



**H Series Cutting Plotter**

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## PREFACE

Thank you for choosing cutting plotter. The machine adopts the special-purpose integrated circuit of America, bringing about fast cutting speed, higher precision and easy operation. In order to ensure excellent cutting quality and producing capacity, please read the direction carefully before using it.

Although detailed and precise information about the machine has been given in the booklet, please contact seller or distributor as soon as possible if there is anything unclear or inappropriate.

### ONE ATTENTION

To ensure the safe and correct use of the cutting plotter, please read the directions before using it. After finishing reading, please put the booklet where you can get it easily for convenient and rapid reference when necessary. Make sure that children can never touch the cutting plotter. The major directions for safe operation are as follows. Please stick to them strictly.

#### Directions of Safety Symbols

##### **Make sure the cutting plotter is fixed grounded**

There-hole-socket with grounded wire should be used.

If not, once leak electricity, the operator will get electric shock. Meanwhile, the machine and the interface will probably be burnt.

**Connect grounded-wire!**



##### **Keep the cutting plotter off water, rain or snow**

If it encounters any of these, once leak electricity, it will result in electric shock or fire.

**No water!**



**If the cutting plotter belches smoke, releases peculiar smell because of overheat or malfunctions,**

**and pull out the plug from the socket.**

If you go on using it in the case, it will result in electric shock or fire.

After making sure that the cutting plotter no longer belches smoke, please get in touch with the Technical Department of **seller or distributor** immediately.

**Forbidden!**



**Be careful when cutting plotter**

While cutting, keep your hands away from the blade.



While cutting, keep your hands, hair, etc. away from any moving part of the cutting plotter.

**No touch! Keep space!**

**Don't use or set the cutting plotter in the sunshine or in front of the vent of the heating or air-conditioner.**

In this state, the functions of the cutting plotter will be damaged.

**Forbidden!**



**Don't use the cutting plotter in dusty and damp places.**

If so, the functions of the cutting plotter will be weakened.

**Forbidden!**



**Don't put any container for water or other fluid on the cutting plotter.**

If the fluid seeps into the machine, it will result in electric shock or fire because of leaking electricity.

**No water! Electricity!**



**If water or any foreign matter gets into the cutting plotter .stop using it. Turn off the switch and pull out the plug from the socket .**

Using the cutting plotter in this state will give rise to electric shock or fire because of leaking electricity.

Please contact with the technical department in time.



**Pull out from behind!**

**Don't add lubricating oil to the mechanical parts of the cutting plotter without authorization.**

**This will lead to the malfunction of the cutting plotter.**

**If you encounter any of these malfunctions, please get in touch with the technical department of seller or distributor in time.**

***Forbidden!***



**While cutting or plotting, there must be ample space around the cutting plotter, in case the paper touches anything around.**

It will result in the deformation of the character due to the dislocation of the plotting.

***No touch! Keep space!***



**While using the cutting tool, the blade should not extend the necessary range.**

If the blade extends too much, it will damage the layering and affect the quality of cutting.

The stretch of the blade is usually about 0.50mm to 0.60mm.

***Do !***



**Don't move the pen cart rapidly with hands when the cutting plotter is on.**

The electric circuit generated will burn the panel board of the cutting plotter.

***Forbidden!***



## **TWO INTRUCTION OF FUNCTIONS**

### **1. Technical Parameters**

Item	model	620H	750H	1000H	1250H
The widest paper for entering		72cm	85cm	110cm	135cm
The widest paper for cutting		62cm	75cm	100cm	125cm

<b>Force</b>	<b>2-500g</b>
<b>Speed</b>	<b>20-400mm/s</b>
<b>Memory</b>	<b>128K-2M</b>
<b>Interface</b>	<b>RS-232, USB</b>
<b>Language</b>	<b>DMPL</b>
<b>CPU</b>	<b>three CPU controller</b>
<b>Power supply</b>	<b>AC90V-AC240V 50-60HZ 60W</b>
<b>Drive</b>	<b>Stepper</b>
<b>LCD</b>	<b>Display with English</b>

**ATTENTION:** Any change in technical parameter will not be given further notice.

## 2. The Diagrammatic Sketch of the Main Points of the Cutting Plotter:



- ① wheel for pressing the paper
- ② pen cart
- ③ handle for pressing the paper
- ④ liquid crystal operation panel board
- ⑤ serial port
- ⑥ power socket
- ⑦ switch
- ⑧ fuse base
- ⑨ cylinder for containing paper
- ⑩ support

## 3. Connection

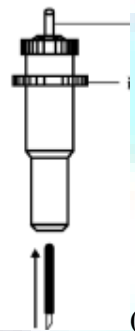
- ① Get through the power with the supplied wire.
- ② Turn on the power switch. If the pen cart returns to the origin automatically, the **LCD** will display as (Pattern 1). The **Connect/Leave** indicator light appears red, the **Power** indicator light appears green and the button **Stop** is in the state of turning of. It means ok.

<b>Speed</b>	<b>cm/s</b>
<b>Force</b>	<b>g</b>

(Pattern 1)

## 4. Cutter and cutter holder

- ① Type Roland cutter is preferred



**Up-pole  
Regulation**

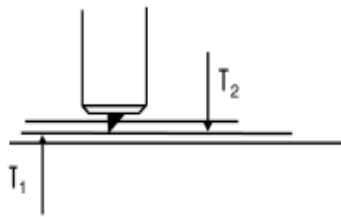
**(Pattern 2)**

④Like (Pattern 3) adjusting the length of the cutter tip extending outside.



**(Pattern 3)**

⑤The length of cutting tip extending outside as (Pattern 4).



(Pattern 4)

**T1: the bottom surface thickness of the memo sticker**

**T2: the surface thickness of the memo sticker**

**The outside length of the cutter tip :  $(T_1 + T_2)/2$  (about 0.5mm)**

## 5. Pen and Pen holder

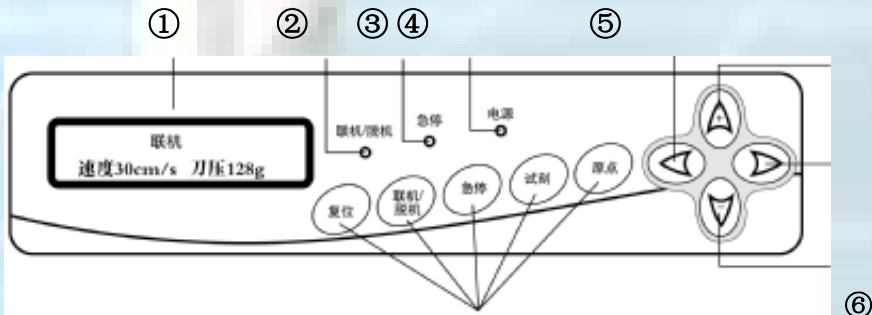
Using pen you can plot the characters or sketches that you have designed on the paper, when plotting you should reduce the force in order to avoid damaging the paper .Meanwhile you should give up the compensation of sharp angle in the software, and improve the speed of output .Like (Pattern 5) installing pen:



(Pattern 5)

## THREE Operation of the Panel Board

### 1. Introduction of the panel board



- ① LCD
- ② Connect/Leave indicator light
- ③ Stop indicator light
- ④ Power indicator light
- ⑤ Direction key
- ⑥ Function key (from left to right) :  
Connect/Leave, Stop, Test & Reset.



## 2. General introduction

①**The state of Leave** : The indicator light of *Connect/Leave* appears red;

②**The state of Connect** :The indicator light of *Connect/Leave* appears green;

③**The state of turning on normally**: When you turn on the power switch, the *Connect/Leave* indicator light appears red, the **Power** indicator light appears green, and the *Stop* indicator light is in the state of turning off.

## 3. State introduction of the indicator light

Under the state of starting the cutting plotter, the **Power** indicator light appears green, the *Connect/Leave* indicator light appears red, and the *Stop* indicator light is in the state of turning off.

Under the state of **Connect**, the **Power** indicator light appears green, the *Connect/Leave* indicator light appears green and the *Stop* indicator light is in the state of turning off.

## 4. Functions of the buttons in the state of leave

①In this state ,you can move the paper into all the four directions as you like.

②**Connect/Leave Button** : It is the button for choosing the state of Leave or **Connect** .In the normal state ,following operations can be carried on ,for example ,moving the paper into different directions , regulating force and speed , and testing ,etc . , and in the state of connection , it means the cutting plotter is ready ,and after the computer sends out the data ,the process of cutting begins .

③**Stop Button**: In the state of connection, the LCD shows as (Pattern 6);

Speed	cm/s
Force	g

(Pattern 6)

Force value	g
Regulation value	g

(Pattern 7)

At the moment you can adjust the speed, force by **Stop Button**; Press the button again the LCD will show as (Pattern 7). Press the button **Up** or **Down** to increase or reduce the force (the maximum force 500g, the minimum force 2g).After regulation presses the *Connect/Leave* button again and confirms the regulation.

And you can press **the Stop Button** twice, the LCD shows as (Pattern 8); you can press the button **Up** or **Down** to increase or reduce the speed (the maximum speed 40cm/s, the minimum speed 2cm/s). After regulation presses the *Connect/Leave* button again and confirms the regulation.

④**Test Button** : After the regulation of force and speed , you can press the *Test* button to examine whether the speed or force is proper .If plotting large characters the proper force is 90-105g , and the speed 35-40cm/s ;In the state of cutting characters , the proper force is 140-150g ,the speed about large characters 35-40cm/s and small characters 20-30cm/s .

⑤**Reset Button**: After all regulations finish, press the **Reset Button** once you can get into the state of connection. The *Connect/Leave* indicator shows green and the LCD displays as (Pattern 9), the cutting plotter can start the output;

<b>Connect</b>
mm/s      g

(Pattern 9)

**Attention :** In the state of turning on ,the pen cart will go back to the right side automatically ,where is the origin .It appears as Pattern 6 in the LCD .Press the *Connect/Leave* button to get into the state of connection . But if you want to move the pen cart and change the origin to get the output ,you must affirm it through the origin .

#### 5. Function of Buttons in the state of connection:

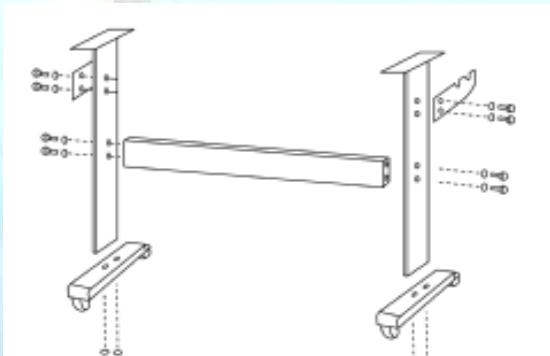
- ① In this state , press the **Connect/Leave** button twice to get into the state of **Leave**, now you can observe the effect of cutting/plotting moving the button **Up** 、 **Down** 、 **Left** or **Right** . Then press the **Connect/Leave** button again, the cutting plotter will go on working.
- ② In this state ,press the **Connect/Leave** button twice , the indicator light turns red and the machine gets into the state of **Leave** . Now the steps in 4 including ①、 ②、 ③、 ④ can be carried on .Press the button again; the cutting plotter will continue to work.
- ③ In this state ,press the button **Up** or **Down** to increase or reduce the cutting speed , and press the button **Left** to confirm it .
- ④ When the cutting plotter is working, pressing the **Connect/Leave** button once the LCD shows as (Pattern 10) , now it can stop the working and eliminate the cutting plotter's storage .

Stop  
cm/s g

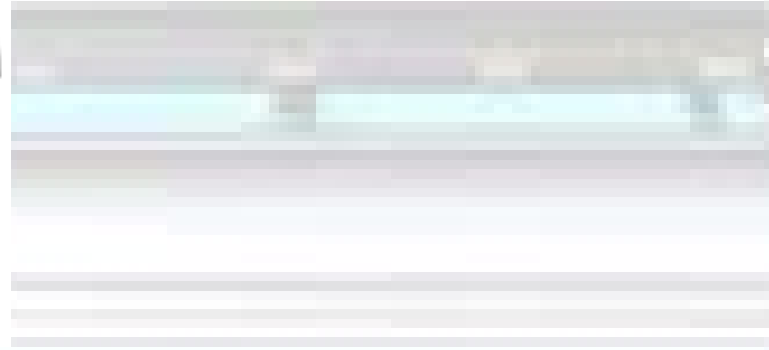
(Pattern 10)

#### Four Installation of Cutting Plotter

##### 1. Installation of the support



##### 2. The cutting plotter is fixed onto the support as illustrated in the following picture.



## **FIVE Common Problems in Cutting**

### **1. Resolutions to failure of entering cutting state**

- ①Please reinstall the cutting system with system disk when the system file is destroyed.
- ②Check if the cutting software functions well; press keyboard **Alt+Tab**.

### **2. Resolutions to invalid item of cutting output**

**After entry to the system.**

- ①Check if the software of cipher card or cipher Dog is probably installed (you should conform the instruction).
- ②If it is probably installed, turn on the cutting system. If the item-cutting output is still invalid, please contact with your salesman or software corporation directly.

### **3. Resolutions to failure of working in cutting output**

- ①Check if the wire of cutting plotter is well connected with the computer.
- ②Check the installation of interface in the output state. Make clear it is **COM1** or **COM2** and make sure the interface of the menu should be correspondent to that of the computer connected to the cutting plotter.
- ③Attention should be given to the option of the cutting plotter type.
- ④Check if the cutting plotter is connected to the computer.
- ⑤If there is any problem in the software, please rein-stall.
- ⑥Check the output interface of the computer.

### **4. Attention to cutting characters of small type**

- ①If characters are below 2cm, adjust the speed to the slowest. Since the distance between each character is close, fast speed will result in substandard characters.
- ②When cutting small characters, it's better to use compensating function and the compensating figure should be set between about 0.3mm, which will bring about better result.
- ③The length of the knife tip should be shorter than the normal length, which makes small characters smoother.

### **5. Attention to cutting characters of large type**

- ①If the width of engraving character is large than that of the cutting-plotter, the system software will separate it automatically. You can also separate it by hand to

make each page joined together and form a large one .But please make sure the width of the output should be identical with that of the memo sticker.

②The speed can be regulated a little faster .Besides, the compensating function should be eliminated in the process and at the same time seamless connection should be chosen.

#### **6. Resolution to failure of tearing off the memo sticker after cutting**

①Before output, please examine the force of the blade and adjust it to a suitable size.

②If there appears any dotted line; it suggests the overuse of the blade. Please try a new one.

③After cutting, if only one side of the character can be torn through, please check if it is caused by broken plastic sheet.

#### **7. Adjustment of the length of blade tip**

Proper adjustment of the length of blade tip not only makes the cut characters smoother but prolongs the use of the cutting plotter and the layer.

##### **Method:**

First, loose the screws in the blade frame and revolve the blade socket until the blade turns out with 0.5mm at length.

Then tighten the screws. In this way, even high force will not lead to the damage of the layer.

#### **8. Attention to cutting plotter**

If the last operation is abnormally quitted, please turn off the cutting plotter before turning on the computer.