

Cutting Plotter

Operation Manual

GH490/GH720/GH1350

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1. Safely information

1.1. Before turning on the cutting plotter, care must be taken to remove the protective material

1.2. Check the label on the back or side of the cutting plotter to confirm whether the rated voltage required by the cutting plotter matches the voltage of the power socket.

1.3 Make sure the cutting plotter's power switch is turned off before plugging the power into a grounded power outlet.

1.4. Please do not touch the power cord with wet hands to avoid electric shock.

1.5. Use only the power cord, data cord or manufacturer-approved substitute supplied with this product.

1.6. Do not drop metal objects and liquids into the machine to avoid malfunction.

1.7. After shutting down, you must wait for 5 seconds before turning on the cutting plotter again, otherwise it will easily cause damage to the cutting plotter.

1.8. During thunderstorms, please turn the power switch OFF and pull out the power plug.

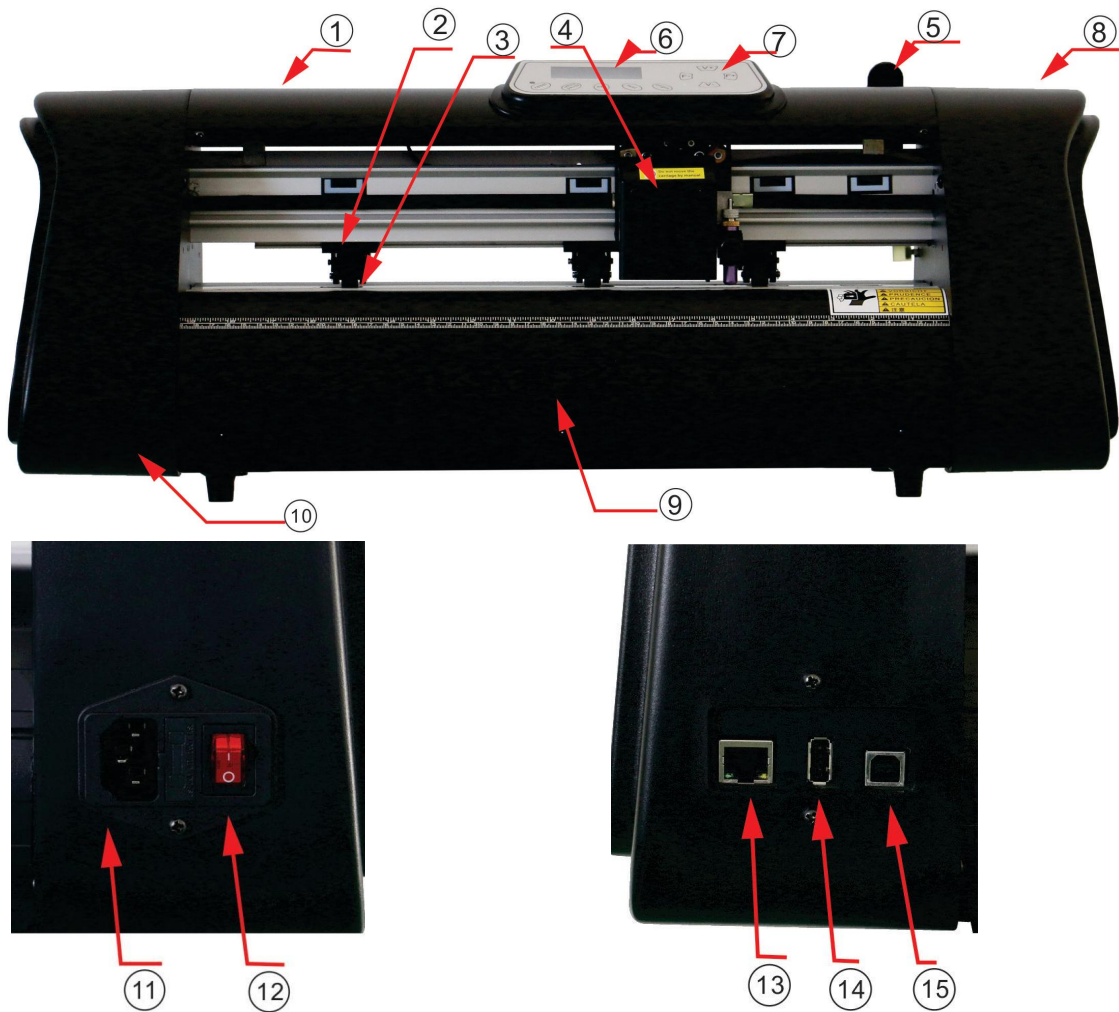
1.9. Please do not replace the manufacturer's components without permission.

1.10. The manufacturer reserves the right to change product specifications without prior notice.

1.11 The manufacturer only assumes due legal obligations for the products sold to users, and does not assume other losses caused by users due to product failures.

1.12. Without the permission of the company, no one may copy and distribute the contents of this manual in any name

2. Introduction of Main Components



- ① shield ② paper press ③ main roller ④ carriage
- ⑤ Roller handle ⑥ display ⑦ keyboard ⑧ right cover
- ⑨ panel ⑩ left cover ⑪ power socket ⑫ power switch
- ⑬ Ethernet port communication
- ⑭ U disk communication
- ⑮ USB communication

3. Technical Parameter

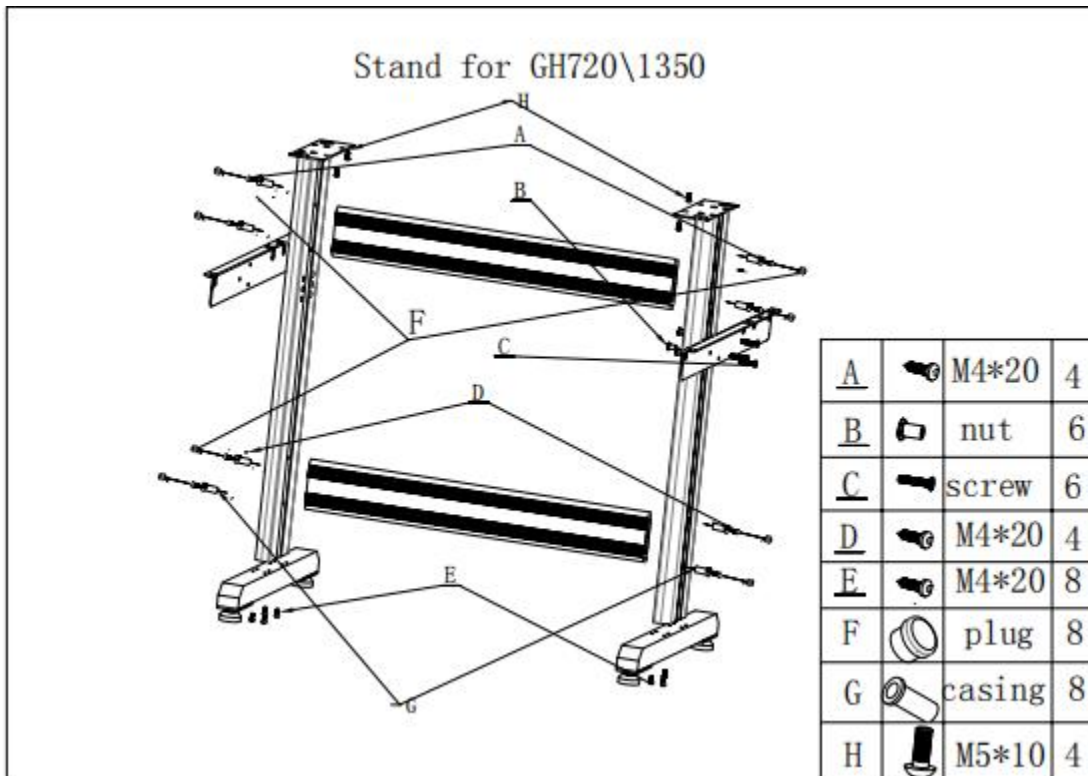
Model item	GH490	GH720	GH1350
Max paper width	490mm	720mm	1350mm
Max cutting width	380mm	610mm	1240mm
Max cutting depth	≤1mm		
Speed	10-1200mm/s		
Force	10-800/g		
Memory	16M		
Display	Chinese/English		
Real-time speed regulation	Yes		
Interface	USB+U disk+ Network port		
Repeatability positioning accuracy	0.127mm		
Resolution	0.0245mm		
Language format	HPGL		
Power supply	AC 85V-AC264V		
Working environment	temperature: +5℃±35℃ Relative humidity : (30%-50%)No condensation		

4.Schematic Diagram of Accessories and Bracket Assembly

accessory :

	Name	Pcs	QTY	
1	Power plug	1	pc	
2	blade	1	box	
3	Blade holder	1	pc	
4	Pen holder	1	pc	
5	Refill (oil-based ballpoint pen)	1	pc	
6	USB cable	1	pc	
7	Allen Wrench	1	pc	
8	Warranty Card	1	pc	
9	USB drive	1	pc	Instructions included
10	Screws	1	bag	Optional
11	dust cover	1	pc	Optional

Schematic diagram of bracket assembly



5. Power-on Test Machine

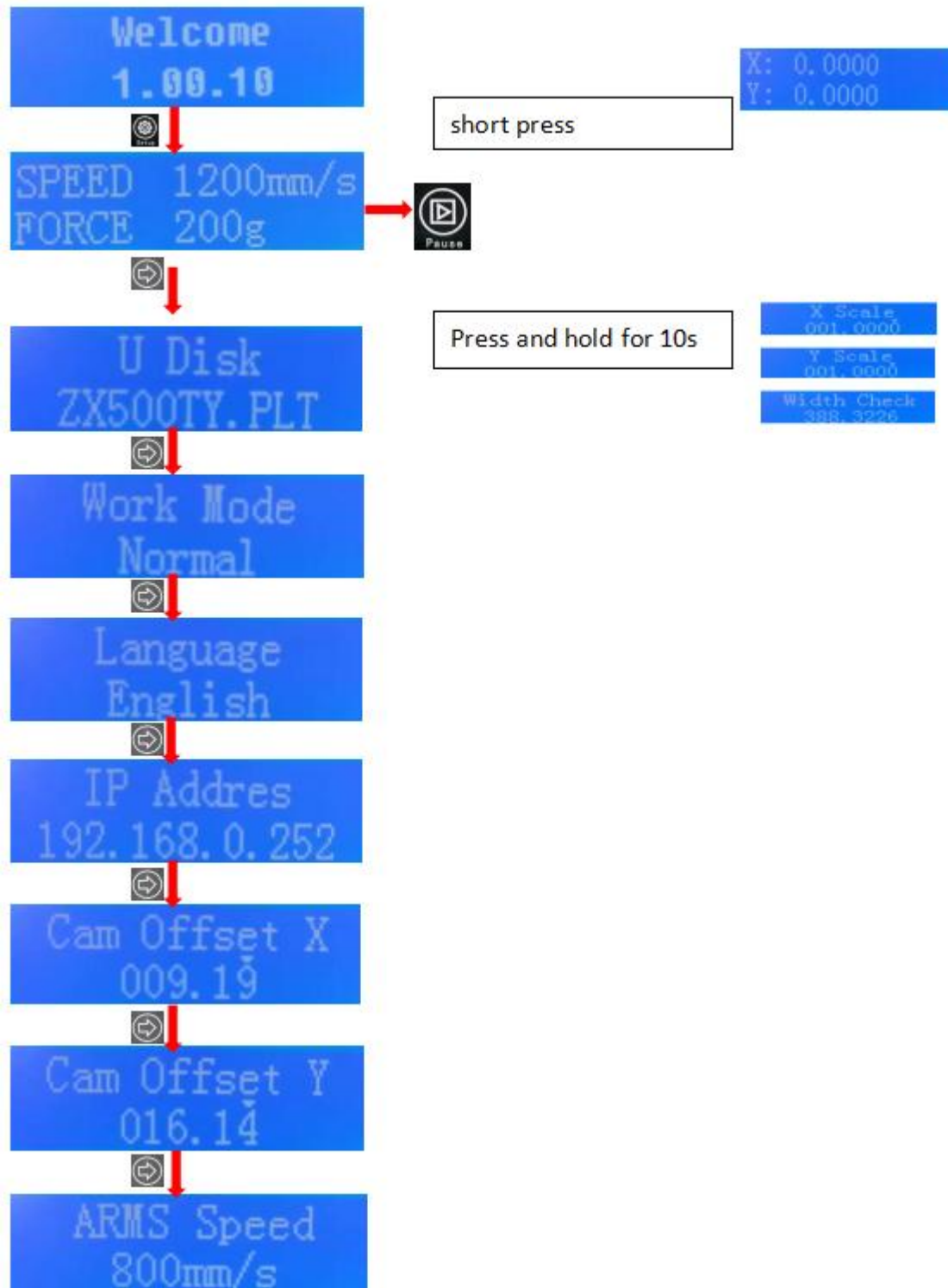
1.1 Place the machine on a flat table or stand. To ensure safe and reliable work, please connect a ground wire from the bottom cover. There should be enough space around the machine.

1.2 Use the supplied power cord to connect the power supply, turn on the power switch, the display screen will light up, the sports car will automatically move to the right end, and the paper feed roller will rotate back and forth, indicating that the machine is automatically reset.

1.3 After the car is turned on, the cutter holder of the sports car will automatically lift up. At this time, press the " " key on the panel, and the cutter holder of the sports car will drop down. Release the key, and the cutter holder will rise. This shows that the sports car cutter holder is working properly.

1.4 Press the " " key, at this time, press the direction key "" to move the car to the left, press the direction key "" to move the car to the right, press the direction key "▼" to scroll the roll paper shaft forward, press the direction key "▲" key rolls the paper shaft backwards; if the "" key is pressed, the self-checking program of the cutting plotter is started.

6. Screen Display Description and Operation Instructions





Button function introduction:

Power/Reset: suitable for resetting the machine without cutting off the power switch;

Pause/Offline: Press 10S to enter X gear ratio, Y gear ratio, width detection settings;

Setup/Setting: Press to Enter U disk reading, working mode, language, red light, firmware version settings;

Test: to adjust length of blade and cutting force;



- /Origin: Finish positioning in state of offline;
- F+: Force up/moving carriage to left side in state of offline
- F-: Force down/moving carriage to right side in state of offline
- V+: speed up/move material in state of offline;
- V-: Speed down/move material in state of offline;
- Set/+F-/Lower cutting force: Automatically identify the QR code to read the U disk file and cut it;
- Test+/origin: Automatic contour calibration (need to use a pen holder for calibration)

Cutting Plotter Function

SPEED 800mm/s
FORCE 200g


1. Adjust the display to main interface

- (1) Only under this interface can you communicate with the computer online.
- (2) Adjust cutting speed and force, Press “◀” or “▶” to adjust cutting force, “▼” or “▲” to adjust cutting speed.



(3) Test Function, Press “” button, plotter will cut a “” pattern, According to the cutting effect, you can check whether the material is cutting through and whether the speed is too fast (if you adjust the speed and force, you must press the origin key to confirm and save).

X: 0.0000
Y: 0.0000

2. Adjust the display interface to the mobile interface

1. Manually locate the origin, press “◀” or “▶” to move the carriage, “▼” or “▲” to move the cutting material, stop where you want, Press “” to complete origin positioning.

3. Pause function

1. During the processing, if there are special circumstances, it is necessary to suspend the processing, press “” Pause the machine, then press “” Exit offline.

7. Gear Ratio Adjustment and Profile Deviation Adjustment Instructions

1. Gear ratio adjustment:

X scale for small axle

Y scale for the reel

Actual Size / Theoretical Size = Proportion

For example, the design size of the small axle painting is 500mm, and the design line length is 498.8mm; $498.8/500=0.9976$, and the X ratio is 0.9976.

2. Contour cutting adjustment:

Blue is the cutting line, this picture is the exact cutting line;



The following picture shows the camera offset X, at this time, the camera offset X value should be minus, the cutting line moves to the right



The following picture shows the camera offset Y. At this time, the camera offset Y value should be minus, the cutting line moves down



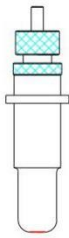
8. Knife composition and installation

NOTICE:

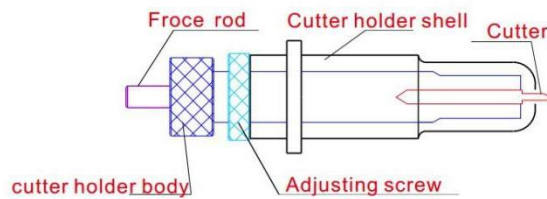
Do not touch the tip of the knife with your fingers, as doing so can cause injury to your fingers.

1. Insert the knife into the holder from the front hole

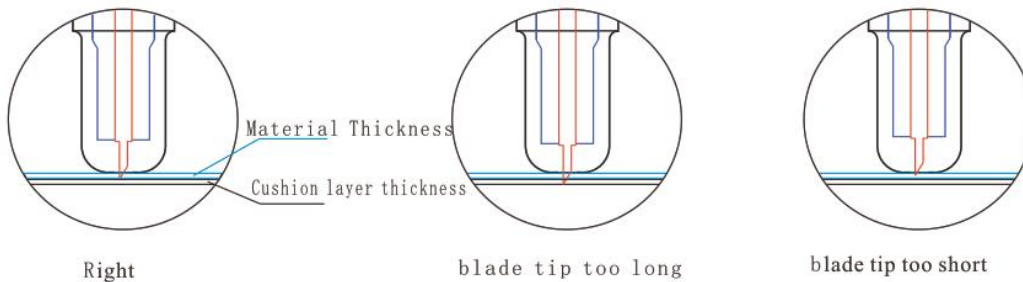
(Outside view)



(breakdown drawing)



2. Adjust cutting blade



Loosen the Adjusting Nut in blade holder ⇨ **Rotate the handle to adjust the length of the exposed part of the knife tip** ⇨ Adjust the protruding length of the knife tip according to the thickness of the cutting material

3. When changing the knife, press the knife bar by hand, and when the knife is exposed, take it out and replace it by hand

4. Install the adjusted cutter on the carriage

- (1) Loosen the fixing screw on the knife holder
- (2) Put blade holder to holder in carriage
- (3) Tighten the fixing screw



9. Feeding Material

1. Adjust the position of the pinch roller according to the paper width

The cutting plotter uses one-in-all pinch roller combinations, and every single pinch roller can move on the guide rail. When moving, the handle of the combination must be lifted, and only the rear of the pinch roller can be held before moving the position. The position of the pinch roller should be ensured:

- 1.1. The pinch roller must be placed in the position with the steel feeding roller,
- 1.2. The distance between the pinch roller and the outer edge of the paper should be 5~50mm;
- 1.3. Make sure the paper is flat on the base plane.


2. load paper

lift up the pinch roller combination, forward the material from the backside of the cutter, and press down the handle while ensuring the material is horizontal with the platform. Repeated adjustment to confirm the paper feed without deviation.

3. Adjust the speed and force, press “◀” and “▶” to control the cutting force, “▲” and “▼” to control the cutting speed. Press “Oringin” to save.

10. Test

1. Test cutting effect.

Press  button, and the cutter will cut a test file, please correct the cutting speed and force according to the cutting effect.

2. adjust the cutting force.

larger value means larger cutting force, please adjust the cutting force according to the cutting effect every time to ensure get a best cutting effect.

3. When the cutter is cutting, it is necessary to ensure that the bottom plane of the blade holder is always touching the surface of the material.

4. When using a pen holder please use a small cutting force.

5. Please do the test job when cutting different materials.

11. Transfer finished pattern

Cutting process complete:

1. Use knife to cut down the pattern.
2. Use tweezers to peel off the unwanted part. (For easy peeling , add a rectangle around the pattern.)
3. Use “transfer film” stick onto the whole pattern, smooth it (reduce wrinkle and bubble).
4. Peel of the "transfer film" with pattern on it , stick to the right place and peel “transfer film” again.



5 . After work, unload the material; carefully wipe the blade holder clean.; turn off the power, unplug the power cord; cover the machine with dustproof cover.

12. Troubleshooting

1. Why the letter is deform or incomplete?

- 1.1. Blade tip too long , cutting force too high, too dirty the plate(left sticker residue),or sticker too soft.
- 1.2. Software setting is incorrect.(For example, tool compensation function is open and the value is too high).
- 1.3. Metal roller screw or motor gear loose; metal roller or carriage can't move along the motor and cause deformation.
- 1.4. Letter is only incomplete, usually is the close compensation value too low.

2. Why machine draw abnormally?

- 2.1. Software setting improperly; select correct command set in plotter type(select DMPL / HPGL command set), If the file format is a little large, and need to open tool compensation, you need to tick the delay output selection for 10 milliseconds.
- 2.2. File been interrupted while signal transmitting.
- 2.3. Plotter software is damage or virus in the computer.
- 2.4 . Wireless station or other power tool nearby will cause interference.(parallel transmission is sensitive to this interference, we recommend using serial port to transmit).
- 2.5 . Adopt unsuitable voltage-stabilized source, like household breaker type regulated power supply, it will generate severs interference in relay on-off moment, bring error to communication data.

3. Why machine run out of position?

- 3.1. Vinyl do not place in position: if 60cm width vinyl deviate 0.6mm, every 5 meter it will has a 5mm deviation.
- 3.2. Too dirty the plate and left vinyl residue, the friction is uneven on each side of the plotter, it finally result in deviation.
- 3.3. Pinch roller pressure is a little low, vinyl is easy to deviate by external force.
- 3.4. The weight of the sticker varies before and after (for example, the front is short and the back is long, and the engraved image is more complicated, which will cause it to gradually deviate from the back. At this time, it is best to connect a piece of paper weight at the front).
- 3.5. Uneven pressure among the left and right pinch roller.
- 3.6. The motor loses step and causes deviation.

4. Why motor run miss-step?

- 4.1. Material is thick and high strength, the plotter motor power is not strong enough to drive it.
- 4.2. Control driver IC chip is abnormal and cause motor miss-step.
- 4.3. The paper press is too old and the pressure is not enough, causing the friction coefficient between the material and the main stick to be too small, resulting in lost steps.

4.4. The knurling on the surface of the main roller is too dirty, and there is an oil film on the surface, which causes the friction coefficient between the material and the main roller to be too small, resulting in the phenomenon of lost steps.

5. Why machine cut irregularly, somewhere is off the backing layer, but somewhere is still not cut?

5.1. Strip has been carved to a groove, or new strip is uneven and form a slope.

5.2. There is a difference in the parallelism of the rails.

5.3. The protruding length of the blade tip is incorrect. Right way: adjust the tip length to 2/3 of vinyl thickness, make sure not cut the backing layer with big pressure, then lower the pressure to ensure all area will be cut well.

6. How to check the pattern quality during the cutting process.3

Press the "Offline" or "Pause" button, the drawing is paused, and the observation is carried out. After observing no problem, press the "offline" or "Pause" button again to continue to draw.

7. Why some letter cut indistinct and the corner is messy?

7.1. Blade tip extend too long.

7.2. There is impurity in the blade holder, blade can't rotate flexible in the holder.

7.3. Blade offset is too large.

8. Why does the baseboard fan not turn after turning on the power switch, and the machine does not respond?

Reason: Check the fuse first, if it is not damaged, the switching power supply of the device is damaged.

Attachment 1: USB driver installation

The default connection pattern of the machine is Printer pattern.

1. The machine includes Printer and Virtual COM connection pattern, it will automatically install virtual port driver in Windows 10,



The Virtual COM port will show as COM X in Windows 10.



The Printer pattern will show as USB printing support or USB printer in Win 7/8/10.

2. Manual install USB driver in Windows XP/7:

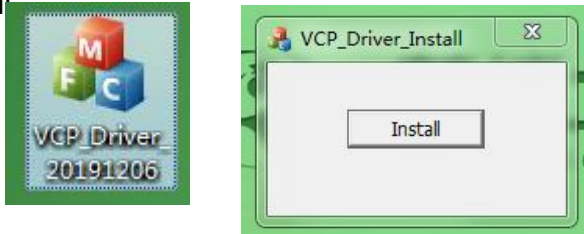
2.1 Connect the cutting plotter to the computer, and an unknown device will appear in the device manager



2.2. Open the VCP-Driver.rar file in the driver CD,



2.3. Unzip the VCP-Driver.rar file, double-click the unzipped file and click Install



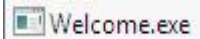
4. After the installation is successful, the COM X port appears in the device manager.



Operation Settings of Anycut Software

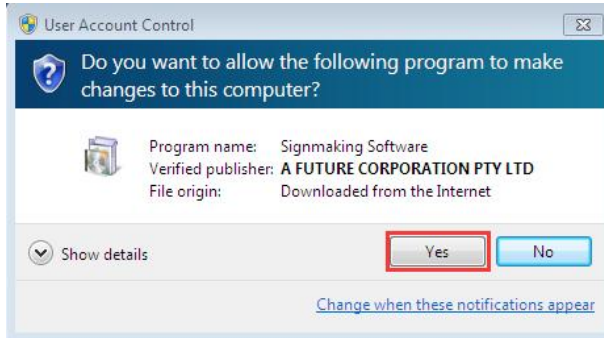
installation steps:

1 Insert the software installation CD into the CD-ROM drive and open it.

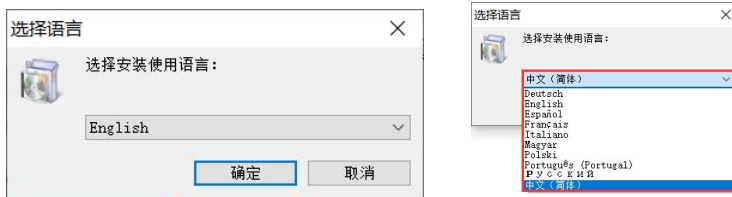
2 Double-click the icon  Welcome.exe in the file to start the installation



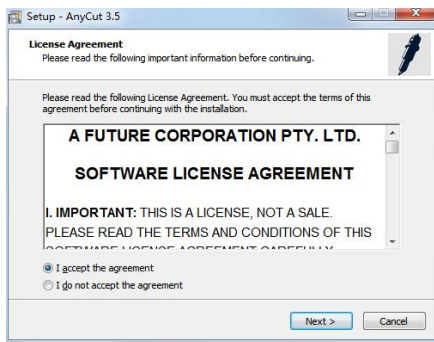
3 Click "Yes" to allow the software to make changes to the computer.



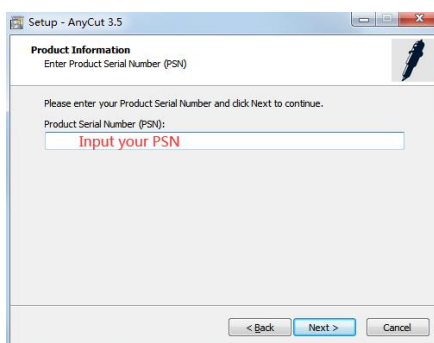
4 Please select the installation language and click the language to display more language options.



5 Please accept the license agreement to continue the installation

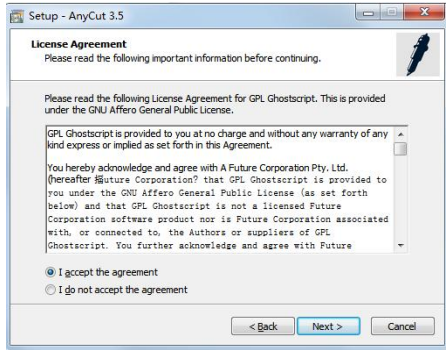


6 Please enter the 20/26-digit Product Serial Number (PSN) provided by the dealer.



Note: Please keep the Product Serial Number (PSN) in a safe place, you will need to enter the Product Serial Number when activating and deactivating the software.

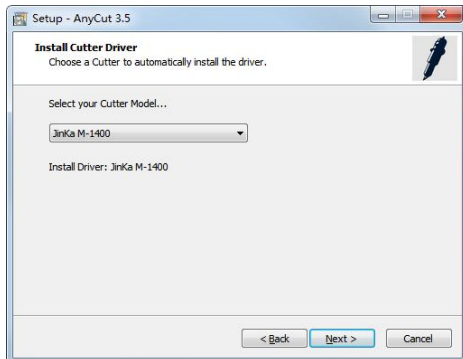
7. Please agree to the license agreement.



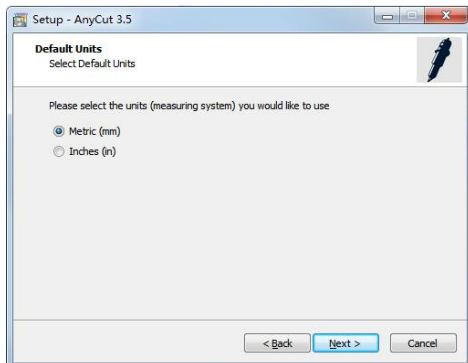
8 Please install Anycut in the following file and click "Next".



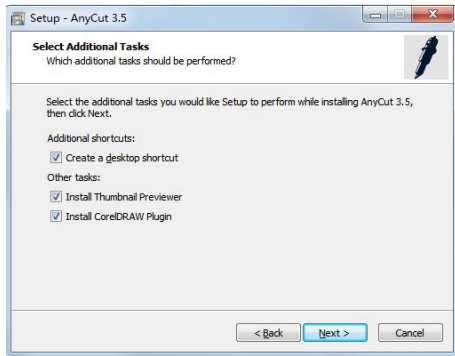
9. Select the cutting plotter model: GH490/720/1350



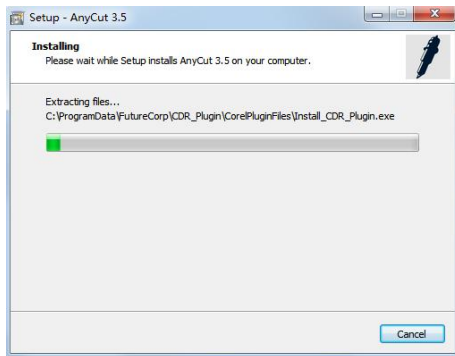
10. Please select the unit of measure (you can also change it in the software after installation is complete).



10 Please select additional tasks and click Next.



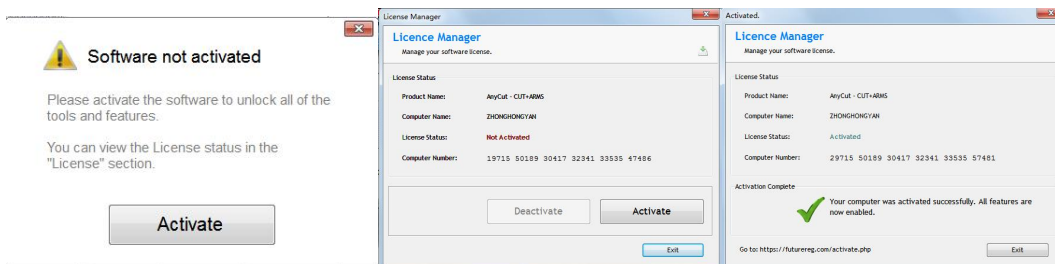
11 The software is being installed, please wait.



12 Installation is complete! You can now start using Anycut



13 To enable all functions in the software, you need to activate the software.



Note: If you need to enter an email address during the account registration process, please enter the same email address twice and record your email address. If your PSN is accidentally lost, we may retrieve your PSN through the email address you used for registration .

For software operation, please refer to the software instruction manual.

