# Vinyl cutter to T-shirt manual

Our Vevor vinyl cutter from the front

Our Vevor vinyl cutter from an isometric perspective





Manual for using the Vevor vinyl cutter to create a T-shirt

#### Time estimates

- Most time will be spent peeling plastic from the vinyl
- Schedule two hours to produce your first T-shirt with one print
- Schedule 10 minutes to produce your tenth T-shirt with one print, 15 minutes for two print

#### Procedure

Overview of the procedure

- 1. Install Inkcut
- 2. Setup Inkcut
- 3. Get T-shirts
- 4. Get vinyl
- 5. Connect the vinyl cutter
- 6. Place foil of vinyl cutter
- 7. Set up Inkcut connection
- 8. Use Inkcut
- 9. Transfer vinyl to T-shirt

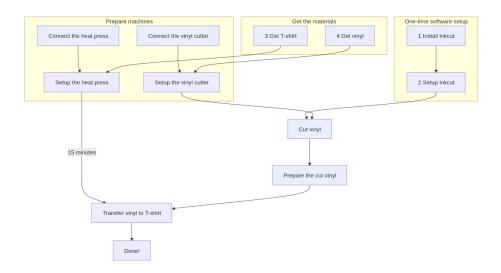


Figure 1: Overview of the procedure

#### 1. Install Inkcut

Inkcut is a program to send things to cut to the vinyl cutter. It works under Linux, Mac and Windows. This guide shows how to do this for Linux.

Install the Debian packages:

sudo apt-get install python3-pip python3-pyqt5 python3-setuptools
sudo apt-get install libcups2-dev python3-pyqt5.qtsvg

Create a (mandatory!) virtual environment for Inkcut:

python3 -m venv ~/inkcut\_venv

Install the Inkcut and PyQt5 Python packages in the virtual environment"

~/inkcut\_venv/bin/pip install inkcut PyQt5

Now you can start inkcut with:

~/inkcut\_venv/bin/inkcut

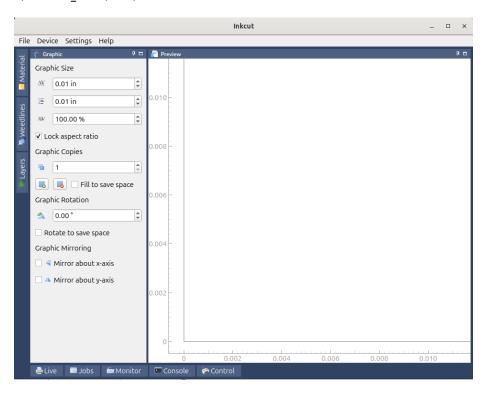


Figure 2: inkcut in action

## 2. Setup Inkcut

• See Setup Inkcut notes for the notes behind this

Add yourself to the dialout group:

```
sudo usermod -a -G dialout "$USER"
```

Restart (yes, a cold boot!).

#### 3. Get T-shirts

Get one or more T-shirts.

Company	Address	Price	Description
Lager 157	Kungsgatan 95	30	Has S, M, L and XL
New Yorker	Marknadsgatan 1	79	?All sizes

• Price is in kroner per (cheapest) T-shirt

## 4. Get vinyl

Get suitable vinyl

Suitable foil looks like this:

- The foil feels smoother than a sticker ('klistermärke')
- The foil is shinier than a sticker

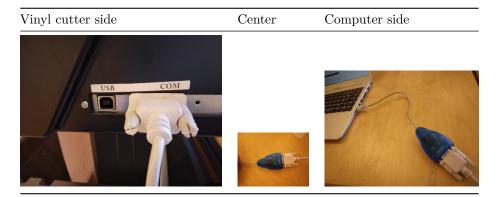
A good place to vinyl is at https://www.scandraft.se/, where we have bought Siser P.S. Film Easyweed, which works well. You can order longer rolls: we've ordered rolls of 25 meters, for an unknown price (if you know the price, please contribute).



Figure 3: Transfer foil ready for transfer

## 5. Connect the vinyl cutter

Plug in the correct USB cable from the vinyl cutter to your computer:



### 6. Setup the vinyl cutter

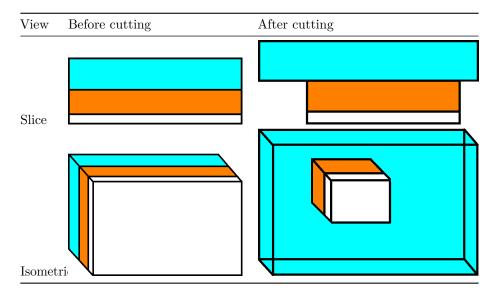
The vinyl cutter has three parameters:

- Origin: the bottom-left of the cut, move the red dot to the bottom-left of the vinyl
- Speed: the speed of the blade
  - If the speed is too high, no idea what happens. Please contribute if you know!
  - If the speed is too low, the process takes needlessly longer
- Force: how much force the blade applies to the vinyl
  - If the force is too high, the cutter will go through the vinyl
  - If the force is too low, the vinyl cannot be removed easily

Vinyl	Speed (mm/s)	Force(g)	Recommendation source
Siser P.S. Film	20	120	Trying out, works! manual
Siser P.S. Film	300	60	

# 7. Place foil of vinyl cutter

Place the foil on the vinyl cutter, with the white side up.



Structure of the foil and what will be cut away. Light-blue: thick, transparent layer, do not cut, can be separated from orange layer by hand. Orange: the color of the print. White: the glue connecting the print to the T-shirt

The knife cuts the white and colored layer only. The thick and transparent layer needs to remain intact.

#### 8. Set up Inkcut connection

Go to the 'Configure device | Connection':

• Type: Serial port

• Port: ttyUSB0. If you cannot select ttyUSB0, you've used the wrong USB cable coming out of the vinyl cutter :-)

• Baudrate: 38400

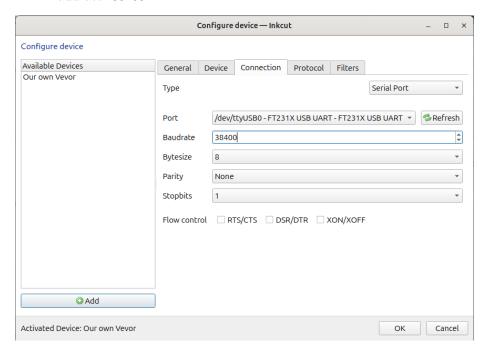


Figure 4: Use the serial port with a baudrate of 38400

Use the serial port with a baudrate of 38400. If you cannot select ttyUSBO, you've used the wrong USB cable coming out of the vinyl cutter

#### 9. Use Inkcut

Load an SVG.

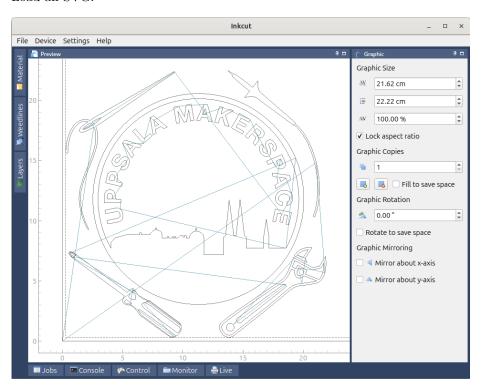


Figure 5: Inkcut in action

Fig 5. Inkcut in action

Don't forget to mirror letters. These letters will be mirrored when put on a T-shirt. Click on 'Mirror y-axis' (at the bottom-right of the screen) to mirror the letters horizontally.

- Fig 6. Don't forget to mirror letters. These letters will be mirrored when put on a T-shirt
- Fig 7. Don't do two copies like this, this is wasteful.
- Fig 8. Do many copies like this: this is not wasteful

Click on 'Device | Send to device' to start the vinyl cutter:

Click on 'Device | Send to device' to start the vinyl cutter

## 10. Setup heat press

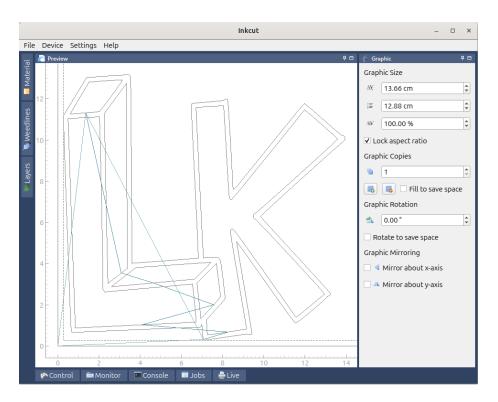


Figure 6: Don't forget to mirror letters. These letters will be mirrored when put on a T-shirt

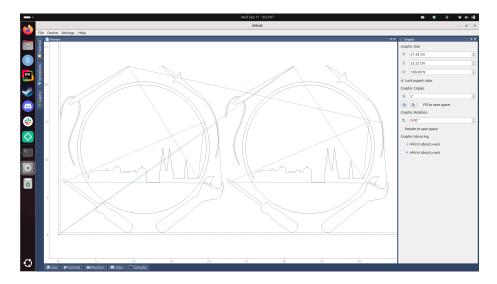


Figure 7: Don't do two copies like this

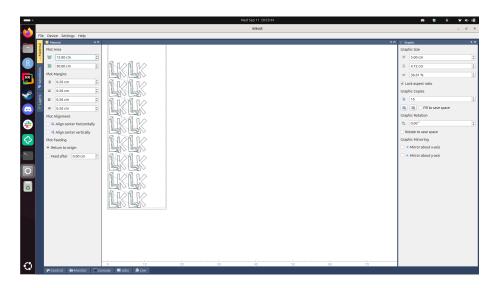


Figure 8: Do many copies like this

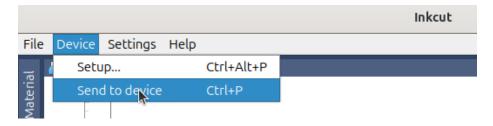


Figure 9: Click on 'Device | Send to device' to start the vinyl cutter

Vinyl	Temperature (C)	Time (s)	Recommendation source
Siser P.S. Film	180	10	Trying out, works!
Siser P.S. Film	150	15	manual

# 11. Transfer vinyl to T-shirt

Put the remainder of the foil on the T-shirt, with the colorful side up.



Figure 10: Press not yet ready

Press not yet ready. It should say T=160/160C. A temperature from 155 to 165 degrees Celcius would also be fine.

Heat up the heat press, this takes about 15 minutes.

Place the T-shirt under the press, with the foil at the right spot.

When the heat press is warmed up, lower the press. After around 20 seconds, the press will start to beep. Raise the press again.

Wait for the print to cool off.

Carefully peel off the transparent layer from the shirt.

Done!



Figure 11: T-shirts that are done

# Troubleshooting

The vinyl cutter is wrinkling the paper

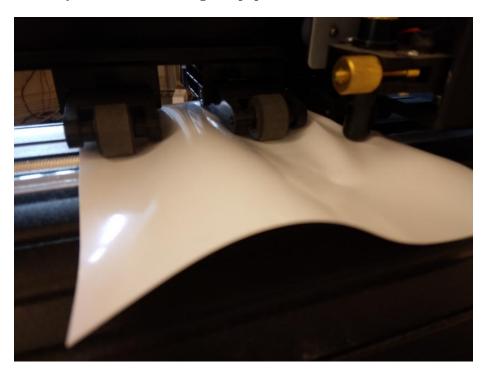


Figure 12: The vinyl cutter is wrinkling the paper

The vinyl cutter is wrinkling the paper.

This happens when at least one wheel of the three movable heads is not on a roller at the bottom:

The right wheel (right rectangle) is not on the roller (partially shown and indicated by the left rectangle)

#### The vinyl cutter is confused

This may happen when you send multiple prints at the same time. Press reset, close Inkcut, press reset, start Inkcut and try again

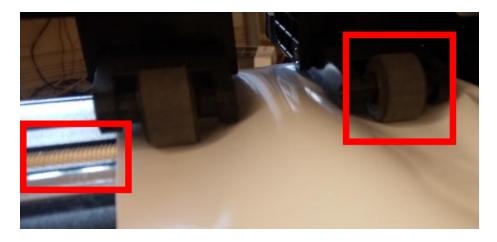


Figure 13: The right wheel is not on the roller



Figure 14: The vinyl cutter is confused

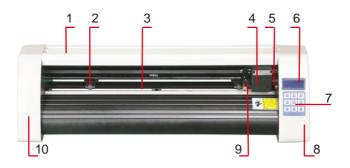
# **Contents**

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#### I .Precautions

- 1. Protective material must be removed before turning on the cutting plotter.
- 2. Check the label on the back side of the plotter to confirm that the rated voltage required by the plotter matches the voltage of the power base.
- 3. Firstly make sure that the power switch is off, then plug the power supply into grounded power outlet.
- 4. Please do not touch the power cord with wet hands to avoid electric shock.
- 5. Please only use the power cord, data cable provided with this product, or manufacturer-approved replacements.
- Please do not drop metal objects and liquids into the machine to avoid malfunction.
- 7. After shutting down, you must wait another 5 seconds to turn on the cutting plotter again, otherwise it will cause damage to the cutting plotter.
- 8. In thunderstorms, turn the power switch to OFF and unplug the power cord.
- 9. Please do not privately change the manufacturer's components.
- 10. Manufacturer reserves the right to change product specifications without prior notice.
- 11. The manufacturer only bears the legal obligations of the product itself sold to the users, and does not bear other losses caused by the malfunction of the products.
- 12. Without our company's permit, no part of this manual can be copied or transmitted in any name.

# $oldsymbol{\Pi}.$ Introduction for main parts



**KH Model** 

1.Cover for rail guide	2. Pinch roller kit	
3. Roller for feeding paper	4. Carriage	
5. Reset switch	6. Screen	
7. Buttons	8. The right cover	
9. Blade clamp	10. The left cover	

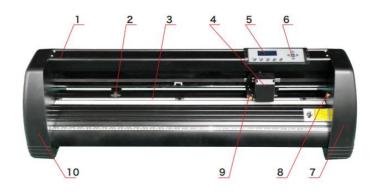




11.Power connection
12.Fuse holder
13.Power switch
14.USB port
15.COM port

Left side

Right side



# KI Model

1.Cover for rail guide	2. Pinch roller kit	
3. Roller for feeding paper	4. Carriage	
5. Screen	6. Buttons	
7. The right cover	8. Reset switch	
9. Blade clamp	10. The left cover	

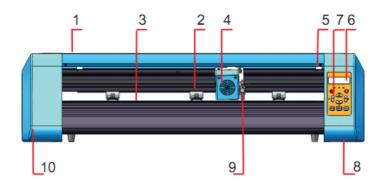


Left side



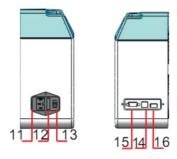
Right side

11.Power connection	
12.Fuse holder	
13.Power switch	
14.USB port	
15.COM port	



# **EH Model**

1.Cover for rail guide	2. Pinch roller kit	
3. Roller for feeding paper	4. Carriage	
5. Reset switch	6. Screen	
7. Buttons	8. The right cover	
9. Blade clamp	10. The left cover	



Left side Right side

11.Power connection
12.Fuse holder
13.Power switch
14.USB port
15.COM port
16.U-disk port

# ${ m III}.$ Technical parameters

Model	375	720	870	1350		
Item	3/3	720	870	1330		
Max. feeding width	375mm	720mm	870mm	1350mm		
Max. cutting width	285mm	630mm	780mm	1260mm		
Cutting thickness		≤1mm				
Speed/Pressure		20-1200mm	/s 20-1000g	Ţ.		
Buffer	1-4M					
LCD display	CN/EN					
Real-time	Support					
Speed adjusting	,					
Interface	COM+USB / COM+USB+U-DISK					
Re-cutting function	Support					
Re-cutting accuracy	0.127mm					
Resolution Ratio	0.0245mm/step					
Language format	DMPL/HPGL					
Voltage	AC85-264V					

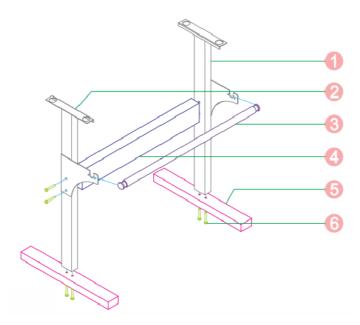
# **Accessory box**

	Item	Quantity	Unit
1	Cutting plotter	1	Set
2	Power supply cable	1	Pc
3	Blade	1	Вох
4	Blade holder	1	Pc
5	Pen holder	1	Pc
6	Ball pen core	1	Pc
7	COM connection cable	1	Pc
8	USB cable	1	Pc
9	Spanner	1	Pc
10	USB driver	1	Pc
11	Bracket screws	1	Bag

To protect the machine, use only the accessories in this accessory box

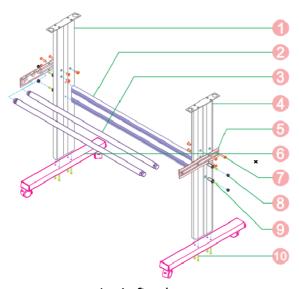
# IV. Bracket assembly diagram

# Iron bracket assembly diagram



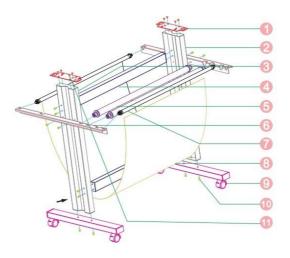
1.	Right column	1pc
2.	Left column	1pc
3.	Paper roller	1pc
4.	Beam	1pc
5.	Foot	2pcs
6.	M6*40 Hex bolts	8pcs

# Al bracket assembly diagram



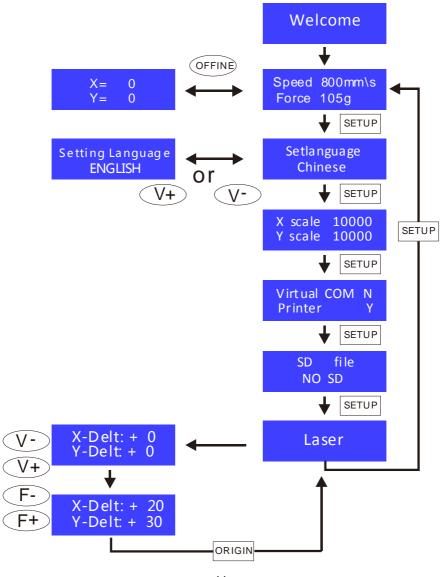
1.	Left column	1pc
2.	Beam	1pc
3.	Paper roller	2pcs
4.	Right column	1pc
5.	Paper holder	2pcs
6.	Foot	2pcs
7.	Screws	6 sets
8.	Screw sleeve	4 sets
9.	Self-tapping screw 4*16	4pcs
10.	Self-tapping screw 4*40	8pcs

# Sheet metal racket assembly diagram



1.	Connected board	2pcs
2.	Right column	1pc
3.	Left column	1pc
4.	Beam	2pcs
5.	Paper roller	2pcs
6.	Paper holder	2pcs
7.	Basket roller	2pcs
8.	Basket	1pc
9.	Foot	2pcs
10.	20pcs	
11.	8pcs	

## V. Control buttons description and operation instructions

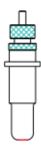


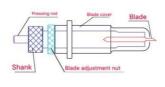
## VI. Blade assembly

1). Assembly the blade into holder, see as below:

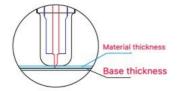
(Appearance view)

(Exploded view)





2). Loosen the blade adjustment nut and rotate the shank to adjust the length of the exposed blade tip. Determine the tip length according to the thickness of the material.







Correct

Blade tip is too long

Blade tip is too short

- 1) Press the pressing rod when you want to change blade. Take out the blade when it is exposed.
- 2) Assembly the blade holder into wagon:
  - a, Loosen the fixed screw on tool holder
  - b, Put the blade holder into tool holder
  - c, Tighten and fix the blade holder when it arrives to correct position



## Tips:

Do not touch the blade tip by finger, otherwise, your finger will be injured and the tip will be blunt.

#### VII. Software and driver installation

1. Open the software box (pic 1), take the disk and put it into CD optical drive (pic 2)





(pic 2)

(pic 1)

2. Open the computer, double click or right click optical drive to install the software. (pic 3)

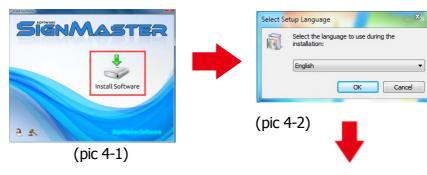


(pic 3)

## 3. After opening optical drive, click Install Software (pic 4)

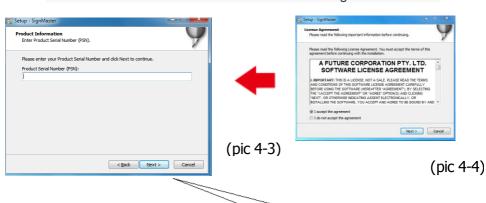
Click on the icon in the red box

Select the language



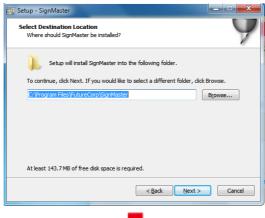
Enter the PSN code

Agreeto click next



PSN code can be found at left side of opened software box.

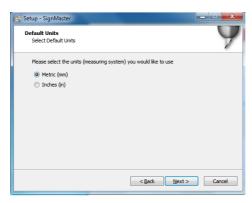
## Default installation path, click next



(pic 4-5)



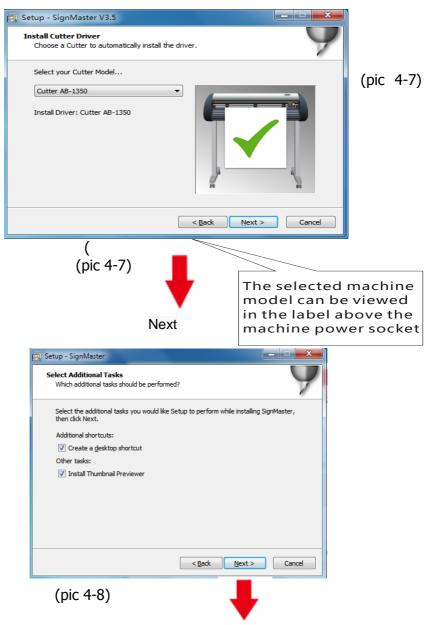
#### Select the unit



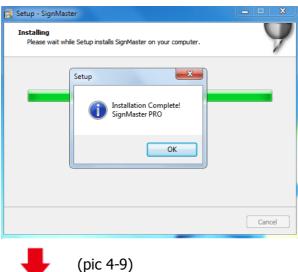
(pic 4-6)



#### Select machine model



### The installation is complete

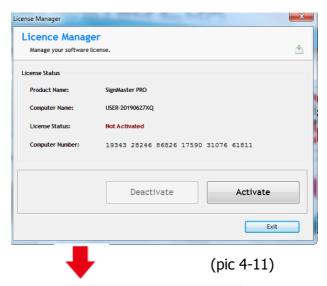


(pic 4-9)

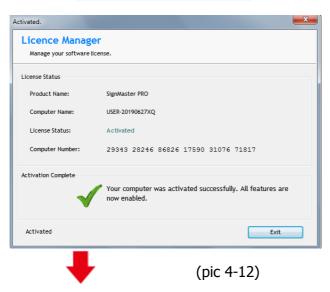
#### This activation window appears when you open the software



## Click activate and enter your email twice



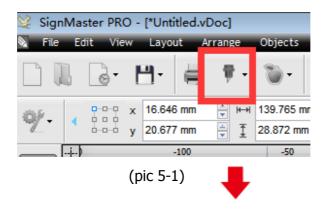
# Activation successful, exit



#### **III.** Connection of software and machine

# 1.Open the software, select cut content, and click send to the cutting plotter

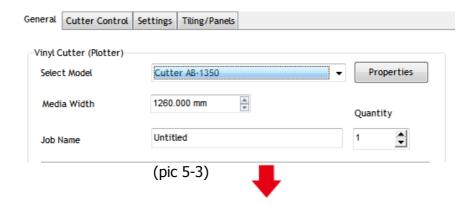
### Click the carving knife icon in the red box



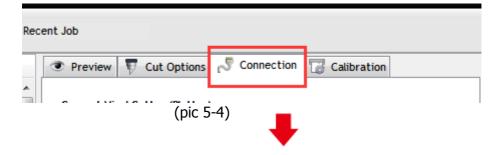
#### Click send to cutting plotter



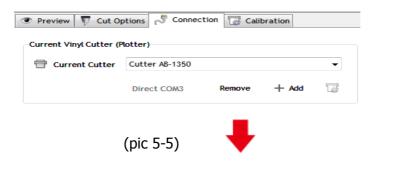
## **Click properties**



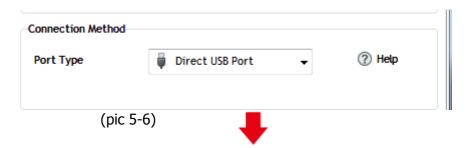
#### **Click connect**



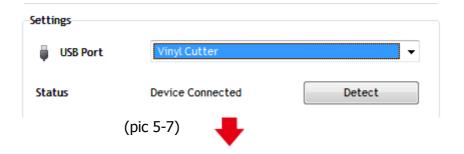
#### Select machine model



#### **Select Direct USB Port**

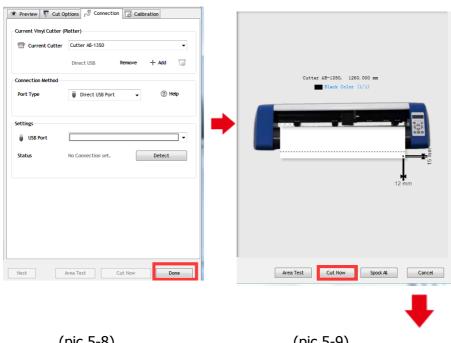


## Drop-down select driver



#### Click finish

#### Click cut now



(pic 5-8)

(pic 5-9)

#### Click cut now



## The output is completed, the cutting plotter is cutting



(pic 5-11)

Note: Please refer to the USB flash drive for specific operation, including the following videos

- 1. Ordinary cutting video
- 2. Automatic contour video
- 3. Automatic deviation correction video
- 4. Software installation video



# P.S. FILM - EASYWEED®

# **SPECIFICATIONS**

Composition	र्ये Avarage Thickness	Carrier	Certifications
PU	90 microns	Adhesive polyester	REACH n° 1907/2006/EU  OEKO-TEX ® CONFIDENCE IN TEXTILES  STANDA 100  W4370 OF INTROCA

# APPLICATION INSTRUCTIONS

⊘ Applies on	SUGGESTED CUTTING SETTINGS			TRANSFER SETTINGS			
cotton, polyester, poly/ cotton blends (not suited for treated	Blade	<u></u> Pressure	>> Speed	Time	Temperature	Pressure	Peel
`and dye sublimated textiles)	45°	60 gf	30 cm/sec	15 seconds	150°C (302°F)	Medium (2,5/3,5 bar)	hot/cold

- → Cut the material mirrored
- → Peel off excess material (Tip: use a heated surface for faster and easier "weeding")
- → Place the decoration on the garment
- → Apply following the recommended parameters
- → Remove the carrier hot or cold

#### PRODUCT HIGHLIGHTS

- → Wide range of colors
- → Can be Layered
- → Suitable for clothing for children and babies
- $oldsymbol{\mathcal{L}}$  NOTE: We highly recommend to perform a test before launching a production.

# CARE AND WASHING RECOMMENDATIONS

<b>W</b> Washing	Ironing	Tumble dry	Ony cleaning	Storage Shelf Life	Storage Temperature	Storage Conditions	<b>∮</b> Position
Up to 80°C, inside-out	YES inside-out	YES (cotton cycle)	YES	Up to 2 years	Between 18°C and 26°C	Away from sunlight and dust	Vertical

- → Wait 24 hours after the application before the first wash
- → Respect the textile recommendations
- → Do not bleach or use aggressive chemical agents

This document can be subject to variations. Updated versions are available on www.siser.com. For further information, please contact our sales office: info@siser.it



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