

LASERPOINT II

User Manual & Assembly Instructions



USCutter 

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The fastest and most economical way to get started.

Greenstar Outdoor Starter Pack



GreenStar 12-Color Starter Kit

Green Star IPV vinyl is great for general purpose interior/exterior graphics of all types. An excellent vinyl to cut, weed and transfer, Green Star IPV vinyl has an outdoor lifespan of up to 5 years (3 years for metallic vinyl) and is made in USA. Includes twelve 24" x 5 yard rolls.

Go to [USCutter.com](#) and search keyword: "Greenstar outdoor bundle" for pricing.



Oracal 631 Starter Kit



The ORACAL 631 24 x 5 Sample Pack contains 12 of the most popular colors in the ORACAL 631 line. ORACAL 631 vinyl is a removable calendared vinyl that is ideal for most indoor applications. It features a lower-tack adhesive that won't damage interior walls during removal. Also has a matte surface which matches interior paint

Go to [USCutter.com](#) and search keyword: "Oracal 631" bundle for pricing.



Siser Start Bundle



The Siser EasyWeed Starter Kit consists of twelve 15" by 12" sheets of Siser EasyWeed heat-transfer vinyl in the 12 most popular colors. A great way to get acquainted with this versatile product!

Go to [USCutter.com](#) and search keyword: "Siser starter bundle" bundle for pricing.



Etched Glass Kit



Oracal 8510 gives the professional appearance of etched glass for a fraction of the price and labor associated with sandblasting. This vinyl is meant for long-term indoor and outdoor window application to provide business names, logos and other graphics on entrance doors, street-facing windows, and corporate environments. This starter kit includes a 24" x 10 yard roll of coarse silver structure vinyl, clear high-tack application tape for accurate registration and ease of use, a squeegee, and application fluid for wet application.

Go to [USCutter.com](#) and search keyword: "etched glass kit" for pricing.



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GET EVERYTHING FOR YOUR
VINYL CUTTING NEEDS

- 1 Intro
- 2 Where to use and store your vinylcutter
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Take Your Craft Cutting to the
NEXT LEVEL

Thank you for purchasing the LaserPoint II vinyl cutter. Please read this manual completely and keep it in a safe place for further reference.

For Accessories, Supplies, and replacement parts please visit
our website at [www.uscutter.com](#)

Please read and heed these important safety
messages:

- This device uses sharp blades to cut vinyl. Take care not to touch the blades or gears during operation!
- Make sure this device is not connected to power during assembly, service, and maintenance. Also beware of static build- up. We recommend using mats and anti-static vinyl systems.
- Vinyl cutting is not recommended for young children.



Where to use and store your vinyl Cutter

Location, Location, Location! It's not just important for real estate. Where your vinyl cutter "lives" in your home or business is a vitally important element of your success.

- 1 You need access to a 110 volt grounded electrical outlet. That's the standard household kind with three holes, not two. Be safe... don't plug your cutter into an already over-crowded powerstrip or system of extension cords.
- 2 Dust and dirt will limit the useful life of your cutter. If you use it in a dusty or dirty environment the cooling fans will suck in the dust and it will get inside the machine and gum up the works.
- 3 Operate on a stable surface. A solid flat surface is needed for your vinyl cutter to do its best work. If it wobbles or vibrates during operation your cut is not going to be as sharp and clean as it could be.
- 4 Access is important. The LaserPoint II is a large machine, but it doesn't belong in the corner during use. You'll need to access the front and back of the cutter to operate it and change the vinyl rolls.
- 5 There will be some noise when the cutter is in use. Take that into account when you locate your vinyl cutting headquarters.
- 6 Position the LaserPoint II near enough to your computer to be able to attach it via USB cable or 9-pin serial cable. Internet access will be necessary for downloading drivers and software.

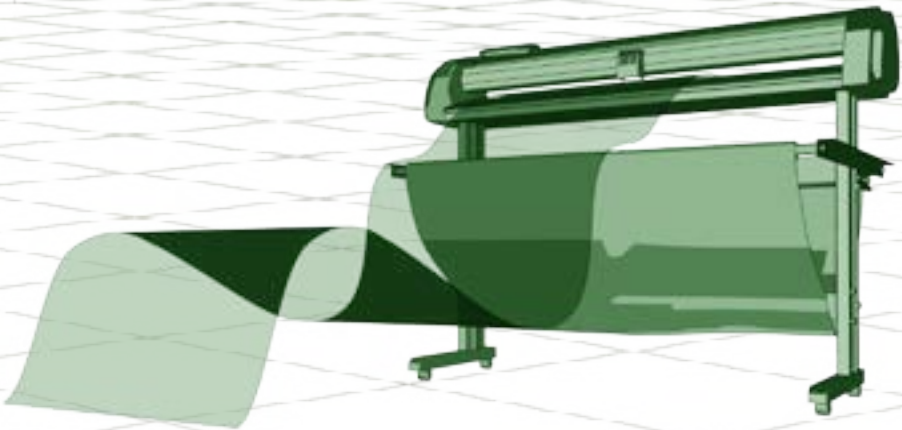
Before starting work, please check whether the following items are all present.

Serial Cable, USB Cable, Power Cable

Items:

- A: Foot
- B: Cutter
- C: Casters
- D: Cross Brace
- E: Roller Bars
- F: Legs
- G: Cutter Mount
- H: Screw Bag

If any parts seem to be missing from your package please contact support @1-888-975-2047



Before you begin:

Read the assembly instructions from beginning to end. Give yourself plenty of time. Gather the tools you'll need that aren't included in the box:

- 1. A Phillips head screwdriver.
- 2. Pliers, or a crescent wrench.

Here's how to assemble the stand:

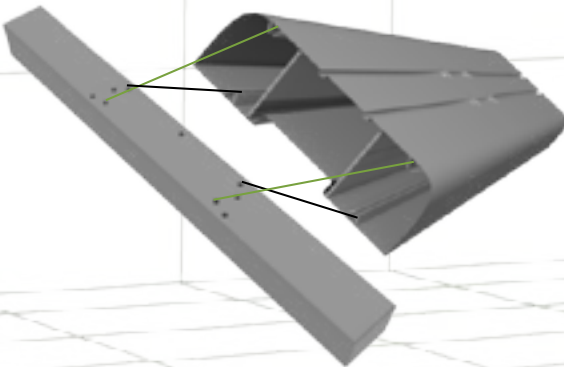
Step 1.

Attach the feet (A) to the legs (F).

This is the leg:



This is the foot:



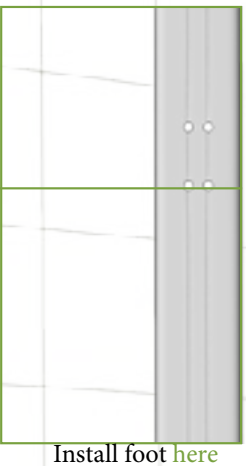
Attach the foot to the leg with four #1 screws.

Notice there are way more than four holes on the foot.

Line up the foot and the leg so that the four holes in the leg that look like this line up with the four holes on the foot.

Which end of the leg do I attach the foot? They both have holes.

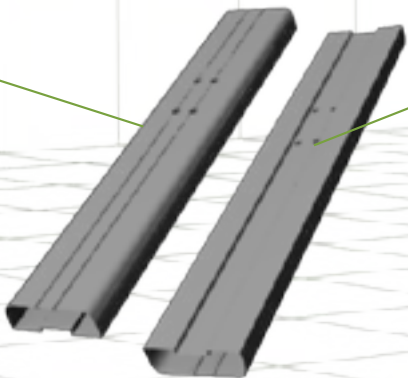
Good question. See those two holes that are further toward one end of the leg? That's where your cross piece is going to attach and hold the two legs together. Attach the foot to the other end.



One side is rounded and the other has sharp corners? Which side should face out?

The rounded edge side should face out. If you look closely at the holes you will see that one side is bigger than the other. The small holes will attach the cross piece and you'll screw them in through the larger hole.

Face out



Face in

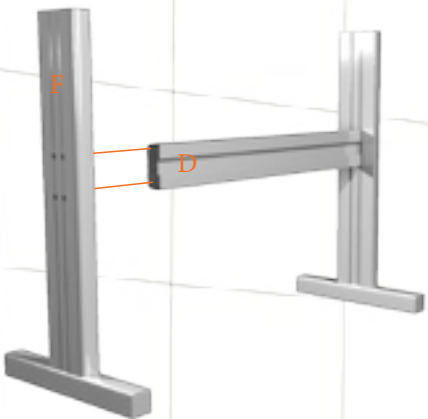
Attach the foot to the leg with four #1 screws using the Phillips screwdriver. Repeat with the other leg and foot making sure the rounded edge faces out and the holes for the cross piece are close to the top.

Step 2.

Attach the cross piece (D) to the legs (F) with 8 #1 screws (4 for each leg).

This is where making use of a chair or bench to hold the cross piece in place while you attach the first leg will come in handy.

Remember those holes about 3/4 of the way up the leg? That's where you'll attach the cross piece.



We've got the rounded edge and sharp edge situation again? Which way do I orient the crossbeam?

It actually doesn't matter, but the rounded edge looks a little more aesthetic, so we like to make that the front-facing side.

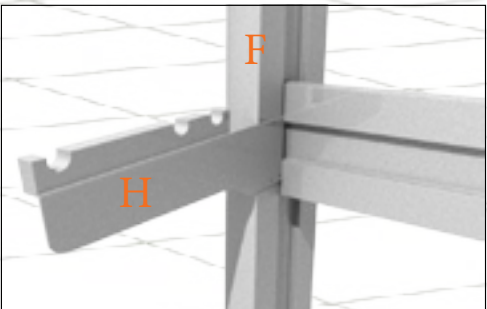
Here's the tricky part: You need to insert the #1 screws through both holes in the stand legs (the outside and the inside), so the screw will be recessed while you attach it to the cross piece. The leg is hollow and if your screw falls into the hole, turn the leg upside down so your screw falls out and you can try again.

Step 3.

Now let's mount the roller brackets (I) to the legs (F). They'll attach at the crosspiece and will create a place for the rollers to sit.

NOTE: If your roller brackets arrived in four pieces instead of two, simply attach the black plastic roller guides to the metal brackets with those extra six screws (the smallest ones).

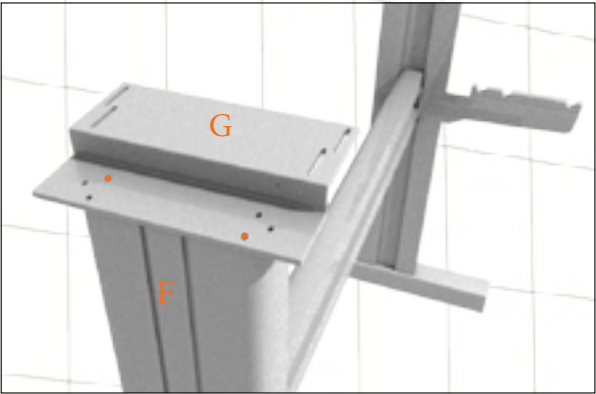
Use 4 #1 screws (2 on each side) to attach the roller brackets to the stand legs. The metal brackets have a "lip" which the roller guide sits on. When you attach the bracket, make sure the lip faces outward like this:



Step 4.

Attach the mounting brackets (G) to the top of the legs (F). This is where you will mount your LaserPointII. Almost done!!

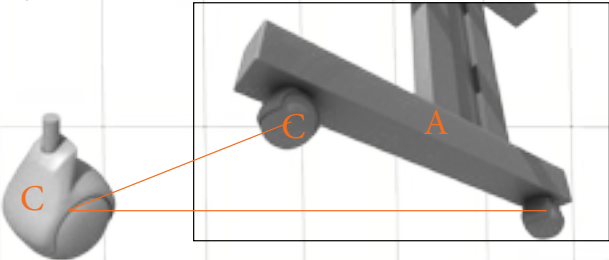
Use 4 #1 screws (2 on each bracket) to attach the mounting brackets to the legs. The brackets have a staircase-like shape. you will screw the lower "stair" to the standleg and will attach your LaserPointII to the upper "stair" in a later step.



Since you're only using two screws, position them so that if you drew a line between them it could make a diagonal line.

Step 5.

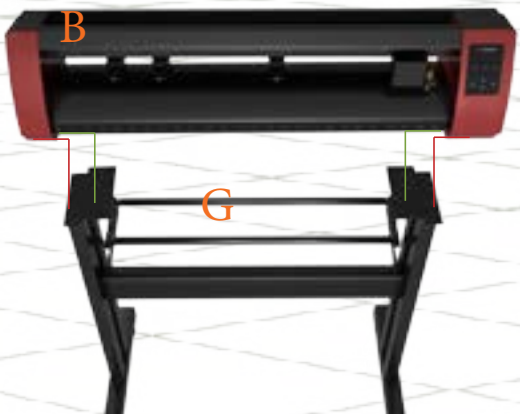
Attach the wheels (C). You won't need any screws for this because the wheels have screws already attached. Simply screw them into the bottom of the stand feet(A)., two wheels for each foot.



Step 6.

Mount the LaserPointIICutter (B) to the mounting brackets (G) on the stand. Lift the LaserPointII onto the brackets so that the plastic end pieces rest on the lower 'stairs' and then use 4 #2 screws (2 on each side) to secure the cutter to the brackets. The upper "stair" will appear to have many more slots than you will need but just use the holes that line up with the slots.

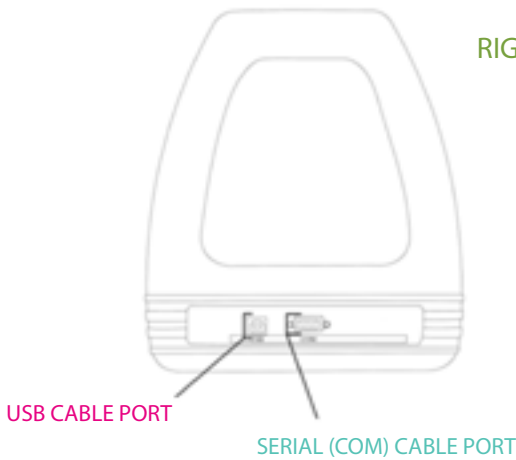
Remember to take the four rubber feet off from the bottom of the LaserPointII.



Before you start cutting, you should familiarize yourself with the cutter along with its basic parts and functions.

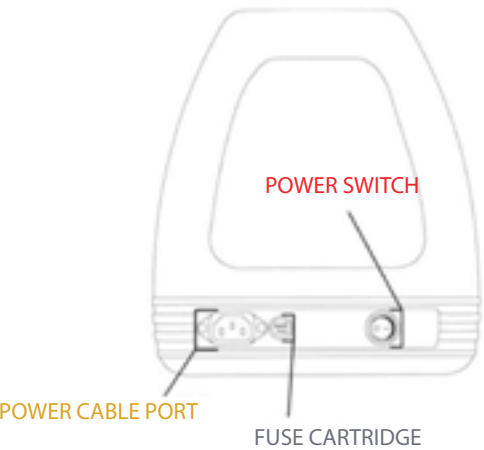


CONTROL PANEL	Used to provide input directly to the cutter. Covered in detail in the “Control Panel” section of this manual.
CARRIAGE ARM	Holds the blade (or pen) carriage.
PINCH ROLLERS	Holds the media tightly to the feed roller below.
FEED ROLLERS	Positions the cutting material during operation.
CAMERA	Used by the cutter to determine the location of cut contours
LEFT SIDE COVER	Contains the power cable port, power switch, and fuse cartridge for the cutter.
RIGHT SIDE COVER	Contains the USB and serial cable ports for the cutter.



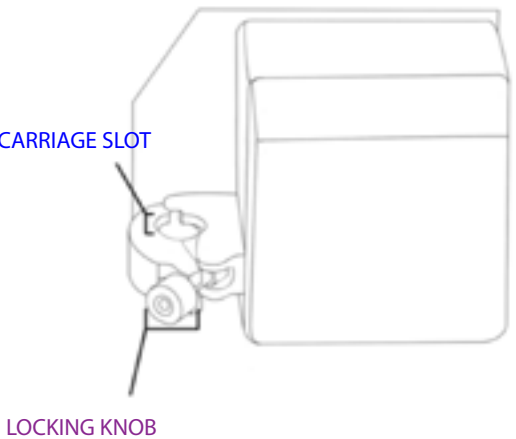
RIGHT SIDE VIEW

USB CABLE PORT	Used to connect a USB cable from the cutter to a computer.
SERIAL (COM) CABLE PORT	Used to connect a serial cable from the cutter to a computer.



LEFT SIDE VIEW

POWER CABLE PORT	Used to connect a power cable from the cutter to a wall outlet or surge protector.
POWER SWITCH	Main power switch for turning the power of the cutter on (1) or off (0).
FUSE CARTRIDGE	Allows access to the fuse inside of the cutter.



CARRIAGE SLOT	Holds the blade carriage in place.
LOCKING KNOB	Allows access to the blade/pen carriage slots for exchanging/ replacing carriages.

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:

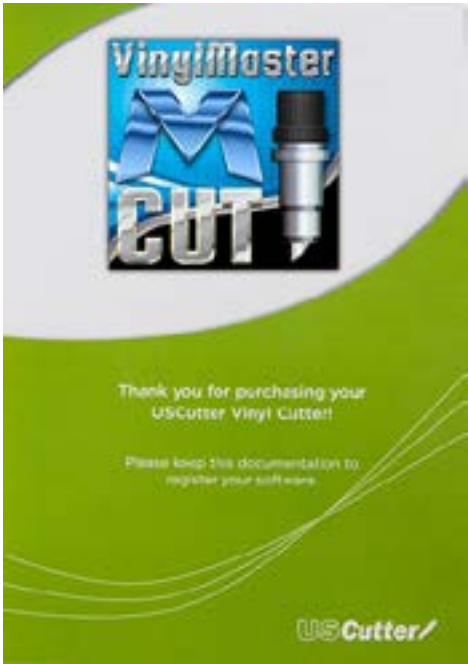
You will need to download and install drivers for the USB connection to work properly. Go to www.uscuttersupport.com/mh-support-page and select the driver that supports your Windows version.

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](#).

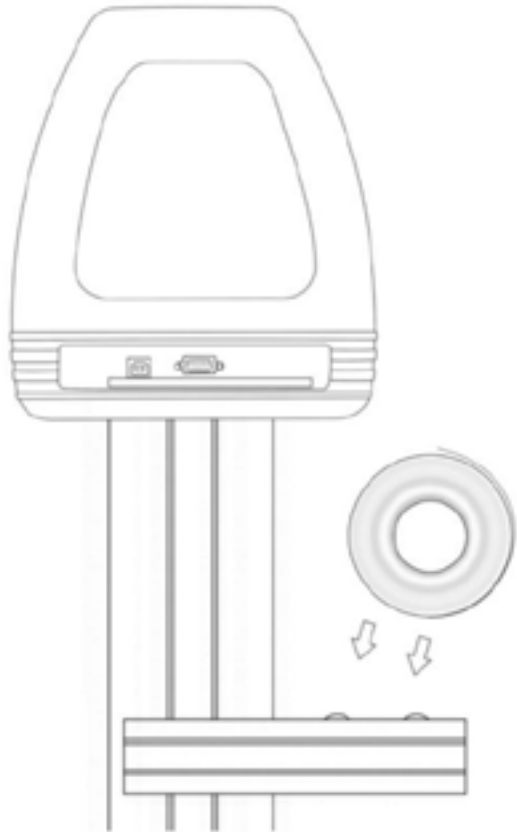


If you are going to cut from a scrap or single sheet instead of a roll, then skip the next step on placing a vinyl roll. All other steps will be the same.

1

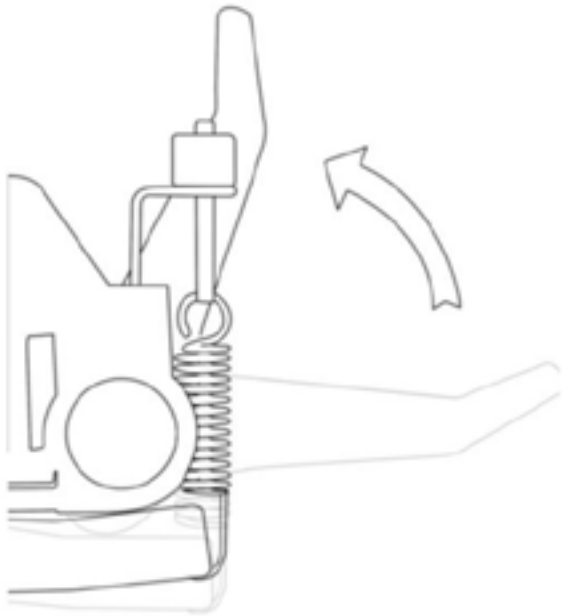
Place the roll on top of the stand rollers.

For heat press vinyl, please flip the roll.



2

Release the pinch rollers release levers.



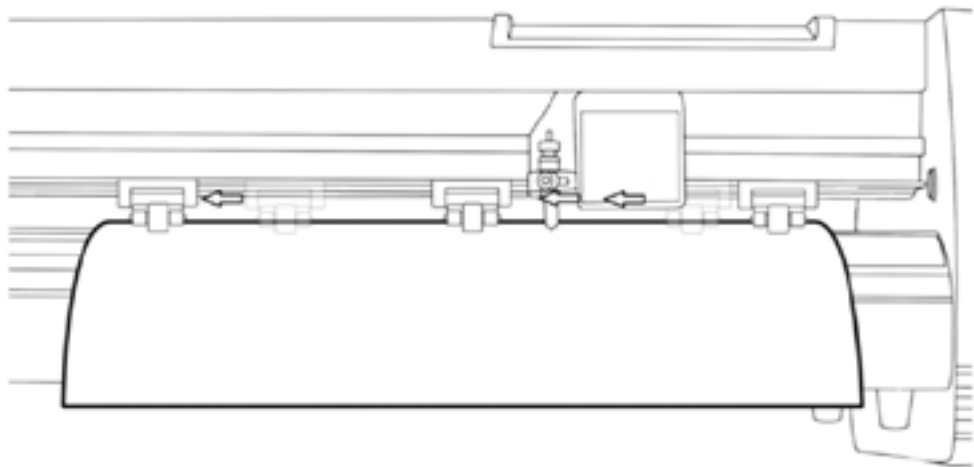
3

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).



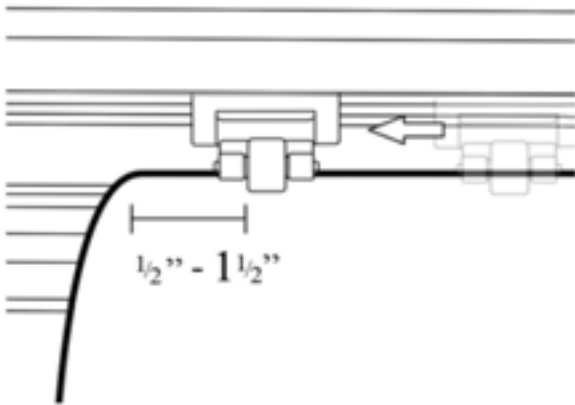
4

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.



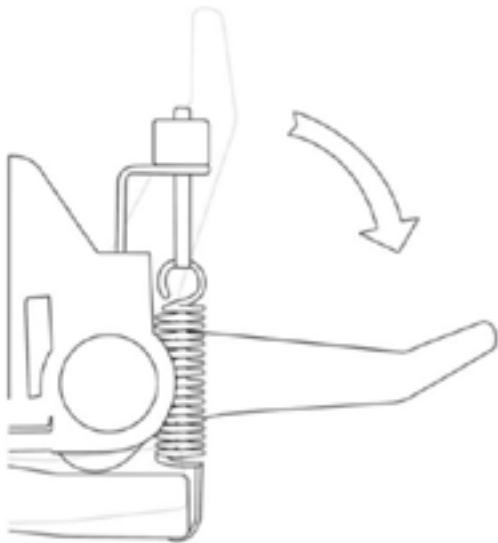
5

Leave a gap of between 1/2"-1 1/2" from the edge of the roller and the edge of the vinyl on both sides.



6

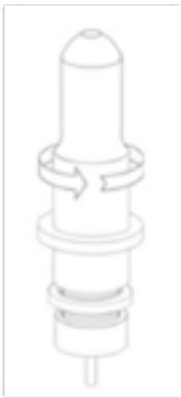
Engage the Pinch Rollers by pushing down on the Pinch Roller Release Levers.



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

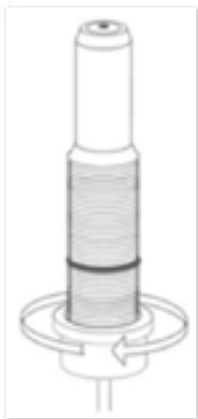
1

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.



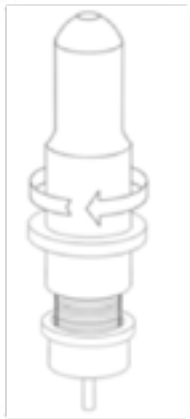
4

Insert the blade into the top of the Blade Carriage.



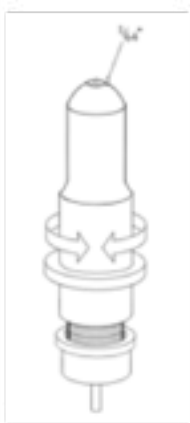
5

Screw the cap back onto the Blade Carriage.



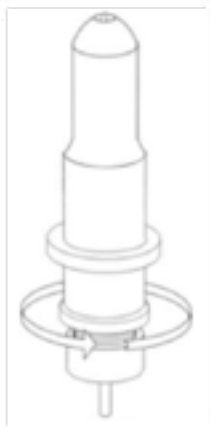
6

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.

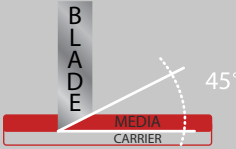
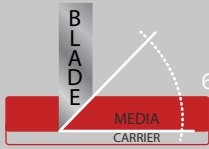
21 for an example.) Assuming you’re cutting standard signage vinyl, you’ll want to use your 45° blade. If you received vinyl along with your cutter package, chances are very good it’s a standard GreenStar or Oracal signage vinyl. Now, find the TEST button on the cutter control pad and press it. It should 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.



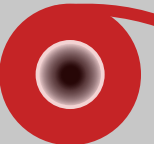
CUT SPEED

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

1

LOAD MATERIAL

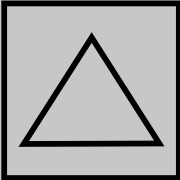


Most vinyl products are loaded from over the top.

3

FORCE/PRESSURE

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



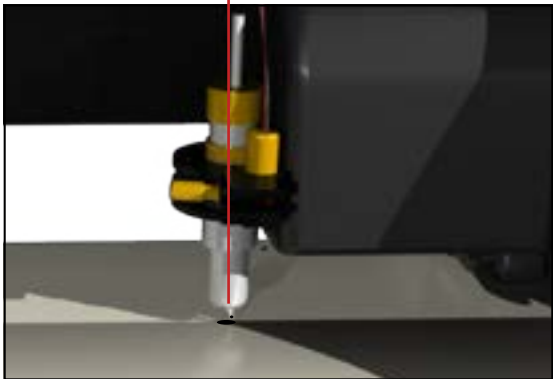
Test Cut

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.

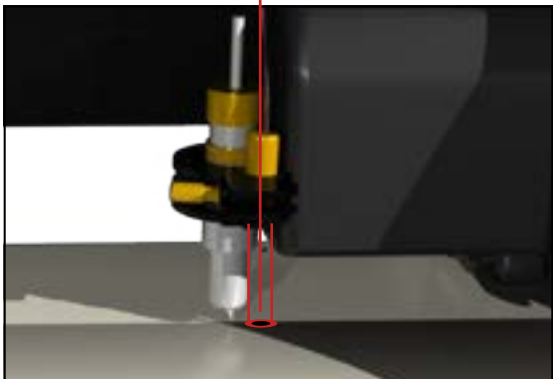
Pen Mark



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 cartridge 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.

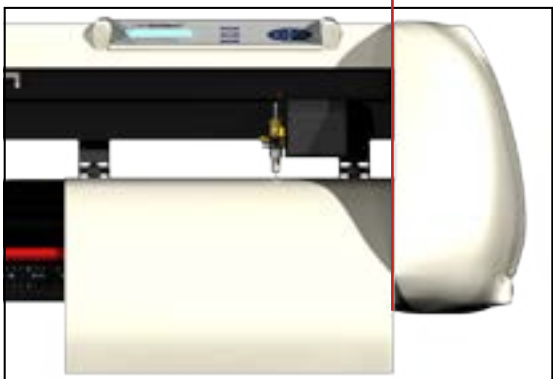
Laser centered



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.	<p>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).</p> <p>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.</p>
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

Blade is skipping turns and corners.

EXAMPLE



CAUSE

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

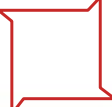
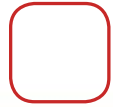
SOLUTION

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.

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.

A good VINYL CUTTER is just the start...

You also need the right media, blade, and application tape to ensure a professional job.



> Oracal 8300, 8500, 8510, & 8800
Main Tape GFX-775 or R-Tape AT65
45° Blade

Glass Application



> Oracal 3951 & 3651 HP Gloss & Matte
Main Tape GFX-341
45° Blade

Digital Printed Graphics



> Oracal 631 or GreenStar Wall Vinyl
Main Tape GXP750 or Oratape HT55
45° Blade

Indoor Wall Vinyl



> EasyWeed (standard fabrics)
EasyWeed Extra (nylons/water resistant)
30° Blade (general)
60° Blade (glitter/flock)

Heat Press



> Oracal 651 or GreenStar Intermediate (calendered) for short term
Oracal 751 or 951 (cast) for long term
GreenStar Layflat Classic or Main Tape GFX-775
45° Blade (general)
60° Blade (reflective)

Outdoor Signage



> Anchor BlastLite Oramask
R-Tape 4076RLA
60° Blade

Stencils & Masks

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