

***ENGLISH***

**M-1 Series  
INSTRUCTION MANUAL  
(Simple type electrical)**

# Foreword

**Thank you for purchasing this product, In order to make use of product better, Before installing and testing, please read the operating instructions and the sewing equipment specification carefully, to use correctly, and be installed and tested by professionals.**

## **Note:**

If there is any doubt when using product or any comments or suggestions of our products and services, please feel free to contact us!

Our company has the right of final interpretation of this manual.

## **The usage of the operating instructions:**

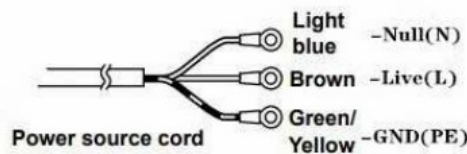
The operating instructions provide guidance information based on user's requirements.

The information involves equipment and other usage occasions, transportation, installation, use and maintenance.

The operating instructions are intended for users and technical staff.

## **Safety Instructions**

1. Make sure that the switch button of the controller is off before the plug is plugged in and powered on;
2. Please make sure that the line is plugged in before the switch button is turned on, otherwise an error will be prompted;
3. Do not press or over-twist the motor wire by external objects. To avoid damage to the joint signal line;
4. Do not disassemble the controller without professionals, to avoid accidents;
5. Power terminals should be installed by specially assigned person. Connect the wires of the same function together.



## **Caution:**

Inside of the controller and interface wire are with strong power, please do not touch, in order to avoid an electric shock!

# **Catalogue**

**1: Introduction to the common operation of the display**

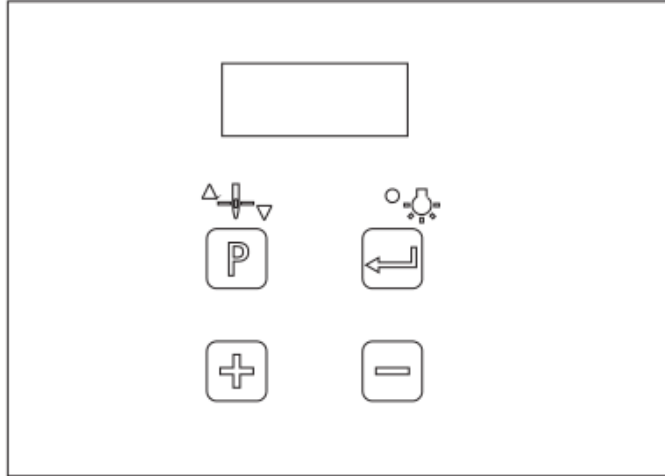
**2: Parameter adjusting and example**





**3: Operation parameters description table**

**4: Control box port description**

**5: Fault code analysis**

# 1: Introduction to the common operation of the display



NO.	Icon	Function description
1		1, Working mode, switch the up-down needle position; 2, Parameter mode, setting the parameter. 3, Input password, shift key
2		1, Working mode, switch the LED light; 2, Parameter mode, save the parameter.
3		1, Working mode, adjust the motor speed; 2, Parameter mode, choice and adjust for parameter.
4		

## 2: Parameter adjusting and example

### 2.1 The panel is four digital Nixie tube display.

Adjust the speed by press the“+”, “-”,key when in standby interface.

2.2 In standby interface ,press the“P”,when the up needle position indicator light is on ,it is on up needle stop , when the down needle position indicator light is on , it is on down position stop, when the indicator light is off ,the needle position function turn off.

2.3 In standby interface , press the“S”key , can turn on/off the machine head light.

### 2.4 Enter in and change the system parameter:

① Press the "P" and "+" keys together for more than 2 seconds,it enters into the parameter mode. The nixietube shows“P-00”;


② Press the “+”、“-”key ,can change the parameter;

③ After choose the parameter , press the“P”key ,enter into the parameter ,then can change the value of the parameter by “+”、“-”key;

④ Press the “”key save the value;

### 2.5 Reset:


① Press the "P" and "+" keys together for more than 2 seconds, it enters into the parameter mode. The nixietube shows“P-00”;

② Press the“”key for three seconds to reset;

### 2.6 P-01 parameter (maximum speed limit) entry and modification:

① Press the "P" and "-" keys together for more than 2 seconds, The nixietube shows“0000”;

② Then short press the "P" key to move the flashing position, enter the password by "+" or “-”;

③ Press the “” , The nixietube shows“P-00”,then press “+”,The nixietube shows“P-01”, press the“P”key ,enter into the parameter ,then can change the value of the

parameter by “+”、“-”key;

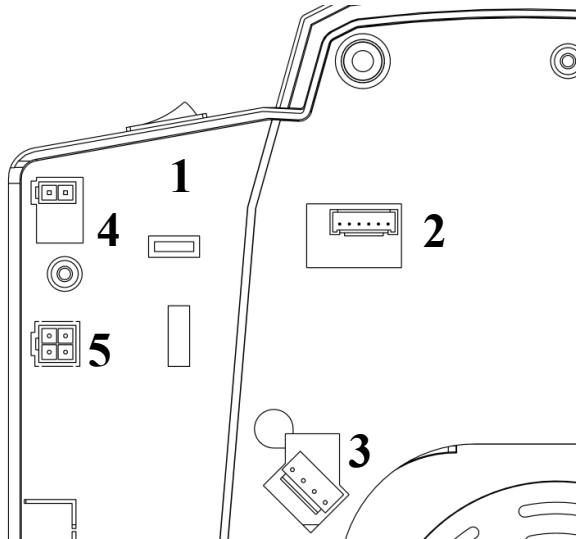
- ④ Press the “”key save the value;

### 3: Operating Parameter Description Table

Serial Number	Name	Parameter range	Factory Default	Function
P-01	Maximum speed lock	200~7500	5500	Need password
P-02	Positive and reverse setting of motor	0~1	1	0 : represents reversal, 1 : represents positive rotation
P-03	Down stop angle	0~23	12	Lower needle stop position adjustment
P-04	The starting speed	200~800	200	RPM
P-05	Pedal acceleration curve	1~100	50	Less than 50, the curve up; More than 50, curve under the cast

P-08	The lower needle stopping position returns to the upper needle stopping position	0~1	1	0: close 1: open
P-10	Automatic running in test	0~1	0	The parameter is changed to "1" automatically running in, set to "0" or turn off the power, run in and stop
P-11	Running-in running time	1-99	5	
P-12	Running-in pause time	1-99	5	
P-14	Motor output power adjustment	100~999	750	Maximum current value
P-15	Electric control version	/		
P-16	Display screen version	/		

## 4: Control box's port illustration



The port number	The name of the device port
1	Power switch
2	Electric port
3	Encoding port
4	Head lamp port
5	Speed controller port



## 5: Fault code analysis

Fault code	Fault description	Fault reason	Fault solution
ER-01	The signal of the needle is wrong	1: the contact between the needle and Moore thread is bad 2: the permanent magnet on the hand wheel is at wrong position or is demagnetized.	1: check the needle and Moore thread; 2: check whether the permanent magnet is at the wrong position; 3: change the hand wheel;
ER-02	The signal of the speed controller is wrong	1: didn't plug the speed controller in when the machine is on. 2: the speed controller is plugged in at the wrong position. 3: the speed controller is disconnected. 4: the speed controller is broken	1: check the signal line of the speed controller; 2: change the speed controller; 3: change the controller;
ER-03	The signal of the motor is wrong	1: the contact between plugs is bad 2: moore and rotator have some big deviations when install the motor 3: the motor and Moore is broken	1: open the rubber cap and check whether the motor rotator and stator is at the same level, make sure the deviation is less than 1MM; 2: change the motor; 3: change the controller;

ER-04	The motor stops rolling	1: the sewing machine is too heavy or is stuck 2: the motor is overloaded 3: the motor's 4 drive lines didn't connect or were plugged at the wrong position	1: check the motor's 4P thread; 2: check whether the sewing machine is too heavy; 3: change the controller;
ER-05	Hardware over current	1: the sewing machine is too heavy or blocked 2: motor overload	1: check if the sewing machine is too heavy; 2: replace the controller; 3: restart the machine;
ER-07	Communication timeout	1: display connection board line connection is bad 2: the main board chip is broken	1: check the connection line between the screen and the controller; 2: check whether there are some high frequency machines interfering; 3: change box damage;

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