUSE

Dull blade or blade holder isn't secured properly in slot.

SOLUTION

Replace blade, check the blade force, and secure the blade holder.

ISSUE

Blade is skipping turns and corners.

EXAMPLE



CAUSE

Part of the blade is dragging on its side during turns.

SOLUTION

Clean the inside of the blade holder by coating the blade with WD40 and moving it in and out of the blade holder. Clean off any debris that comes out. Replacement blade holder may be needed.

ISSUE

Corners are not cutting correctly.

EXAMPLE

ROUNDED CORNERS



CORNERS WITH FLAGS



CAUSE

Offset setting is incorrect.

SOLUTION

Change the offset setting.



RAISE OFFSET

LOWER OFFSET

Cutting Strips for your vinyl cutter will need to be replaced periodically - we recommend it be done every six months if you use your vinyl cutter continuously.

You might need to change out your Cutting Strips sooner if you start experiencing an uneven depth of cut, or your material is peeling up even on slow speeds.

To replace your Cutting Strip:

- USCutter stocks replacement cutting strips. Go to USCUTTER.com and search using the keyword: Cutting Strip.
- Use a weeding tool or other pointed tool to pry up the existing strip. (For best results, start at either end of the strip.)
- Lay replacement into the channel and use a heat gun or hair dryer to heat the strip up as you squeegee it into place.
- Use a knife to trim the ends of the strip so that it fits in the channel.

Cutting Blades wear out with use and the tips of the blades can snap just like the point of a sharp pencil. (This is particularly true of the 60 degree blade.) You should also periodically visibly inspect your blades and if you see visible chips in the edge it's best to replace the blade with a new one. (This is also a good time to wipe away any vinyl debris that has built up inside the blade holder.)

You might also consider the replacement of your blade if you develop problems weeding or otherwise experience problems with cut quality.

Refer to the manual section on Blade Set-up for instructions on how to install replacement blades and remember to dispose of your old blade safely by putting it in an aluminum can or other closed hard container.