

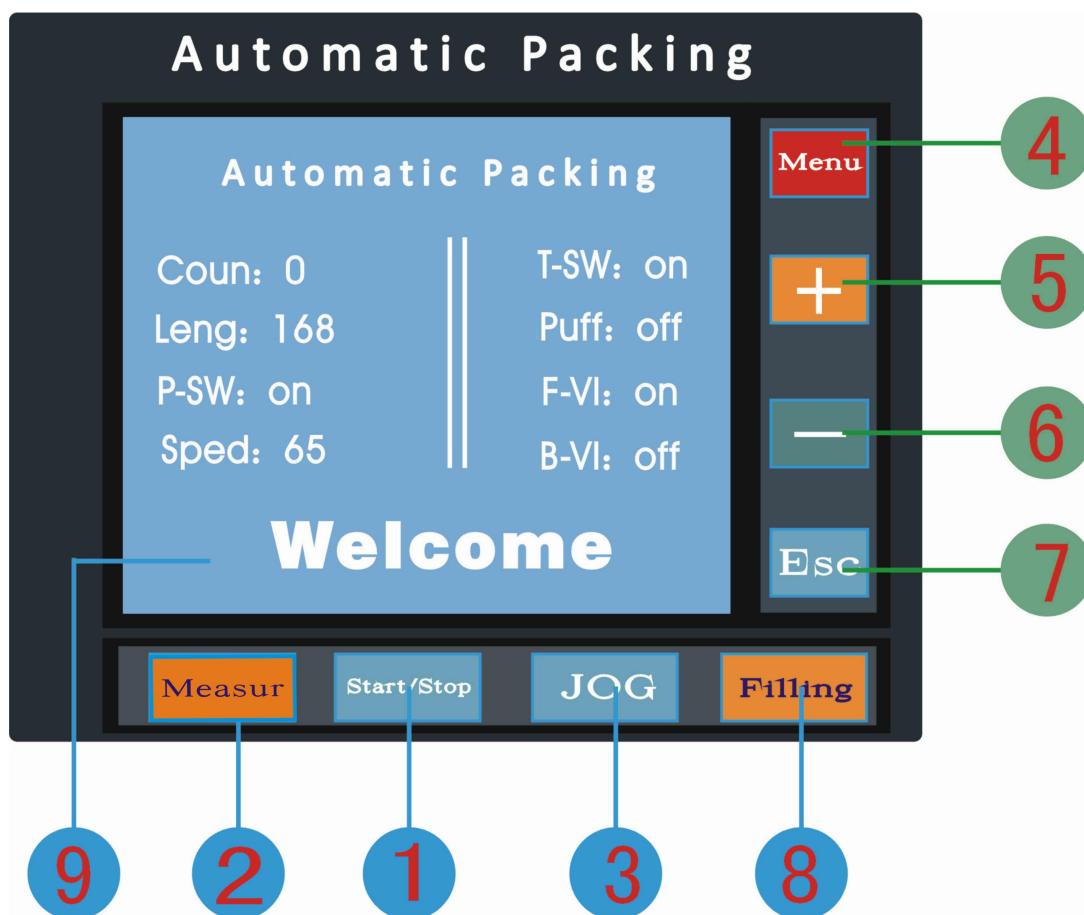
## User's Manual for the Vertical Packaging Machine



### 1、 Technical information

- 1.1 Applying the Chinese Liquid Crystal Displaying technology, the system can display all of operating directions (e.g. packaging length, packaging number etc.).
- 1.2 Personalized design, and display the company name, telephone number and other information according to different manufactures.
- 1.3 Measure packaging length automatically.
- 1.4 Electronic benchmarking locating function instead of photoelectric eyes operated by hand.
- 1.5 Specifying parameters to accord the length displayed with the actual packaging length. (Notes: Those parts marked red color are new functions updated since April, 2007 ).
- 1.6 Function of conversion from Chinese menu to English or on the contrary, and this applicable to the international market.
- 1.7 Applying the special technology of photoelectric fluttering and intelligent error correcting, the accuracy of photo electricity is improved greatly.
- 1.8 Packaging length: from 35mm to 999mm.
- 1.9 Packaging speed: from 0 level to 16 level, and this speed is adjustable(When packaging length is up to 200mm, the fastest speed also can reach the speed of 90 packages per minute).
- 1.10 Packaging counting: from 0 to 990, 000 packages, and counting cumulatively.
- 1.11 Display the speed of packaging per minute immediately.
- 1.12 Menu operating interface and displaying operating directions, and the operation becomes very easy.
- 1.13 Diagnose malfunction intelligently and displaying error position (e.g. photo electricity malfunction, course malfunction etc.).
- 1.14 The Electrical Machinery of the Host and the pedometer both can be operated in the way of "Dot-Startup".
- 1.15 Integrating four auxiliary switch including temperature control, inflation, front vibration and back vibration etc..

- 1.16 Adjusting finely the force of vibration back and forth to make supplying materials faster and more accurately.
- 1.17 Cutting number: from 2 to 99 packages, and the number is adjustable.
- 1.18 Supporting two stepped motors simultaneously.
- 1.19 The urgent stop button can be optional to be add.
- 1.20 All options of function control are based on software and it is very convenient to adjust functions and update technologically.
- 1.21 The main board is made according to the Patch Production Process.



## 2、 Parts identification on the controlling board

1. ON/OFF switch
2. Measur
3. Dot-Startup button for the Host Electrical Machinery
4. Confirm button ( to select functions)
5. + button (upwards/increase)
6. - button ( downwards/decrease)
7. Exit button (to return previous menu)
8. Filling button
9. english Multi-function LCD screen. It can display information such as the company name and its telephone number etc.(e.g. SHANGHAI MOTECH A Machinery Company 021-1234567) every opening this packaging equipment. Under working condition, it displays packaging number, length, speed and condition etc. .

## 3、 Operating instructions to the controlling board

**3.1 ON/OFF :** After electrifying the equipment, press the ON/OFF down, and the system is under working

condition; simultaneously, the Host begin to work, and the LCD displays “ON”. Press the ON/OFF again, the system stop, and LCD displays “OFF”.

**3.2 Photo electricity switch:** the shortcuts for the Electrical Machinery 1( You also can operate the button of photo electric eyes located in the main menu in LCD ). You can read the content that the photo electricity switch displays in the LCD. If displaying “photo electricity off”, press the photo electricity switch, then the photo electricity switch is turned on, and displays “photo electricity on”. Press it again, then the photo electricity switch is turned off.

**3.3 Dot-Startup button for the Host Electrical Machinery:** Press it, the Host works, but the system is not under working condition; loosen it, the Host stop.

*The following four buttons, “Confirm”, “+”, “-”, and “Exit”, are used to monitor menu on the LCD to specify different functions. We will first introduce basic operations, as to more detail, please see the following parts.*

**3.4 Confirm :** used to select, enter and confirm. For example, press “Confirm” to make the system come into the main menu, then use “ + ” or “ - ” to move the cursor to an option, and then press “Confirm” again to confirm the function that you want to select. The system will save the present specifications when you press the Exit button to finish the adjustment.

**3.5 + :** Under the state of menu, press “+” will move the cursor upward to the above row, under the state of digital adjustment, press “+”, the corresponding number will be added “1”. And under the state of ON/OFF, pressing “+” denotes “ON” or “OFF”. (Under the state of ON, press “+”, and the system will enter the function menu of “Benchmarking Location” directly).

**3.6 - :** Under the state of menu, press “-” will move the cursor downward to the below row, under the state of digital adjustment, press “-”, the corresponding number will be minus “1”. And under the state of ON/OFF, pressing “-” denotes “ON” or “OFF”. (Under the state of OFF, press “-”, and the system will enter the function menu of “Auxiliary Button” directly).

**3.7 Exit button:** used to return to previous menu and to quit. ( Under “OFF” condition , to press “Exit” up to 2 seconds will let the Stepped Motor 1 operate in the way of dot-startup; or to press “Exit” without losing will let the Stepped Motor 1 operate in the way of dot-startup in succession ).

*Note: You can switch to the main menu to modify the parameters that you want even when the system is working. The system will save the adjusted parameters automatically after halting, and these specifications can be applied automatically next time.*

## 4. Fast mastering operating procedure

### 4.1 Electrifying the main power, the LCD will display the main window.

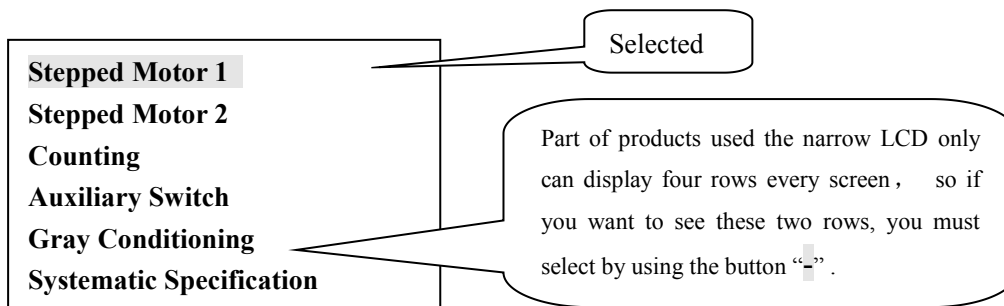
|                             |                 |
|-----------------------------|-----------------|
| <b>Automatic packing</b>    |                 |
| <b>Quantity: 0</b>          | <b>t-sw:on</b>  |
| <b>Length : 150</b>         | <b>puff:off</b> |
| <b>Photo eletricity :ON</b> | <b>F-VI:on</b>  |
| <b>Speed : OFF</b>          | <b>B-VI:off</b> |
| <b>welcome</b>              |                 |
| <b>Welcome</b>              |                 |

Special notes: The system has the function of automatically measuring the length of object that you want to package. When the packaging film that you want to use has benchmarking, the following step 2 can be omitted. The system will measure automatically the length of packaging film and

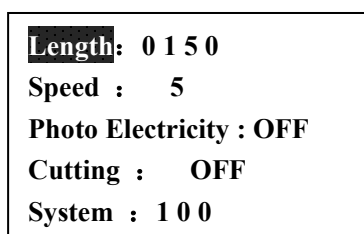
adjust automatically the speed of stepped motors when press the button of “ON/OFF”.(More detail, please read the following labeled “5.0 Measuring the length automatically”).

## 4.2 Adjusting packaging length and speed based on different objects.

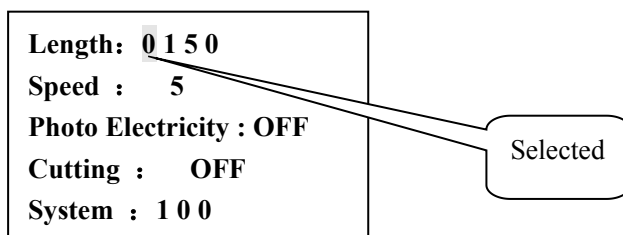
4.2.1 Press “Confirm” once, the LCD will display the main menu:



4.2.2 Press “Confirm”, the LCD will display the specifications of the Stepped Motor 1:



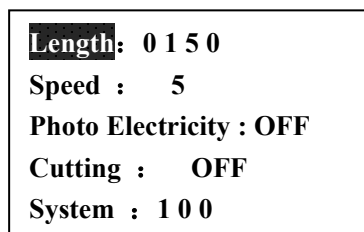
4.2.3 Press “Confirm” to adjust the thousand in the length specification, the LCD will display (unit: mm):



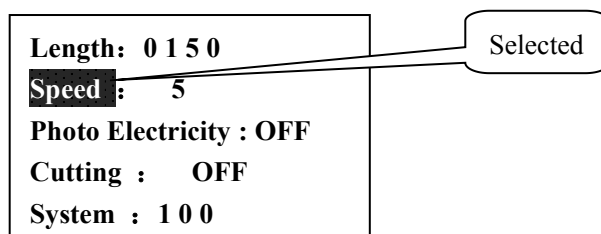
4.2.4 Press **+** or **-** to adjust the thousand in length specification. For example, 1,200mm, the thousand should be equal to 1. If the packaging length is less than 1,000mm, the thousand should be set to 0.

4.2.5 Press “Confirm” again to adjust the hundred in length specification. The method is the same as the above. You can set the ten and the single just by the same way. The graph above displays that the length is 150mm. If the length is 185mm, the length specification should be 0185.

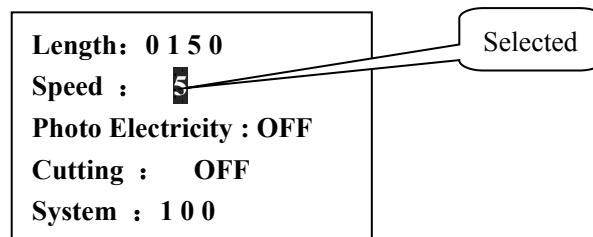
After specifying the length, press “Confirm” to return to the Stepped Motor 1 Specification, the LCD will display:



4.2.6 Press “←”, the cursor will move to the Speed Specification, the LCD will display:

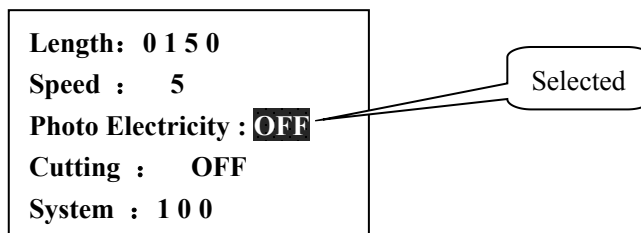


Press “Confirm” to enter the state of the Speed Specification, the LCD will display:



Press **+** or **-** to adjust the speed, it covers 16 levels, from zero to F. But the highest level available varies according to different packaging length. Therefore, if the speed that you specified is beyond the highest level available, the system will decrease the level to proper one. Press “Confirm” to return to the interface of the Stepped Motor 1 Specification.

4.2.7 Press “**-**” again, the cursor will move to the Photo Electricity Specification, and then press “Confirm” to specify the state of photo electricity, and the LCD will display:



Press **+** or **-** to adjust the state of photo electricity to “ON” or “OFF”(Pressing the Photo Electricity button on the main board also can realize this function).(Notes: When the packaging film that you want to use has not benchmarking, this function is not available). And then press “Confirm” to return to the interface of the Stepped Motor 1 Specification.

4.2.8 After specifying the three functions above, Press “Confirm” again, the system will save these adjusted parameters automatically. Press “Exit” to return to the “Main Window”.

Notes: Any interface referred above will be close if any specification is not made, the system will return to the “Main Window” automatically, and those parameters specified will be discarded.

**4.3 Press “ON”, the system starts operating, the row of the Speed Specification in the LCD will display “ON”. After packaging two packages, it will display the present packaging speed. And you can know the product of the packaging per minute.**

**4.4 When you change the packaging film that different from the previous film in length, the cutter maybe does not cut along the benchmarking to a turn. Under this circumstances, press **+** to enter the interface of “Benchmarking Location”, and then press **+** or **-** to adjust the**

**position of the cutter in order to make it cut along the benchmarking to a turn. (More detail, please read the following labeled "5.1 Benchmarking Location")**

## 4.5 Weight adjustment (applicable only to spiral tube feeding machine)

5.1 The role : Adjusting the packaged goods value target weight, the weight of powder packaged goods more accurately.

5.2 into the functional approach : the Key menu by the "main menu" → "Motor2 setup" entry interface as follows :

|   |
|---|
| Motor2 setup<br><b>weight: 0 0 6 0 g</b><br><b>length: 0 3 9 0</b><br><b>ratio: 0 0 6 . 5</b><br><b>speed: 3</b><br><b>motor2SW: on</b> |
|---|

Basic operation and the menu above the "Bag parameter setting," the same method of operation. Following is the function of a brief introduction :

5.3 "set weight" which is your packaged goods to the target weight range 1-9999 grams. If the packaging weight of 60 grams on the set to "0 0 6 0" grams.

5.4 "length show" Lo governing motor length (unit : mm), may also be used as packaging weight of minor adjustments.

5.5 "set proportion" is the proportion of the weight of packaging materials required for a motor run grams length, range 0 .1-999.9. Available "length shows that the" divided by the numerical "actual weight" to be. "Actual weight" refers to the scale packaging machine called out a bag packed the weight (unit : grams).

5.6 "rate adjustments" for regulating solenoid motor speed, when the weight on the packaging into by the big hours the system automatically reduce speed. Following two required manual adjustments Motor Speed : ① When motor rotation can not reduce the need for motor speed.

② When the weight of the packaging, from small to large, the system does not automatically increase the motor speed, When it is discovered that the operation is too slow rotating spiral tube packaging weight is too small so many in need of appropriate increase in motor speed.

5.7 "Lo motor control" switch, because some models do not have to screw feeding tube motor, control system, which is the switch, The default setting is "off", the need to use the Lo feeding tube when it had to "open."

**Skills** : When packaging a new commodity, according to the following steps :

- ① by 5.3 by the method of packaging products to the weight set to "set weight" Lane.
- ② can first make reference to the previously wrapped around an estimate of the value of goods "proportions," and set it to "share their" Lane.
- ③ powder into the packaging materials needed to start packing machines normal five packets. Were said with a weight per weight of the package and then calculate an average weight of

the packet (Unit : grams), use the "length shows that the" numerical just calculated by dividing the weight of a package is the value of the actual "proportions," accurate to a decimal places (such as 7.5), and its re-creation of the "proportion of their" Lane.

- ④ start a normal start packaging machinery, packaging this time the weight and the weight you set up basically the same, If there is deviation, you can fine-tune until the proportion of the weight of the packaging line with the required weight. Due to the viscosity of various items such as mobile and the impact of precision might not be able to reach 100% In general grams plus or minus 0.6% to be acceptable. The state machinery in the kick-off time, according to bond photoelectric quick to share adjustment Key then fine-tuning by "+" "-" share value. Note : stop unnecessary state function key will change accordingly photoelectric switch settings, please prudent operation.
- ⑤ I would be grateful if the proportion of the final record, the packaging for future use similar products, Similar products because the proportion is the same, the packaging after similar products imported directly recorded on the proportion can be used.

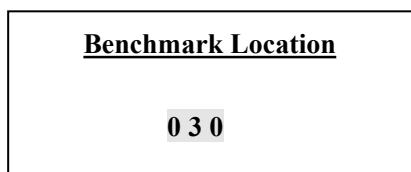
## 5. Advanced operations and other functions.

### 5.0 measuring length automatically

- 5.0.1 This system has the function of automatic measuring, therefore, if there is benchmarking on the package to be packaged, and if turn "Photo electricity" on, the system will measure the packaging length automatically when you press "ON". And you can save much time to measure, specify and adjust. The function of measuring is automatic fully. This system can operate according to the accurate length and speed even under the condition in which you change the packaging film that is different in length.
- 5.0.2 Tips: If you think the machine operates too fast or too slowly when you apply the function of automatic measuring (Notes: the packaging film will wrinkle if the machine operates too fast, while the product will be decreased if the machine operates too slowly.), you can press "Confirm" to enter the main menu firstly, and then enter the "Stepped Motor 1 Specification" to find "Speed Adjustment", you can adjust the speed level by hand. The system will operate according to the speed that you specified just now.

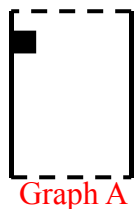
### 5.1 Benchmark Location

- 5.1.1 Function: In order to let the cutter cut along the benchmark in a turn. You need not to adjust the photoelectric eyes by hand.
- 5.1.2 Usage Methods: Press **+** to enter to the interface of "Benchmark Location":

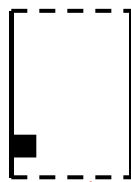


- 5.1.3 When you change packaging film that is different the previous one in length, the cutter maybe does not cut along the benchmark in a turn. AT this time, you can adjust the location of the cutter through pressing **+** or **-** to make the cutter and the benchmark alignment.
- 5.1.4 The number in the middle of the LCD denotes the length that the benchmark was adjusted, and the unit is millimeter. When you press **+** or **-** to , the length will be increased or decreased 1mm, respectively.
- 5.1.5 Tips: ① Take a package that is cut and packaged before, observe the distance that the benchmark

locates between the above knife-edge and the below knife-edge following the direction that the packages comes down. If the benchmark is closer to the above knife-edge(displayed in Graph A), you had better press **+** to increase the value of the benchmark location. If the benchmark is closer to the below knife-edge(displayed in Graph B), you had better press **-** to decrease the value of the benchmark location.



Graph A



Graph B

② When the benchmark is far way from the knife-edge, you may pause the machine firstly and then adjust the location of the benchmark in order to avoid wasting the packaging film. The method of adjustment is the same as that referred in ①. That is, press **+** or **-** to refine the value of the benchmark location .

③ When the value of the benchmark location that you want to adjust is very high, you can press **+** or **-** up to more than 1 second without loosening it, the number will change quickly.

5.1.4 Press **“Exit”** to return to the main window to finish all specifications.

*Important safety note: Be sure to take care when taking the packages. Not to take the packages by hand when they are in the heater. You should take the packages till them to basket.*

This system has the function of automatic measuring, therefore, if there is benchmarking on the package to be packaged, and if turn “Photo electricity” on, the system will measure the packaging length automatically when you press “ON”. And you can save much time to measure, specify and adjust. The function of measuring is automatic fully. This system can operate according to the accurate length and speed even under the condition in which you change the packaging film that is different in length.

## 5.2 Language Selection (Chinese and English)

5.2.1 Function: Makes the equipment applicable to international customer.

5.2.2 Usage method: press “Confirm” and enter the main menu, and then press **-** to move the cursor down to the sixth row where you can find “System Specification”, and press “Confirm” to enter the following interface:



5.2.3 Press “Confirm” to move the cursor to “Chinese/English”, and then press **+** or **-** to select the language that you want.

5.2.4 Press “Exit” to return to the Main Window to finish all specifications.

## 5.3 Counting

5.3.1 Usage Method

Press “Confirm” to enter the main menu, and then press **-** to move the cursor down to the third



row where you can find “Counting”. Press “Confirm” again to enter the interface as follows:



5.3.2 Entering the interface above, press “Confirm”, the counter becomes zero, and the LCD displays “OK”.

5.3.3 Cumulative counting: Entering the interface above, press **-** and the cursor move to “Cumulative Counting”:



Press “Confirm” and the state of the Cumulative Counting turn into “ON”. Press “Confirm” again and the state of the Cumulative Counting will turn into “OFF”.

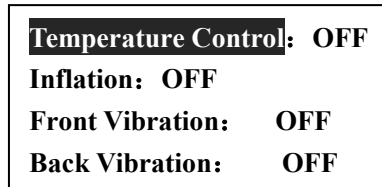
5.3.4 Press “Exit”, the system return to the Main Window.

5.3.5 Function of Cumulative Counting: if you want to memorize the packaging number, you can change the state of the Cumulative Counting into “ON” before powering off. The packaging number will be displayed on the LCD when you launch the system next time. Furthermore, if you always set the state of the Cumulative Counting “ON”, the system can cumulate the packaging number several times.

## 5.4 Auxiliary Switch

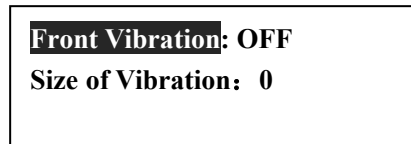
### 5.4.1 Usage Method

- ① Press **-** on the panel directly.
- ② Press “Confirm” to enter the main menu, press **-** to move the cursor down to the fourth row where you can find “Counting”, and select it. Press “Confirm” again to enter the interface as follows:



5.4.2 Entering the interface above, press **-** or **+** to move the cursor to the item that you want to specify, and then select the state. Finally, don't forget to press “Confirm” to confirm your specifications.

5.4.3 When the cursor is moved to “Front Vibration” or “Back Vibration”, press “Confirm” to enter the interface below. At this time, you can open or close the front vibration and back vibration and adjust the size of vibration.

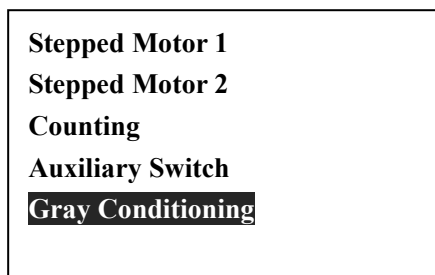


5.4.4 Press “Exit”, the system return to the Main Window.

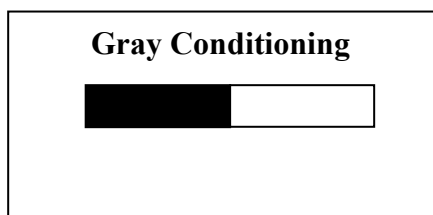
## 5.5 Gray Conditioning

5.5.1 Function: specify the extent of gray of the words displayed on the LCD to make them to be seen clearly.

5.5.2 Press “Confirm” to enter the main menu, and then press **-** to move the cursor down to the fifth row where you can find “Gray Conditioning”.



Press “Confirm” to enter the interface as follows:



5.5.3 Press **+** to increase the extent of gray, while press **-** to decrease the extent of gray.

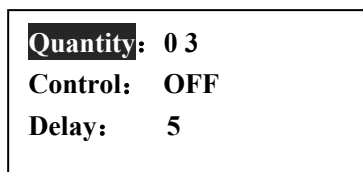
5.5.4 Press “Confirm” to save your specifications, and the LCD displays “OK”.

5.5.5 Be sure not to specify the extent of gray so high that you can read the words. If so, you can specify it again on the contrary direction until the words can be read clearly, or press “Exit” to discard your specifications.

5.5.6 If you save the specifications that make the words not to be read clearly because of carelessness, please try to specify again using the method as follows: Firstly, press “Confirm” one time. Secondly, press **-** 4 times. Thirdly, press “Confirm” again. Finally, press **+** without losing until you can read words clearly. If this does not work, please call us!

## 5.6 Cutting Specification

5.6.1 Press “Confirm” to enter the main menu, and then press “Confirm” again, you can enter the interface of “Stepped Motor 1”. Subsequently, press **-** to move the cursor down to the fourth row where you can find “Cutting Specification”, and press “Confirm” to enter the interface as follows:



5.6.2 Entering the interface above, press “Confirm” to select the specification of “Quantity”. And then press **+** or **-** to set the specific number, and press “Exit” to return.

5.6.3 Move the cursor to “Control” and press “Confirm”, and then press **+** or **-** to select “ON” or “OFF”.

5.6.4 Delay is used to specify the ejection timing of the cutter.

## 5.7 Specifying parameters (this function is offered to those manufacturers which engage in producing machine for packaging, the terminals don't try it for god's sake!)

Please read “Additional instructions for the manufacture” first before usage.

## 5.8 Operation of Stepped Motor 2

5.8.1 The methods of “Length Specification”, “Speed Adjustment” and “Photo Electricity Specification” of Stepped Motor 2 is the same as the Stepped Motor 1. However, the Stepped Motor 2 has the functions such as “Cutting Specification” and “Specifying Parameters”, etc.

5.8.2 The Stepped Motor 2 is equipped with the controlling switch because it is used rarely. By default, the state is set “OFF”. You can modify it into “ON” when you want to use.

## 5.9 Stop urgently (to be optional)

5.8.2 There is a port for linking the button of urgent stop on the controlling board. Please link one button used frequently when applying. When happen to emergency, please press the button of urgent stop quickly, the system will stop at once (including the Host Machine, the Stepped Motor 1 and the Stepped Motor 2). Attention: the best and safest method still is to cut off AC electricity.

## 5.10 Dot-Startup for the Stepped Motor 1

Under the state of stop, press “Exit” up to 2 seconds, the Stepped Motor 1 runs in the way of Dot-Startup. While press “Exit” without loosening, the Stepped Motor 1 runs in the way of Dot-Startup in succession.

## 5.11 Delay Stands

Function: make the closed cutter be in the state of separation when the machine is turned off in order to avoid charring the packaging film.

Usage method: press “Confirm” to enter the main menu → System Specification → delay Stands, and then press **+** or **-** to adjust parameters.

## 5.12 Selecting the way of measuring length

Usage method: press “Confirm” to enter the main menu → System Specification → Length Measuring.

In most case, this function should be set to the state of “automatic”. Only when the packaging film is tainted, you need to set the state to “Manual”.

# 6. Malfunctions frequently occurs and their solutions

## 6.1 Photo electricity malfunction

- ① If there is the typeface of “P-E” displayed in the status bar and followed by the voice of “click…click…”, please adjust the sensitivity of photoelectric-eye. Both too high and too low sensitivity will bring about the malfunction above.
- ② The disaccord between the specified value of packaging length and the actual length of package also bring the malfunction above. However, the system is provided with “the function of automatic measurement”. When packages to be packaged are printed with cursor, we suggest you applying “the function of automatic measurement” to avoid from making the mistake of specifying the packaging length.

## 6.2 Course Malfunction

If there is the typeface of “Process Error” displayed in the status bar and followed by the voice of “click…click…”, please check the switch of course.

## 6.3 Stepped Motor 2 doesn't operate

Please check whether the control switch of the Stepped Motor 2 is opened or not according to the method referred in the Part 5.7.2 .

#### **6.4 Symptom of Malfunction**

If you find that the Stepped Motor 1 operates slowly, please check ① whether the six wires that link the Stepped Motor have been broken off or not, ② whether the “Exit” button on the panel is pressed or not.

#### **6.2 Symptom of Malfunction**

You can't measure the length automatically.

Solutions: Please press “Confirm” to enter the main menu → System Specification → Length Measuring, and then set the state to “Automatic”.