VINYL CUTTER

9113/25200 INSTRUCTION MANUAL

www.monstershop.co.uk

SPECIFICATION PRODUCT DESCRIPTION

The PixMax Vinyl Cutter has a cutting width of 20/28/59 inches/525/720/1510mm, allowing you to cut a variety of sign vinyl and t-shirt flex vinyl. The built in optical eye with laser guiding allows for precision cutting at a minimum of 10mm, using different speed and force settings which can be adjusted through the control panel.

Please refer to and read the Safe Working Practice to ensure prevention of injury or damage to the device before starting.

PRODUCT SPECIFICS

20"/525mm CUTTER

 VOLTAGE:
 85-264V

 INTERNAL LENGTH:
 365mm

 SIZE (H x D x W):
 220 x 240 x 520mm

 WEIGHT:
 9kg

59"/1510mm CUTTER

 VOLTAGE:
 85-264V

 INTERNAL LENGTH:
 1350mm

 SIZE (H x D x W):
 1050 x 240 x 1510mm

 WEIGHT:
 24kg

ITEM CONTENTS

- 1 x Vinyl Cutter Machine
- 1 x Allen Key
- 1 x Blade Holder Unit
- 1 x Pen Holder
- 1 x Dust Cover
- 1 x Driver Disc

28"/720mm CUTTER

 VOLTAGE:
 90-260V

 INTERNAL LENGTH:
 000mm

 SIZE (H x D x W):
 1080 x 350 x 880mm

 WEIGHT:
 0kg

- 1 x Power Cable
- 1 x USB Cable
- 1 x Serial Cable
- 1 x Spare Fuse
- 3 x Roland Blades

Monster Group UK Limited's liability will be limited to the commercial value of the product only.

SPECIFICATION

PRODUCT FEATURES

- 1. Side Pod: ON/OFF switch is positioned on left hand side.
- 2. Control Panel: Adjust the settings including speed, pressure & blade position.
- 3. LED Screen: Displays the parameter settings.
- 4. Blade Carriage: Holds the blade and moves across the vinyl when cutting.
- 5. Carriage Belt: The carriage moves back and forward across the belt.
- 6. Pinch Rollers: Hold the vinyl in place and move the vinyl during cutting.
- 7. Grip Roller: Helps to move the vinyl during cutting.
- 8. Cutting Strip: Keeps the vinyl level during cutting.
- 9. Ruler Guide: Helps to align the vinyl.
- **10.Blade Grip:** Holds the blade holder.

Rest on your work surface or slot onto the included stand.

12.Bearings:

11.Feet:

- Allows the grip roller to move.
- 13.Pinch Roller

Placement Guide: Shows where centre bearing is positioned, the pinch rollers should not be situated on the bearings or underneath this guide.



CONTROL PANEL

- **RESET:** Return the carriage to the default position.
- **OPTION:** Allows the blade to be moved into the required starting position.
- SETUP: Opens the Setup menu for adjusting Baud & eSpeed.
- MOVE: Performs a test cut.
- **ORIGIN:** Sets the blade starting position.

Arrow keys operate different parameter settings dependent upon which menu the vinyl cutter is in.



SAFETY ADVICE O SAFE WORKING PRACTICE

Please read through the safe working practice to ensure prevention of injury or damage to the device.

Do not operate the device in areas of high temperature or humidity as the machine may not function correctly.

Do not use the machine if the adaptor wire is frayed or damaged.

When the device is not in use ensure that the power plug is removed from the socket. This will prevent damage to the appliance through power surges.

Take care when using the vinyl cutter as the blades are sharp, do not touch the carriage, metal roller or cutter when the machine is working.

No magnetic devices should be placed near the plotter.

Do not leave the pinch rollers pressed down when the machine is not in use.

Operate the machine on a sturdy surface that is free from vibrations, electromagnetic fields, dust, moisture and direct sunlight.

Use the dust cover when the machine is not in use.

We advise that this machine is only suitable for cutting vinyl with backing paper, it should not be used for cutting any vinyl material that does not have a backing paper, foam, card or hardboard.

BLADE COMPONENTS

Please Note: When you receive the vinyl cutter, the blade holder will be assembled as shown. The blades are provided separately in a pack of 3.

Blade Release:	Press this to push the blade out of the blade holder for safe removal.
Silver Nut:	This can be twisted to adjust the length of the blade.
Brass Nut:	This locks the blade in position so that it cannot be adjusted or moved whilst in use.
Blade Holder:	This provides housing for the blade.
Blade:	The cutting component that sits inside the blade holder.

BLADE INSTALLATION

- 1. Insert the blade with the tapered end up into the blade holder.
- 2. Loosen the brass nut so that the blade height can be adjusted. Using the silver nut, adjust the height of the blade until it protrudes approximately 2mm from the bottom of the blade holder or until the 45 degree angle of the blade is showing. If the blade is sticking out too much from the holder then this can cut straight through the vinyl



and damage the cutting strip, but if the blade is not sticking out enough then it will only lightly scratch the vinyl and you won't be able to weed your design.

- 3. Locate the blade carriage on the vinyl cutter you will see a plastic clasp that can be locked and opened via a grip, consisting of a brass nut and thread. Open the clasp so that the blade holder can be placed inside.
- 4. Place the blade holder into the blade carriage so that the lip of the blade holder is raised around 2-3mm from the top of the blade carriage. If the lip of the blade holder is placed flat against the top of the blade carriage it will be too low and can score unwanted lines across the vinyl.
- 5. Tighten the grip and close the clasp so that it is tightly locked in place.

BLADE REPLACEMENT

Please Note: After periodical use the blade may become blunt, especially when continually cutting thick vinyl, follow these instructions to replace the blade.

- 1. Turn the machine off at the power supply and unplug the power cable, then remove any vinyl from the rollers.
- 2. Locate the blade carriage on the vinyl cutter and open the clasp that keeps the blade holder in place.
- 3. Press the blade release, on top of the blade holder, to free the blade that is currently in use.
- 4. Remove the safety cap from the new blade and insert the blade with the tapered end up into the blade holder.
- 5. Loosen the brass nut so that the blade height can be adjusted. Using the silver nut, adjust the height of the blade until it protrudes approximately 1mm from the bottom of the blade holder or until the 45 degree angle of the blade is fully showing.
- 6. Replace the blade holder into the blade carriage so that the lip of the blade holder is raised around 2-3mm from the top of the blade carriage. If the lip of the blade holder is placed flat against the top of the blade carriage it will be too low and can score unwanted lines across the vinyl.
- 7. Tighten the grip and close the clasp so that it is tightly locked in place. You may need to perform another test cut to check that the blade is set in the correct place; see "Blade Installation".

USER GUIDE PRODUCT FEATURES - STAND

- A. Base Plates with Wheels
- B. Roller Supports
- C. Vinyl Roller Bars

- D. Side Stands
- E. PixMax Support Plate



ITEM CONTENTS

- 6 x Small Screws
- 6 x Black Plastic Screw Cases
- 6 x Bolts with Threaded Bolt Caps

10 x Large Screws

6 x Black Plastic Screw Caps

All you will need to assemble this stand is a Phillips screwdriver.

ATTACHING THE SUPPORT PLATE

- 1. Attach the PixMax support plate to the side stands using 4 small screws, 4 plastic screw cases and 4 plastic screw caps.
- 2. Face the flat sides of the stands inwards, ensuring that the top plate (where the cutter will rest) is at the top. On the outside of the side stands locate the two lowest holes positioned vertically in line around the middle of the stand.
- 3. Insert the small screws into the black plastic screw cases, these cases will help guide the screw into place and hold it whilst you screw the support plate into place.
- 4. Locate the three holes on the side stands positioned in a triangle shape. The two that are in line are meant to be at the back of the stand, so the PixMax logo on the support plate should face away from these.
- 5. Ensure your side stands are positioned in this way before attaching the support plate.
- 6. Insert the cases into the two holes and thread the screw through to attach the support plate. Once both side stands are screwed onto the support plate, place the plastic caps over the screw cases.

ATTACHING THE BASE PLATES

- 1. Attach the base plates with wheels using 8 large screws.
- 2. Line up the four holes in the base plate with the four rubber runners inside the bottom of the side stand, ensuring that the wheels are facing away from the stand. Insert the screws into the holes and screw into place, repeat with the other side stand.
- 3. Make sure the screws are tight before moving to the next step.

ATTACHING THE ROLLER SUPPORTS

- 1. Attach the roller supports, using 6 bolts with threaded bolt caps. These extend out the back of the stand and can hold rolls of vinyl in place during cutting.
- 2. Locate the three holes in a triangle shape on the side stand and line the roller supports up with them against the outside of the stand with the roller holders facing upwards and inwards.
- 3. Remove the bolt caps from the bolts and thread the bolts through the support and side stand from the outside. Screw the bolt caps onto the bolts from the inside and tighten with a screw driver. Now position the roller bars in the holders in the roller supports.
- 4. You can now slot the feet on the bottom of the vinyl cutter into the top of the stand.

COMPUTER CONNECTION

- 1. To begin installation, connect the vinyl cutter via USB or Serial cable to your desktop computer or laptop. Only one cable needs to be connected, not both USB and Serial cables.
- 2. Ensure that the cable is connected at both ends, the vinyl cutter does not have to be switched on at this point.
- 3. Open your computer disc drive to insert the included disc. This is a small mini disc provided with the vinyl cutter.
- 4. The computer should automatically search for the USB driver on the disc to install the vinyl cutter as a recognised device. This is what we refer to as "plug in and play".
- 5. When "plug in and play" USB driver is installing you should see a "Software Installation" window.
- 6. Please note that some versions of Windows may not have this function and the vinyl cutter will need to be installed manually.

FOR MANUAL INSTALLATION

Please Note: Windows 8.1 and 10 customers will first need to "disable driver signature enforcement" before installing the drivers.

- 1. Connect the vinyl cutter to the computer via USB or Serial cable and insert the included mini disc.
- "Found New Hardware Wizard" box should pop up. If this does not happen go to "Control Panel" and click on "Devices & Printers" (this may also be called "Printers & Hardware"). Click on "Add hardware" or "Add a device". On the "Found New Hardware Wizard" select "Install the software automatically" and click next.
- 3. The computer will automatically search for the driver folder on the system. Once it has done this, a box will appear regarding the fact that the cutter does not have Windows logo testing to verify its compatibility with Windows. Click "Continue Anyway" to install the hardware.
- 4. "Files needed" box will pop up and will require you to locate the file "CH341SER.sys". Click "Browse" and locate the "USB driver" folder inside the disc drive on "Computer". Click "Open" to find a file called "CH341SER". Select this file and click "Open".
- 5. The pop up box will now show the extension for the file in the drop down bar, click "OK" to continue.

FOR MANUAL INSTALLATION

6. The driver will now be installed and the "Completed the found new hardware wizard" box will appear. Click "OK" to continue.

To check that the device has been correctly installed go to "Control Panel" and look for "Device Manager", sometimes located under "Hardware". Here you will find a list ofhardware devices. Click on the drop down arrow next to "Ports" and if the device is installed correctly it should show "USB-SERIAL CH232".

The computer will automatically assign a COM number in brackets e.g. (COM3), this is important for software set-up as this is how the computer recognises the vinyl cutter so make a note of this COM port number and which port on your computer that the cutter is connected to.

As a general rule the lower the COM port number the better so if you're connected to a COM6 or above try changing to a different port.

Please Note: this number will change if you attach the cutter via a different USB port.

These instructions are for use with the SignCut Pro cutting software which is supplied with most of our vinyl cutting bundles, these instructions may vary if you are using a different software. You will need a cutting software to be able to transfer your design from a computer to the cutting machine, contact the manufacturer of the software for support connecting your cutter.

Open the SignCut Pro software and locate the tool bar at the top of the screen. Click on "Settings" and a menu will drop down. Select the "Cutter" option and you should be presented with the following box.

Cutter		_
Manufacturer:		-
Cutter		
JINKA JK721	•	
Output Device / Port		-
COM5		Use spooler:
Use Windows serial se	Rotate:	
Baud:	Parity:	Advance after cut:
9600	+ NON	· Rewind after advances
Databits:	Stopbits:	Rewind after advance.
8	- 1	Size abbreviation calibration:
Handshake:	Blade Offset:	RTS CTS
Hardware (RTS/CTS)		<u></u>

FOR MANUAL INSTALLATION

The top three drop down bars are the only ones which require you to input information about the vinyl cutter, usually after first installation of the software. The disc does not need to be inserted every time you use the vinyl cutter, the drivers will be installed on the computer until you remove them.

For the PixMax 720 Vinyl Cutter the manufacturer name needs to be set as "JINKA, GOLDCUT" or "Monster Doodles", the cutter number should be set as "JINKA JK721" or "JINKA JK720" or simply "720". The output device / port needs to be the same COM number that you made a note of when installing the drivers for the vinyl cutter.

All this information must match between the software and the vinyl cutter, otherwise it will not communicate with the cutter to produce your design.

IF YOU ARE EXPERIENCING ISSUES WITH THIS PROCESS PLEASE FOLLOW THESE QUICK CHECKS:

Is the USB or serial cable attached to both the vinyl cutter and the computer? Check for any visible damage to the cable or try using another port.

Have you inserted the disc into the disc drive and downloaded the drivers from the .zip folder? You will not be able to install the vinyl cutter without the drivers.

If the "USB-SERIAL CH232" is not visible in the Ports section on the Device Manager:

- Remove the USB or Serial cable and restart the computer. Then re-insert the cable and the disc to restart the process and recognise the plug in and play settings.
- Ensure the USB connection has been recognised. Open "Device Manager", as previously instructed, under USB there will be a device highlighted as "USB 2.0 Serial". Double click on the device and go to the "Driver" tab. Click on "Update Driver" or "Install Driver" and follow the instructions until you have the option to select "Have Disc".

At this point you should insert the mini-disc, which came with the vinyl cutter, into the CD drive. Then locate the files in the disc "USB Driver" folder and click the file USBCH232 to install the USB driver. Check this by going to the Ports drop down menu in the Device Manager and locating the USB-SERIAL CH232.

If the problem still persists please get in touch with our Support department via the details on the Contact page.

FORCE & SPEED SETTING

When the vinyl cutter is switched on, a red indicator light will show on the Reset button to indicate there is power to the machine. The default menu showing the speed and force settings will show on the screen, here you can adjust the speed and force settings as shown below.

Higher force will be needed for thicker vinyl whereas thinner vinyl will only require a slight amount of force. The faster speed should be used for simple shapes whereas a slower speed should be used for more intricate designs.

It's best to start at a lower force and work your way up. If the force is set too high for the vinyl then it could cut through, damage the cutting strip which will stop your vinyl cutting properly and you will need to purchase a new strip.



POSITION & ORIGIN SETTINGS

To access the position menu press the "Option" button. The screen will show the position of the blade on the x and y axis. The arrow keys can then be used to position the blade where required. Once the blade is in the necessary starting position the new origin can be confirmed by pressing the "Origin" button.

The starting position of the blade depends on the shape and size of your design. Press the Reset button to bring the blade back to the default position at the right hand side of the machine.



Press down – to move the blade along the X axis and up the vinyl, this will feed the vinyl forwards.

Press up – to move the blade along the X axis and down the vinyl, this will feed the vinyl backwards.

Press left – to move the blade left along the Y axis, this will move the carriage left across the carriage belt.

Press right – to move the blade right along the Y axis, this will move the carriage right across the carriage belt.

USER GUIDE OPERATION INSTRUCTIONS

- 1. Install the drivers and connect the vinyl cutter to your computer.
- 2. Install cutting software such as SignCut Pro, that we provide with many of our vinyl cutter bundles.
- 3. Prepare your logo or sign in a design software such as Inkscape, CorellDraw or Illustrator. For further advice on this there are many videos on YouTube, especially regarding the cutting software, SignCut Pro.

Take a look at the video tutorials on the SignCut Pro website: www.signcutpro.com Or their YouTube channel known as SignCut Academy TV:

www.youtube.com/user/SignCutAcademyTV

4. Load your vinyl into the cutter whether feeding from a roll of vinyl stored on the stand or from a large sheet of vinyl on your work surface. Ensure the vinyl is facing up and there is enough slack vinyl to pull through the machine.

To open or move the pinch rollers, release the 3 levers at the back of the cutter. Positioning the levers vertically up or down will open the rollers so you can feed your vinyl through, then slide the pinch rollers across the cutter depending on the width of vinyl you are cutting. If you are using the whole width of the vinyl cutter then you can position the three rollers evenly across the cutter.

Please Note: Do not position the pinch rollers on top of the black bearings situated on the left, right and centre of the grip roller. The pinch roller placement guide shows where the centre bearing is located so avoid putting the pinch roller directly underneath this guide.

Now ensure the vinyl is aligned correctly in the cutter, a common problem many people face is the misalignment of vinyl. If the vinyl is positioned at a slight angle then your design will not cut correctly.

With the cutter switched on and the vinyl threaded through the cutter, use the "Option" button to access the position menu and then the up and down arrow keys to move the vinyl back and forth through the machine.

As you do this watch the edges of the vinyl as they run past the ruler guide, the vinyl should remain at the same measurement whilst you move it back and forth. If the vinyl veers across the ruler guide then release the pinch rollers to reposition your vinyl.

You will need to repeat this process when removing or changing vinyl.

USER GUIDE OPERATION INSTRUCTIONS

5. Set your blade origin, force and speed settings. You may need to do several test cuts using different settings to find the optimum cut for your specific vinyl. See "Force & Speed Settings" and "Position & Origin Settings" pages for how to alter these settings.

Press the Move button to perform a test cut and peel the vinyl to check that it has cut through deep enough to weed out easily. If it has not cut deep enough then adjust the force accordingly in increments of 10 and perform another test cut until the desired depth is achieved.

The blade should only cut through the vinyl, it should not penetrate the backing paper, it will damage the cutting strip which will stop your vinyl cutting properly and you will need to purchase a new cutting strip.

Performing a test cut also shows that the vinyl cutter is working correctly and should be performed when changing between different types of vinyl.

6. Open your design in SignCut and set it to cut out. Consult SignCut Pro on how to perform the best cut, via their website and online chat support system.

www.signcutpro.com/support-portal

USER GUIDE RECOMMENDATIONS

SPEED SETTINGS

Higher speeds can be used for cutting simple shapes and logos quickly, whereas we advise that lower speed settings should be used for intricate designs or small letters.

Attempting to cut complicated images at high speeds can cause unwanted scratches or damage to the vinyl, our cutter has a minimum cutting size of 10mm so bare this in mind when preparing your design.

When using the cutter for the first time or performing a test cut we advise using a slower speed so you can see how the cutting machine operates.

The PixMax vinyl cutter can cut to a minimum size of 10mm, shapes or designs any smaller than this will be too intricate and will cause damage to the vinyl.

FORCE SETTINGS

When cutting vinyl you should be aware of its thickness in microns so you can adjust the amount of pressure applied by the blade.

Overall it depends on the thickness of the vinyl you are cutting, start at a lower force and perform several test cuts to get the right pressure settings to ensure the blade is not cutting straight through the backing paper. This will damage the cutting strip and you will need to purchase a new one in order to cut correctly.

We only advise using the vinyl cutter for cutting vinyl with a backing paper, this machine should not be used to cut card, foam, hardboard or vinyl without a backing paper.

USER GUIDE RECOMMENDATIONS

At Monster Group we stock both T-shirt and sign vinyl in a variety of bundles, giving you choices on colour and price.

Garment Flex Vinyl is our standard vinyl for pressing on to T-shirts, hoodies, bags, caps any material made from polyester, cotton or poly-cotton. At 80 microns (0.08mm) thick, this vinyl would require a cutting pressure of approximately 50g.

Available in a variety of colours including neon, glitter, metallic and in packs of 6 or as a single roll - view our range in the Vinyl section on our website: www.monstershop.co.uk.

Blockout Garment Vinyl is our thicker vinyl which is specially formulated to prevent ink migration and dye bleed during pressing. At 150 microns (0.15mm) thick this vinyl would require a cutting pressure of approximately 100g and can press onto polyester, cotton or poly-cotton materials.

Available in 5 colours including white, blue, orange, yellow and red.

All our Garment vinyl is certified by Oeko-Tex standard 100 class 1, which means it is produced ethically, contains no harmful substances that may come off during washing/ wearing and is suitable for children's clothing. Garment vinyl is washable up to 60° but also be aware of the washing temperature of the material.

As a hot peel vinyl it is quicker to press as you won't need to wait for the design to cool before peeling away the backing paper, this will increase production time when pressing onto lots of items.

Sign Vinyl is used on signs, vehicles and windows - both indoors and outdoors. Our starter pack is 80 microns thick and comes with 6 coloured rolls in black, white, red, yellow, pink and blue.

It requires no heat as the vinyl is sticky backed for long lasting placement on your required surface.

For more information about pressing vinyl onto garments or transferring sign vinyl onto signs and vehicles check out YouTube which is a great source of information for beginners.

USER GUIDE RECOMMENDATIONS

eSPEED & BAUD SETTINGS

These settings regulate the speed at which the information is being sent from the computer to the vinyl cutter. The default settings will calibrate with your chosen software and must be the same on both the software and vinyl cutter to work.

The vinyl cutter should arrive with the optimal settings already installed and should only be adjusted if advised.

Press the Setup key to access the eSpeed and Baud menu, the green indicator light on the key will show.



Press the Setup key again to exit the eSpeed and Baud menu and the green indicator light should turn off.

TROUBLESHOOTING RESOLUTION GUIDE

WHAT DO I DO IF THERE ARE MISSING PARTS FROM MY ORDER?

If there appears to be any part missing from your order, contact our friendly and helpful Customer Support Team within 7 days of receipt.

WHEN I CUT MY DESIGN THE BLADE LEAVES UNWANTED FAINT LINES ACROSS THE SURFACE OF THE VINYL.

The blade holder has been positioned too low in the grip on the vinyl cutter carriage. Raise the blade holder until the top lip is 2-3mm above the top of the grip (see Blade Installation).

THE BLADE IS RIPPING THROUGH THE BACKING PAPER ON THE VINYL AND RUINING MY DESIGN.

The blade is either sticking out of the holder too far or the force settings are too high for the thickness of the vinyl. Remove the blade holder from the carriage and adjust the blade so that it sticks out around 2mm. Decrease the force settings and press "Move" to perform test cuts until you find the optimum pressure (see Force & Speed settings). The blade may have also damaged the cutting strip, which will stop your vinyl cutting properly and you will need to purchase a new cutting strip.

WHEN I CUT MY DESIGN IT IS HARD TO WEED OUT FROM THE BACKING PAPER.

The force of the blade may be too low, which means the blade will struggle to cut through the vinyl, or the blade holder is set too high which is preventing the blade from pushing down onto the surface of the vinyl properly. Remove the blade holder from the carriage and adjust the blade so that it sticks out around 2mm. Increase the force settings and press "Move" to perform test cuts until you find the optimum pressure (see Force & Speed settings).

THE BLADE CARRIAGE UNIT WILL NOT DROP THE BLADE ON TO THE VINYL OR THE BLADE WILL NOT MOVE.

The may be a loose connection to the carriage or a faulty chip on the main board. Please get in touch with our Support department via the details on the Contact page.

FOR ALL OTHER ISSUES, PLEASE CONTACT OUR CUSTOMER SUPPORT TEAM.