## EPSON TX800-12H Flatbed Printer Control System User Manual



## 上海瑞汇实业有限公司

Shanghai Rainbow Industrial Co., Ltd.

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## Preface

Thank you for purchasing and using this product of WellPrint. In order to let you better use this product, please read this manual carefully before using the product. If you have any questions while using the product, please feel free to contact us by phone or email.



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## - Board instructions





## 1.3W801TOA3\_VA mainboard interface instructions

J21: Main board power supply, need to connect 12V, 24V, 42V (sequentially connection according to the board screen printing), and the current requirement above 5A
J5: X-Moto signal J6: Y-Moto signal J7: Z-Moto signal (DIR, DIR-, PUL, PUL-)
J26: Moto1 Wiper motor interface J25: Moto 0 Lift motor interface
X origin limit (J13 right, j9 left), Y origin limit (J8feed, J12back), Z origin limit (J10 down, j4 up), ink lift limit (J11 up, J15 down), wiper limit (J17 out, J20 back), (J18, JP10) standby, (port from left to right is + 5V, GND, signal)
J101: Cleaning Unit (LM: Ink Pump 1, Ly: Ink Pump 2, Output Voltage 24V)
JP7: Keypad port



J1: Fiber interface J5: USB interface 1.4W801TOA3 VA mainboard notes

1. The power supply of the board is 24V and 42V, with the current above 5A. Power module 220V input recommended plus a two-stage filter.

2. The board must be reliably grounded in the process of use it. The board fixing screws should be in full contact with the shell, and the shell should be connected with the large conductor embedded in the earth. The middle hole of the equipment power socket also shall be reliably grounded

3. Ambient temperature required by the equipment: 15°C-30°C; Normal temperature range for board: 0°C-75°C

4. The installation place of the mainboard shall ensure the air circulation around the board to prevent the excessive temperature around the board from affecting the printing effect or damaging the board. Floors should be easy to clean and free from dust and static.

## 2、W803HDON\_VA spray plate 2.1W803HDON\_VA spray plate



- 1, JP3 raster decoder port (left to Right: +5V, B, A, GND)
- 2, J2 origin left limit interface. (Interface from left to right is + 5V, GND, signal)
- 2, J3 origin right limit interface. (Port from left to right is + 5V, GND, signal)
- 3, J4 standby interface
- 4, Secondary ink supply port
- 6, +42V power interface (note positive and negative)

## 2.2W802HEND\_VA XP600 gusset plate



## **3.** External touch panel

At present, there are two kinds of screens, one is 4.3-inch display control (left), the other is Kunlun Tongtai 7-inch (right)





## The main interface of the two pumping screems is the same, as shown blow:



When using the touch screen, the small board as shown in the left picture shall be connected to the main board, and it shall be connected to the screen through 232 direct data line

## 4. Startup initialization

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## **4.1USB3.0** board startup initialization configuration file download tool

## 4.2Instructions for USB boot action tool

1. Firstly, the USB driver should be installed after the board is powered on. When the connection status of the tool interface shows that it has been connected, the tool interface can be used to set parameters.

2. The tool shows that it is connected. First click the load file, find the parameter file configured by the technician, and then click download to write the boot parameters into the board.

3. Origin fine tuning setting: After power on, you also need to load the file first, and then click on the initialization action interface to set the speed and movement distance, and click move left and right. When the head and platform corresponding, then click Set, and then go back to the firmware setting interface and click Download, and then restart the machine.

Note: Before the 3.0 board is shipped, the parameters are set according to the customer machine model. Generally, tools are not be used, but only used when the parameters do not correspond or the origin needs fine-tuning.

## 二、 Head ink sequence

## 1.1Head color sequence



Four colors, in order 123456 -- K, C, C, M, M, Y; six colors, in order 123456 -- K, C, M, Y,

LC, LM

## **1.2Color offset**

	套色通道选择											套	色通道选	择	
		CH00	CH01	CH02	CH03	CH04	CH05			CH00	CH01	CH02	CH03	CH04	CH05
٦	H00	к	С	С	М	М	Y		H00	К	С	М	Y	LC	LM
Τ															
	H01	White	White	White	White	White	White		H01	White	White	White	White	White	White

## **1.3Supported resolution** and PASS numbers

FOUR-COLOF CHANGE POI	R PRINT NT: use	SIX-COLOR PRINT CHANGE POINT: use SingleDot4					
SingleDot4 360 X 720 720 X 720 720 X 1080 720 X 1440	2 PASS 4 PASS 6PASS 8PASS	360 X 720 360 X 1080 720 X 720 720 X 1080	4 PASS 6 PASS 8 PASS 12 PASS				
DDINIT Single	Detune						
SingleDot1, SingleDot3	SingleDot2,	PRINT Singl SingleDot3	eDot: use SingleDot1, SingleDot2,				
SingleDot1, SingleDot3 720 X 720	SingleDot2, 2 PASS	PRINT Singl SingleDot3 720 X 720	eDot: use SingleDot1, SingleDot2, 4 PASS				
SingleDot1, SingleDot3 720 X 720 720 X 1080	SingleDot2, 2 PASS 3 PASS	PRINT Singl SingleDot3 720 X 720 720 X 1080 720 X 1440	eDot: use SingleDot1, SingleDot2, 4 PASS 6PASS 8 PASS				
SingleDot1, S SingleDot3 720 X 720 720 X 1080 720 X 1440	SingleDot2, 2 PASS 3 PASS 4 PASS	PRINT Singl SingleDot3 720 X 720 720 X 1080 720 X 1440 720 X 2160	eDot: use SingleDot1, SingleDot2, 4 PASS 6PASS 8 PASS 12 PASS				
SingleDot1, S SingleDot3 720 X 720 720 X 1080 720 X 1440 720 X 2160	SingleDot2, 2 PASS 3 PASS 4 PASS 6 PASS	PRINT Singl SingleDot3 720 X 720 720 X 1080 720 X 1440 720 X 2160 720 X 2880	eDot: use SingleDot1, SingleDot2, 4 PASS 6PASS 8 PASS 12 PASS 16 PASS				

## **Ξ**、Software Instructions

## **1**. Software home screen

SoftechSoftware	Open Print Pause Stop Flash	Clean	Test	Home	Left	Right	Feed	Back		
Task Choice	Margin Width:     20.00     mm     IV Margin     30.00     mm       Print Speed:     High-speed     Print-direction:     Bi-Direction     IV       Step-trimming:     0.00     Bi-tuning:     -10     IV									
Parameters Maintainance	File Name:       Colors:     Width:       Bits Per Dot:     Height:       Resolution:     Area:									
Quit	Status Information Printing Status: Print progress: Printing Time:									
	Error Code: Occur Times Numbers								P	Previous Next rint Record Qlose
System	Flash Jetting:Off Position: 0.0.	nm								

After the initialization of the board, connect the board to the computer through the USB data line, insert the dongle, and after opening the software, the printer status in the lower left corner will display "high", as shown in the figure below:

🏫 系统菜单			
打印机 连续信	1 风吹灯	小车位置: X:0 mm, Y:0 mm	

## 2. Software debugging steps

## 2.1Calibrated gear ratio

X-Moto Configuration										
		Print Frequency								
Slow:	600	mm/s 8.50KHz								
Normal:	700	mm/s 9.92KHz								
Fast:	800	mm/s 11.34KHz								
Reposition Speed:	705	mm/s								
Return Speed:	800	mm/s								
Move	Move 800 mm Gear ratio: 1.255454									
Reposition										

Click the Maintenance, Motion setting, you can see the left picture as shown. Firstly, fill in a smaller value(100) after the Move, click the Move, at the same time, the software will display the cartridge position in the left bottom corner(if it shows negative, it means the raster decoder is backwards in polarity, changing its A and B line decoder sequence, eventually machine). Click restart the the Reposition, and then fill in a larger value, half of the format width, and then click the Move, click Reposition after the cartridge position stops. Finally, fill in the format width size; click Move, and the click Reposition.

Y-Moto Configuration									
stour 30									
Normal: 40	mm/s								
Fast: 50	mm/s								
Move 500 mm	Run length: 0 mm								
Caculate	1mm = 30.692619 pulse								

Firstly, mark the material, then fill in 100 after the Move, clicks the Move. Mark the material again after its move is completed. Measuring the actual moving distance with a ruler, fills in the Run length, and click Calculate. (Note: only click one time of Calculate each time)

The second time, fill in 300, click Move, measure the actual run length, and then click the Calculate. The third time, fill in 600, click Move, measure the actual run length, and then click the Calculate. Note: After gear ratio is calibrated, click the application button at the bottom of the interface to save the parameters

## 2.2Cleaning option

## Click the Maintenance, cleaning option, as shown in the following picture:

Bias calibration Motion setting Platform Control White-ink Time Set Cleaning Option Voltage setting Basic setting

	Cartridg	e
Task Choice	Move to scraping head 1 position pulses: 1000 Move to scraping head 2 position pulses: 0 Motor accleration time: 36,000000	Move to scraping head 1 pulses: 5600 Move to scraping head 2 pulses: 0 Motor maximum speed: 50
Parameters	Wiper	
	Scraping head 1 Move out pulses: 0 Scraping head 2 Move out pulses: 0	Scraping head 1 Move in pulses: 0
Maintainance	Motor accleration time: 36	Motor maximum speed: 1000
	Platfor	m
Quit	Move up to flash pulses: 2400	
	Move down pulses: 50000	Move up to pumping pulses: 4800
	Move up to scraping pulses: 2000	Move up pulses: 2400
	Motor accleration time: 512	Motor maximum speed: 3000
	SetPannelParam	Apply

**Cleaning steps** 

- 1、The ink pad move down to the lower limit (platform move down pulses)
- 2. The ink pad move up against the head to absorb the ink (platform move up to pumping pulses)
- 3、The ink pump began to pumping (the pumping time can be set through the tool)
- 4. After pumping, wait for a certain time to prevent ink suction, when the air pressure inside the ink pad is balanced (tool setting, make sure more than 3 seconds)
- 5. The ink pad move down to the lower limit (platform move down pulses control)
- 6. The ink pump pumps the waste ink from the pad
- 7、Cartridge move left to origin scraping position (cartridge move to scraping head 1 position pulses)
- 8、Platform move up to scraping height (platform move up to scraping pulses)
- 9. Move the scraping to the head, prepare for scraping (scraping head I move out pulses)
- 10、Cartridge moves to scraping (cartridge move to scraping head 1 pulse)
- 11、The ink pad move down the lower limit (platform move down pulses)
- 12、Scraping reposition (Scraping head 1 move in pulses)
- 13、Cartridge reposition
- 14. The ink pad move up to flash jetting position (platform move up to flash pulses)
- 15、Head began to flash jetting
- 16. The ink pump pumps the waste ink from the pad
- 17、The ink pad move down to the lower limit (platform move down pulses)
- 18. The ink pad move up to standby height (platform move up pulses)

## 2.3Head status

On the home screen of the software, press the Test, and select the Head status from the drop-down menu



## 2.4Vertical calibration

On the home screen of the software, press the Test, and select the Vertical calibration from the drop-down menu



The vertical status as shown in the figure is obviously wrong, so it is necessary to adjust the head. The situation shown in the figure should be adjusting the head "left front push" and "right back pull".

The vertical status is shown in the following figure:



The vertical status as shown in the figure is obviously wrong, so it is necessary to adjust the head. The situation shown in the figure should be adjusting the head "left back pull" and "right front push".

The vertical status is not adjusted until it reaches the following figure shown:



## 2.5Step calibration

Click the Maintenance, select Bias calibration, Step calibration, lastly click Print, as shown in the following picture.



In the Steps, select Base step, click Print, the cartridge began to print:

+ O -基准步进

As shown in the above figure, the position of -6 is overlapped, which proves that there is an error of -6 in the Base step. Input -6 in the Revise, click the Apply at the bottom of the interface

Step Calibration								
Steps: Base Step 💌	Print							
Revise: 0.00								

Click the Print again, as shown in the following figure:

16	14	12	10	8	6	4	2	+ 0 -	2	4	6	8	10	12	14	16
基准	÷步)	#														

Overlap at position 0, which proves that the Base step is well adjusted. If it does not overlap at position 0, continue to adjust the parameters and continue to print until it can overlap at position 0 each time

			Step Calibration	
Steps:	Base Step 💌		1	Print
Revise:	Base Step 2 Pass 3 Pass	1		
	4 Pass		Distance Calibration	
Vertical :	6 Pass 8 Pass		Print	
Horizontal:	10 Pass 12 Pass 16 Pass	Print	Left_Offset_Prin	t
	Righ	t_Print	Right_Offset_Prin	it

Select the drop-down menu of the Base step, different PASS numbers can be selected. After selecting respectively, it can be calibrated through click Print.

## 2.6Bi-Dir Offset

14

16

12

10

8

6

4

Click the Maintenance, select Bias calibration, as shown in the following picture:							
	Bias calibration	Motion setting	Platform Control	White-ink Time Set	Cleaning		
			Bi-Dir Offset				
Task Choice							
	360resolution	▼ Fast ▼ -2	25	Print			

Firstly, the corresponding resolution should be selected. The default is 360resolution. Select the corresponding speed and adjust the bidirectional values of slow, normal and fast. Click the Print lastly.



The above figure is aligned above and below the position of 6, indicating that in the case of normal speed, the bidirectional deviation is -6. Add -6 to the adjustment box in the back, and click the Apply

360resolution  Fast  Print Click Print:	Bi-Dir Offset					
Click Print:	360resolution	▼ Fast	-25		Print	
	Click Print:					

When aligned at position 0, which proves that bidirectional value adjustment is completed.

0

2

-2 -4 -6 -8 -10 -12 -14 -16

Instructions for Bi-Dir Offset resolution select: 720X720 4PASS' s corresponding bidirectional calibration is 360resolution, When select 8 PASS, the corresponding is 180resolution; 720X1080 6PASS 360resolution, 12PASS , 180 resolution; 720X1440 8PASS 360resolution, 16PASS 180resolution

## 3. Load print file

There are three options for loading print file. The first is to click the Open in the main menu bar and find the PRN file with good RIP. After selecting it, double-click or click Open in the bottom to open it.



The second is click the Task Choice in the main menu bar to find the path where the RIP file is stored, and double-click the file to be printed



The third is using RIP software directly printed. Set the port, 127.0.0.1



When you double-click to print the task, the task properties box pops up, as shown in the figure below:



#### **Task properties:**

Repeating printing can be selected. After selecting the Repeat printing, the front end will be reposition each time the printing is completed, and then the same PRN task will be printed at the stating position of the margin width

Multiple setting, transverse amplitude and longitudinal amplitude can be set, interval can be set, and the unit of interval is mm

Area printing, you can manually select a part of the file for printing, when the area printing, the repeated printing and multiple setting are invalid

Ink count: represents the amount of ink required for current PRN file

Ħ	量统计							<b>E</b>	×
									]
		0.1011ml	0.1031ml	0.0964ml					
	0.0227ml				0.0000m1	0.0000m1	0.0000ml	0.0000m1	
	F	副新					100%		

任务属性			<b>X</b>
	文件路径: D:\测试图\720X720 4pass.pm	▶ 墨里控制	
	PASS模式: 4 💌 打印总幅数: 1 📑	黑(K):	100% 🕂
	□ 区域打印 □ 重复打印 □	青(C):	100%
		品(M):	100% →
		`#M·	1 100% -
	区域设置(mm)		
	X: 0 Y: 0 W: 200 H: 266	浅有[LC].	
		浅红(Lm):	
	11分属性 11分:72UX72U 4pass.pm 精度:720 x 720	浅黄(Ly)	」100% 兰
	图象大小:200.03mm x 266.56mm 色彩模式:4色 Pacet時式:4Pace	浅黑[Lk]:	100%
	任务提交时间:2018-01-27-10:18:39	自(w):	100%
	72	20.99.31.00.21.00.2	
		设置/小款认业	

Click the ink volume control under the task choice, and the interface as shown in the following figure:

Selecting ink volume control, which can adjust the ink volume of current PRN file

Note: When the ink volume is intercepted, the output image resolution will decrease and the dot will become thicker. It is generally not recommended to adjust the ink volume here

When you click the OK button below the properties, the task import is completed; you can click the top of the software to print and start printing. At the same time, the software interface will display the file information of the current PRN task, such as colors, area and etc. As shown below:

SoftechSoftware	Open Print	Pause S	op Flash	Clean	Test	Home	Left	Right	Feed	Back	
Task Choice	Margin Width: 20.00 Print Speed: High-speed Step-trimming: 0.00	mm V Mar Print-directi Bi-tuni	gin 30.00 mm on: Bi-Direction <b>v</b> ng: -10 -								
Parameters Parameters Maintainance Ouit	File Name: Colors: Bits Per Dot: Resolution: Printing Status:	Width: Height: Area: Status Information									
	Print progress:										
Chi Catalan	TeshName	Resolution	Size	Pass Mode	Stat	115	Submission 1	ime c	opies printed	File Path	

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## 4. Software function

## 4.1Title menu bar



Open: Import PRN file with good RIP for printing

Print: After importing the PRN file, select the file and click Print to start printing the current task

Pause: During the printing process, pause the printing, reposition, and the button will change

- to Continue. Click Continue, and the task will continue to print
- Stop: Stop the current print task

Flash: Turn on or off the head standby flash

Clean: When the head is not in good condition, clean it

Test: Head status, vertical calibration

Home: When the car head is not at the origin, right click can make the cartridge directly

reposition, back to the origin

Left: The cartridge is moving to the left

Right: The cartridge is moving to the right

Feed: The material moving forward

Back: The material moving backward

## 4.2 Print Control Interface

Note: Only the parameters to be used are described

	Margin Width: 20.00	mm 🔽 Y Ma	rgin 30.00 mm					
Task Choice	Print Speed: High-spee Step-trimming: 0.00	d ▼ Print-direct	ion: Bi-Direction  ing: -10					
Print Control	,	File Information						
	File Name:	The information						
Parameters	Colors: Bits Per Dot:	Width: Height:						
Maintainance	Resolution:	Area:						
	Printing Status:	Status Information						
Quit	Print progress:							
	Printing Time:							
	TaskName	Resolution	Size	Pass Mode	Status	Submission Time	copies printed	File Pat

**Margin width setting:** The initial print position is in the X-Dir of the current PRN file. You can press the key board to move the cartridge to the actual printing position. Click the Set button to set the current position as the initial printing position, and the margin value on the interface will change accordingly

**Color bar print:** Check the Color bar, which is set in the parameter setting interface, you can set the color width, distant to image and position (image left, image right or both side)

Colorbar Setting						
Width:	20	mm				
dist to image:	8	mm				
Position	Both Side	•				
	Image Left Image Right Both Side					

Print queue: When import multiple PRN tasks

at the same time, check the queue print, and will be attached to print all the tasks

Print speed: You can choose the print speed as slow, normal and fast. You can adjust it in

the Motion setting interface, Maintenance

**Print-direction:** You can select print-direction as to-left, to-right and bi-direction. When you select bi-direction, you need to debug the bi-directional values first

	White-Ink Setting	Clean Option	Other
Task Choice	Type: Spot	🕅 Auto Cleaning	Y-Speed Normal 💌
Print Control	Print All	Cleaned once every print: 50 times	Auto feed after printed 26
۲ŻŁ	White-ink Repeat Times: 1 White-ink back	Frequency: 64	Auto Fill Ink
Parameters	Colorbar Setting	Clean Time: Fast	
$\sim$	Width: 20 mm	Flash Jetting	Metarial Setting
Maintainance	dist to image: 8 mm	□ Is Standby Flashed?	Select: Epson_6H6C 💌
	Position Soth Side	Standby Interval Time: 2000 ms	Metarial feature
Quit	Edesien	Flash Time: 200 ms	function
	Colosion ✓ enable eclosion Type: FOG	Frequency: 32	Head1  Load-Ink
	Level: 90 %		
		Apply	

## 4.3Parameters interface

**White-ink setting**: In photo machine application, only spot color or only-white type are used. The white-ink channel counts don't change, using the default values given on the software. When the white-ink needs to be thickened, the white-ink repeat times can be set

**Color bar print:** You can set the color width, distant to image and position (image left, image right or both side)

**Eclosion:** By default, you only need to check the eclosion. General choice of type is FOG. The level is adjusted according to the actual situation. The higher is the level, the slower is the speed, and the better is the effect. The enable eclosion is used when print color block, or when the head is in poor state. Turn it on, the printing speed will be reduced, but the effect will be improved a lot. You can actually adjust it according to the printing effect

**Auto cleaning:** Click OK to start auto cleaning. As shown in the following screen capture: cartridge print 10PASS after printing, it will return to the origin for quick flash jetting with a frequency of 512





**Flash jetting:** It is the flash frequency during standby. When checking Is Standby Flashed, intermittent flash will be performed. You can fill in standby time and flash time by yourself, which is set 4-16 as usual

## Other setting:

Feeding speed refers to the speed of Y feed; the specific speed can be set in the Y-Moto Configuration, Motion setting, in the Maintenance

After the current PRN printing is completed, the material moves forward

Skip white, when turned on, empty
areas will be skipped in X,Y directions,
only print the area of figure (When
colorbar is checked, the function of
skip white is valid)





**Load-ink function:** Optional: head1, head 2 and heads. Click Load-ink button, system controls the ink move up to pumping position, the ink pump began to pumping, and the button displays "stop", the ink pump stop pumping ink until manually click the Stop button

#### 4.4Maintenance interface

	Bias calibration Motion setting Platform Control White-ink Time Set Cleaning	Option	ו	Voltage s	setting		Basic setti	ng		
	Bi-Dir Offset						Color Off	set		
hoice				CH00	CH01	CH02	CH03	CH04	CH05	
	360resolution V Fast V -25 Print		H00	к	Y	С	С	м	м	
			Ver	370	370	370	370	370	370	
ontrol	Step Calibration		Right	832	832	832	832	832	832	
oncror			Left	832	832	832	832	832	832	
-	Steps: Base Step  Print Print									
<b>C</b>	Revise: 0.00		HU1	white1	White1	White1	White1	White2	white2	
eters	· ·		Right	0	0	0	0	0	0	
-	Distance Calibration		Left	0	0	0	0	0	0	
	Vertical : Head2: 0 Print									
۲										
nance	Horizontal: Left_Print Left_Offset_Print									
	Right_Print Right_Offset_Print		-							
it										
	Parameters Value									
	Space of Heads									
	Distance between Head 1 and Head 2(Left P 0									
	Distance between Head 1 and Head 2(Right 0	1							ſ	Duint
	PrintHead Selected									FILL
	Select print Head PrintHead1		Applu							
	UV lamp control setting		Apply							
	The distance of UV-lamp to the varnish noz 100.000000									
	The UV lamp print time of Varnish(pass) 0									
	The minimum range of irradiation of the lef 120									
	The maximum range of irradiation of the lef40									
	The minimum range of irradiation of the rig 60									

## 4.4.1 Bias calibration

**Bi-Dir Offset:** Before printing, 180resolution, 360resolution, slow, normal and fast speed calibration chart shall be printed respectively for calibration. The Bi-Dir offset shall be specified in the debugging instructions.

360resolution 🔽 Fast 🔽 -25 Print	360resolution V Fast V-25 Print
180resolution	Normal
360resolution	Fast Step Calibration

Step calibration:Selectthe commonly used PASSnumber,printrespectively to see if theStepiscorrect

Steps:	Base Step 💌	Print
Revise:	Base Step 2 Pass 3 Pass	
	4 Pass	Distance Calibration
Vertical :	6 Pass 8 Pass	Print
Horizontal:	10 Pass 12 Pass 16 Pass	Print Left_Offset_Print

Step Calibration



## 4.4.2 Motion setting

	Bias calibration	Motion setting	Platform Control	White-ink Time Set	Cleaning Option	Voltage setting	Basic setting
Task Choice							
		X-Moto	Configuration		Ył	vloto Configuration	
			B: 15				
Print Control		ou [600			Slow 30		
. Sector		SIOW: BOO	mm/s 8.50KHz	_	510W. [50	mm/s	
		Normal: 700	mm/s 9.92KHz	_	Normal: 40	mm/s	
Parameters		Fast: 800	mm/s 11.34KHz				
	Repositio	on Speed: 705	mm/s		Fast: 50	mm/s	
×	Ret	um Speed: 800	mm/s				
Maintainance		800	mm Gear ratio: 1	255454	Maura 500	mm Dum law atta	
		Move			Move	nin Hunlength: U	mm
		Reposition			Caculate	1mm = 30.69	2619 pulse
Quit						,	
		Z-Mot	o Calibration		Apply		

**X-Moto Configuration:** The print speed of the print control interface is set here. Slow and normal speed can be set by you according to the actual situation. Fast speed has certain speed setting, which cannot exceed the flash frequency of the head. At present, the 5<sup>th</sup> and 7<sup>th</sup> generation can support 1200mm/s with 360resolution

Reposition speed: When click the Home in the software title menu bar, the cartridge motion speed

Return speed: When one-way printing, the speed of the cartridge return motion

Move, Reposition: It is used in calibrating the X gear ratio, and it has introduced in the debug steps

#### Y-Moto Configuration:

The speed of the feeding motor, divided into slow, normal and fast speed. The corresponding value of feeding speed in other settings on the parameters interface is set here. The faster the feeding speed is, the smoother the printing process will be. However, under the premise of no motor and no step loss, the specific speed needs to be determined by actual debugging

Move, Calculate: It is used in calibrating the X gear ratio, and it has introduced in the debug steps

Note:	After 1	the o	current	interface	parameters	are	modified,	click	the	Apply	button	below,
otherwise		the	1	modified	l pai	rame	ters	will		be		invalid

#### 4.4.3Voltage setting

Print Mode: SingleDo	t3 💌						
		Volta	ige Offset				1
0.0	0.0	0.0	0.0	0.0	0.0	0.0	
0.0 0.0	0.0	0.0	0.0	0.0	0.0	0.0	
	F	resh		Sett	ing		

**Voltage Offset:** You can adjust the jet level (-6 to +6) by changing the waveform voltage to increase or decrease the current ink dot. After filling in the value, click Setting. At this time, the software mag have a lag, because the software is writing voltage offset value to the board, it only needs to wait a moment to restore, at this time the modified voltage offset value into effect

	voitage Offset								
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
		F	resh		Sett	ina	)		

	Bias calibration	Motion setting	Platform Control	White-ir	nk Time Se	et	Cleaning	Option	1	/oltage se	tting	Ba	sic setting
Choice		Base Step V	alue						C	olor Offse	t		
		1Pass Step: 360	_				CH00	CH01	CH02	CH03	CH04	CH05	
						H00	К	Y	С	с	М	М	
Control		Position Of	fset			H01	White 1	White 1	White 1	White1	White2	White2	
*	X-Offset: 9	4.00 mm	Y-Offset: 24.00	mm									
neters		Acceleration D	istance										
	X-Direction: 9	0 mm	Y-Direction: 4	mm									
ainance													
uit													

#### 4.4.4Basic setting

**Base step value:** The default value is 360. The value here is generally not modified, subject to the software

**Position offset:** The X-Offset value is generally filled in here. When the margin width value is 0, it will be just at the edge of the material. The Y-Offset value has the same meaning, but it is not used in photo machine

**Acceleration distance:** The distance from static to printing speed acceleration, the greater the value is, the more gentle the car. The smaller the value is, the faster the motor is reversed and the faster the overall speed is. However, the motor is jitter, so an appropriate value needs to be adjusted in practice. In Y-Direction, the stepping distance is short each time, so the acceleration distance is generally set to be small, between 3 and 8.

**Color Offset:** The ink sequence of the channel corresponds to the flash ink sequence of the head. When the ink sequence needs to be changed, it must be guaranteed that the two channels of one color should be changed together, such as CCMMYYKK, MMYYCCKK, etc. Instead of KCMYMCK, the two adjacent channels should be one color

Note: When the parameters are modified, click the Apply button below to save it, otherwise, it will not take effect

#### 4.4System menu

In the system menu, the head status and vertical calibration are the same as the software title menu 第32页/共34页



bar

After all the software parameters are debugged, you can click the system menu, click Setting factory parameters. At this point, the software will save a copy of current parameters. When the software parameters are abnormal in the later period, you can click Restore factory parameters

Dogle manager: When using a staging dogle, you will need to write a password to continue using it

About WellprintExp, it will display the firmware and logic version number of the current board, which can only be used if the software is normally connected to the board, as shown in the following figure:



#### 4.50ther display information



The connection status of the printer: It is currently disconnected. It will display "high" when it

connected

Current flash jetting status: On or off

When the cartridge moves, the real time of the cartridge

In the error message prompt bar, you can click the Question mark button in the lower corner to view the precious prompt message record



The precious bar for the printed PRN file

任务名	图形大小	PASS模式	状态	开始打印时间	打印时间	已打印幅数	文件路径	
33.prn	200mm x 299mm	4	打印完毕	16:01:51	00:01:17	1/1	C: \Users \Administrator \Desktop \33	
								报警信息
								关闭(C)
•							•	

## 四、Common fault handling

## 1. No action on startup

(1) If there is some problem with the connection of data lines, check whether the sequence of optical fiber lines is corresponding

(2) Check whether the single line of the motor is connected correctly, whether the line sequence is correct, and whether the signal line of X-Moto and Y-Moto is connected backwards

(3)Check whether the motor driver is functioning correctly

(4) Verify that the boot action settings are correct and re-import the parameters or firmware

(5)Check the power supply of the board and observe whether the indicator lights of D71、D72、D74, and D80 are on

## 2. Startup X-Moto move in only one direction

(1) There is a problem with the motor single line. Only 3 data lines are connected. There is a

short circuit between the lines.

(2) If the sensor is broken, manually block the sensor to confirm whether the limit sensor is normal

(3) The polarity set for the starting action of the board does not correspond to the actual polarity used (at this time, it can be judged by manually blocking the sensor; if the blocking sensor works normally, it must be set with the opposite polarity).

(4) If the electric driver fails, replace the driver.

## 3. The software is not online

- (1) Confirm whether the startup action is completed
- (2) Check whether the computer has identified the driver of the board. If not, the driver shall be reinstalled
- (3) Whether the computer has inserted the dongle, and whether the top left corner of the software shows that the dongle has not been detected, re-insert and unplug the dongle
- (4) The software version does not correspond, and the software USB type settings do not correspond

4. After the software is online, the cartridge has been moving to the left (Delimit ink 33 5 / # 34 D

## stack type machine easy to appear)

(1) If the software cannot read the raster value, O is always displayed at the bottom left corner of the software. Check whether the raster decoder is normal and whether there is a problem with the line connection

- (2) When the software reads the grating value to be negative, the cartridge position in the lower left corner always display the negative number, changes the grating polarity, or changes the A and B line sequence of the decoder
- (3) Incorrect machine origin orientation setting

## 5. No flash head

- (1) Board logic, software version and the head type does not correspond
- (2) Check whether the head line is inserted well and whether the 16PI data line is inserted correctly
- (3) If the board is damaged, replace the board for testing
- (4) Change head test
- (5) Software flash head area setting is wrong

## 6. Unable to print the status diagram

- (1) If there is no action in the status diagram and PRN file in the software is incorrect, please contact the technical support of WellPrint to solve the problem
- (2) The software prompts the 1 PASS data exception, and the software version does not correspond to the board

(3) It is suggested that Y DPI is too small, the software configuration file does not correspond, the status diagram is not set correctly with the software, generally single and double head, head type does not correspond, etc.

(4) The software prompts data interleaving error, and white-ink channel number set by software is wrong; The second decryption software is incorrect

## 7. The head status is missing

- (1) Check whether the line of head is inserted and plug it again
- (2) Software system maintenance, basic setting interface and whether the channel is closed

(3) Check the ink sequence of the software and whether it is installed according to the instructions in this manual. In particular, make sure that the ink sequence of the seventh generation head flashing out is of the same color

(4) Take out more ink, whether the ink has not been draw out of the head, the head in the cleaning solution, confirm whether the head is blocked

## 8. Printing head status spray

(1) Check whether the software, board and the head type are corresponding

- (2) Re-insert the head line, and check the 31PI long data line for insertion and skew
- (3) Change a small head board and try to change the head line

(4) Replace head test

## 9. Drawing wire

- (1) More needles are missing in the head. Clean the head to ensure that there are fewer needles missing in the head
- (2) The more PASS, the more edosion, the better the effect will be
- (3) Open and strengthen edosion, will improve the drawing wire, the speed will have a certain decline in the depth of the drawing

## **10**. Draw a picture of the depth and whiteness

(1) Check whether the head is installed at the level of the platform



- (2) Whether the step, vertical and Bi-Dir are calibrated well
- (3) Open and strengthen edosion, The effect will be significantly improved

# **11**. It is wrong to read 1PASS data, the amount of written data is not equal, and it is wrong to set micro-injection status

- (1) If there is a problem with the USB interface or data cable, try to replace the data cable or computer interface
- (2) If there is a problem with 31PI long data cable, please re-plug it or replace it
- (3) The print speed exceeds the head frequency of the head and reduces the printing speed
- (4) Replace the board for testing