门襟机

Placket machine

(MB1009A)

# 电控系统使用说明书

Instruction manual for electric control system

# 常州智谷机电科技有限公司

# IMB AUTOMATION CO., LTD

# 在使用本设备之前请先阅读本使用说明书.

Please read the operation manual of the touch

screen interface before using the device

# 请将本使用说明书放在便于查阅的地方保管

Please keep this operation manual of touch screen

interface in convenient place for reference

版本信息/Version

2023. 05

#### Enter the main interface

After checking the machine, power it on, and after turning it on, enter the language selection interface. Select the language to use, and then click the reset button to enter the main interface

#### 1. Main interface



#### 1.1 Pattern display

The middle of this area is used to display the pattern of the pattern, the top left corner is used to display the brand and model number of the pattern, and the top right corner is used to display the length and width of the pattern;

#### 1.2 Pattern selection

Click  $\leftarrow$  and  $\rightarrow$  Turn the page to select pattern;

#### **1.3 Pattern preview**

Click and Control the machine to move according to the designed stitch;

#### **1.4 Speed control**



speed.

#### 1.5 Production Count

The number is used to display the current production quantity and can be changed,



#### **1.6 Function switch**



Indicates whether the middle foot has fallen down;



Indicates whether the bottom line detection function is turned on;

When the bottom line encoder detects a wire break, the machine will st op and you can check for any wire breaks at this time.If yes. press th e OK button to clear the alarm.Click the<Threading>button to enter the threading state of the machine. After threading is completed, it will return to the main interface.Press the down arrow in the pattern prev iew area to move the fabric back to the place where the thread starts to break, and press the foot switch to restart sewing.When the last th read is sewn synchronously with the cutting knife, the thread is broke n. It needs to be retracted to a position of more than 10 stitches aft er the cutting knife falls to continue sewing. Please follow the instr uctions on the screen



Indicates whether the blowing function is turned on;



:Control the brightness of the laser light;



Indicates whether to execute the material receiving action after the

sewing is completed;



Indicates whether to perform the function of cutting cloth with a knife.

# 1.7 Touch Function



Execute a single thread trimming action;



After clicking thread on the main interface, the interface will be locked. At this point, the needle can be threaded. After completion, click to return to the unlock interface and return to the main interface;

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Placket Machine		2023-11-21 14:33::21	1. 2. 066	不通话	刊测试	版本
(I-388)Threading						
Don't Do Other Operation When Threading						
					F	ז



Raise or lower the presser foot;



Complete machine reset operation. After pressing this function key, all structures return to the original position, and no other operations can be performed during the process of returning to the original position



Enter the settings interface;

Menu Mode		2023-11-21 14:36::52	1.2.066不通讯测试版本
Open File	Placket Design	Function System Function	Factory Mode
User Parans			



The formula parameters of the pattern file can be modified, and a new pattern file can also be regenerated;



Enter the working sewing state, and after the sewing is completed, click Stop Work again to return to the editing state;

Start sewing: Turn on the laser light, adjust the position, place the fabric, adjust the speed, confirm the opening status of the placket ma chine function is normal, and click to start working. If the prompt is that the machine is not at the origin, click to reset the origin and then click to start working. At this time, the color of the interface changes. Press the pedal to start sewing.



Enter the accessibility interface

# 2、Accessibility interface

辅助工作界面		2023-04-2	1 1.2.051不通讯测试版本
X_ABS: +0.0	Y_ABS: +0.0	Angle: 0.0 Z_ABS	5: +0 S_QEP: +0
	无无		
	无无		
	无无		
	无无		<b>リ</b>
回零点		L	E

## 2.1 Coordinate observation



Four coordinates are used to observe whether the machine position is normal;

2.3			
R		7	
÷		∢	
ĸ	♥	R	Used to control the XY plane movement of the machine:



When winding is required, install the winding device and click this button to enter the following figure. Press the green pedal to start, and by default, the winding will stop after releasing the pedal $_{\circ}$ 

Wind Mode			2023-11-2	21 14:38::41	1.2.066不通讯测试版本
0	- Set Winding Oprate Ma	ode	Stop winding when Releas	ing Btn	
HIGH Speed up			Stop winding when Press B	tn Again	
			Time to stop windir	ų	
	Winding Time			Winding length	
	Set-Time	<u> </u>		Set length	<u>0</u> nm
Low.	Remain-Time	0 S	bottom line count	Remaining length	0 mm
Speed down					length
$\mathbf{X}$					

The left interface is used to control speed

Set Winding Oprate Mode -		
	Stop winding when Releasing Btn	
	Stop winding when Press Btn Again	
0	Time to stop winding	

You can choose the winding method according to your needs;

Winding Time		
Set-Time	0	S
Remain-Time	0	S

After selecting timed stop winding or other winding methods, click Set-Time to set time;

Winding length		
Set length	0	mm.
Remaining length	0	mm
1	length	

Click Set length Set the length and remaining length, length to reset the length;

better line count Switch status for controlling bottom line counting.



### 2.5 Presser foot synchronization height setting

Quickly set the synchronization amplitude of the middle presser foot during the sewing process;

### **3**、Instructions for placket machine pattern

#### Mode 1

The three icons in the upper right corner of the main interface represent modes one to three from left to right,



Click on Mode 1 and click Modify Parameters below the main interface to enter the parameter modification interface

模式一		Ü	20	23-04-21		1.2.051不通讯测试版本
	A 长边			B 短边	10.0	
B	<b>c</b> 0.1			D	10.0	
A K D	E 10.0			压脚伸出距离	0.0	
F	F (IIIF)			针距	0.0	
E E	下刀延迟 0			切刀运转	0	
$\mathbf{X}$			1/3	•	]	L
Mode 1			2023-11-	21 14:56::01		1.2.067不通讯测试版本
	A LongSide	150.0		B ShortSid	de	100.0
B	с	5.0		D		15.0
A <u>C</u>	E	30.0		Footer Out Dista	nce	450.0
F		3		Pitch		2.3
E E	Cutter Down Delay	20		Cutter Run Tin	ne	320
$\mathbf{X}$			1/3	•		Ļ

## Specification:



(1) A:The value of long edge length A can be set, ranging from 1.0 to 320.0 millimeters

(2) B:The value of short edge length B can be set, ranging from 0.0 to 320.0 millimeters

(3)C:Can set the value of short edge width C, with a setting range of  $0.0 \sim 30.0$  mm. The short edge width C must be less than or equal to the left and right line width E, otherwise it will not run;

(4)D:The width D of the midpoint and right line can be set to a value ranging from 0.0 to 30.0mm. By setting D, the knife can be controlled to cut the cloth at any position between the left and right lines. D must be less than or equal to E, otherwise it will not run;

(5)E:Can set the value of left and right line width E, with a setting range of 0.0~60.0mm,

(6)Presser foot out distance:The extension distance of the large presser foot can be set, which refers to the length of the large presser foot extending forward; Setting range 0-500.0 mm;

(7)F:Reversing needle:Set the number of reverse stitches, with a range of 0-20 stitches. When the number of reverse stitches is 0, there is no reverse sewing function;

(8)Pitch: sewing needle pitch can be set, with a range of 0.1-5.0 millimeters

(9)Cutting down delay: The cutting delay can be set within the range of 0-320 milliseconds. When the set value is too large, the cutting tool may not work;

(10)Cutter run time: The cutter operation time can be set, with a range of 0-1000 milliseconds;

Mode 1			2023-11-21 14:56::19	1.2.067不通讯测试版本
	Sew Speed Big Presser Expand Left Inpress Height	4000 2.5 0	Start Point Bottom offse height Right Inpress Heigh	0.0 t 10.0 nt 0
$\mathbf{X}$			2/3	L

(11)Sew speed:The sewing speed can be set, with a range of 100-4200 revolutions per minute; Increase or decrease in units of 100

(12)Start point:The large presser foot can be set to press the cloth and then retract to the distance where the needle can be inserted. The size of the user parameter includes a distance of 80 from the large presser foot to the needle, which, combined with the needle starting distance, is the distance that the large presser foot can drag the cloth back, with a setting range of 0-400 millimeters;

(13)Big Presser Expand: The tension of the large presser foot can be set. When the large presser foot presses on the fabric, it will slightly open to form tension, with a setting range of 0.1 to 10.0. The larger the value, the greater the tension  $_{\circ}$ 

(14) Bottom offset height: Adjustable offset height at the connection of long and short edges, ranging from 0 to  $320_{\circ}$ 

(15)Left in press height:Set the height of the left presser foot from the tabletop within the range of 0-50mm

(16)Right in press height:Set the height of the right presser foot from the tabletop within the range of 0-50mm



Right first: Start sewing from the right side

Left first: start sewing from the left side ;

Drag At Behind	

(18) Drag position

Drag at behind: Clamp catch the fabric tail and move it

Drag at front: After completing the sewing, use the large presser foot to deliver the cloth to the clamping area, and then use the clamp to drag the cloth away,



(19) Bottom line Long short line

Switch between sewing or not sewing the bottom line

Double Color	•
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(20) Sew order

Double color:sewing one side then another side

First sew the inner reinforcement line, then sew the width line of the placket  $_{\circ}$ 

(21) Exit the pattern parameter modification and return to the main interface; (Do not save data)

(22) back to last page, Advance to the next page;

(23)Save Save the currently set parameters and rename the new file name

(24) Using the current parameters and entering the main interface, the file name will not change.

(25)Preview Preview the shape of the current data generation pattern



## Mode 2

Click on Modify Parameters in the main interface of Mode 2 to enter the parameter modification interface:



## Specification

(1)The length C of the upper left edge can be set, with a range of 1.0 to 320.0 millimeters. The value of C+D should not exceed 360 millimeters;

(2)The length D of the lower left edge can be set, with a range of  $0.0 \sim 160.0$  millimeters. The value of C+D should not exceed 360 millimeters;

(3)The upper right length E can be set, with a range of 1.0 to 320.0 millimeters. The value of E+F should not exceed 360 millimeters;

(4)The length F of the lower right edge can be set, with a range of  $0.0 \sim 160.0$  millimeters. The value of E+F should not exceed 360 millimeters;

(5)The width G from the midpoint to the top left can be set, with a range of -30.0 to 30.0 millimeters;

(6)The width H from the midpoint to the middle left can be set, with a range of -30.0 to 30.0 millimeters;

(7)The width I from the midpoint to the bottom left can be set, with a range of -30.0 to 30.0 millimeters;

(8)The width J from the midpoint to the upper right can be set, with a range of -30.0 to 30.0 millimeters;

(9)The width K from the midpoint to the middle right can be set, with a range of -30.0 to 30.0 millimeters;

(10)The width L from the midpoint to the bottom right can be set, with a range of -30.0 to 30.0 millimeters;

模式二			2023-04-21		1.2.051不通讯测试版本
$C \xrightarrow{G} \xrightarrow{J} E$ $E \xrightarrow{H} \xrightarrow{K} \xrightarrow{F}$ $E \xrightarrow{H} \xrightarrow{K} \xrightarrow{F}$	A     이       (11     ・     针距		8         (12         D/F計距         (14         下刀延迟         (16         缝纫速度         (18         起针距离         (20	0 0.0 0 0.0	
$\mathbf{X}$			2/4		ſ
Mode 2			2023-11-21 15:29::14		1.2.067不通讯测试版本
GXJ	A BackStitch	Q	B BackSti	itch	0
C E	Pitch	0.0	D/F Pitch	1	0.0
<u>× {H×K} ×</u>	Footer Out Distance	0.0	Cutte Down D	er elay	0
D F	Cutter Run Time	0	Sew Sp	eed	0
₩ (I × L ) ↓	Big Presser Expand	0.0	Start Po	oint	0.0
$\mathbf{X}$			2/4		ſ

(11)Set the starting number of reverse stitches A, with a setting range of 0-20 stitches;

(12)Can set the number of terminating reverse stitches B, with a setting range of 0-20 stitches;

(13) Adjustable sewing needle pitch (except for D/F segment), with a setting range of  $0.1{\sim}5.0$ 

(14)Set the needle pitch of the D/F section, with a setting range of  $0.1 \sim 5.0$ 

(15)The extension distance of the large presser foot can be set, with a range of  $0.0 \sim 500.0$  millimeters, which refers to the length of the large presser foot extending forward;

(16)The cutting delay can be set, with a setting range of 0-320 milliseconds. When the setting value is too large, the cutting tool may not work;

(17) The working time of the cutter can be set, with a range of 0-1000 milliseconds;

(18)Sewing speed can be set, with a range of 100-4200 revolutions per minute in increments of 100  $_{\circ}$ 

(19)Can set the tension of the large presser foot, with a setting range of  $0.1 \sim 10.0$ ;

(20)tart point: The large presser foot can be set to press the cloth and then retract to the distance where the needle can be inserted. The size of the user parameter includes a distance of 80 from the large presser foot to the needle, which, combined with the needle starting distance, is the distance that the large presser foot can drag the cloth back, with a setting range of 0-400 millimeters;



(21)The reinforcement length M can be set, with a setting range of 0.0~320.0 millimeters;

(22)The reinforcement width N can be set, with a setting range of 0.0~160.0 millimeters;

(23)The width O of the reinforcement line from the midpoint to the upper left can be set, with a range of -30.0 to 30.0 millimeters;

(24)The width P of the reinforcement line from the midpoint to the left can be set, with a range of -30.0 to 30.0 millimeters;

(25)Reinforcement Back stitch: The width Q from the midpoint to the bottom left reinforcement line can be set, with a range of -30.0 to 30.0 millimeters;

(26)Set the number of reverse stitches for the reinforcement thread, with a range of 0-20;

(27)Bottom stitch : Set the stitch count of the bottom stitch between two placket lines, ranging from 1 to 6;

(28)Cutter delay cutting distance: Extend the cutting distance, ranging from 0 to 160

Mode 2				2023-11-21 15:29::26	1.2.067不通讯测试版本
A (G)	⟨J →	Start Dir	Right First	Drag Position	Drag At Behind
C H	E	Reinforcement Width	NOT SEW	Backstitch's Zo Sew Bottom L	not sew
	F	Left Inpress Height	0	Right Inpress Heig	ht 0
$\mathbb{B}$	(L)	Bottom Inpress Height	0	Align Positon	Bottom Aligned
$\mathbf{X}$				4/4	L
		Right First			

(29)Start Dir

Right first: Start sewing from the right side

Left first: start sewing from the left side ;



Drag at behind: Clamp catch the fabric tail and move it

Drag at front:After completing the sewing, use the large presser foot to deliver the cloth to the clamping area, and then use the clamp to drag the cloth away,



(31)Reinforcement width no matter what the value of 0 is, no sewing will occur. Select sewing to sew the reinforcement width according to the G-0 value;



(32)Back stitch's Zero sew bottom line When the B value (end revise needle) is set to 0, select sewing, and a bottom thread will be sewn between the two sewing threads. If not sewn, an empty thread will be fed.

(33)Left in press height :Set the distance from the tabletop when the left presser foot falls, with a setting range of  $0\sim50$ 

(34)Right in press height:Set the distance from the tabletop when the right presser foot falls, with a setting range of  $0\sim50$ 

(35)Bottom in press height:Set the height of the presser foot when sewing the bottom edge line, ranging from 0 to 500

(36)Align position Top alignment/bottom alignment. When the length of two sewing threads is different, the bottom or top of the two threads can be aligned here

## Mode 3

Click on Modify Parameters on the main interface of Mode 3 to enter the parameter modification interface:



(1)Set the line length of schematic line A, ranging from 1.0 to 320.0

(2)Set the line length of schematic line B, ranging from 1.0 to 60.0

(3)Side line type:Select the line type that connects the two straight lines of the placket A, with the arcs at both ends connected by arcs and the straight lines at both ends connected by lines to form a rectangle

(4)Arc height C: This parameter sets the height of the arc when both ends of the line type are selected. Range 0.0-30.0 mm

(5)Pitch:Set the sewing needle pitch, ranging from 0.1 to 5.0;

(6)Footer out distance:Set the extension distance of the large presser foot, ranging from 0.0 to 500.0;

(7)Reinforcement back stitch: Set the number of revise stitches at the end of the sewing, ranging from 0 to 20;

(8)Sew speed: Sewing speed range from 100-4200RPM;

(9)Left in press height:Set the distance from the tabletop when the left presser foot falls, with a setting range of 0-50mm

(10)Right in press height:Set the distance from the tabletop when the right presser foot falls, with a setting range of 0-



(11)Cutter down delay:The cutting delay can be set, with a setting range of 0-320 milliseconds. When the setting value is too large, the cutting tool may not work;

(12)Cutter run time:The working time of the cutter can be set, with a range of 0-1000 milliseconds:

(13)Big presser expand:Can set the tension of the large presser foot, with a setting range of  $0.1 \sim 10.0$ ;

(14)Start point: The large presser foot can be set to press the cloth and then retract to the distance where the needle can be inserted. The size of the user parameter includes a distance of 80 from the large presser foot to the needle, which, combined with the needle starting distance, is the distance that the large presser foot can drag the cloth back, with a setting range of 0-400 millimeters;



Right first: Start sewing from the right side

Left first: start sewing from the left side ;

Drag At Behind	

(16)Drag position

Drag at behind: Clamp catch the fabric tail and move it

Drag at front:After completing the sewing, use the large presser foot to deliver the cloth to the clamping area, and then use the clamp to drag the cloth away,