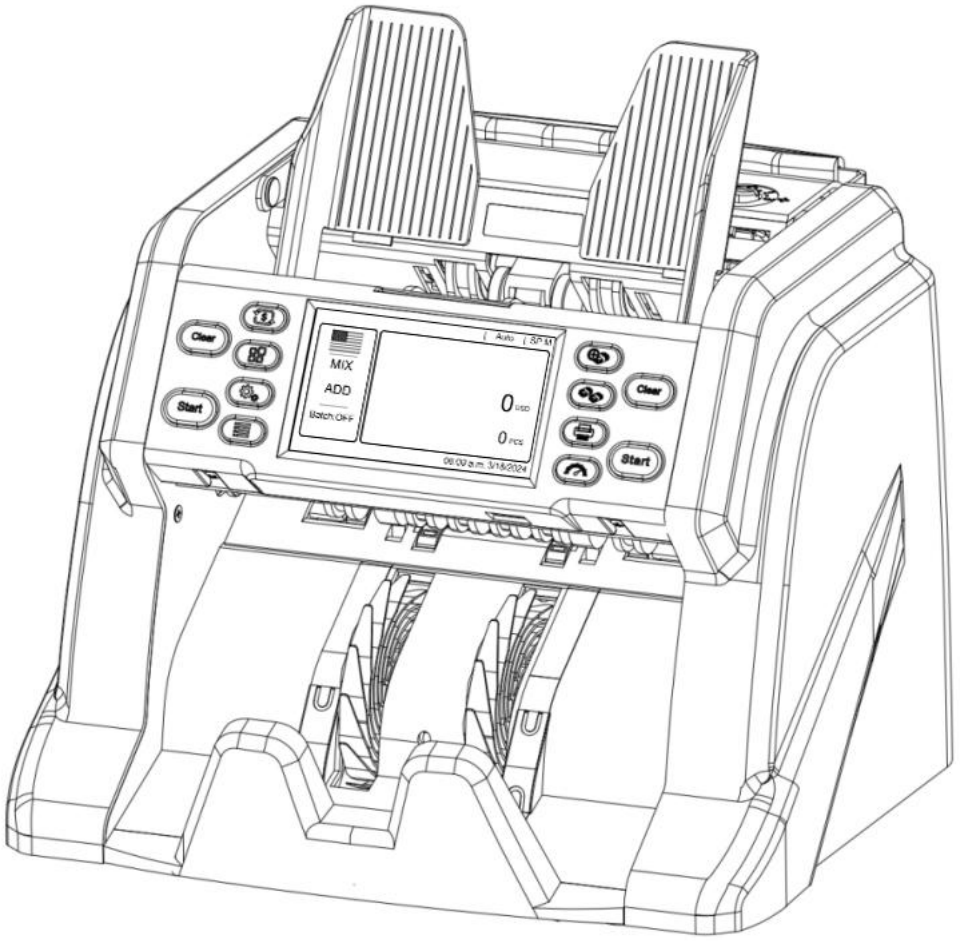
Value Counter
MC-50
User Manual



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1. Overview

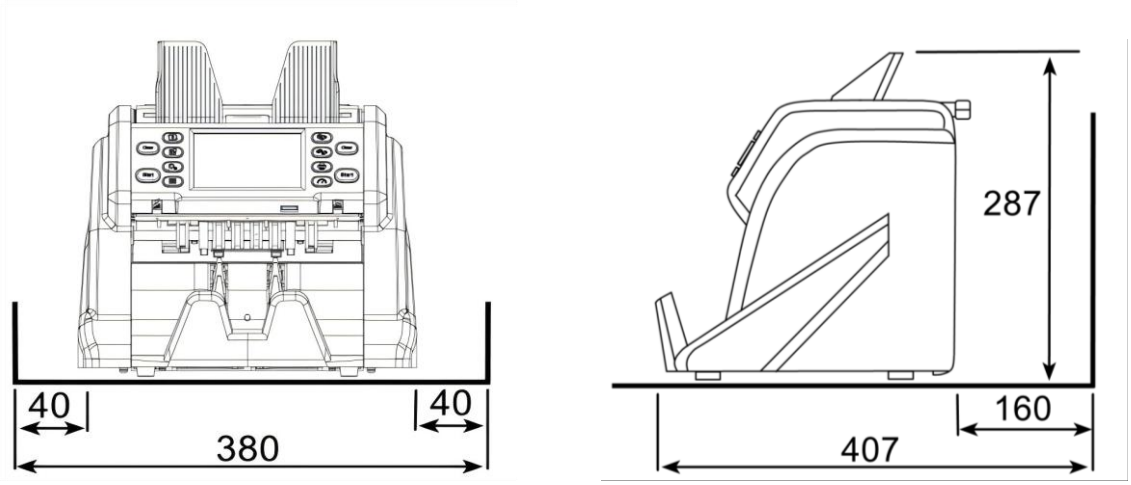
1.1 Safety Instructions

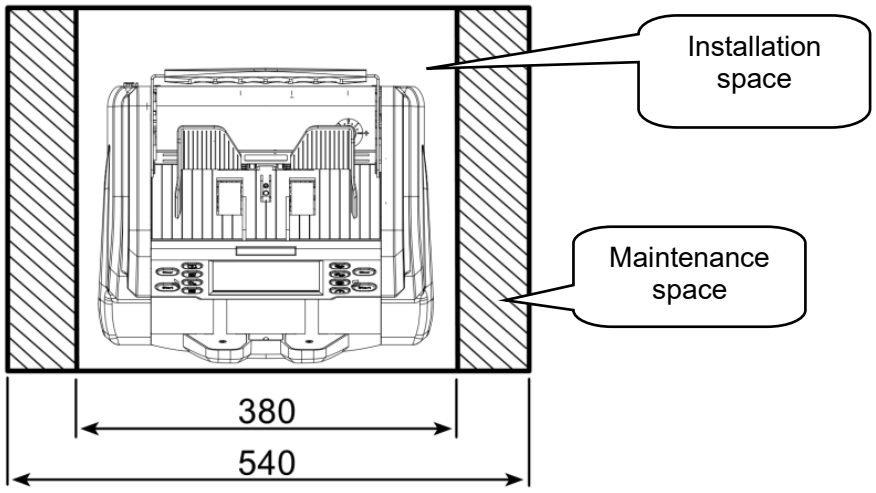
Special Reminder:

- This product is used to count the banknotes described in the specification. Please do not use this product for other purposes. Due to the different specifications and safety standards of power supply, this product is only used in corresponding countries or regions, and may not be used in other countries or regions.
- Please understand that the items recorded in this manual are subject to change without prior notice.
- The appearance and technical specifications of this manual are subject to change without prior notice. Therefore, if the actual product is different from the contents in this manual, please understand.
- No alteration or modification of this product in any form is permitted without the express written authorization of the Company.
- This machine is designed for indoor use. Please do not install or use it outdoors.
- Please do not install it in places where it can't bear the weight of this product or in inclined and uneven places.
- Do not use or place diluent and other combustibles, flammable materials and volatile materials around/inside this product.
- Do not over-bend the power cord, or put heavy and sharp objects on the machine.
- Do not use this product in excessively humid environment.
- Please avoid the interference of strong light and strong magnetic field.
- When the machine is not in use, please turn off the machine switch. Prevent curtains and various entanglements from being involved in the machine
- When cleaning the machine, please turn off the machine switch in advance.

1.2 Installation Instructions

As shown in Figure 1 below, please keep away from the surrounding walls and reserve sufficient operating space for placing banknotes, opening, or closing the cover plate, etc., and leave room for maintenance.





Unit (**mm**)

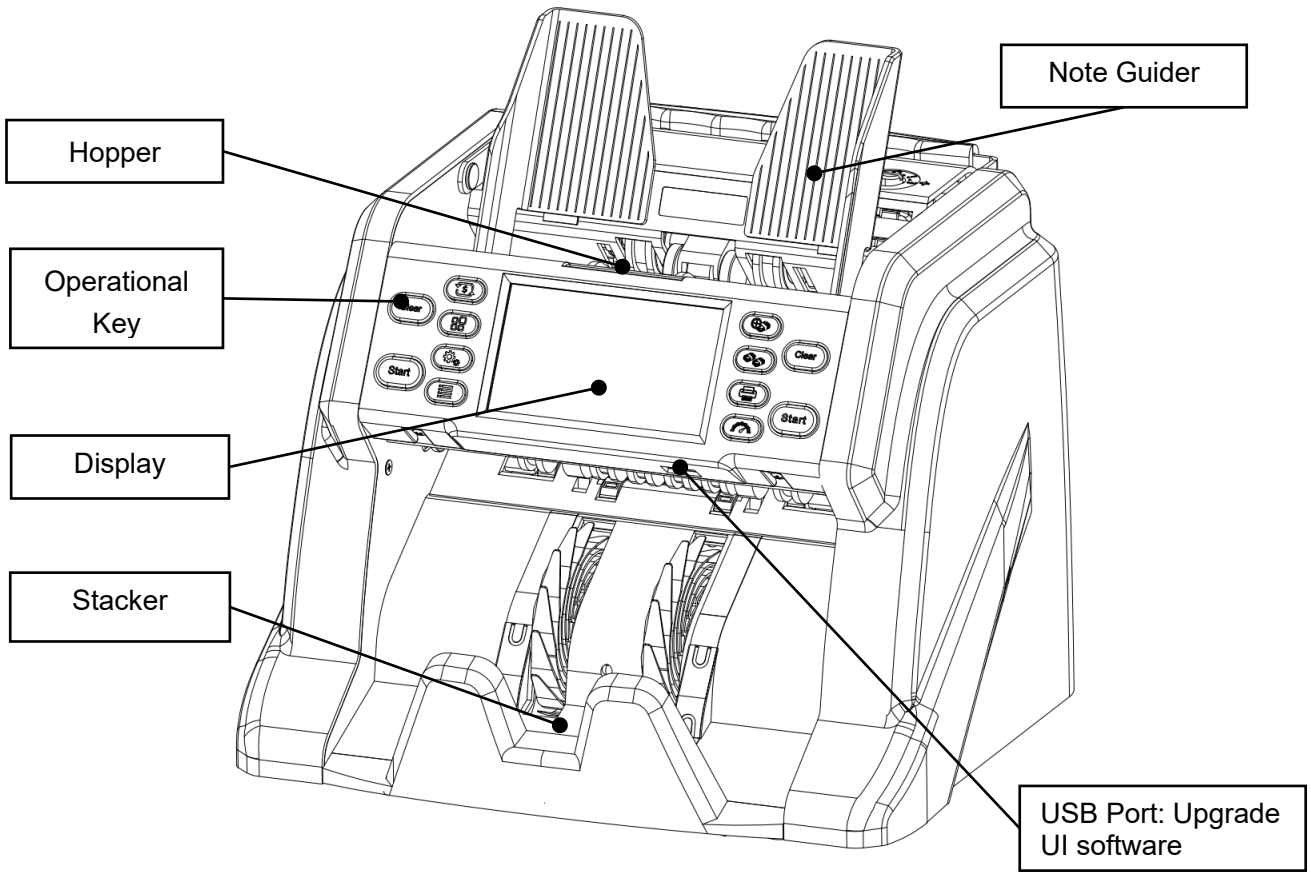
Fig. 1

1.3 Machine and Accessories

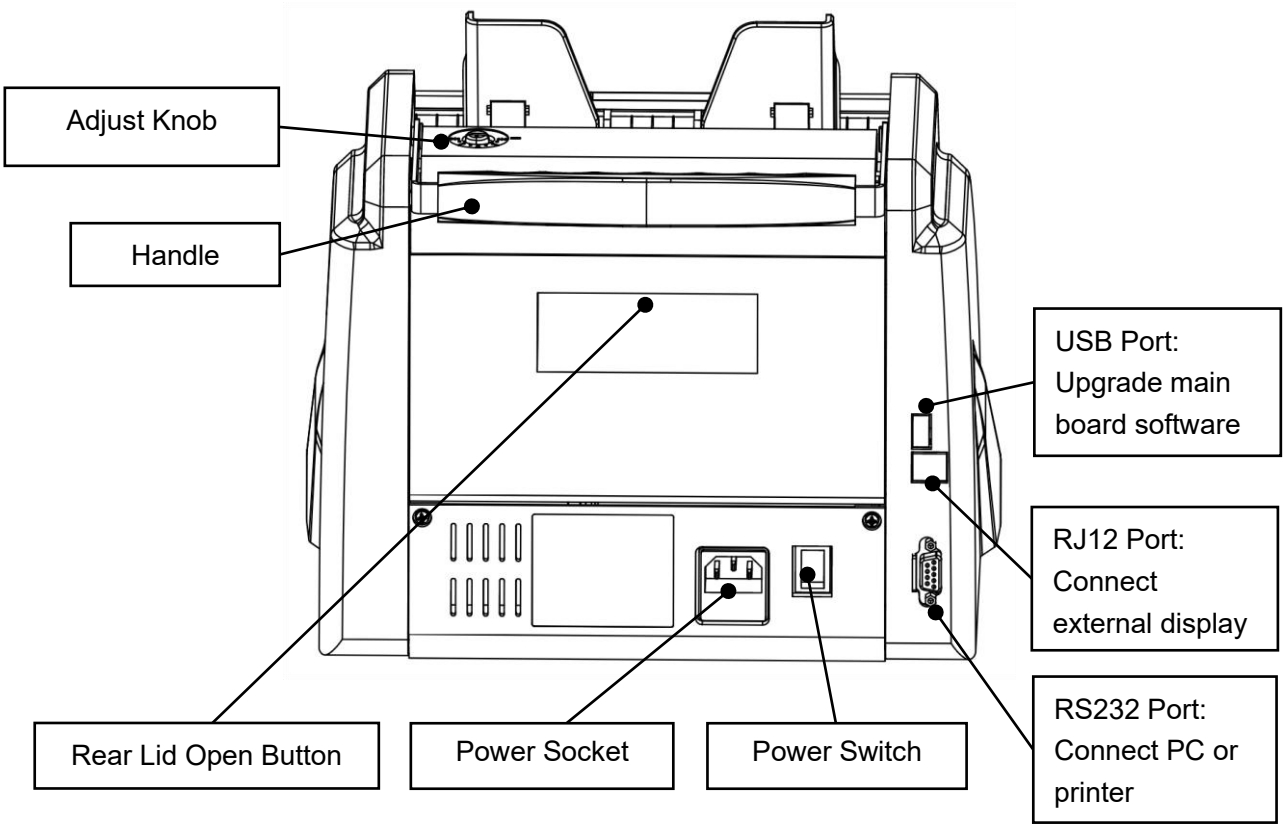
Machine	1PCS
Note Guider (left)	1PCS
Note Guider (right)	1PCS
User Manual	1PCS
Power Cord	1PCS
Clean Brush	1PCS
Warranty Card	1PCS
Dust Cover	1PCS

1.4 Appearance

1.4.1 Front appearance



1.4.2 Back appearance



1.5 Specification

Dimension(L×W×H)	300mm×247mm×287mm
Weight	5.8kg
Currency capacity	Support up to 20 countries
Power Supply	AC100-240V, 50/60Hz ±10%
Counting Mode	MIX Counting Mode, Single Denomination Counting Mode, Piece Counting Mode, Automatic Recognition Mode, Multi-currency Mixed Counting Mode
Counting Speed	800/1000/1200 pcs/min (**MIX**、**SDC**、**CNT** mode)
Counterfeit Detection	UV/MG/MT/IR/CIS
Batch Quantity	0~200
Display	4.3 inch TFT screen
Hopper Capacity	Maximum 600pcs
Stacker Capacity	200pcs

Sortable Notes Size：	Length: 120mm~180mm Width: 50mm ~90mm Thickness: 0.05mm~0.15mm
Power Consumption	Sleeping Mode≤15W, During Operation≤50W
Noise	60-75DB
Software Upgrade	USB
External Display	Optional
Working Condition	Temperature (0~40°C)/ Humidity (40~90%) Air Pressure (70-106kpa)
Storing Condition	Temperature (-40~55°C)/Humidity (10~95%) Air Pressure (70-106kpa)

1.6 Startup Readiness

Warm tip: In order to ensure smooth counting, please open the box of the machine and load the left and right note guiders. The left and right note guiders are in the position shown in the box below, as shown in Fig. 2 below:

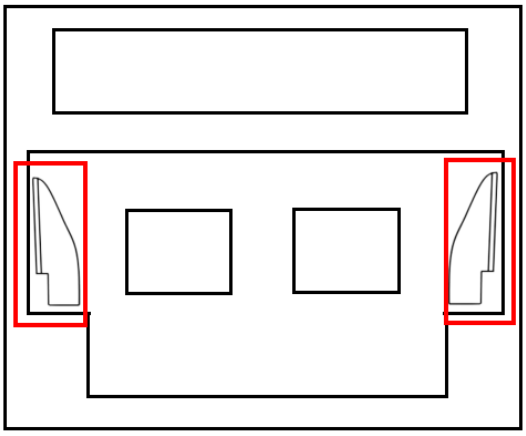


Fig. 2

1) Take out the left note guider, and install it into the left rail, vertical downward pressure on the note guider, until you hear the “click” sound, that is, the note guider has been assembled in place, as follows Fig. 3:

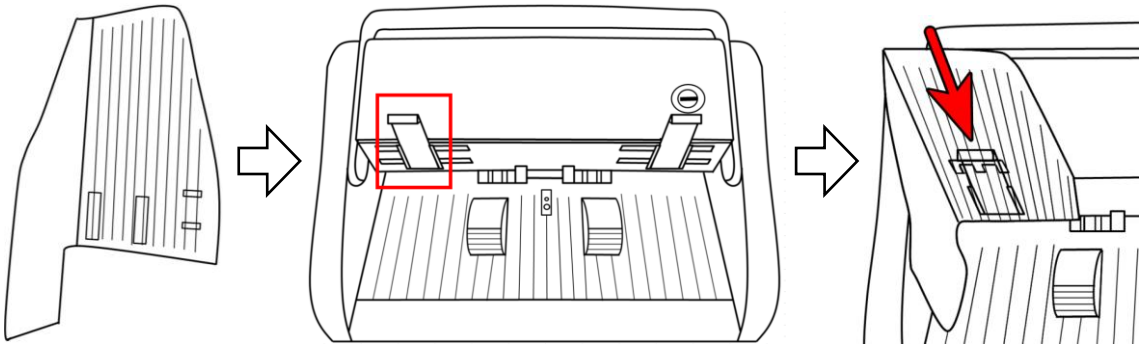


Fig. 3

2) Take out the right note guider, and install it in the same way. After both of note guiders are installed, move the handle to the back of the machine as shown in Fig. 4 below:

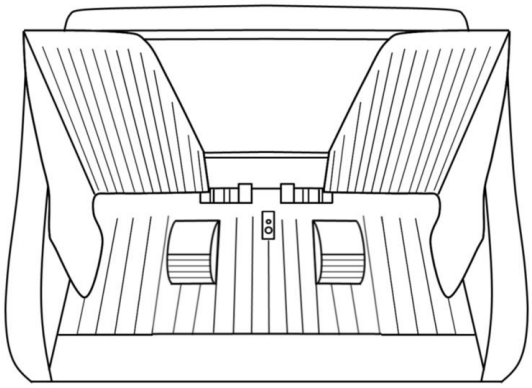


Fig. 4

3) Turn on the machine, first of all, the machine enters the loading interface. After the loading is completed, the machine enters the self-test interface, as shown in Fig. 5. After successful self-test, machine will enter the main interface, as shown in Fig. 6 below:

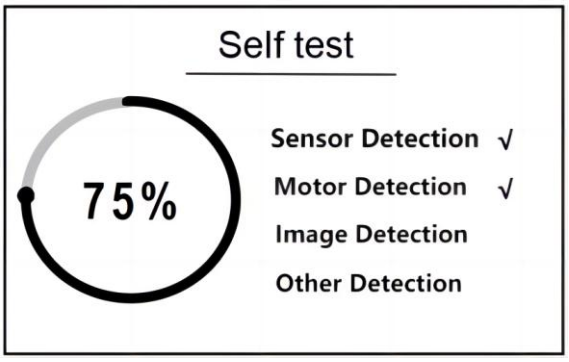


Fig. 5

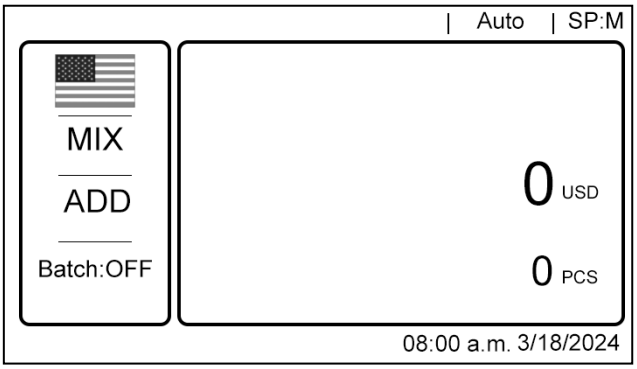


Fig. 6

1.7 Banknote Arrangement

1) Place the handle on the back of the machine before counting the banknotes.

2) Please sort and organize the banknotes to be counted according to their sizes before placing them in the hopper. The banknotes to be counted should be organized in advance when they are wrinkled or arched, so as to improve the one-time passing rate of counting.

3) In the process of counting banknotes, it is necessary to adjust the limit positions of the left and right note guiders according to the maximum size of the current counting banknotes, so as to ensure that the banknotes can be accurately identified by relevant sensors. Take US dollars as an example, please sort out the banknotes first, and then adjust the limit position of the note guider according to the largest size of banknotes. Finally, put the banknotes into the hopper for counting, as shown in Fig. 7:

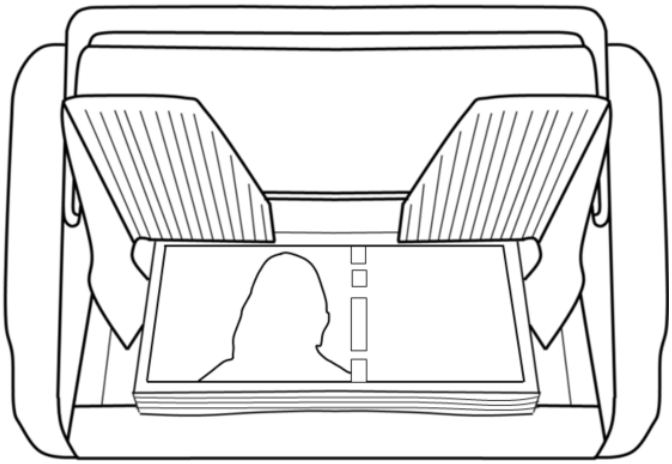


Fig. 7

1.8 Counting Error Code

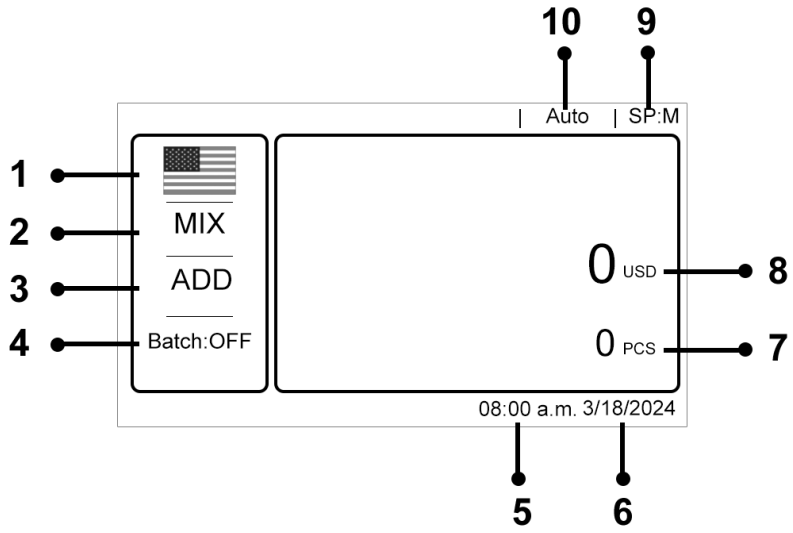
Error code	Cause	Solution
ERR-B001	Image Unknow	Not recognized, please check the banknotes and feed gap of machine.
ERR-B002	Different Denomination	Different denomination from the first banknote, please check the counting mode or banknotes.
ERR-B003	UV Reflection	UV reflection abnormal, please check the banknotes or count the banknote again.
ERR-B004	Magnetism Count	Side MG quantity abnormal, please put the banknotes in the middle of hopper.
ERR-B005	Magnetism Count	Middle MG quantity abnormal, please put the banknotes in the middle of hopper.

ERR-B006	Cash Size	Size abnormal, please check the banknotes and feed gap of machine.
ERR-B007	Image Timeout	Please recount.
ERR-B008	Currency Different	Under Automatic Recognition mode with ADD on, the currency is different from the first banknote, please check the counting mode or banknotes.
ERR-B009	Abnormal Width(long)	Size abnormal, please check the banknotes and feed gap of machine.
ERR-B010	Double	Double notes detected, please check the banknotes or feed gap of machine and count the banknote again.
ERR-B011	IR 1 Feature	IR image abnormal, please check the banknotes or count the banknote again.
ERR-B012	IR 2 Feature	IR image abnormal, please check the banknotes or count the banknote again.
ERR-B013	IR 3 Feature	IR image abnormal, please check the banknotes or count the banknote again.
ERR-B014	IR 4 Feature	IR image abnormal, please check the banknotes or count the banknote again.
ERR-B015	IR 5 Feature	IR image abnormal, please check the banknotes or count the banknote again.
ERR-B016	IR 6 Feature	IR image abnormal, please check the banknotes or count the banknote again.
ERR-B017	IR 7 Feature	IR image abnormal, please check the banknotes or count the banknote again.
ERR-B018	IR 8 Feature	IR image abnormal, please check the banknotes or count the banknote again.
ERR-B019	IR 9 Feature	IR image abnormal, please check the banknotes or count the banknote again.
ERR-B020	IR 10 Feature	IR image abnormal, please check the banknotes or count the banknote again.
ERR-B021	IR 11 Feature	IR image abnormal, please check the banknotes or count the banknote again.
ERR-B022	IR 12 Feature	IR image abnormal, please check the banknotes or count the banknote again.
ERR-B023	IR 13 Feature	IR image abnormal, please check the banknotes or count the banknote again.
ERR-B024	IR 14 Feature	IR image abnormal, please check the banknotes or count the banknote again.
ERR-B025	IR 15 Feature	IR image abnormal, please check the banknotes or count the banknote again.
ERR-B026	Position	Abnormal position, please put the banknotes in the middle of hopper
ERR-B032	Corner Point Error	Size abnormal, please check the banknotes and feed gap of machine.

Stacker Full	Stacker Full	Stacker is full, please remove the banknotes from stacker.
Stacker Error	Stacker Sensor Covered	Please remove the banknotes from stacker, or clean the stacker sensor.
Passage Error	Rear Passage Error	Please close the rear passage or clean the sensor

2. Introduction of Machine Functions

2.1 Display Interface and Touch Screen Interface Description

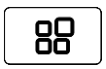


1. Currency selection key
2. Counting mode switch key
3. Accumulative function key
4. Batch setting key
5. Current time display
6. Current date display
7. Qty of banknotes counted
8. Counting Amount
9. Counting speed display
10. Auto/Manual mode display

Fig. 8

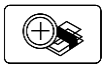
2.2 Operation Instructions for Function Keys

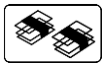
 **Currency selection key**

 **Counting mode switch key**

 **Function setting key**

 **Counting list key**

 **Accumulative function key**

 **Batch key**

 **Print key**

Speed switch key

Start the machine manually

Clear key

2.3 Auto/Manual Mode Settings

Click the “” button to enter the "User Menu" interface, as shown in Fig. 9, touch and select the “Auto/Manual” option to enter the Auto/Manual Mode selection, as shown in Fig. 10, touch and select “Auto Mode” or “Manual Mode” according to your needs, and then Touch the “” button in the upper right corner of the screen or click the “CLEAR” button to return to the main interface.

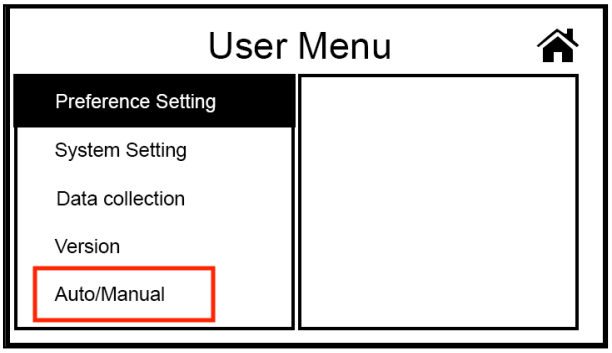


Fig. 9

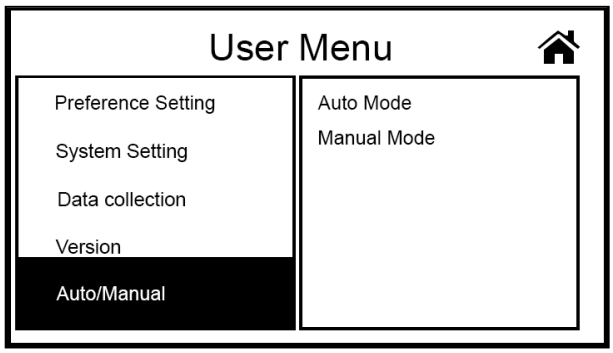


Fig. 10

Auto Mode: “Auto” appears in the upper right corner, as shown in Fig. 11. At this time, put the banknotes into the hopper of the machine, and the machine will automatically count the banknotes.

Manual Mode: “Manual” is displayed in the upper right corner. As shown in Fig. 12. At this time, the banknotes are put into the hopper of the machine, and the machine will not automatically count the banknotes. The “START” button must be pressed before the machine counts the banknotes.

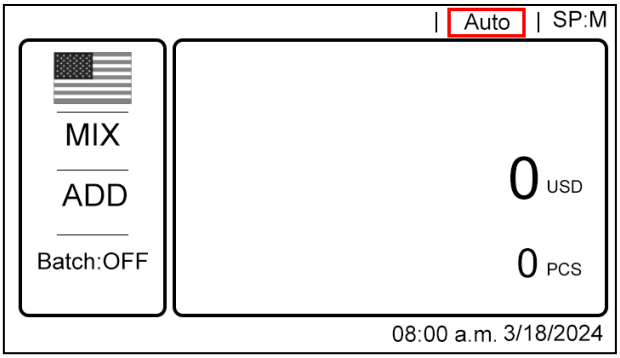


Fig. 11

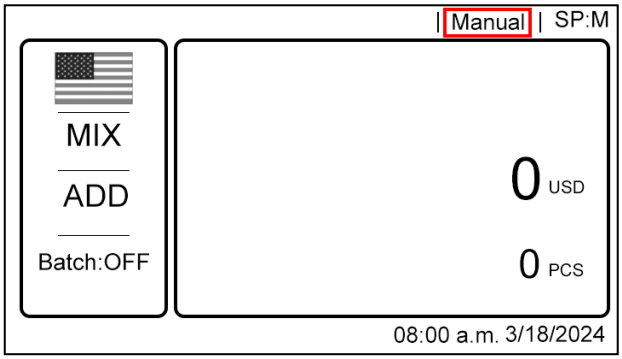


Fig. 12

2.4 Counting Mode Selection

2.4.1 Single National Currency Mode

Under the main interface of the machine, you can click the “” button on the left or touch the “” logo pattern in the upper left corner of the display screen, as shown in Fig. 13, enter the “Currency List” interface to select the currencies of different countries, as shown in the following Fig. 14:

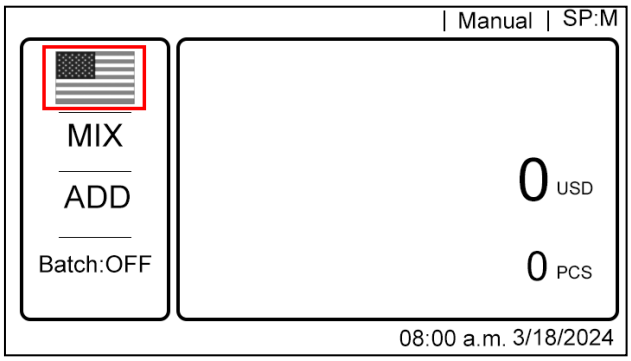
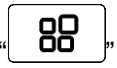


Fig. 13



Fig. 14

Take the dollar as an example. After touching the “” button, the display screen returns to the main interface, and the “” logo graphic is displayed in the upper left corner, indicating that the machine is in the mode of counting US dollar bills.

Press the “” button on the left side of the button panel, or click “MIX” on the left side of the display screen to cycle between three counting modes. The three counting modes cycle according to MIX-SDC-CNT, as shown in Fig. 15 below.

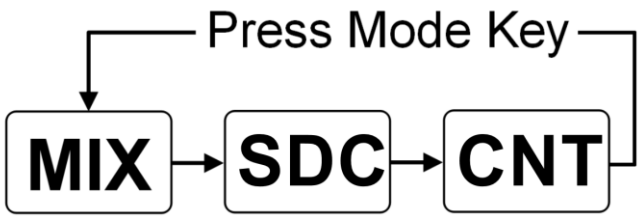


Fig. 15

2.4.2 <MIX> Mix Denomination Count Mode

Fig. 16 below shows the interface of the mixed denomination counting mode in the automatic state of the machine. In this mode, the machine will count all denominations of the same national currency, and record the detailed information of the counted banknotes, including the total amount and total

number of banknotes in the stacker, which is convenient for users to view. When this mode is selected, the machine will count by the speed gear selected (L: 800 pcs/min; M: 1000 pcs/min, H: 1200 pcs/min, 3 optional).

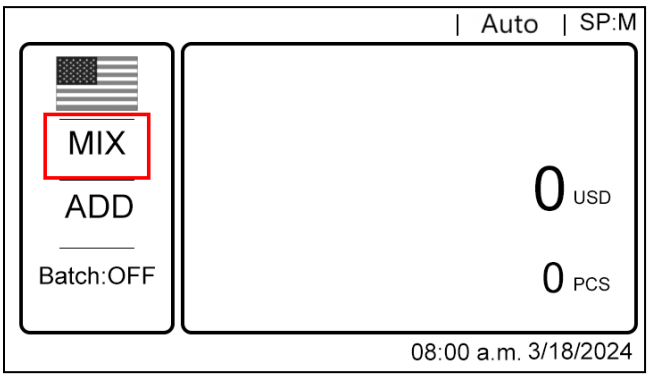


Fig. 16

2.4.3 <SDC> Single Denomination Counting Mode

Fig. 17 below shows the single denomination counting mode in the automatic state of the machine. In this mode, the machine will take the first banknote to be counted as a reference to count the banknotes of the same currency and the same denomination, and at the same time count the detailed information of the banknotes in the banknote stacker, including the total amount and the total number of banknotes, which is convenient for users to view (Note: in this mode, currency of different denominations cannot be put in, if a banknote of different denomination than the first recognized banknote is put in, machine will stop and report an error). When this mode is selected, the machine will count by the speed gear selected (L: 800 pcs/min; M: 1000 pcs/min, H: 1200 pcs/min, 3 optional).

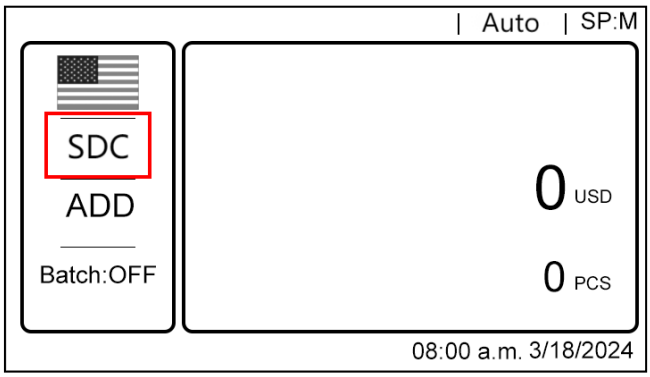


Fig. 17

2.4.4 <CNT> Piece Count Mode

Fig. 18 below shows the interface where the machine only performs quantity counting in the automatic state. This model does not limit the currency, but only counts the number of banknotes. When this mode is selected, the machine counts by the speed gear selected (L: 800 pcs/min; M: 1000 pcs/min, H: 1200 pcs/min, 3 optional).

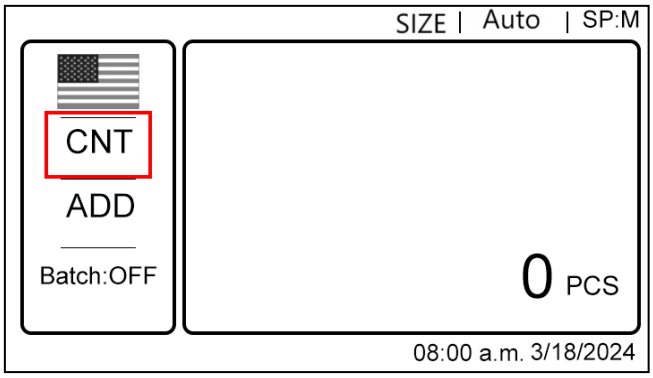


Fig. 18

Note: In MIX mixed counting mode and SDC single denomination counting mode, the machine has image, magnetic detection, UV detection and double detection functions. In CNT counting mode, only double detection function and size detection function are available.

2.4.5 Multi-Currency Counting Mode

Multi-currency counting: The currencies of various countries are mixed together and put into the machine for counting, and the quantity and amount of each currency are displayed according to the currency name. Note: The machine can only recognize the supported national currency displayed by the machine. Machine will stop and report an error when counting the unsupported currencies. Please change the counting mode of the machine to MIX mixed counting mode first.

On the main interface, click the “” button on the left or touch the “” sign in the upper left corner of the display screen to enter the currency selection interface, as shown in Fig. 19. Then click “” Multi-currency mixed counting mode, and the display screen will automatically switch to the main interface. Fig. 20 below shows:



Fig. 19

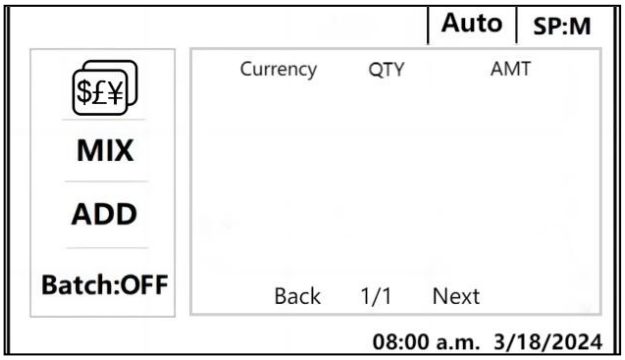


Fig. 20

Example: Put a handful of bills (including dollars, euros, pounds, Canadian dollars) into the machine to count and count. Details of counting are shown in Fig. 21 below:

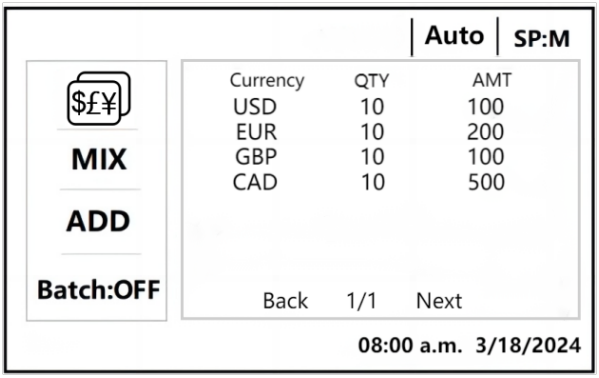


Fig. 21

2.4.6 Automatic Recognition Mode

Automatic identification: Automatic identification of currency types put into the machine. In the process of counting banknotes, the machine identifies banknotes of all denominations in the same country based on the first banknote passing through the sensor. When it recognizes banknotes from other countries, machine will stop and report an error. The machine can only recognize the currency of the country displayed in the program.

Click the "" button on the left side of the main interface or touch the "" sign in the upper left corner of the display screen to enter the currency selection interface, as shown in Fig. 22. Click "" Automatic Recognition Mode, and the display screen will automatically switch to the main interface after selection, as shown in Fig. 23 below:



Fig. 22

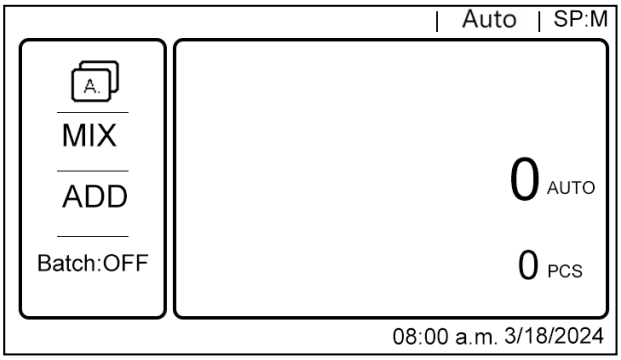


Fig. 23

2.5 Counting Speed Setting

The machine has three counting speed options: high speed (1200PCS/min), medium speed (1000PCS/min) and low speed (800PCS/min). In any counting mode, you can switch between different counting speeds by clicking the "" button on the right. As shown in the red box in Fig. 24 below, SP: M means that the machine is in medium counting speed mode at this time.

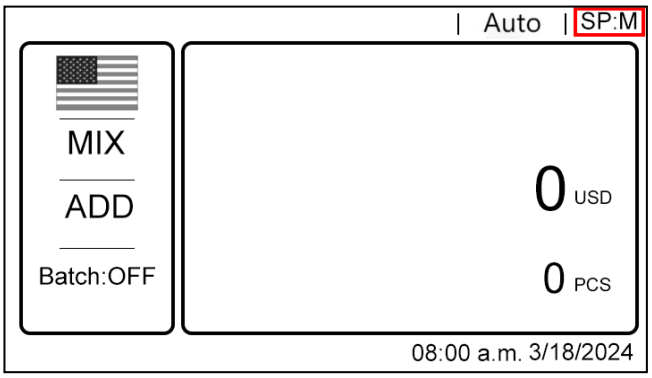


Fig. 24

The following table shows the corresponding counting speeds for each count speed gear in each count mode:

Counting mode	H	M	L
MIX	1200PCS/min	1000PCS/min	800PCS/min
SDC	1200PCS/min	1000PCS/min	800PCS/min
CNT	1200PCS/min	1000PCS/min	800PCS/min

2.6 Check Counting Details

In the MIX mixed counting mode or SDC single denomination counting mode, press the "" button on the left side of the frame or touch the amount counting display area on the screen after the end of the counting, as shown in Fig. 25, you can view the details of the counting by touching the box area, as shown in Fig. 26, taking USD as an example.

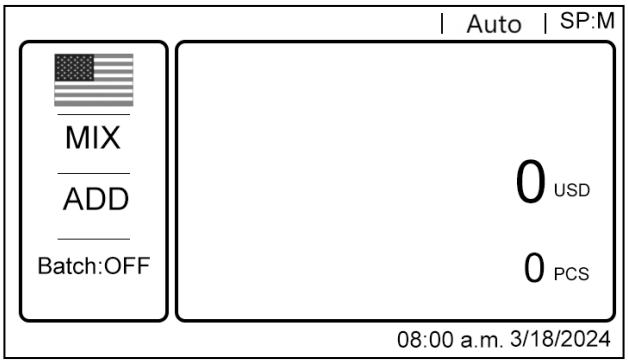


Fig. 25

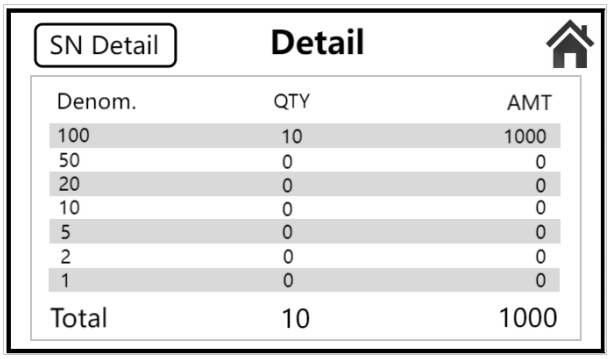


Fig. 26

This interface is used to view the number of banknotes of the corresponding country denomination and the total amount of that denomination, as well as the total amount of all banknotes. To exit the interface, touch the "" button in the upper right corner of the screen or click the "CLEAR" button.

2.7 Check the Details of Serial Number

1) This function requires adjusting the counting mode to MIX mixed counting or SDC single denomination counting mode.

2) After the counting is over, if you want to check the details of the Serial Number, please press the "" button or touch the amount display area on the screen to enter the counting details interface. Then press the "" button or touch the "SN Detail" button as shown in Fig. 27 to enter the serial number details interface, as shown in Fig. 28 below. Touch the "Back" and "Next" buttons at the bottom of the interface to turn up and down to see the serial number of the bill. If you need to exit the current

interface, please touch the “ ” button in the upper right corner of the screen or click the “CLEAR” button.

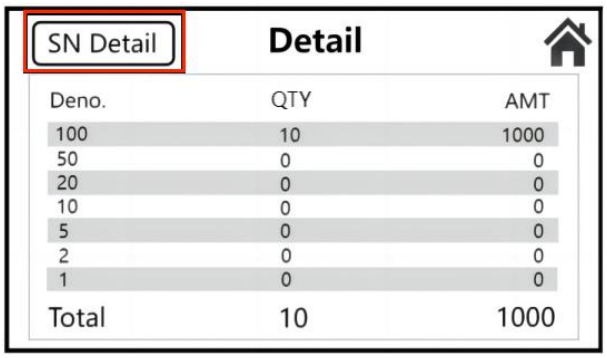


Fig. 27

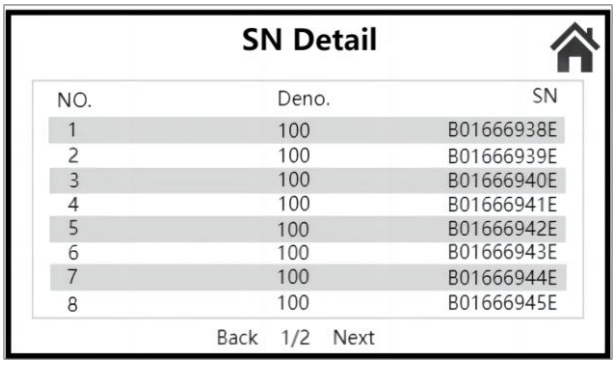


Fig. 28

There is a switch for serial number checking function, and the specific switch steps refer to 2.10.3

2.8 Batch Setting

1) Press the “ ” button on the main interface, and the preset number of the main interface will be switched between “10/25/50/100/Custom/OFF”, as shown in Fig. 29, the lower left corner of the main interface displays “Batch: 10” logo. When the preset number here is “OFF”, the machine defaults to 200. When the preset number reaches 200, the machine will automatically stop running.

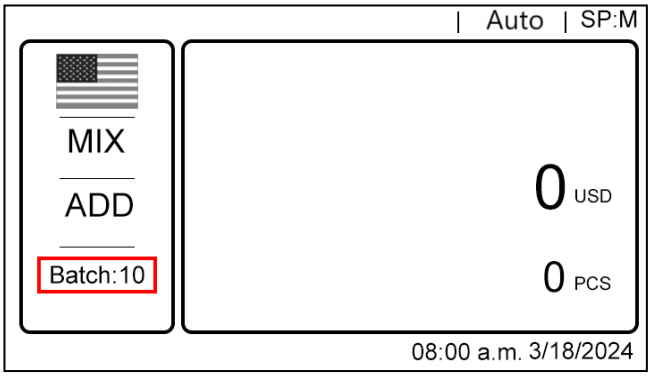


Fig. 29

2) Touch the preset number area of the main interface to enter the custom preset number interface, as shown in Fig. 30 below, click the number keypad below to enter the value within “1 ~ 200”, and then click the “SAVE” button below to SAVE the set preset number, and automatically switch back to the main interface. As shown in Fig. 31, set the preset number to 155. Note: When the number of presets exceeds 200, the machine cannot save, the default number of presets is 200.

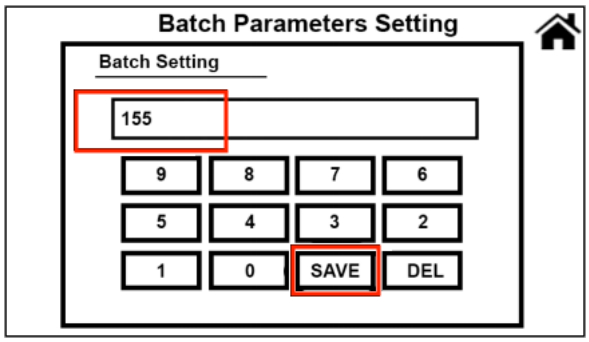


Fig. 30

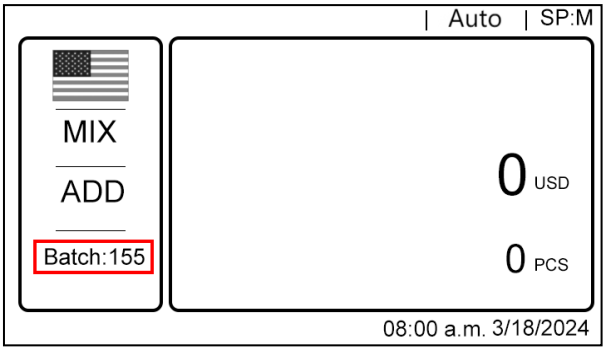


Fig. 31

3) Press the "" button to enter the "User Menu" interface, touch and select the "Preference Setting" option, as shown in Fig. 32, touch the "Batch" option on the right side of the screen, and the interface switches to the default preset number setting interface. The default preset value is "10/25/50/100", as shown in Fig. 33.

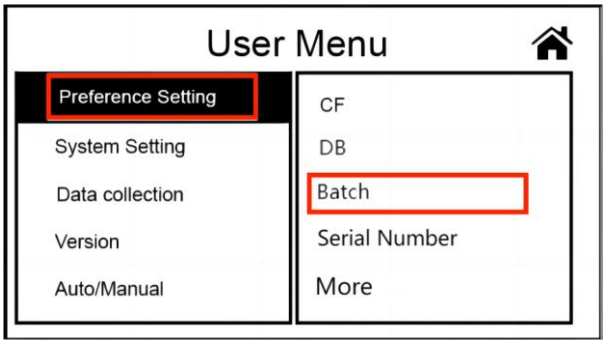


Fig. 32

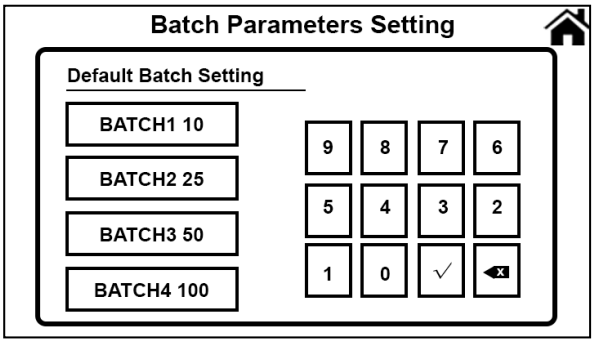


Fig. 33

4) If the default 4 sets of presets do not meet the needs of customers, the default presets can be modified as follows:

a. For example, change "BATCH1 10" to the preset number "155". First touch the screen and select "BATCH1 10" as shown in Fig. 34, and then click "" to clear the original preset number, as shown in Fig. 35.

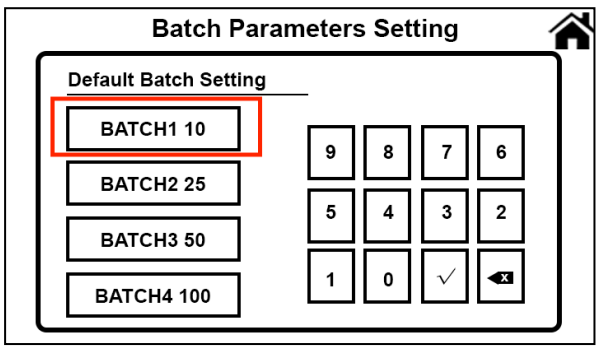


Fig. 34

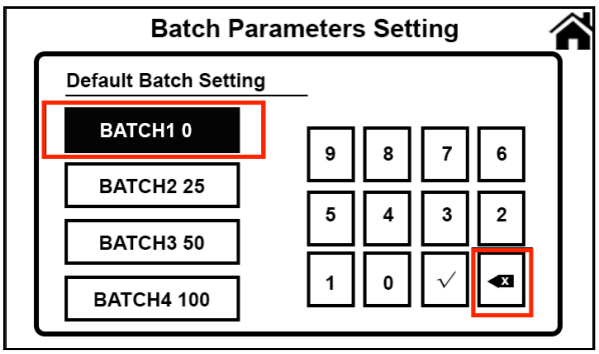


Fig. 35

b. Then click the number button 1-5-5 on the right in turn, and then click "√" to complete the preset number setting, as shown in Fig. 36. The position of the main interface preset number is changed to "Batch: 155", as shown in Fig. 37.

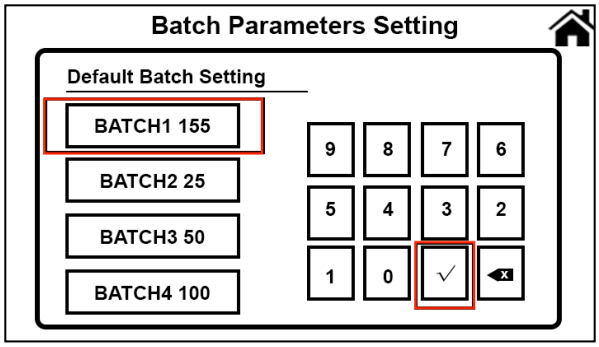


Fig. 36

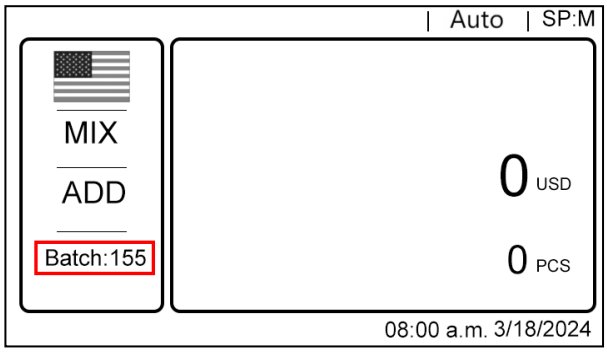


Fig. 37

c. At this time, the default preset number will become "155/25/50/100/". If you need to modify other default preset numbers, or restore the original preset number, refer to the above steps to set.

2.9 Accumulative Mode Settings

In any counting mode, you can turn on the machine's accumulative function by pressing the "" button on the right side or touching the "ADD" position on the screen. At the same time, the "ADD" letter logo on the left side of the main interface will change from gray to black. Fig. 38 shows the closed state of accumulative mode. Fig. 39 shows the accumulative mode on state.

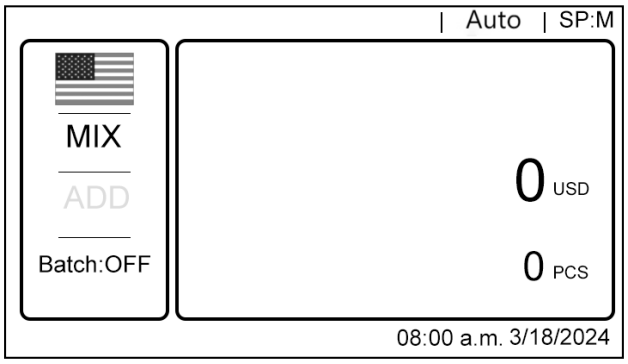


Fig. 38

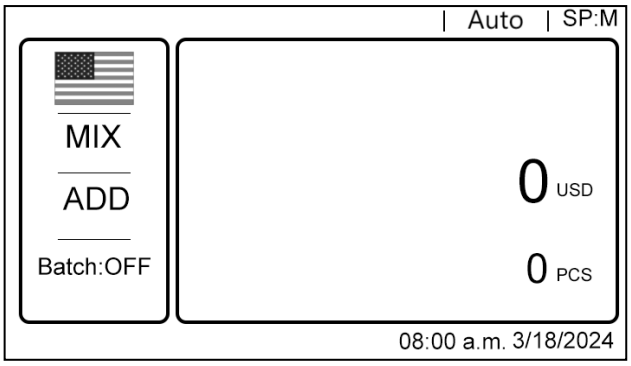


Fig. 39

1) Accumulative function is turned off: Put a handful of banknotes in the machine for counting, and the machine will display the number and amount of banknotes counted this time after counting. After taking out all the banknotes in the stacker, put them back into the banknotes for counting. After counting, the

machine will only display the banknote information counted this time, but not the banknote information counted before.

2) Accumulative function is turned on: Put a handful of banknotes into the machine for the first count, and the machine will display the number and amount of banknotes counted this time after the count is completed. After taking out all the banknotes in the stacker, put them back into the banknotes for the second count. When the banknotes are not removed from the stacker after counting, the machine will display the number and amount of banknotes counted for the second time. When the banknotes are removed from the stacker, the machine will accumulate the number and amount of the banknotes counted for the second time and the first time. At this time, press CLEAR key to clear the first counting information, and then press CLEAR key to clear all counting information.

3) In the counting process, if there is a malfunction or abnormality such as jammed banknotes, which may lead to inaccurate counting results, the machine will automatically delete the information of the counted banknotes and prompt to count again.

4) When switching currencies in automatic recognition mode, the accumulative function will fail.

2.10 User Settings

2.10.1 Counterfeit Detection Level Setting

1) Press the “” key on the left to enter the “User Menu” interface, as shown in Fig. 40. Then touch the “Preference Setting” and enter the interface, as shown in Fig. 41.

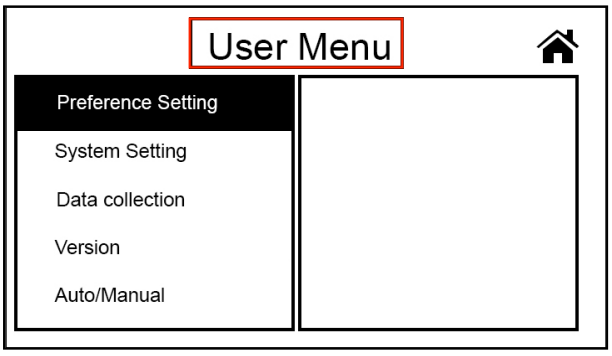


Fig. 40

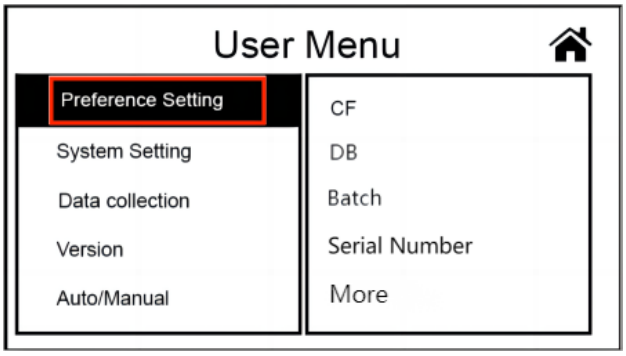


Fig. 41

2) As shown in Fig. 42, touch the first “CF” button on the display to enter the interface of counterfeit detection level setting. You need to input the correct password to enter this interface, as shown in Fig. 43.

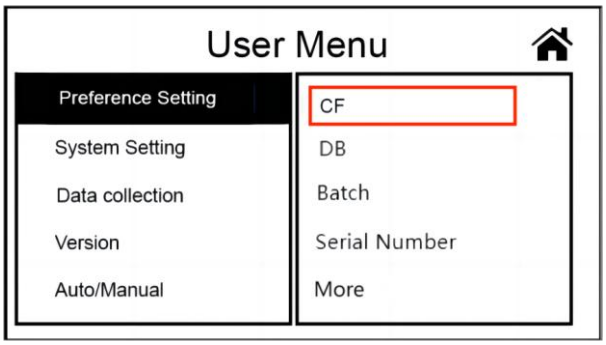


Fig. 44

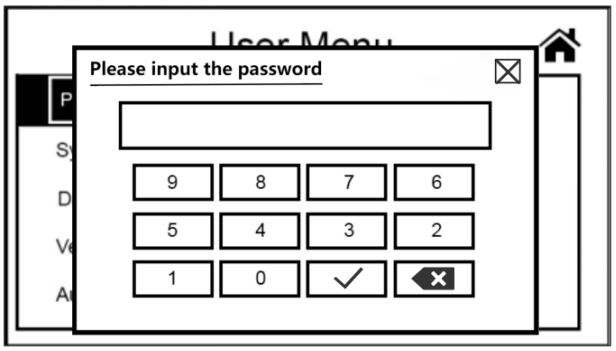


Fig. 45

3) Customers can carry out the corresponding counterfeit detection level settings according to the actual demand for counting as shown in Fig. 46.

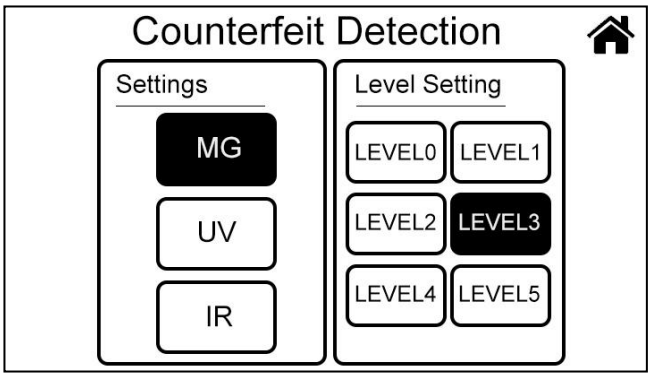


Fig. 46

4) If the customers wish to change the MG counterfeit detection level, please do as following:

a. As in Fig. 47, touch the “MG” option on the left side of the screen, and the default level of the machine is “LEVEL3”.

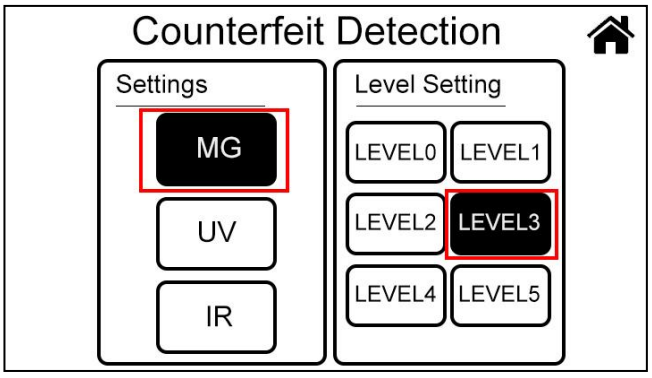


Fig. 47

b. Example: We want to improve the counterfeit detection level of “MG”. We choose “Level 4”, and each counterfeit detection level has 6 gears, ranging from 0 to 5. 0 represents the ability to detect counterfeit off, 1 represents the weakest ability to detect counterfeit. A low detection level enhances the smooth counting of genuine banknotes but at the same time reduces the ability to catch counterfeit notes, while a high detection level enhances the ability to catch counterfeit notes but at the same time may result in

the error reports. The customer can change the gear value according to the actual demand, as shown in Fig. 48. After selection, the machine can automatically save the setting. Touch the “” key on the upper right corner of the screen to return to the main interface or click the “CLEAR” key to return to the previous interface.

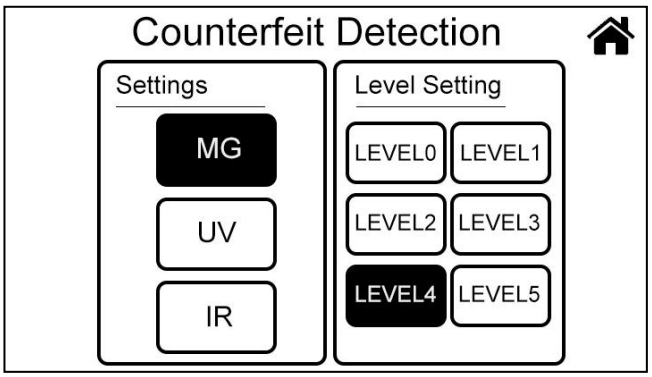


Fig. 48

2.10.2 DB Counterfeit Detection Level Setting

1) Press the “” key on the left to enter the “User Menu” interface, as shown in Fig. 49. Then touch the “Preference Setting” and enter the interface, as shown in Fig. 50.

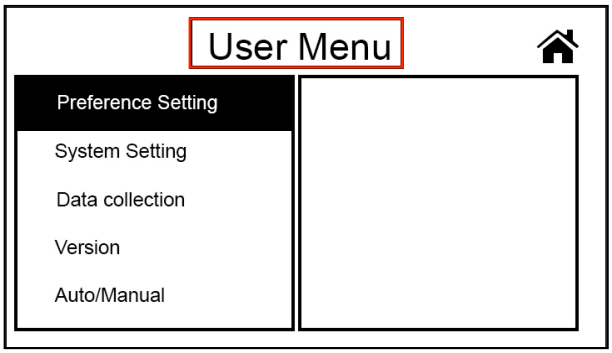


Fig. 49

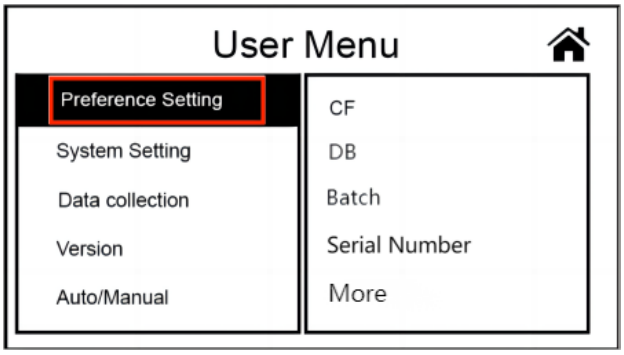


Fig. 50

2) As shown in Fig. 51, touch the second “DB” option to enter the interface of DB counterfeit detection level setting. Input the correct password before entering the interface, as shown in Fig. 52.

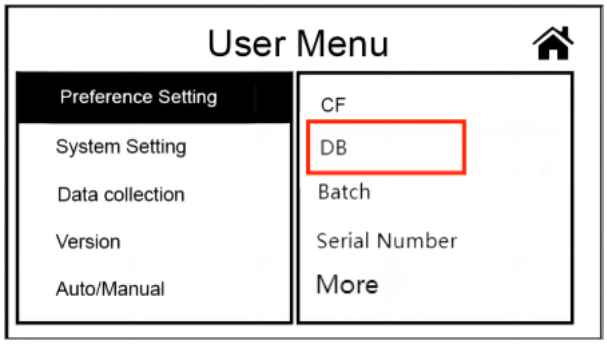


Fig. 51

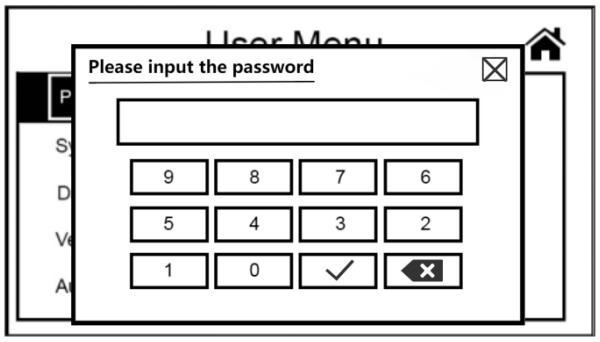


Fig. 52

3) The customer can set DB counterfeit detection level in the interface as shown in Fig. 53. There are 6 gears for DB counterfeit detection level, ranging from 0 to 5. 0 represents the ability to detect counterfeit off, 1 represents the weakest ability to detect counterfeit, and 5 represents the strongest ability to detect counterfeit. A low detection level enhances the smooth counting of genuine banknotes but at the same time reduces the ability to catch double notes, while a high detection level enhances the ability to catch double notes but at the same time may result in the DB error reports. Therefore, when the rate of DB errors is high, you can lower the DB detection level, and when double notes cannot be caught, you can increase the DB detection level. Customers can change the detection level according to their actual needs. After selection, the machine will save it automatically. Touch the "" key on the upper right corner of the screen to return to the main interface or click the "CLEAR" key to return to the previous interface.

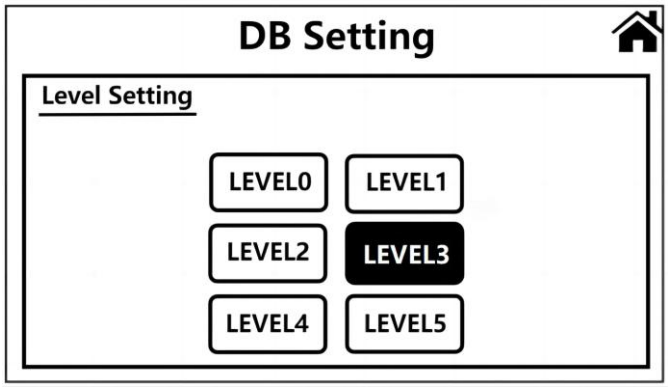


Fig. 53

2.10.3 Serial Number Function Setting

1) Press the "" key on the left to enter the "User Menu" interface, as shown in Fig. 54. Then touch the "Preference Setting" and enter the interface, as shown in Fig. 55.

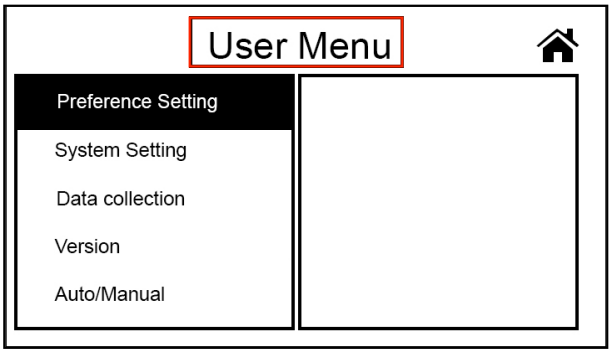


Fig. 54

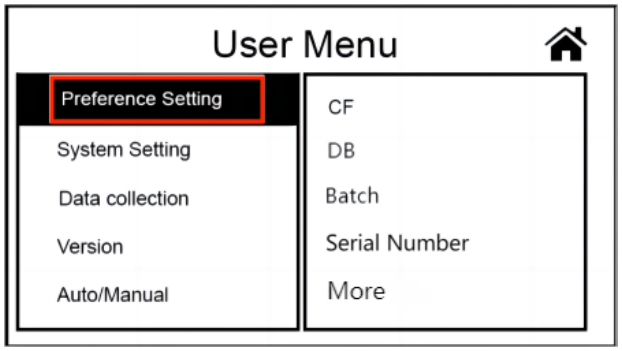


Fig. 55

2) As shown in Fig. 56, touch the forth option “Serial Number” to enter the serial number switch setting interface, as shown in Fig. 57. Customers can set serial number reading in this interface. The “SN.Reading”ON on the left side of the interface means to turn on the serial number reading function, and OFF means to turn off the serial number reading function. This function is only available in MIX mode and SDC mode. Under SN.Reading mode, the machine will read the serial numbers of the recognized currency (see 2.7). Touch the “ ” key on the upper right corner of the screen to return to the main interface or click the “CLEAR” key to return to the previous interface.

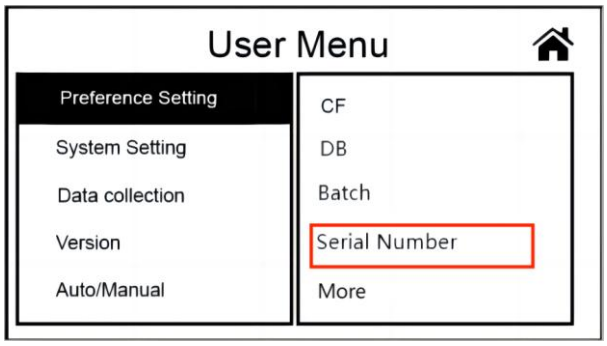


Fig. 56

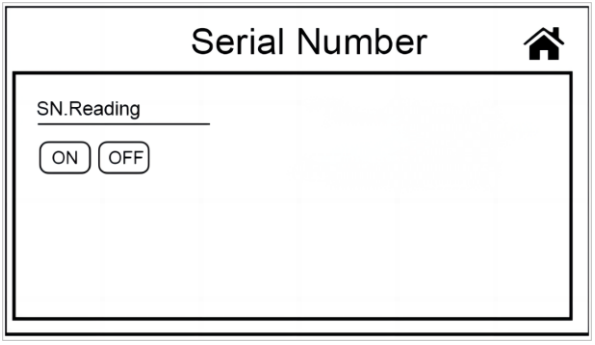


Fig. 57

2.10.4 External Display Protocol Setting

1) Press the “ ” key on the left to enter the “User Menu” interface, as shown in Fig. 58. Then touch the “Preference Setting” and enter the interface, as shown in Fig. 59.

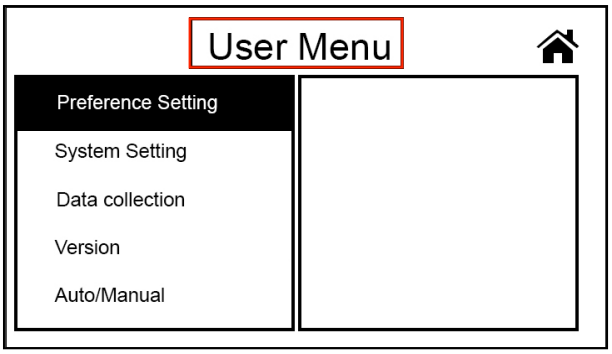


Fig. 58

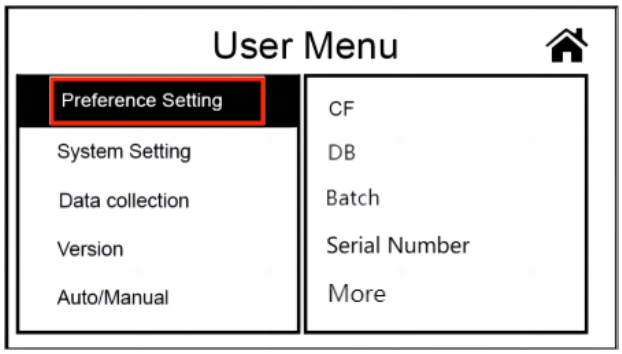


Fig. 59

2) As in Fig. 60, touch the fifth item “More” to enter the interface of external display protocol setting, as in Fig. 61, the customer can select the corresponding version of external display protocol in the interface. After selection, the bottom color will change from gray to blue, and the setting can be saved automatically. Touch the “” key on the upper right corner of the screen to return to the main interface or click the “CLEAR” key to return to the previous interface.

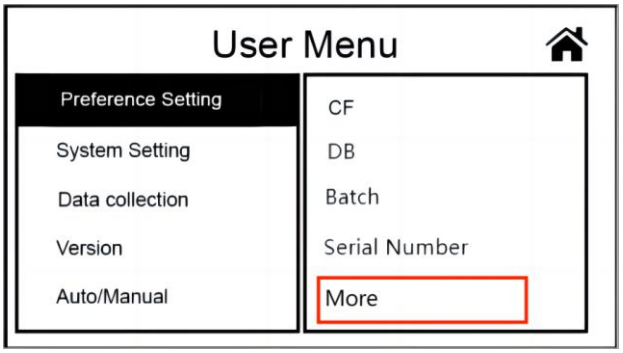


Fig. 60

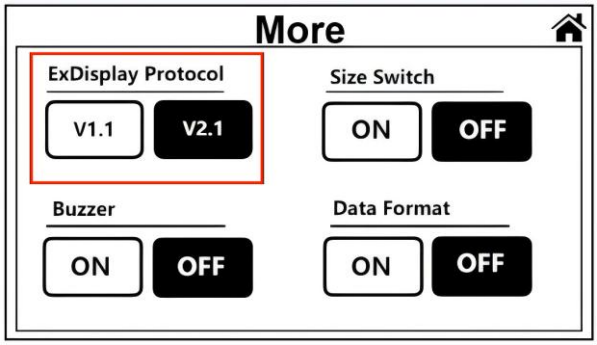
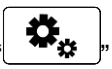


Fig. 61

3) This function is for customers who have our V1.1 version and V2.1 version of the external display, according to external display protocol they have, to select the corresponding options. It is not necessary to choose this option for external display which higher than V2.1 version.

2.10.5 Size Detection Function Setting in CNT Mode

1) Press the “” key on the left to enter the “User Menu” interface, as shown in Fig. 62. Then touch the “Preference Setting” and enter the interface, as shown in Fig. 63.

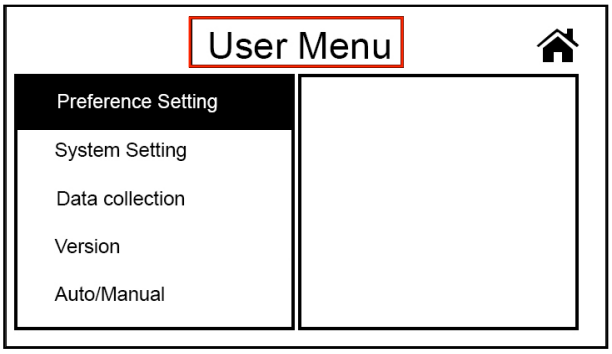


Fig. 62

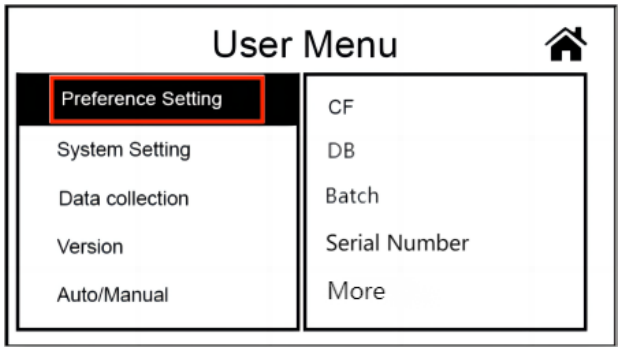


Fig. 63

2) As in Fig. 64, touch the fifth item “More” to enter the size detection function setting interface, as in Fig. 65, the customer can choose whether to turn on the size detection in this interface. After selection, the bottom color will change from gray to blue, and the machine can save it automatically. Touch the “ ” key on the upper right corner of the screen to return to the main interface or click the “CLEAR” key to return to the previous interface.

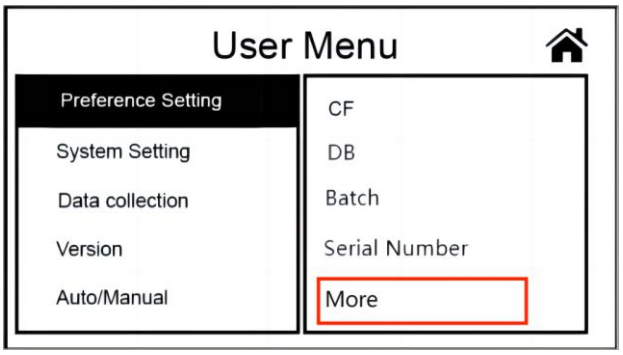


Fig. 64

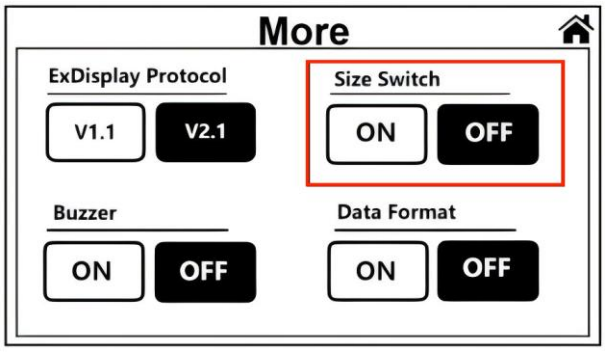


Fig. 65

3) As shown in Fig. 66, the size detection function is turned on, the upper right corner of the main interface has a “SIZE” symbol, as shown in Fig. 67. At this time in the CNT mode with first banknote to be counted as a reference, when the size difference from the first banknote exceeds the set value, the machine will stop and report an error.

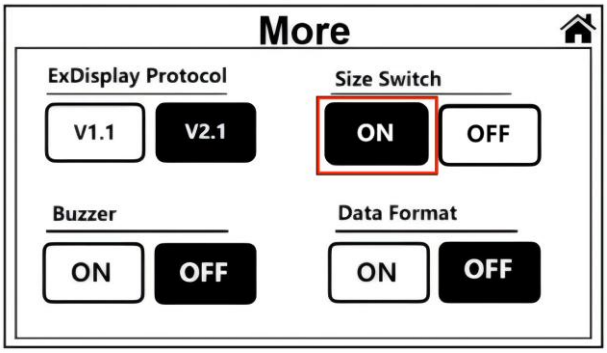


Fig. 66

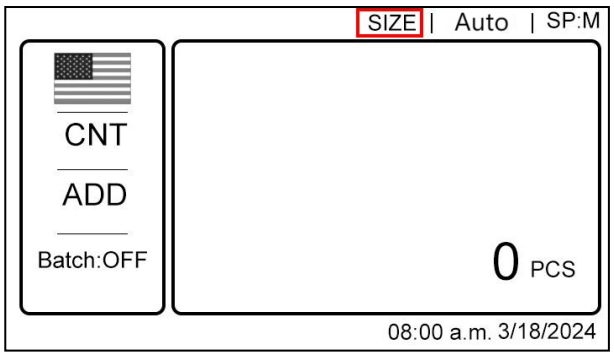


Fig. 67

4) As in Fig. 68, the size detection function is turned off, and there is no “SIZE” symbol in the upper right corner of the main interface, as in Fig. 69. At this time, you can count different sizes of currencies in CNT mode.

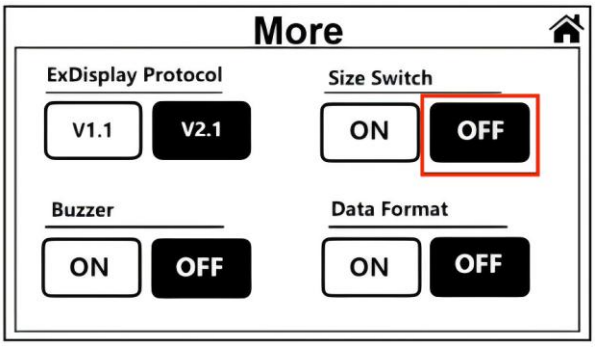


Fig. 68

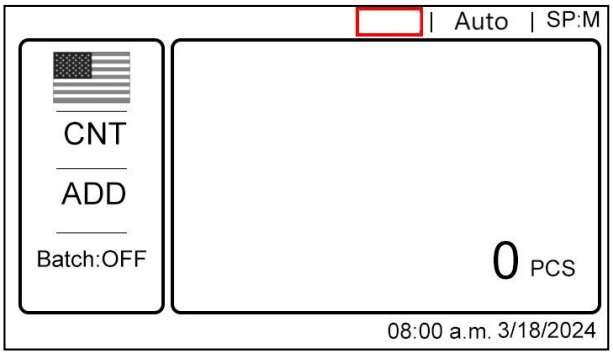


Fig. 69

2.10.6 Buzzer Setting

1) Press the “” key on the left to enter the “User Menu” interface, as shown in Fig. 70. Then touch the “Preference Setting” and enter the interface, as shown in Fig. 71.

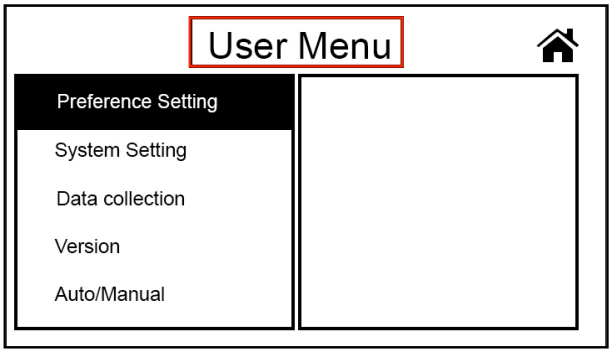


Fig. 70

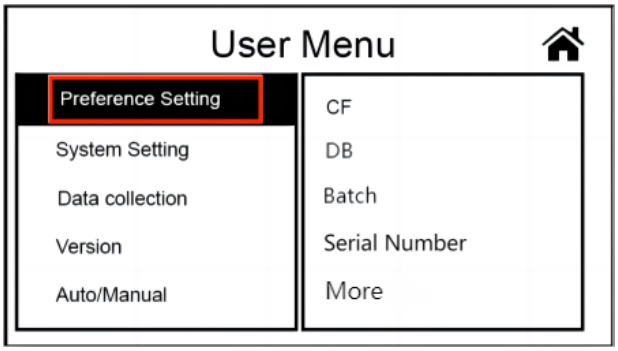


Fig. 71

2) As shown in Fig. 72, touch the fifth item “More” to enter the Buzzer setting interface, as shown in Fig. 73 below. Customers can choose settings in this interface, ON or OFF. After selection, the bottom color will change from gray to blue, and the machine can save it automatically. Touch the “” key on the upper right corner of the screen to return to the main interface or click the “CLEAR” key to return to the previous interface.

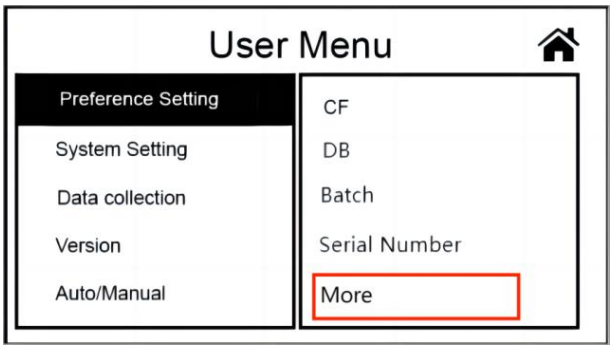


Fig. 72

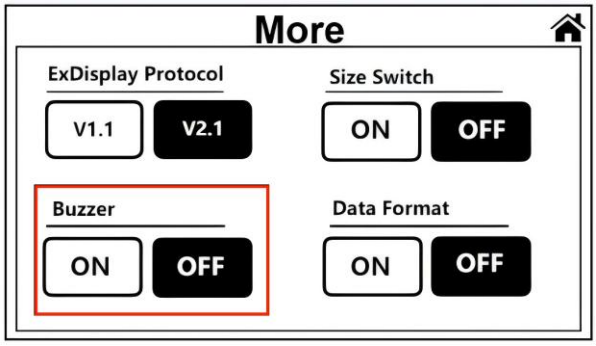


Fig. 73

3) “ON” means the buzzer function is turned on, and “OFF” means the buzzer function is turned off.

2.10.7 Data Format Setting

1) Press the “” key on the left to enter the “User Menu” interface, as shown in Fig. 74. Then touch the “Preference Setting” and enter the interface, as shown in Fig. 75.

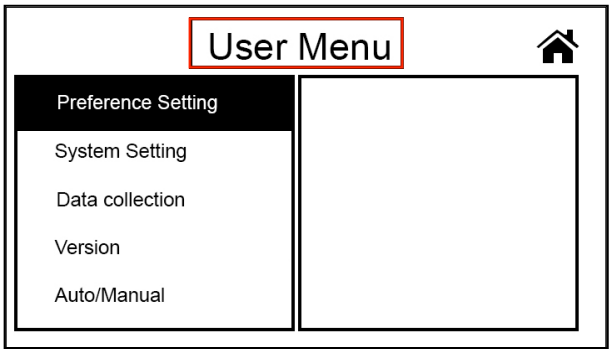


Fig. 74

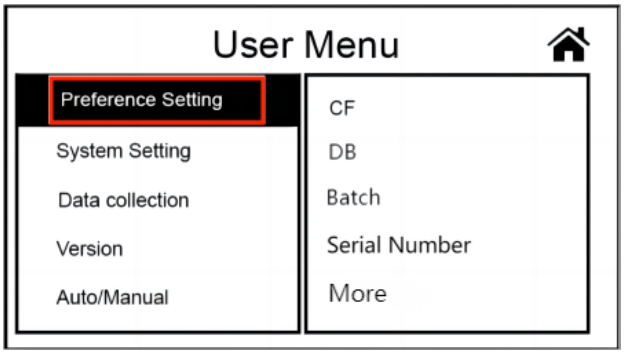


Fig. 75

2) As shown in Fig. 76, touch the fifth item “More” to enter the data format setting interface, as shown in Fig. 77 below. Customer can choose whether or not the counting details in main interface displayed in a format that includes a semicolon. After selection, the bottom color will change from gray to blue, and the machine can save it automatically. Touch the “” key on the upper right corner of the screen to return to the main interface or click the “CLEAR” key to return to the previous interface.

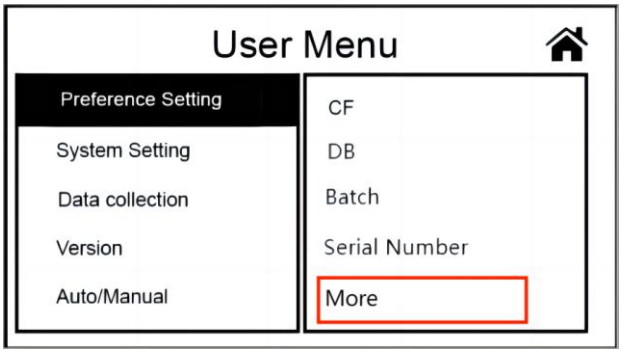


Fig. 76

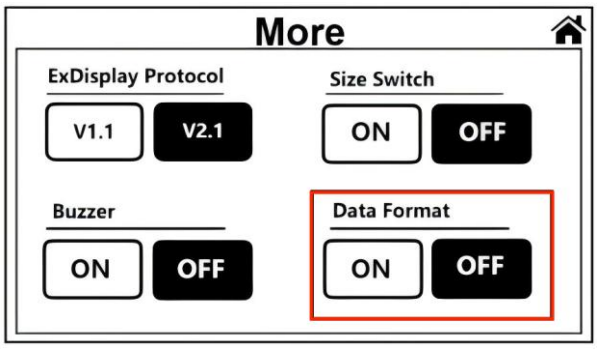


Fig. 77

3) “ON” means the data format is turned on, as shown in Fig. 78, and the main interface is displayed as Fig. 79.

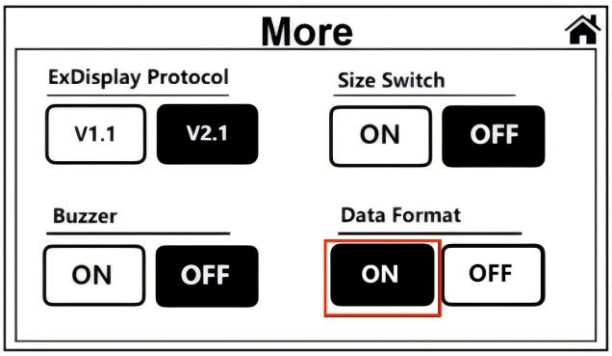


Fig. 78

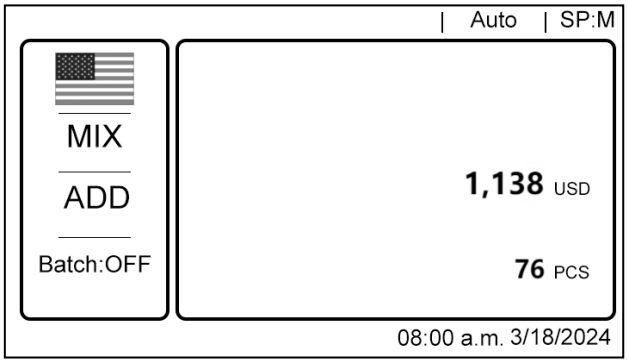


Fig. 79

4) “OFF” means the data format is turned off, as shown in Fig. 80, and the main interface is displayed as Fig. 81.

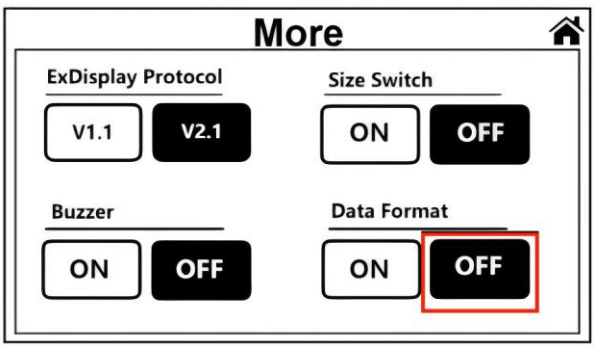


Fig. 80

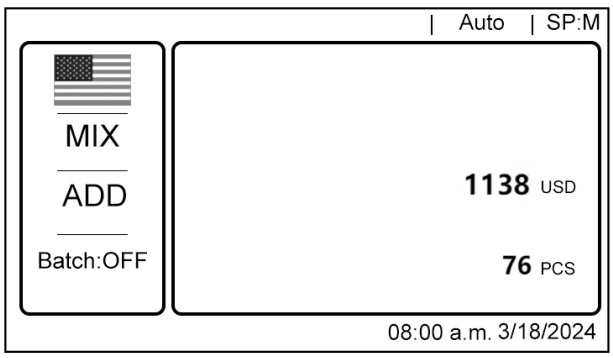


Fig. 81

2.11 System Setting

2.11.1 Time and Date Settings

1) Press the “” key on the left to enter the “User Menu” interface, as shown in Fig. 82. Then touch the “System Setting” and enter the interface, as shown in Fig. 83.

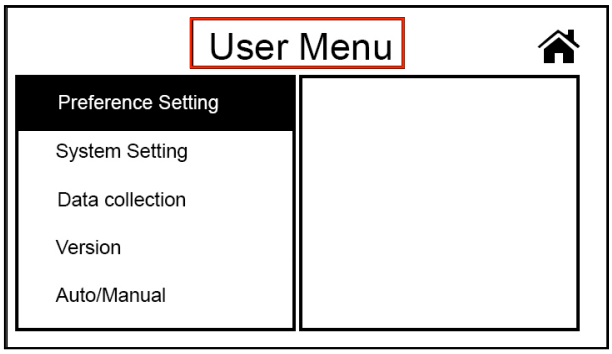


Fig. 82

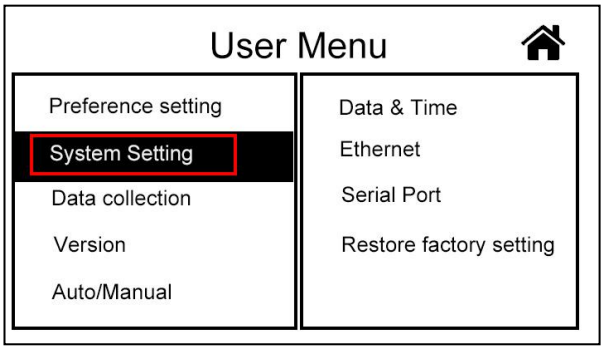


Fig. 83

2) Touch the first option “Date & Time” to enter the interface, as shown in Fig. 84 below. Touch the value of time and date, the interface will pop up the numeric keyboard, as shown in Fig. 85, at this time the customer can modify the time and date according to their own needs. After modification, the machine will save automatically. Touch the “ ” key on the upper right corner of the screen to return to the main interface or click the “CLEAR” key to return to the previous interface.

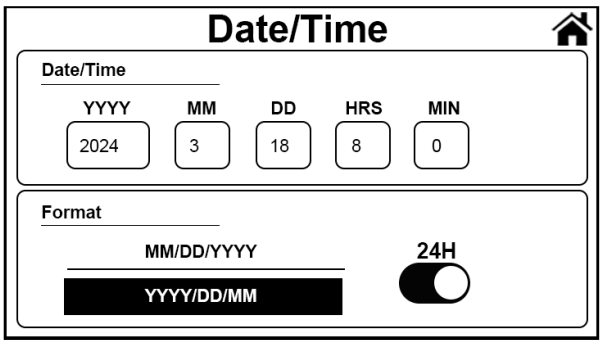


Fig. 84

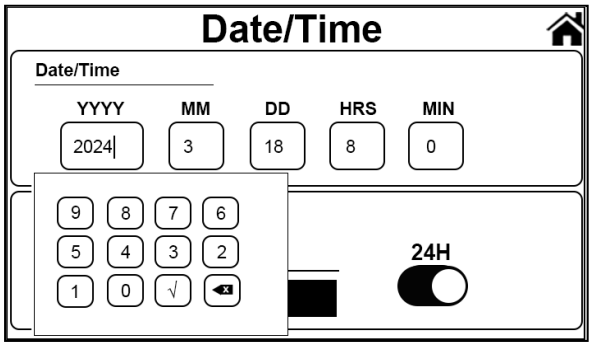


Fig. 85

2.11.2 Printer Serial Port Setting

1) Press the “ ” key on the left to enter the “User Menu” interface, as shown in Fig. 86. Then touch the “System Setting” and enter the interface, as shown in Fig. 87.

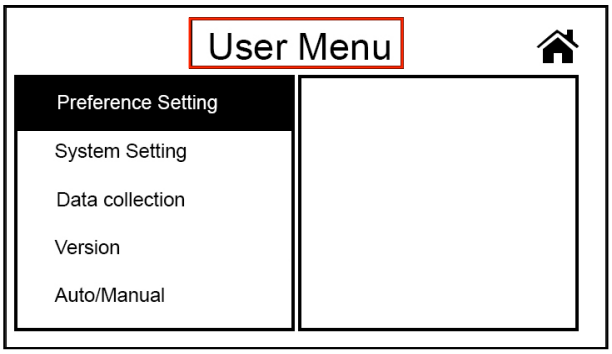


Fig. 86

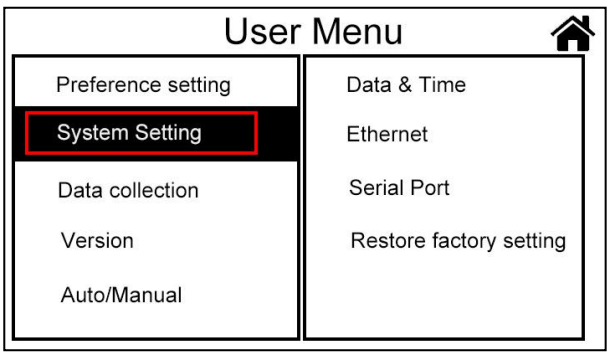


Fig. 87

2) As in Fig. 88, touch “Serial Port” to enter the serial port setting interface. On the left side of the interface, you can select printer and PC, the bottom color of the corresponding serial port will change to blue. As in Fig. 89, the interface is for choosing printer. After selecting the corresponding baud rate on the right side, only the baud rate of the printer can be switched, and the bottom color of the corresponding baud rate value will change to blue. After selection, the machine will save automatically.

Touch the “ ” key on the upper right corner of the screen to return to the main interface or click the “CLEAR” key to return to the previous interface.

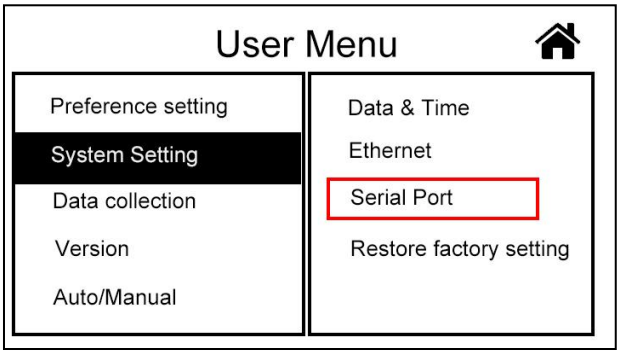


Fig. 88

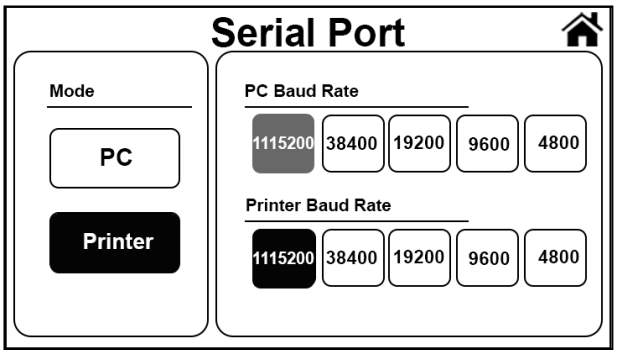


Fig. 89

3) Connect the printer to the power supply, connect one end of the data line in the printer box to the printer, and connect the other end to the RS232 interface of the machine.

4) After the external printer is connected and ready to print, press the “ ” key to print directly from the main interface or the counting list interface, and the printer will print the counting details. The format of the printout is shown in Fig. 90 below.

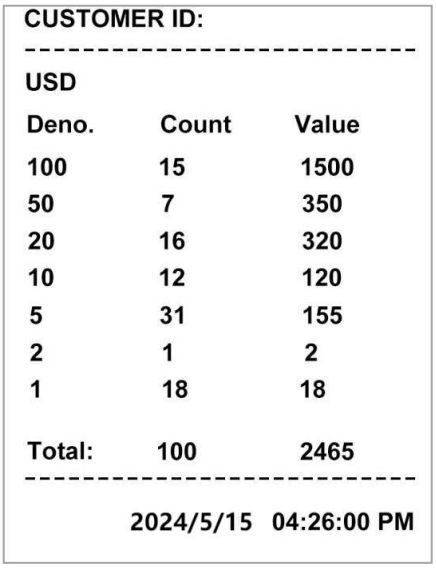


Fig. 90

2.11.3 PC Serial Port Setting

1) Press the “” key on the left to enter the “User Menu” interface, as shown in Fig. 91. Then touch the “System Setting” and enter the interface, as shown in Fig. 92.

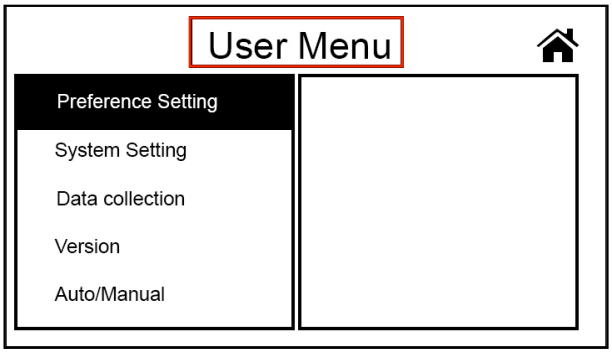


Fig. 91

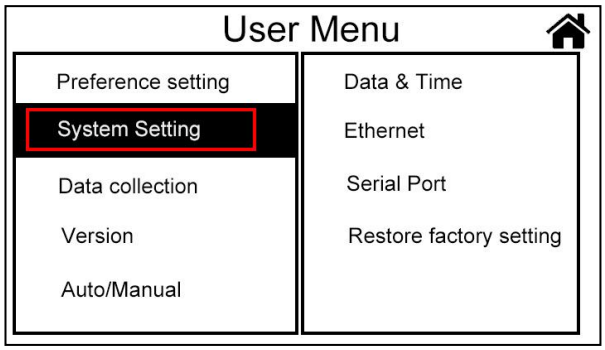


Fig. 92

2) As in Fig. 93, touch “Serial Port” to enter the serial port setting interface. On the left side of the interface, you can select printer and PC, the bottom color of the corresponding serial port will change to blue. As in Fig. 94, the interface is for choosing PC. After selecting the corresponding baud rate on the right side, only the baud rate of the PC can be switched, and the bottom color of the corresponding baud rate value will change to blue. After selection, the machine will save automatically. Touch the “” key on the upper right corner of the screen to return to the main interface or click the “CLEAR” key to return to the previous interface.

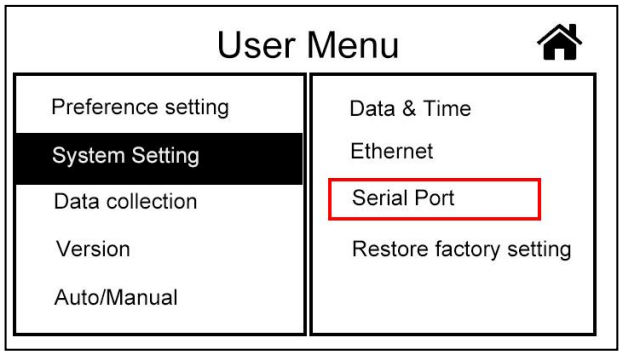


Fig. 93

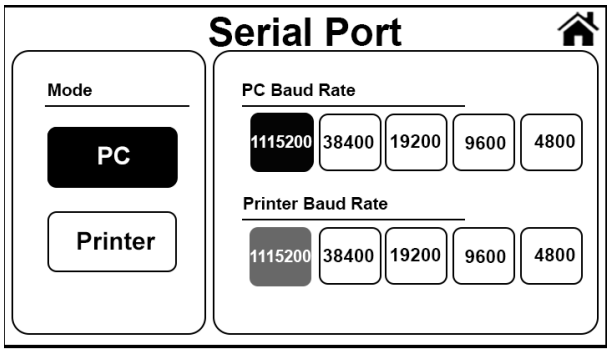


Fig. 94

3) Take a USB to RS232 serial cable and connect the USB end to the PC, then plug the RS232 port into the machine as shown in Fig. 95:

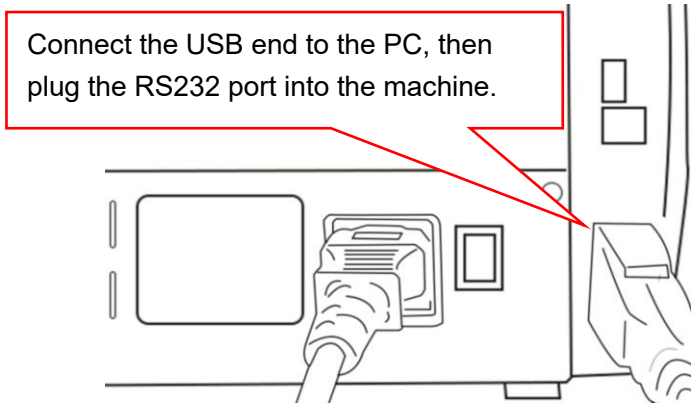


Fig. 95

4) Open and unzip the supplied PC software, you will get a folder named “Release” which contains the following contents.

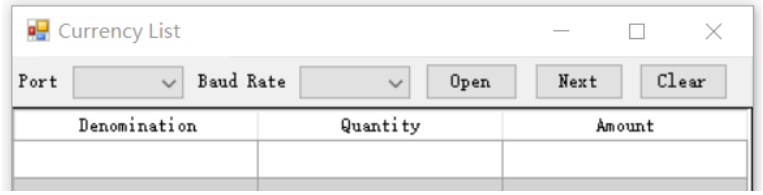


Fig. 96

5) Select the serial port and baud rate, the baud rate must match the baud rate selected on the machine as shown in Fig. 97 below.

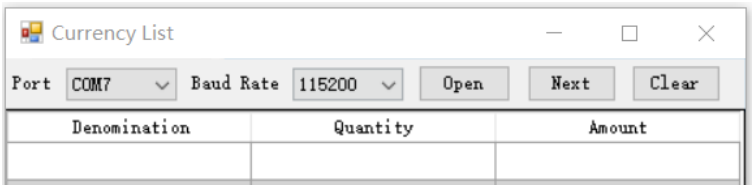


Fig. 97

6) Click the Open key again, the serial port font and baud rate will be dimmed and Open will change to CLOSE, then you can count and check the counting information as shown in Fig. 98 and Fig. 99 below.



Fig. 98

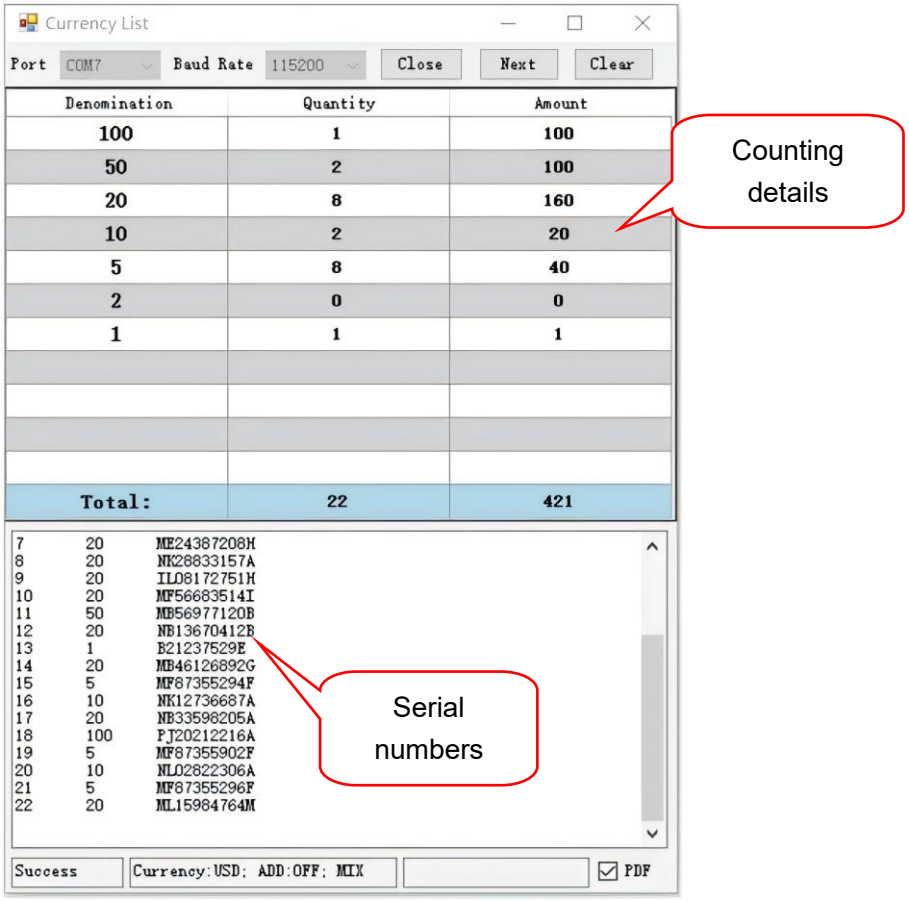


Fig. 99

7) At the same time, a folder “Data” is automatically created from the folder and saved in the upper monitor. Open the “Data” folder and find the corresponding list information as shown in Fig. 100 below.

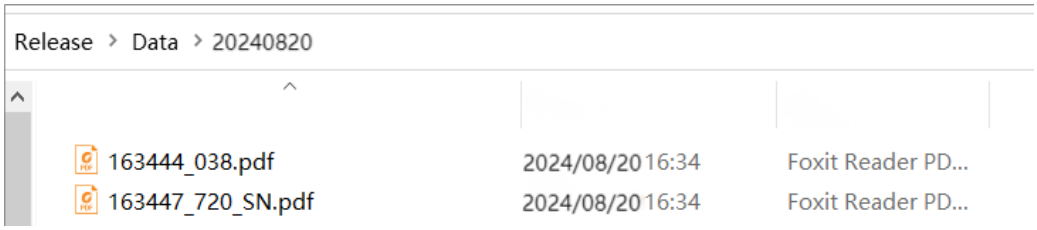


Fig. 100

2.11.4 Restore Factory Setting

1) Press the “” key on the left to enter the “User Menu” interface, as shown in Fig. 101. Then touch the “System Setting” and enter the interface, as shown in Fig. 102.

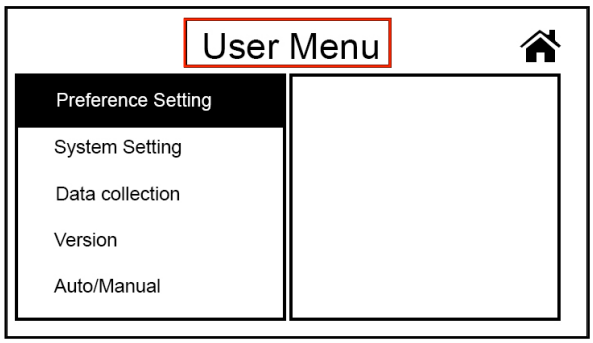


Fig. 101

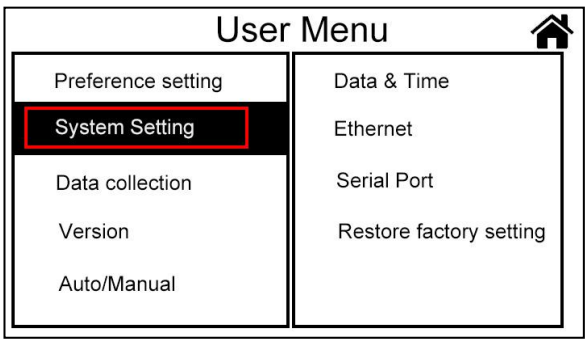


Fig. 102

2) As in Fig. 103, touch the “Restore factory setting” option to enter the factory setting interface, as in Fig. 104.

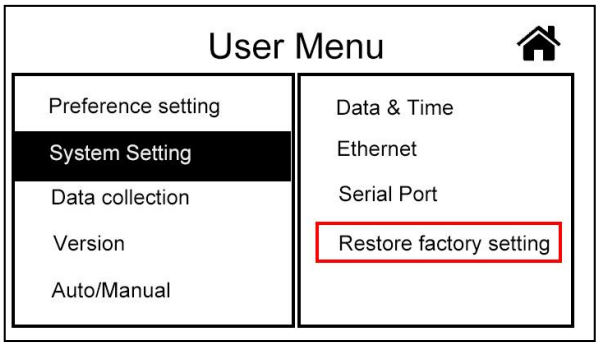


Fig. 103

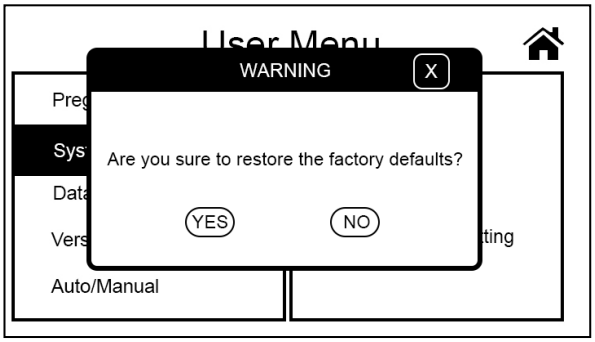


Fig. 104

3) Click the “YES” button to restore the factory settings, all other settings except the initial time and date settings will be restored to the initial state. After restoring the factory settings, please reboot the machine, as shown in Fig. 105 below:

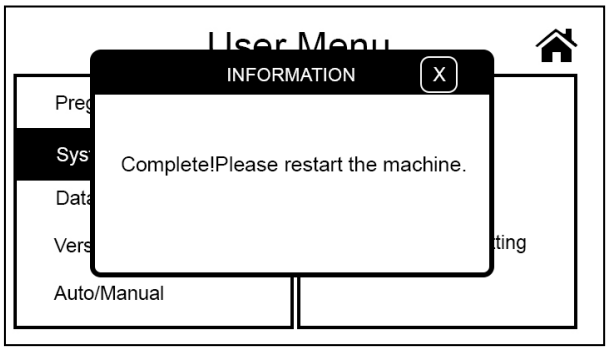


Fig. 105

2.12 Data Collection

2.12.1 All Data Collection Setting

1) Insert the U disk before collecting, as shown in Fig. 106.

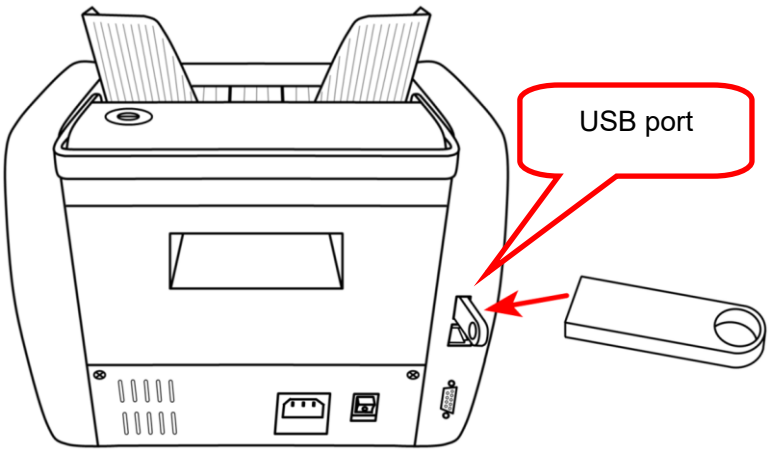


Fig. 106

2) Press the “ ” button on the left to enter the “User Menu” interface, as shown in Fig. 107. Touch “Data Collection” again, and then enter the “Data Collection” interface, as shown in Fig. 108.

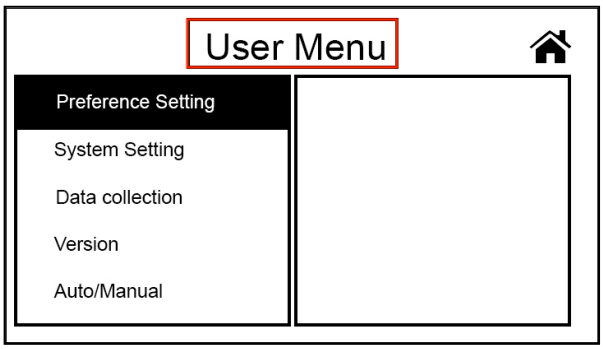


Fig. 107

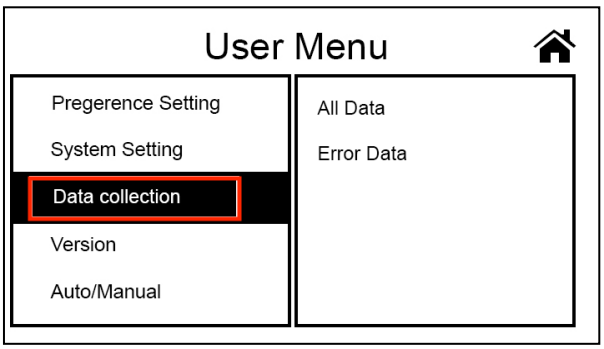


Fig. 108

3) Touch the “ALL Data” option to enter the all data collection interface, as shown in Fig. 109. Click the “Collection by U-Disk” button to enter the collection interface, as shown in Fig. 110.

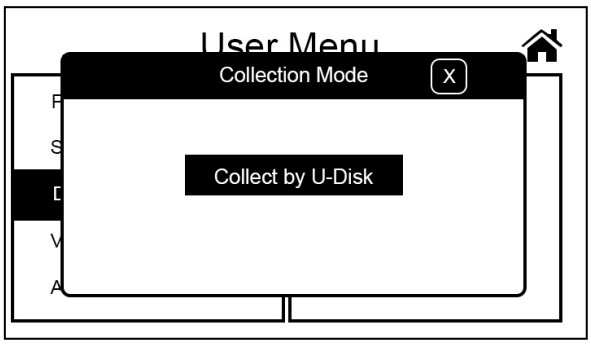


Fig. 109

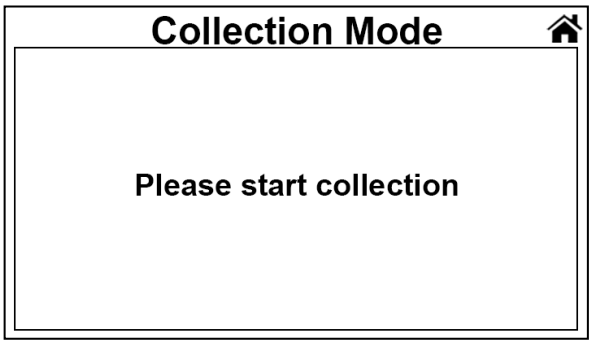


Fig. 110

5) After passing the currency under this interface, the machine will automatically save the collected image in the folder “ collect_cash ” under the root directory of the U disk.

2.12.2 Error Data Collection Setting

1) Insert the U disk before collecting, as shown in Fig. 111.

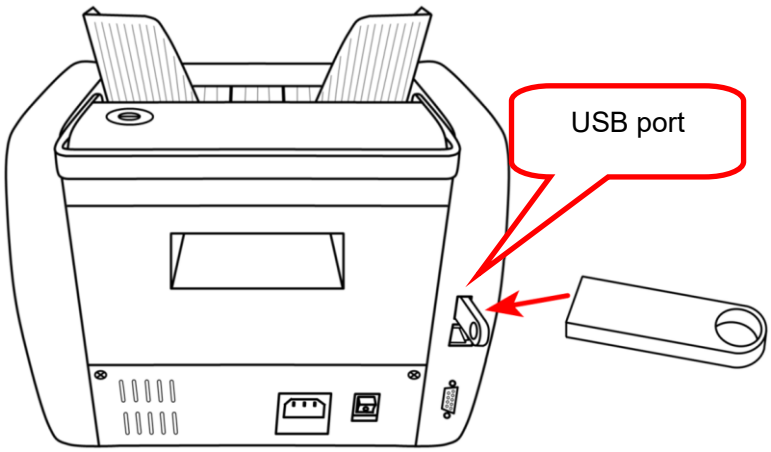


Fig. 111

2) Press the “ ” button on the left to enter the “User Menu” interface, as shown in Fig. 112. Touch “Data Collection” again, and then enter the “Data Collection” interface, as shown in Fig. 113.

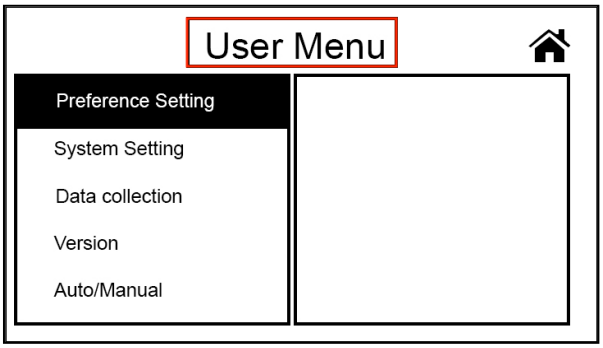


Fig. 112

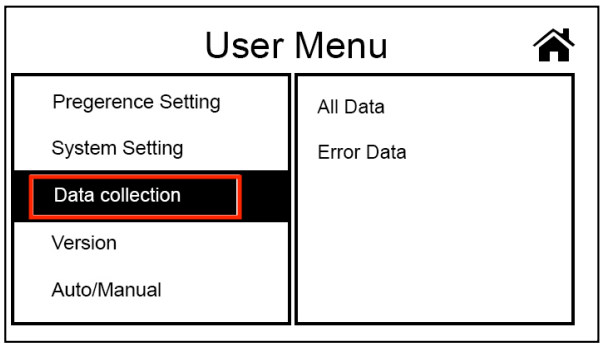


Fig. 113

3) Touch the “Error Data” option to enter the error data collection interface, as shown in Fig. 114. First click the switch above to turn on the error data collection mode, and then click the “Collection by U-Disk” button, as shown in Fig. 115, the machine will automatically switch back to the main interface.

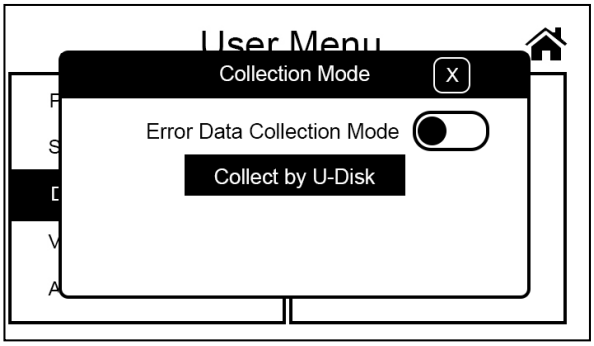


Fig. 114

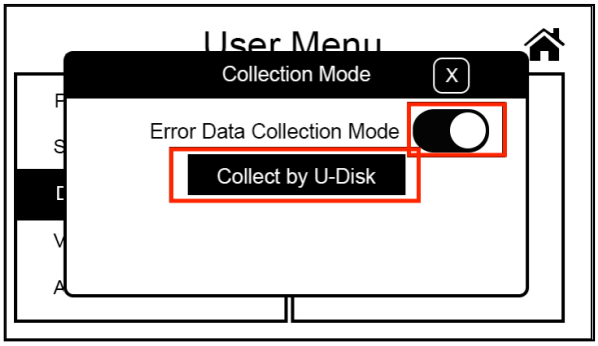


Fig. 115

4) When passing the currency on the main interface, the error images will be saved in the “ abnormal_cash ” folder under the root directory of the U disk.

5) Canceling the error data collection requires that the switch in Fig. 115 be turned off.

2.13 Check Software Version

Press the left “” button to enter the “User Menu” interface, as shown in Fig. 116. Touch “Version” again, and then enter the interface, through which customers can view various software versions, as shown in Fig. 117.

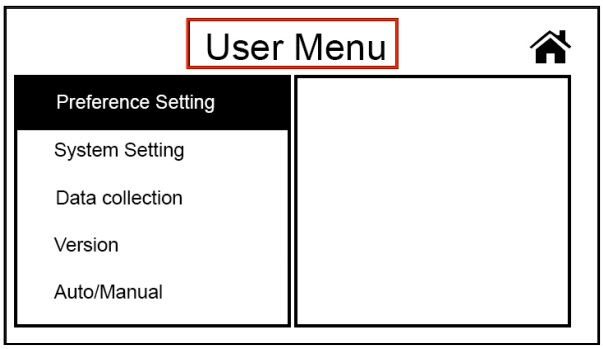


Fig.116

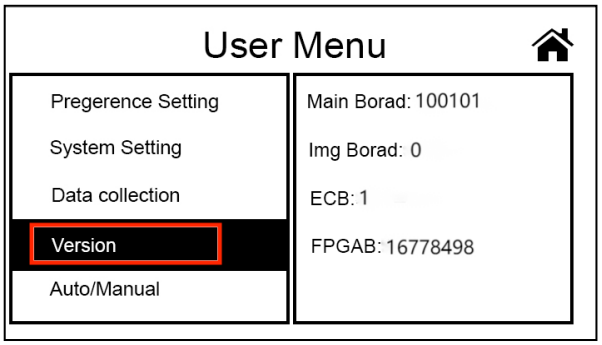


Fig.117

3. Maintenance Instructions

3.1 Software Upgrade

3.1.1 U-disk Preparation

1) The software upgrade of this product adopts U disk upgrade mode.

2) Please connect the USB flash drive to the PC first.

3) Please decompress the application software in .rar or .zip format provided by our company to obtain the application software with the suffix “ZPK” format and the display software with the suffix “bin”. Copy the software "**********. ZPK" and "APP.bin” to the root directory of U disk, please do not modify the suffix of the software, otherwise the machine will not recognize the USB flash drive and the upgrade will fail.

Special reminder: There can only be one “ZPK” and “bin” format file in the root directory of U disk, otherwise it will lead to software upgrade failure.

3.1.2 Software Upgrade

1) In the shutdown state, insert the USB disk into the USB port of the machine, as shown in Figure 118 below:

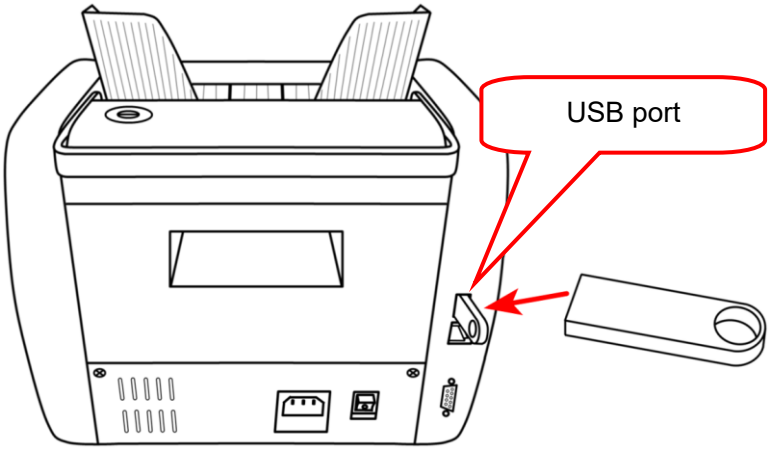


Fig.118

2) Turn on the power of the machine, the machine automatically reads the software in the USB flash disk for upgrading. The interface shown in Fig. 119 will appear, this interface is about 5 seconds. After that, it will switch to the standby interface, as shown in Fig. 120. This interface indicates that the machine is establishing a connection with the U disk. This interface takes about 1 minute to wait.

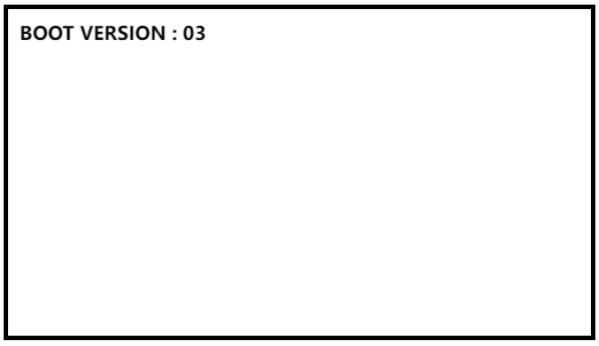




Fig. 119 Fig. 120

3) Then the machine will switch to the upgrade interface, as shown in Fig. 121 below. After the software upgrade is successful, the interface will prompt to restart the machine, as shown in Fig. 122 below. Please pull out the U disk first, and then restart the machine. After the machine self-test is completed, it will automatically enter the main interface, and the software upgrade is completed. This process takes about 2 minutes and 20 seconds.



Fig. 121



Fig. 122

3.1.3 UI Software Upgrade

1) Insert the USB flash drive into the USB port under the frame of the machine when the machine is turned off, as shown in Fig. 123 below.

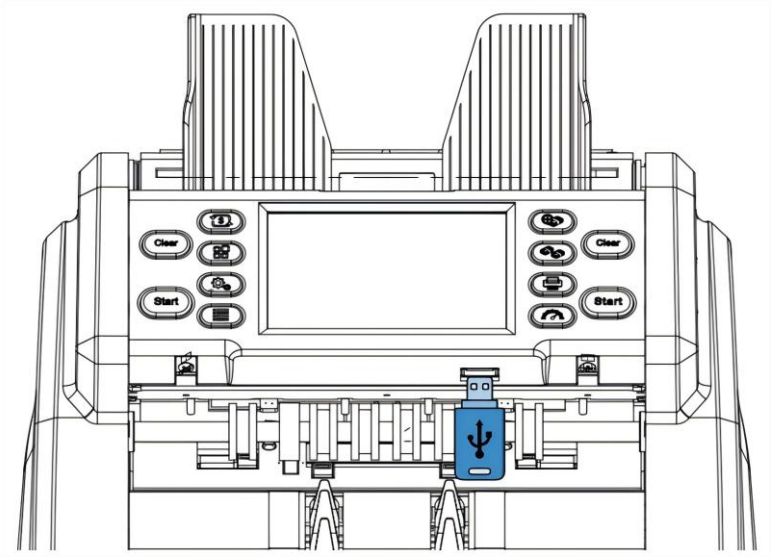


Fig. 123

2) Turn on the power supply of the machine, and the machine will automatically read the software in the U disk to upgrade. The upgrade interface appears as shown in Fig. 124. After the software upgrade is successful, the machine will be prompted to restart, as shown in Fig. 125 below. First pull out the U disk, close the upper and lower channels, and then restart the machine. After the machine self-test is completed, it will automatically enter the main interface, and the machine software upgrade is completed. This process takes about 1 minute.

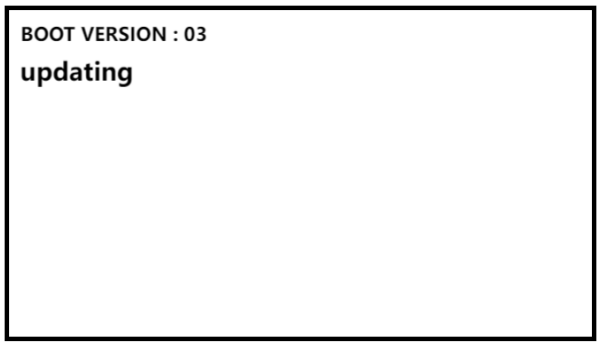


Fig. 124

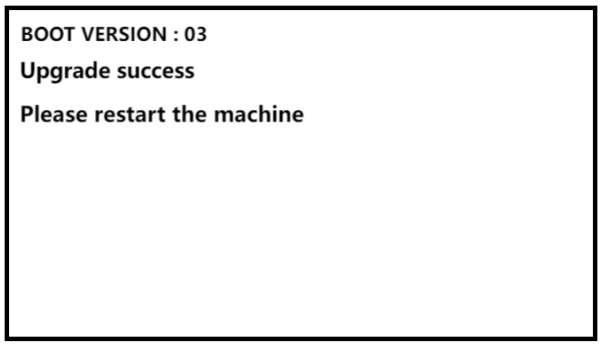


Fig. 125

3.2 Daily Cleaning Instructions

Any dust, dirt or other substance that adheres to the sensor will interfere with the normal operation of the sensor and lead to incorrect counting results. Therefore, clean the sensor daily with the included cleaning tool as needed.

Please turn off the power switch before cleaning to prevent electric shock or other injuries.

Please do not use chemicals such as benzene, diluents, or water, which may cause the machine to fade or crack.

3.2.1 Clean Hopper Sensor

As shown in Fig. 126, clean the hopper sensor with a clean brush or cloth.

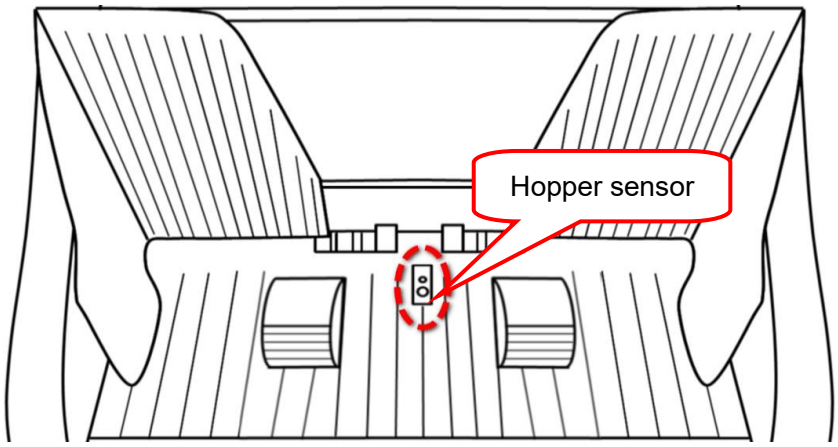


Fig. 126

3.2.2 Clean Kicker Rubber and Feed Rubber

As shown by the arrows in Figure 127 below, clean the kicker rubber and feed rubber with a clean brush or cleaning cloth.

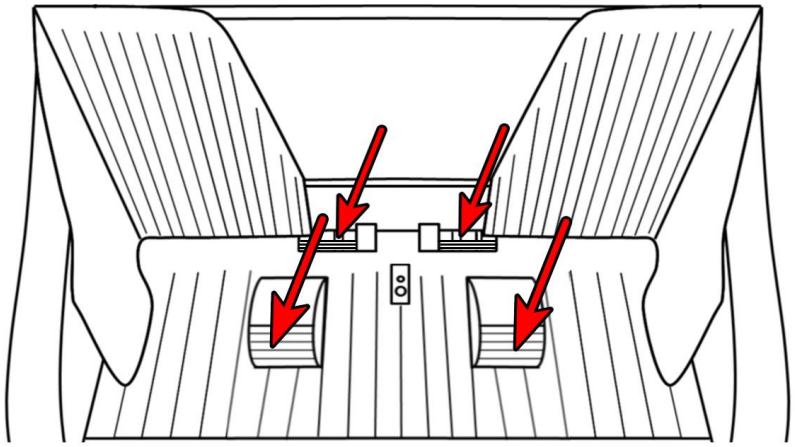


Fig. 127

3.2.3 Clean Stacker Sensor

As shown in Fig. 128 below, clean the stacker sensor with a clean brush or cleaning cloth.

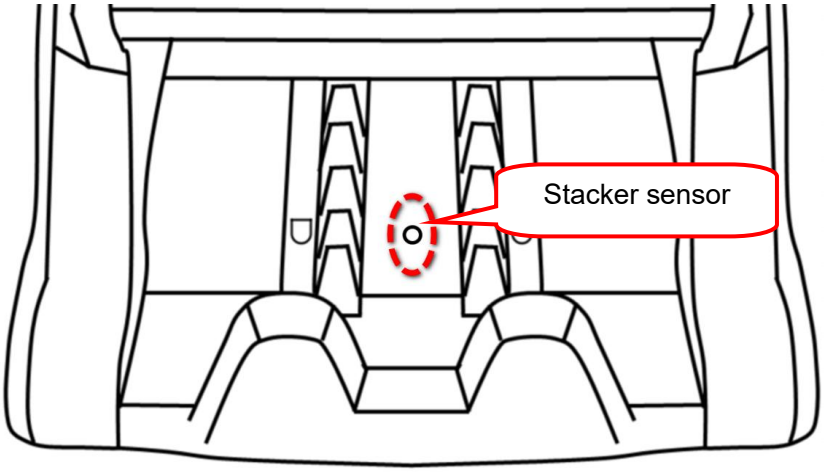


Fig. 128

3.2.4 Clean the Sensors Inside the Upper and Lower Guide Plates

1) Pull in the direction of the arrow in Fig. 129 to open the back cover.

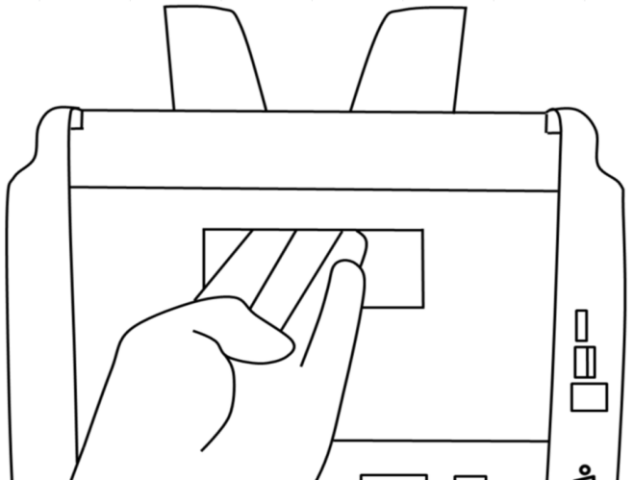


Fig. 129

2) Wipe the upper CIS of Marker 1 in one direction with a dust-free cloth, then clean the IR sensors of Marker 2 with a clean brush.

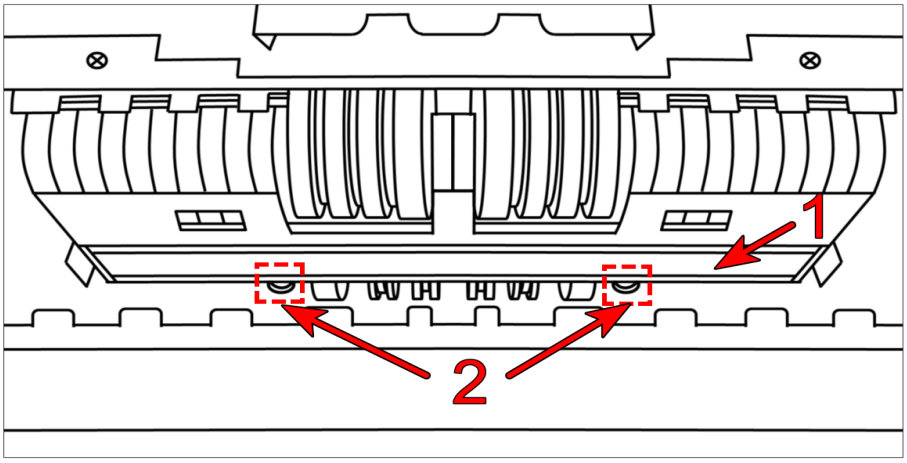


Fig. 130

3) Wipe the lower CIS of Marker 1 in one direction with a dust-free cloth, then clean the IR sensors of Marker 2 and the lower UV sensor of Marker 3 with a clean brush.

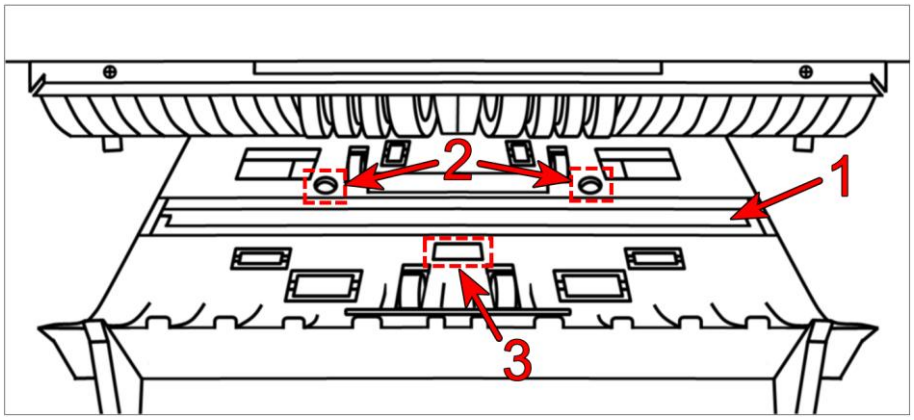


Fig. 131

3.3 Common Errors and Corresponding Descriptions

In the process of using the machine, the machine may appear abnormal state, resulting in abnormal operation, and the machine will display the corresponding error information. The following provides the phenomena when the machine fails. Please refer to the service manual for specific treatment methods. If the user still cannot solve the problem according to the service manual, please contact us.

Description of self-test error:

Code	Location for error	Reason for error	Troubleshooting
QT Error	Hopper sensor	The hopper sensor is blocked	Check the sensor for dust accumulation or occlusion.
Stacker Error	Stacker sensor	The stacker sensor is blocked	Check the sensor for dust accumulation or occlusion.
			Check whether the sensor cable falls off
IRL Error	Left IR sensor	The left IR sensor is blocked	Check the sensor for dust accumulation or occlusion.
			Check whether the sensor cable falls off
IRR Error	Right IR sensor	The right IR sensor is blocked	Check the sensor for dust accumulation or occlusion.
UVD Error	Lower UV	UV abnormal	Check the surface of lower UV for foreign objects.
ENC Error	Encode disk	Encode disk signal abnormal	Check whether the encode disk cable falls off
			Check whether the motor rotates normally when turning on machine
			Check whether the encoder sensor is abnormal
PWR Error	Power supply	Power supply abnormal	Check whether the power supply cable falls off
			Replace the power supply

***** In order to continuously improve our products, we reserve the right to revise the user manual. *****