

# 单双针自动切换缝纫机

Programmable Double Needle Machine

(MB5002B-BR-T8452D-403)

## 使用说明书

Instruction Manual

### 常州智谷机电科技有限公司

CHANGZHOU WISDOM & VALLEY ELECTRICAL TECHNOLOGY 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

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2022. 04. 03

**感谢购买 IMB 工业用缝纫机。**

**在使用此机器之前，请仔细阅读以下的说明，这样可以更好地帮到您了解此机器的相关操作。**

**这些说明是根据现行的条例明确阐述了正确的工作方法。**

Thank you for purchasing this industrial sewing machine from IMB

Before using this automatic unit, please read the following instructions, which will help you to

understand how the machine operates.

These instructions illustrate the correct working methods to comply with current regulations.

**在没有得到IMB授权许可的前提下，此说明书的任何部分是不可以被复制或转录的。说明书的内容可能被修改，而不需预先通知。**

No part of this manual may be copied or transcribed without requesting prior authorization from IMB

The contents of this manual may be subject to change without advance notification.

**我们将欣然接受各位提出的改进此说明书的任何建议和指示**

We are happy to receive suggestions and/or indications on ways we could improve this manual.

**本机介绍说明分为三部分，具体请参照《MB5002B 单双针自动切换缝纫机-使用说明书》、《MB5002B 单双针自动切换缝纫机-零件手册》、《MB5002B 单双针自动切换缝纫机-触摸屏界面操作说明》。**

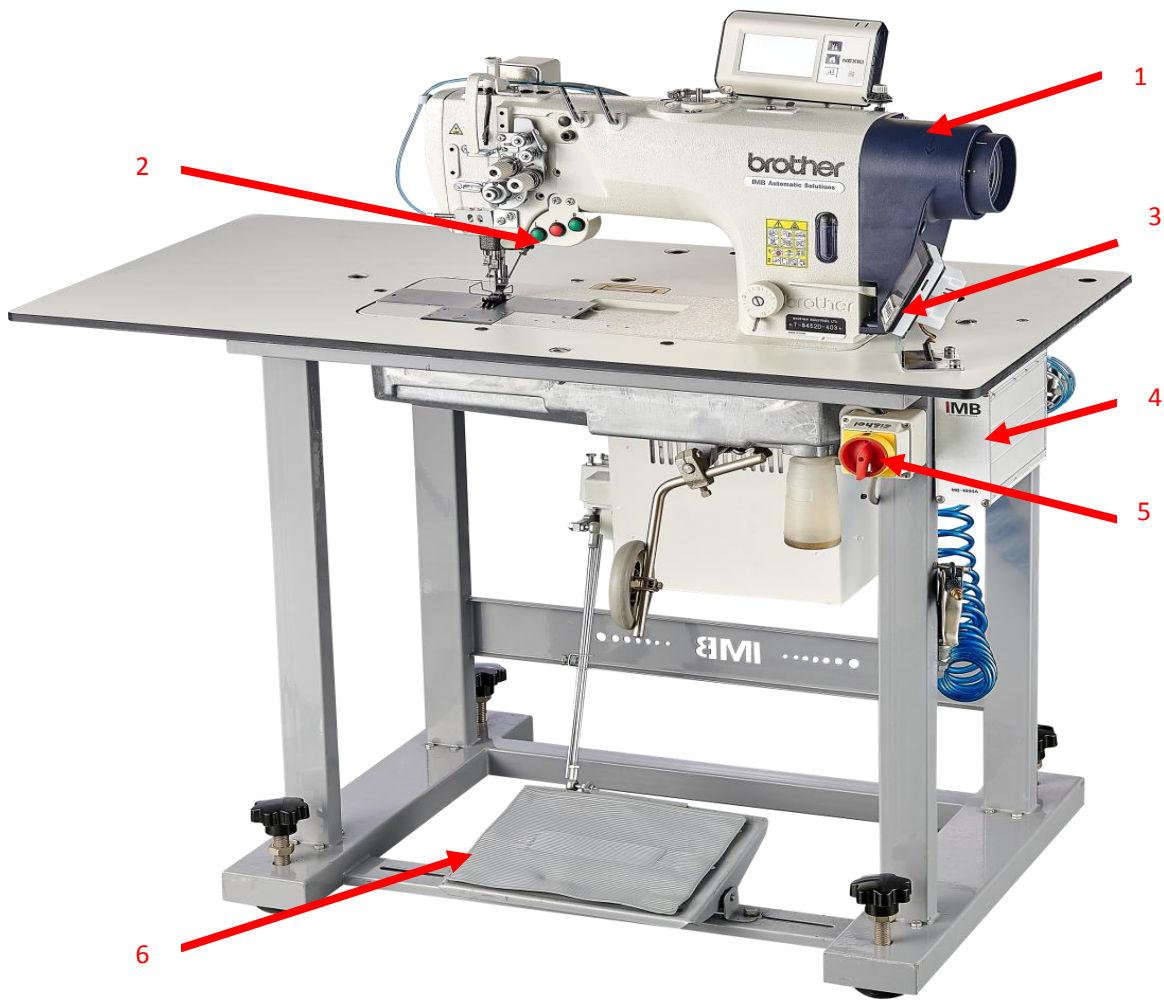
The introduction of this machine is divided into three parts. For details, please refer to 《MB5002B Operation manual》 and 《MB5002B Parts Manual》《MB5002B Touch screen interface operation instructions》

**ENGLISH**

## Catalog

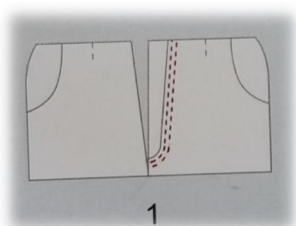
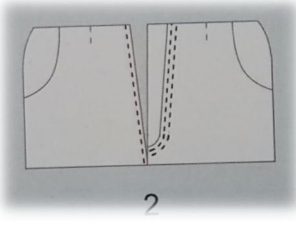
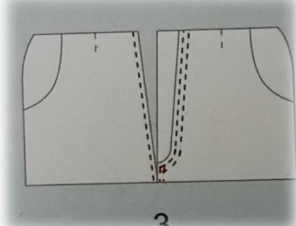
1、 Basic information of equipment.....	1
2、 Technical parameters of equipment.....	2
3、 Safety precautions.....	3
4、 Key function description.....	5
4.1 Function description of the button.....	5
5、 Operating instructions.....	7
5.1. Preparation before operation.....	7
5.2. Operation process description.....	7
5.2.1 Boot device.....	7
5.2.2 Corner seam model.....	7
5.2.3 Single and double needle automatic mode.....	9
5.2.4 Single / double needle manual mode.....	9
5.2.5 Shutdown.....	9
6、 Electrical wiring.....	10
6.1. Signal board: .....	10
6.2. Solenoid valve board: .....	11
7、 Optional device.....	12
8、 Accessories box details.....	13
9、 Common problems and Solutions.....	13
10、 Daily maintenance requirements.....	14
11、 KNOWLEDGE PRODUCT PROTECTION STATEMENT.....	15

# 1、 Basic information of equipment





1: Br-8452D-403 Machine head; 2: Toggle button; 3: Control panel; 4: Control box; 5: Power switch; 6: Pedal

## 2、Technical parameters of equipment

MB5002B Programmable Double Needle Machine			
1	Machine head	brother-T-8452D-403	
2	Maximum sewing speed/rpm	3000	
3	Working voltage/V	220	
4	Working air pressure /Mpa	0.5	
6	Stitch length /mm	6.4	
	Needle type	DP×5	
7	Work efficiency	Single needle or double needle cycle change sewing	
8	Sewing mode	3	
9	Size/mm	1050L×500W×1200H	
10	Weight/kg	75kg	
12	sti tch	 <p>1</p>	Double needle
		 <p>2</p>	Single & double needle
		 <p>3</p>	Single & double needle Corner thread

### 3、Safety precautions

#### Precautions for safe use of automata

 危険	<ol style="list-style-type: none"> <li>1. In order to prevent accidents caused by electric shock, please do not open the cover of the motor electrical box or touch the parts in the electrical box when the power is turned on.</li> </ol>
 注意	<ol style="list-style-type: none"> <li>1. In order to prevent personal injury, please do not operate the machine with the belt guard, finger protector and other safety devices removed</li> <li>2. In order to prevent personal accidents involving the machine, please keep fingers, hair and clothes away from the belt pulley, V-belt and motor during the operation of the sewing machine, and do not put objects on it.</li> <li>3. In order to prevent personal injury, please do not put your finger near the needle when turning on the power or when the sewing machine is running.</li> <li>4. In order to prevent personal injury, please do not put your fingers in the thread take-up rod cover when the sewing machine is running.</li> <li>5. When the sewing machine is running, it turns at a high speed. In order to prevent injury to your hands, please never let your hands near the cloth cutter during operation. In addition, please turn off the power supply when changing the cable.</li> <li>6. In order to prevent personal injury, please take care not to pinch your fingers when the sewing machine moves up and down or returns to its original position.</li> <li>7. When the sewing machine is running, please do not cut off the power or air supply.</li> <li>8. In order to prevent accidents caused by sudden start-up, when the preparatory work is finished and the sewing can be carried out, please remove the cloth guide.</li> <li>9. In order to prevent accidents caused by electric shock, please do not operate the sewing machine when the power ground wire is removed.</li> <li>10. In order to prevent accidents caused by electric shock and damage of electrical parts, please turn off the power switch before plugging in and out the power plug.</li> <li>11. In order to prevent accidents caused by damage of electrical parts, please stop the operation and unplug the power plug for safety during thunder.</li> <li>12. In order to prevent accidents caused by damage to electrical parts, condensation will occur when moving from cold places to warm places, etc., so please turn on the power after the water drops are completely dry.</li> <li>13. Because this product is a precision machine, please pay full attention to the operation, do not splash water and oil on the machine, and do not let the machine drop to impact the machine.</li> <li>14. This machine is a class A industrial machine. If this machine is used in the home environment, the phenomenon of radio interference may occur. At this time, please take appropriate measures to solve the problem of radio interference.</li> </ol>

15. After the power switch is turned off when the stacker acts, the stacker bar acts, so please take care not to pinch fingers, etc.

16. After the power switch is turned off in the presser foot action, the presser foot action, so please pay attention not to pinch fingers, etc.

17. During the folding operation, please be careful not to let the air cylinder clamp the finger when putting the finger in the folding machine.

**\* WARNING:**

✓ Improper operation of the machine may cause personal injury. Please read this instruction carefully and operate it correctly before operation.

✓ Please ventilate the machine before power on.

✓ It is strictly prohibited to open the electric cabinet or the internal parts of the touch screen when it is powered on.

✓ This machine needs to be used after being trained or under the guidance of a special person to ensure the personal safety of the user.



## 4、Key function description

### 4.1 Function description of the button



(1) : Power switch – turn the power switch 90 ° to the on position, and the equipment is powered on.

(2) : Switch button: press the L button, the left needle will work; press the red button in the middle to reset; press the R button, the right needle will work.

(3) : Head control panel – see brother sewing machine interface for details.

(4) : Pedal: slightly step backward to lift the presser foot; step backward to cut the thread; step forward to sew.

(5) : Knee switch: press the right leg and lift the presser foot.

(6) : Control panel – see 《MB5002B Touch screen interface operation instructions》。

a: Power on interface: when the power is turned on, the touch screen will pop up the menu display screen, which is mainly used for switching the whole operation screen between Chinese and English.



b. Main interface: switching of three working modes.



## 5、Operating instructions

### 5.1. Preparation before operation

- ✓ the machine head shall be in the stop state during the inspection by the operator
- ✓ Check whether the sewing thread has been correctly put on
- ✓ Check whether the needle has been installed
- ✓ Clean the sundries on the machine table to ensure that there are no sundries hindering the operation of the machine
- ✓ Check the pressure of the barometer to make it meet the requirements of the machine

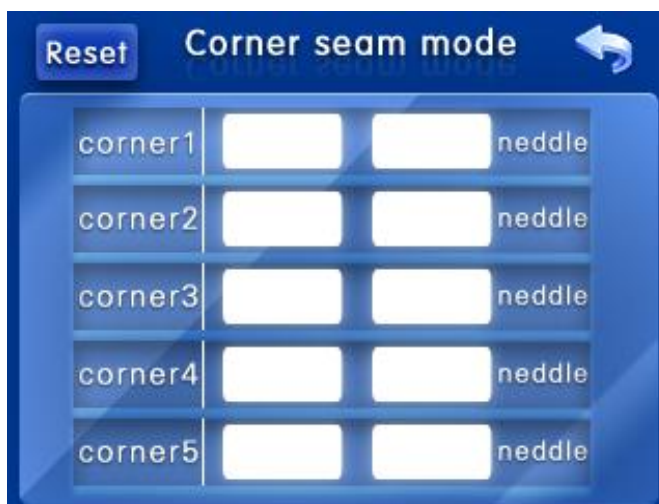
### 5.2. Operation process description

#### 5.2.1 Boot device

4.1- (1) Press the power switch to 1, and the equipment is powered on and ventilated.

#### 5.2.2 Corner seam model

1. Mode selecting steps: select the language in the 4.1 - (6) - a startup interface, skip to the 4.1 - (6) - B main interface, and select the corner seam mode as shown in the figure.



2. Corner seam parameter setting:

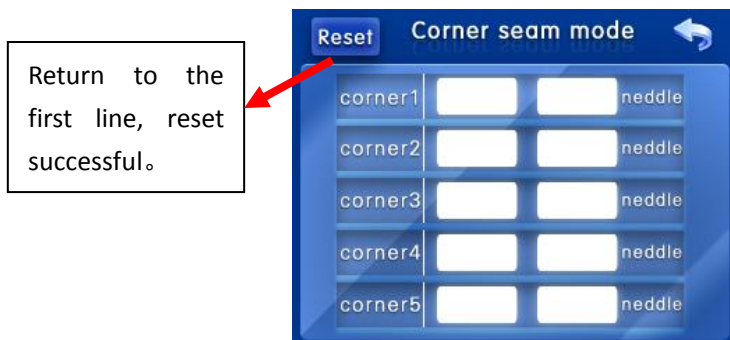


A、As shown in the figure above, from left to right:

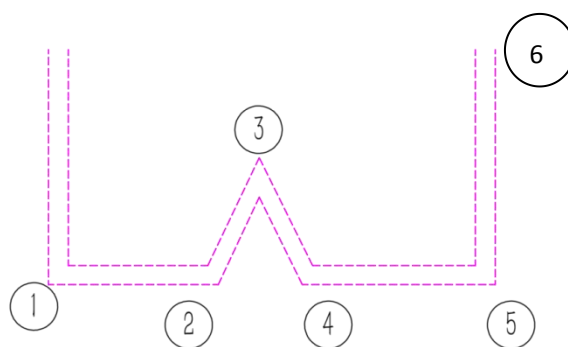
- a. Name: Under the parameter setting of corner sewing mode, up to five angle sewing modes can be set;
- b. A stitch counting: Release the foot pedal 4.1 - (4), manually press the switch button 4.1 - (2) the counting of single needle needles;
- c. B stitch counting: Press the switch button 4.1 - (2) after single needle running, step on the foot pedal 4.1 - (4) single needle counting number.

B, corner sewing cycle: After the first corner sewing is completed, continuous sewing without thread cutting will automatically switch to the second corner sewing, The next corner sewing mode will be automatically changed after treading on the pedal to cut the thread, and it will reciprocate in turn. If you do not need to switch to the next corner sewing, you need to set the number of stitches in column A and B of the downward corner sewing to 0 and 0 for blocking.

C, Reset: halfway sewing error, click Reset on the upper left corner to start from scratch



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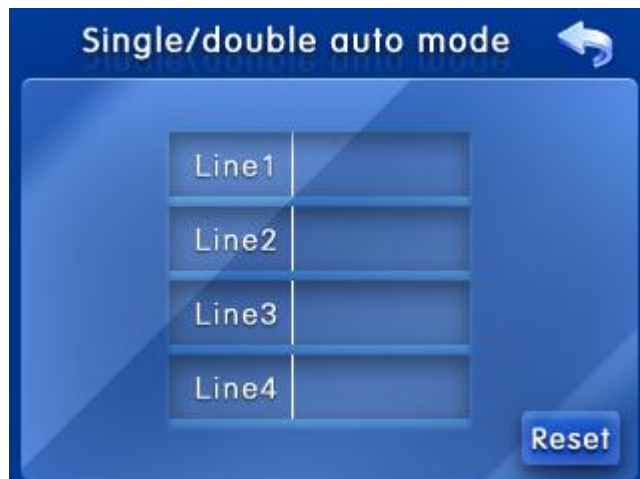


As shown in the figure, there are five kinds of corner seams, (parameters are set according to the clothing process)

1. Continuous sewing 5 corner seams: five parameters need to be set, Step on the pedal 4.1 - (4) to sew to the corner ①, press the right switch button 4.1 - (2), lift the presser foot, manually rotate the cloth, lower the presser foot to sew to the corner ② automatically, repeat the above operation to ⑥, then step back on the foot pedal to cut the thread and finish the sewing. (if the sewing is wrong halfway, click the upper left corner to reset and start from the beginning)
2. Less than 5 corner seams: If only three corner seams need to be sewn, Corner seam 1, 2 and 3 need to set corresponding corner seam parameters, Corner seam 4 is set to 0, 0 for blocking, Press the foot pedal 4.1 - (4) to sew to the angle ①, press the right switch button 4.1 - (2), lift the presser foot, manually rotate the cloth, lower the presser foot to sew to the angle ② automatically, repeat the above operation to ④, and then step back to cut the thread on the foot pedal to finish the sewing.

### 5.2.3 Single and double needle automatic mode

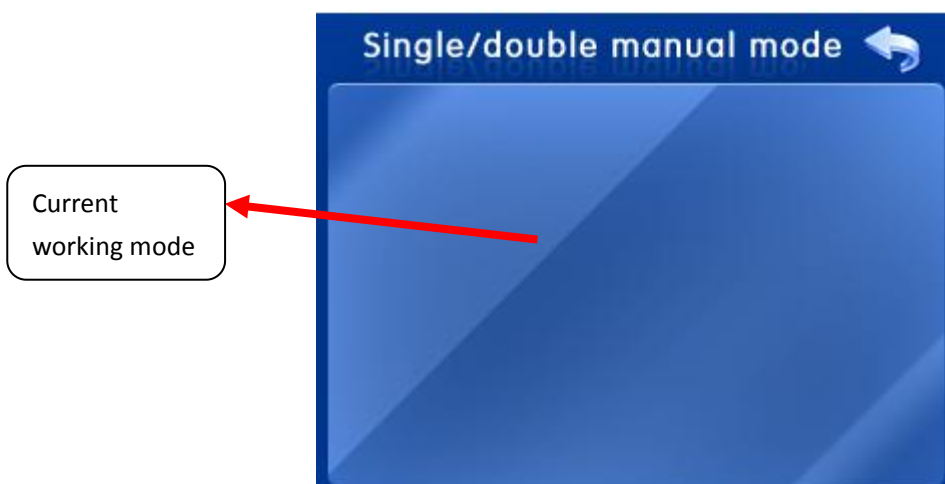
1. Mode selecting steps: select the language in the 4.1 - (6) - a startup interface - skip to the 4.1 - (6) - B main interface to select the single and double needle automatic mode



2. There are three options for each line, with a total of 16 sewing modes
3. The single needle is the right needle. If it needs to be blocked, the next line segment should be set to none. After re stepping on the foot thread trimming, the next mode will automatically cycle. If it needs to be reset, click the panel reset button

### 5.2.4 Single / double needle manual mode

1. Mode selecting steps: select language in 4.1 - (6) - a startup interface --- skip to 4.1 - (6) - B main interface to select single / double needle manual mode



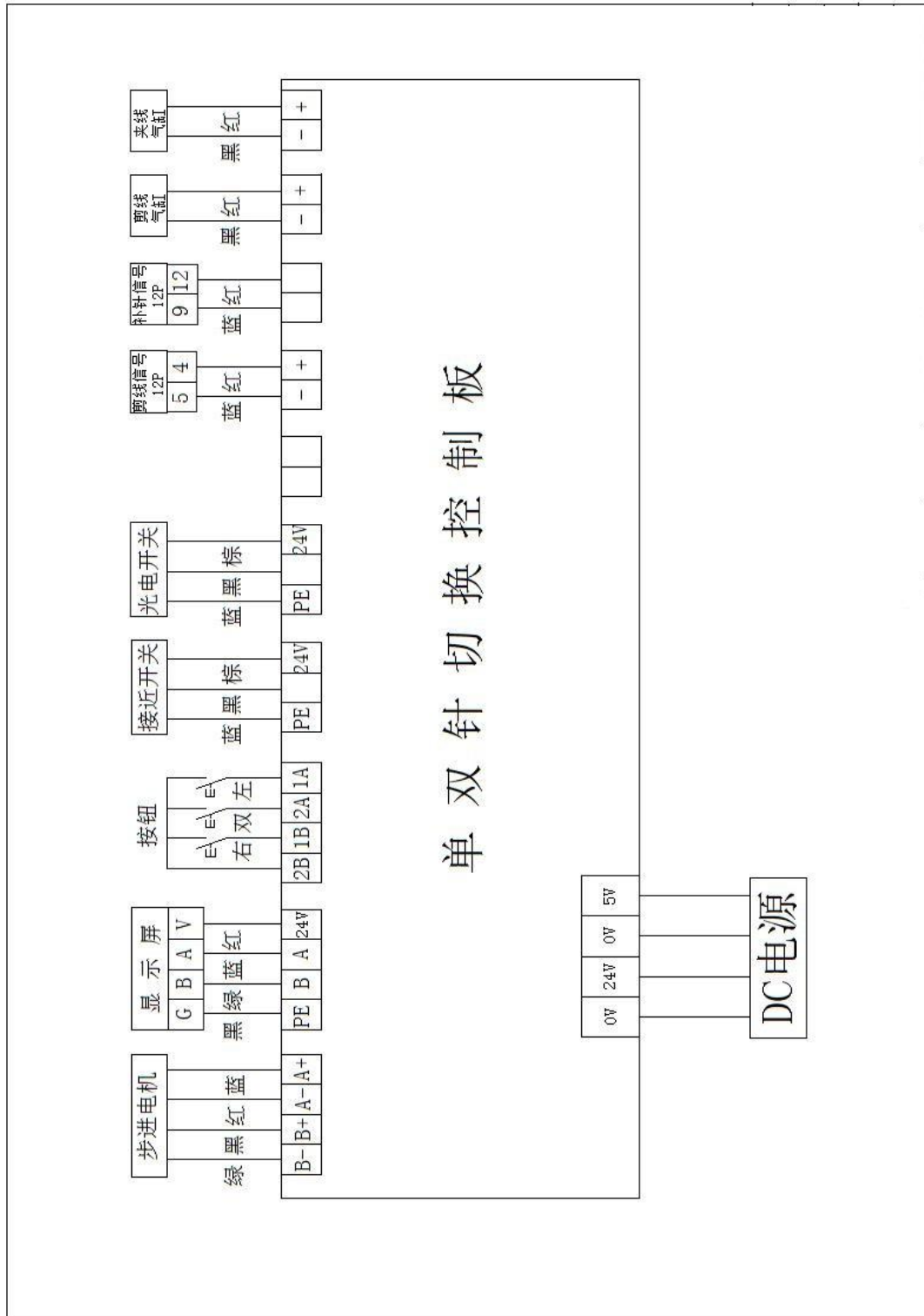
2. The initial state is double needle operation, as shown in the figure above; press the L / R button to switch to the corresponding single needle, and press the red button in the middle to restore the double needle operation

### 5.2.5 Shutdown

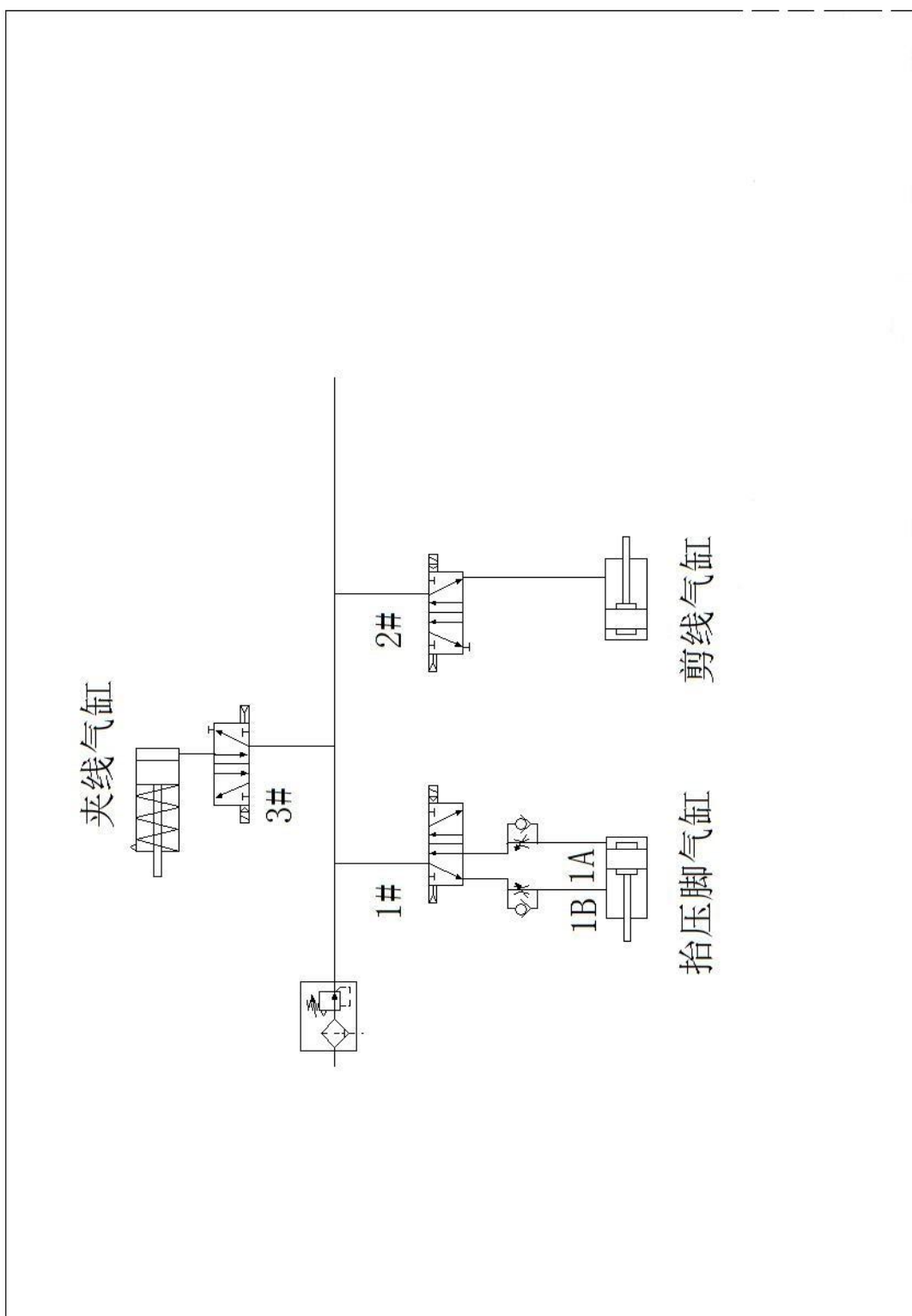
After operation, turn the power switch 90 ° 4.1 - (1) to the off position, and the equipment will be shut down

## 6、Electrical wiring

### 6.1. Signal board:



6.2. Solenoid valve board:



## 7、Optional device

### 7.1. Optional t-8450 table and stand





## 8、Accessories box details

	ITEM		QTY
1	《Operation manual》		1
2	《Parts Manual》		1
3	《Touch screen interface operation instructions》		1
4	Head attachment		1

## 9、Common problems and Solutions

9.1. For common problems and solutions, see 《Touch screen interface operation instructions》、machine head instruction.

## 10. Daily maintenance requirements

10.1. See the following table for the list and requirements of equipment maintenance

10.2. Refer to **BR-T8452D-403** for other maintenance requirements

NO	Project	Frequency				Requirement
		Daily	Weekly	Monthly	Half year	
1	Dust removal	√				Remove dust from equipment surface and parts
2	Cleaning up oil pollution		√			Clean the greasy dirt on the table board, needle board and shuttle core
8	Tracheal interface			√		The air pipe interface is tight without air leakage
9	Oil			√		The head oil quantity shall not be lower than the warning line
10	Bobbin			√		Check if the bobbin is scratched
12	Sensor				√	Check if the sensitivity is accurate and if the position changes
13	Slider				√	Check slide lubrication and add lubricant if necessary
14	Electric control box				√	Cooling fan runs normally, clean up the dust in time

## 11、KNOWLEDGE PRODUCT PROTECTION STATEMENT

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