1+1 Pocket

Multi-Currency Banknote Sorter

User Manual

Preface

Thank you for choosing our products! It is an accurate, reliable multi-currency banknote sorter, the structure design and performance are more scientific and the operation is extremely smooth and vibration free. it defines a new standard of banknote counting machines with sorting functions.

In order to make the best use of the accurate banknote counting/sorting capability of the unit, please read this manual carefully before using and operate as per the procedures stipulated in the manual.

Contents

Prepared by	Reviewed by	Approved by

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Safety Instruction

To avoid damage to the machine and personal injury, please read all warnings and cautions carefully before first use!

|	
⚠	❖ Place the unit on a solid flat surface. ❖ Before moving the unit, please disconnect the power cord, otherwise the power cord may be damaged resulting in fire and electrical shock. ❖ Don't place the unit on a shaky or vibrating surface. ❖ Keep the unit away from volatile gases or flammable materials ❖ Keep the unit away from heavy humidity and strong sunlight, it may cause machine's failure.
⚡	❖ Don't try to modify, pull, bend and rub the power cord, and don't put heavy objects on the power cord. ❖ In case of the spilled water come into the interior of the unit, please stop operating it, switch off and disconnect the power cord immediately, then contact the service center for help. ❖ Please connect the supplied power cord to a grounded well wall outlet. ❖ If the unit is unused for a long period, please switch off the unit and disconnect the power cord from the unit, otherwise there will be a decrease in insulation and electrical shock, creep age or fire may occur.
⚠	❖ Don't touch the power cord with the wet hand. ❖ Don't expose the unit to dust. ❖ Please take care to avoid any foreign objects dropping into the unit, otherwise will damage the machine or effect the note feeding. ❖ It is strictly prohibited for unprofessional personnel to dissemble the machine.

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Features

❖ Detects magnetic ink, infrared ink, UV, CIS image, length, thickness, etc.

❖ Compact size, dual-operator user interface with large and clear LCD display.

❖ Installs up to 4 different currencies, banknotes can be processed in all four orientations.

❖ High-capacity hopper, stacker and reject pocket.

❖ ADD function, batch function, reporting and printing function are available.

❖ Easy enters user menu and maintenance menu interface for flexible operation, user friendly.

❖ Adopts auto adjustable technology, Easy software upgraded via SD card or USB interface.

❖ Configurable USB interface, printer interface, external display interface.

❖ Full open channel design for better maintenance and jam removing.

Unpacking

Please check whether the appearance of the machine is in good condition and whether all of the accessories are available. Inside the package there shall be the following.
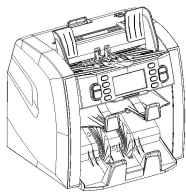
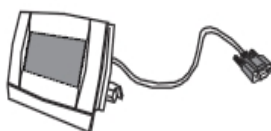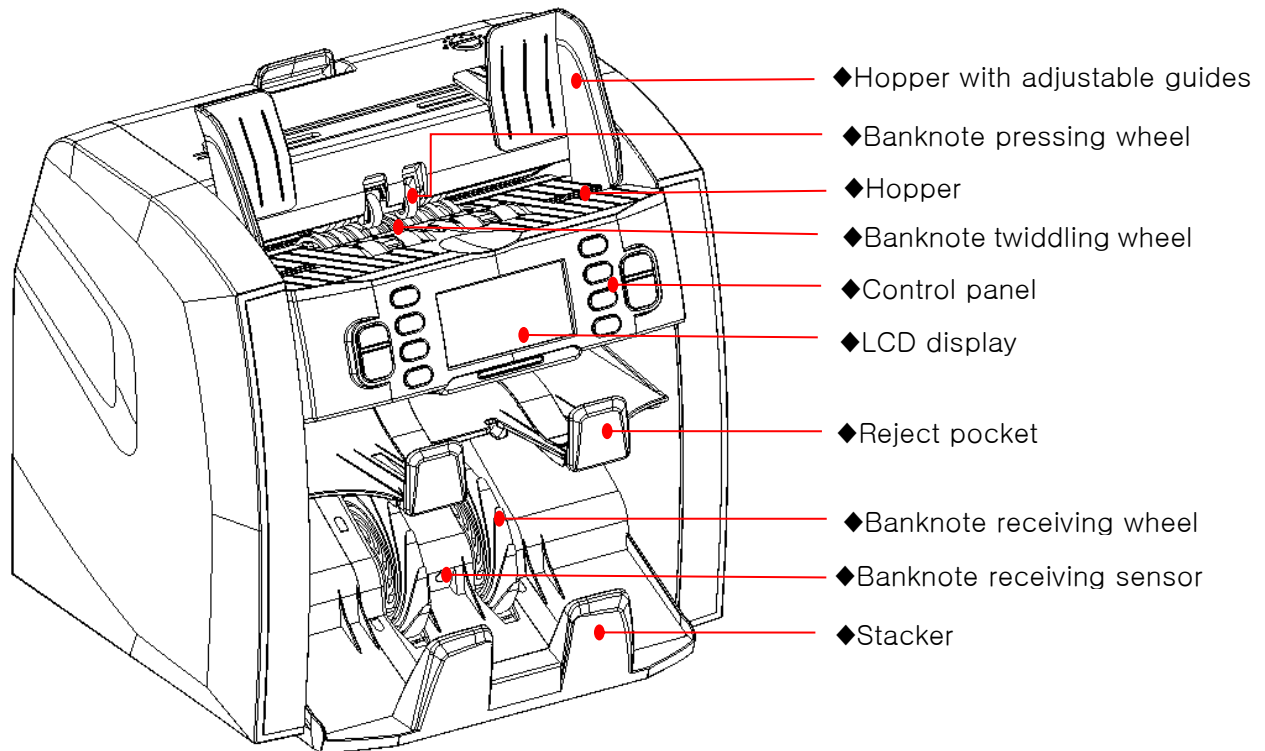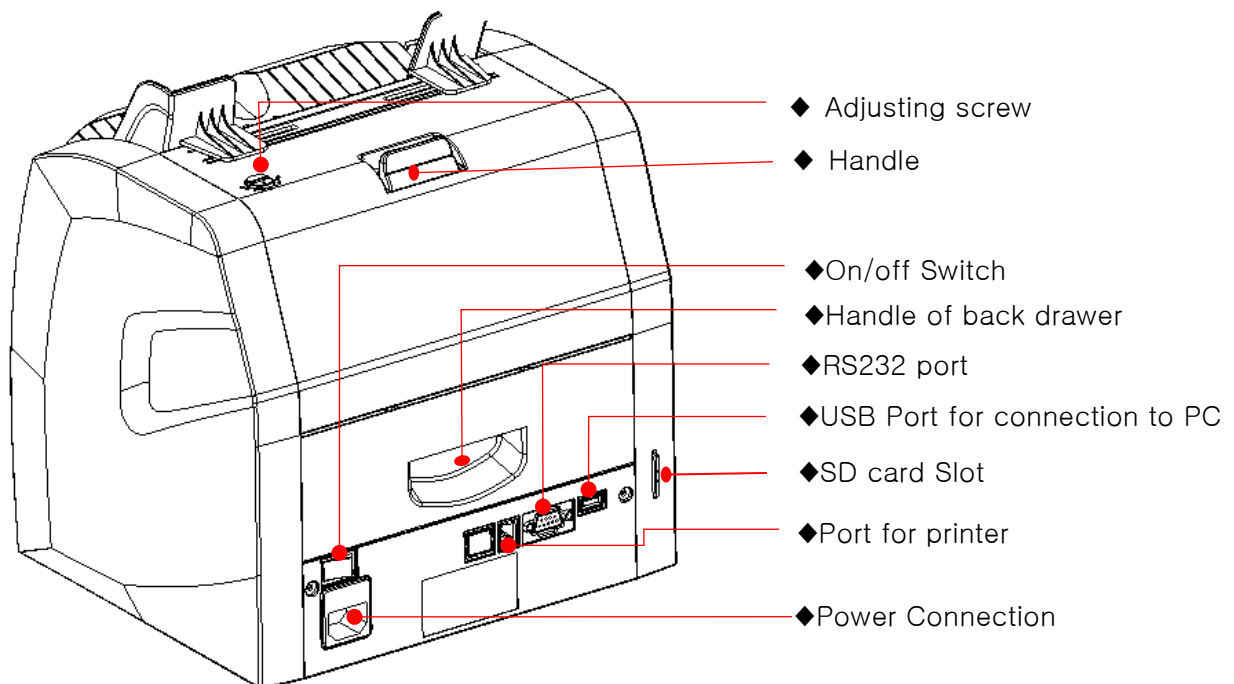|		
Banknote sorter	User manual	Power cable
Cleaning brush	Fuse	USB download cable (Optional)
External LCD display (Optional)	Print cable (Optional)	SD card (Optional)

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Exterior Introduction

1. Three-view drawing

◆Hopper with adjustable guides

◆Banknote pressing wheel

◆Hopper

◆Banknote twiddling wheel

◆Control panel

◆LCD display

◆Reject pocket

◆Banknote receiving wheel

◆Banknote receiving sensor

◆Stacker

2. Back view

◆ Adjusting screw

◆ Handle

◆On/off Switch

◆Handle of back drawer

◆RS232 port

◆USB Port for connection to PC

◆SD card Slot

◆Port for printer

◆Power Connection

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3. Explanation about the user's panel
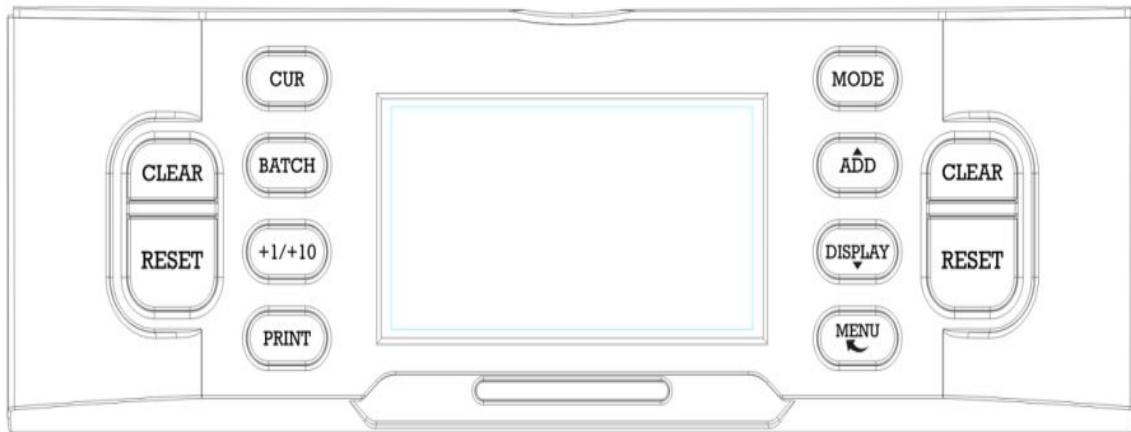
1] CUR : Currency section.

2] BATCH : Batch function on/off and set batch number.

3] +1/+10 : Increase the batch number by 1(just press) or 10(press and hold).

4] PRINT : Send count report to print.

5] MODE : Counting mode settings: MIX, SINGLE, FACE, ORIENT, COUNT.

6] ADD : Add function on/off. Also served as a upward navigation key.

7] DISPLAY : View the counting result report. Also served as a downward navigation key.

8] MENU : Open/ close device menu and go back previous level(in MENU mode).

9] CLEAR : Clear the number of counted banknotes and turn the batch function off.

10] RESET : Start counting/ Confirm selection in menu mode.

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Operation Instruction

In order to avoid counting/detecting errors, the following banknotes should be handle before counting:

① Keep the banknotes in order

② Straighten out the folded notes

③ Remove the wrinkled notes

④ Remove any stray foreign object from the note pack

⑤ Unwrap the fold corner and curved banknotes

Place the machine on a solid flat surface, ensure there is no strong electromagnetic field and strong sunshine around it. Then plug the electric socket into 100~240V AC electric source, make sure all the connections are secure. If you have purchased an external display, connect it to the RS232 interface on the back of the machine.
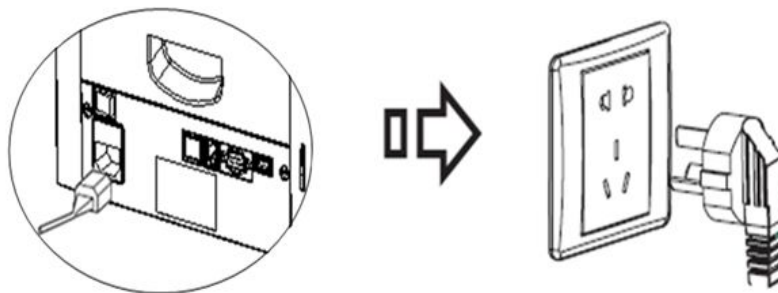
Note: In order to ensure personal safety, the electric socket shall be safety grounded.

Turn on the power switch, the machine will display the software version first, then perform a self-test.
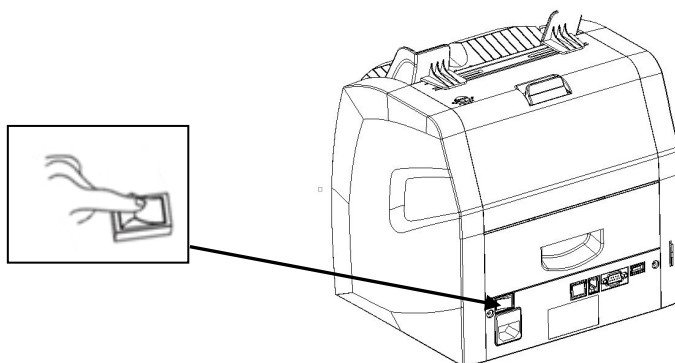
If the test is successful, the machine will enter ready state (See figure 1). If some error

messages are displayed on the LCD, please handle them according to the Troubleshooting in the

manual.
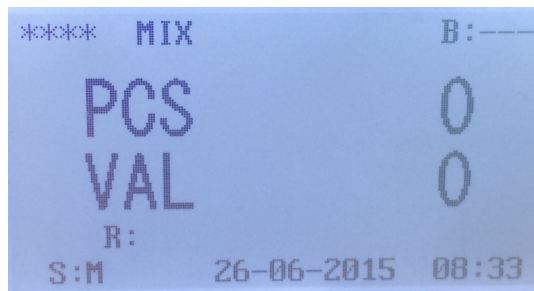
Figure 1

Before counting the banknotes, please adjust the left and right hopper guide to a suitable position base on the length of the banknotes for smooth feeding.

Next place the well-prepared banknotes onto the hopper flatly and the machine will start counting. The suspicious or unfit banknotes are rejected to the reject pocket.

The suspicious or unfit notes

🔔 Note: When an error is found, and causes the machine to stop automatically, please re-count these banknotes.

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1. Currency selection

After turning on the machine, the symbol of current currency is displayed on the LCD. If you need counting/sorting other types of currencies, press "CUR" key to change current currency, the symbol of installed currency will be displayed in turn.

"EUR" means Euro

"USD" means US Dollar

"TRY" means Turkish Lira

"GBP" means Pound Sterling

…etc.

2. Counting/Sorting mode

Five counting/sorting modes are supported. They are Mix mode, Single mode, Face mode, Orientation mode and Count Mode. User can press the "MODE" key on the control panel to switch the counting/sorting mode according to requirement.

A. Mix mode

In mix mode, "MIX" is displayed on the LCD and the machine can count the mixed banknotes with different denomination of the same currency type.
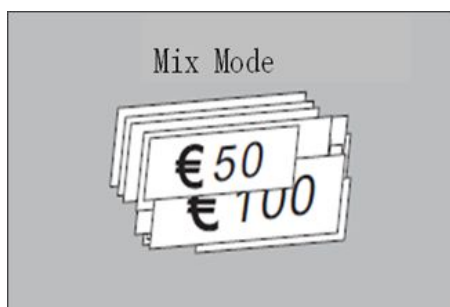
After the counting is finished, the total value and total pieces are displayed on the LCD, and the machine will provide a report for detailed counting result by pressing the "DISPLAY" key.

e.g. Euro result can be as follows:

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Denomination   Piece   Value

EUR	5	0	0
	10	10	100
	20	16	320
	50	8	400
	100	0	0
	200	0	0
Total:		34	820

If the printer is connected to the machine, press the "PRINT" key, the report will be printed.

```
EUR
2015-06-26  08:33
Deno        PCS        Value
---------------------------

EUR 10      10          100
EUR 20      16          320
EUR 50      8           400
---------------------------

Total       34          820
```

B. Single mode

In single mode, "SINGLE" is displayed on the LCD and the machine can count the same denomination. After the counting is finished, the total value and total pieces are displayed on the LCD, If a suspicious or a different denomination of banknote is mixed in the pile, it will be rejected into the reject pocket.

Single Mode

€ 100
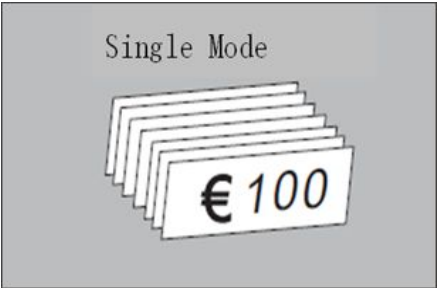
C. Face mode

In Face mode, "FACE" is displayed on the LCD and the machine will sort the banknotes according to front and back.

The banknote with a front or the rear side first detected by the sensor, becomes the reference for stacker. These banknotes are stacked there.

The banknote facing to the other side are then sorted into reject pocket, including any suspect notes.

D. Orientation mode

In Orientation mode, "ORIENT" is displayed on the LCD and the machine will sort the banknotes by orientation.
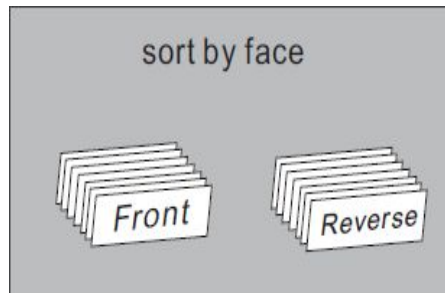
The banknote with a forward or the reversed orientation first detected by the sensor, becomes the reference for stacker. These banknotes are stacked there.

The banknote facing to the other orientation are then sorted into reject pocket, including any suspect notes.
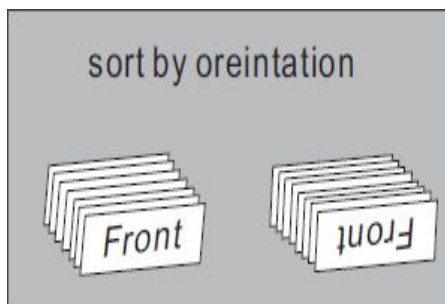
Note: We suggest you to sort the banknotes by face first and then by orientation.

E. Count mode

If you only need to count the pieces of banknotes, press the "MODE" key on the control panel. when the "COUNT" is displayed on the LCD, the machine will count the total pieces without detection. After the banknote counting is finished, the number displayed on the LCD is the total

pieces that have been counted.

🔴 **Note: In count mode, the counterfeit detecting function is switched off.**

3. Accumulative Counting

When you need accumulative counting, press the "ADD" key on the control panel, if "ADD" is displayed on the LCD, the machine will count on the basic of the original number displayed on the LCD. After the countin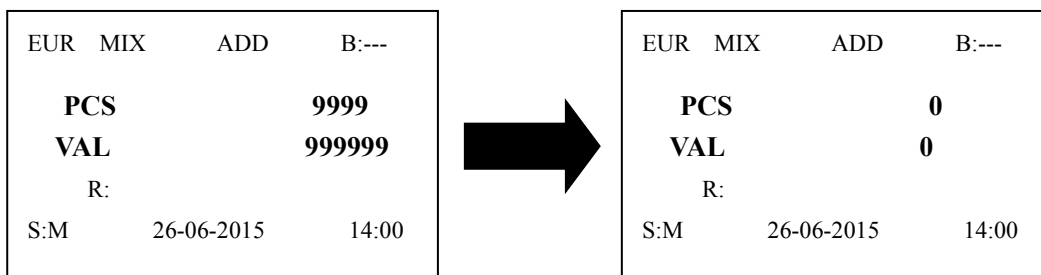g is finished, the number displayed on the LCD is the summation of the several times' counting. When the accumulative pieces reach 9999+1 or accumulative value reaches 999999+1, the number will be resumed to 0.

EUR MIX	ADD	B:---
PCS		**9999**
VAL		**999999**
R:		
S:M	26-06-2015	14:00

➡️

EUR MIX	ADD	B:---
PCS		**0**
VAL		**0**
R:		
S:M	26-06-2015	14:00

🔴 **Note:** To ensure accuracy of counting, in accumulative counting function, if any problem happens such as jam, the current count will not be added.

4. Batch Counting

When you need a batch counting, press the "BATCH" key, if "100" is displayed on the LCD, it shows the batch function has been turned on and the current batch number is 100. Each time when you press the "BATCH" key, "100, 50, 20, 10 and ---" will be displayed in turn repeatedly, When switch to "---", the batch function is disabled. Furthermore, you can press or hold the "+1/+10" key to increase the batch number by 1 or 10 according to the requirement of the banknotes counting. The batch number is select-able in the range of 1~200. After setting the batch number, put the banknotes on the hopper and the machine will count automatically. While reach the batch number, the machine will stop automatically.
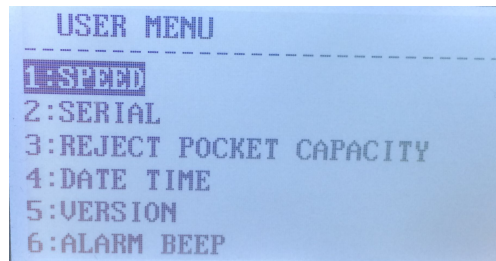
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In normal working state, press the "MENU" key to enter user menu interface, you can select the any item by pressing the "ADD" key or "DISPLAY" key.

```
    USER MENU
--------------------
1:SPEED
2:SERIAL
3:REJECT POCKET CAPACITY
4:DATE TIME
5:VERSION
6:ALARM BEEP
```

1. **Counting Speed**

After selecting "1:SPEED" item, press the "RESET" key to enter, there are three kinds of speed you can select. After selecting the counting speed, press the "RESET" key once again to save the parameter. And press the "MENU" key for 2 times to exit and enter normal working state.

```
1:SPEED
--------------------
SPEED L
SPEED M
SPEED H
```
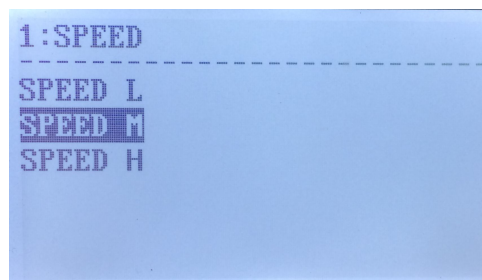
- "**SPEED L**" means low speed mode and its counting speed is 800 notes/min;

- "**SPEED M**" means medium speed mode and its counting speed is 1000 notes/min;

- "**SPEED H**" means high speed mode and its counting speed is 1200 notes/min.

When selecting the medium speed or high speed, the serial number identification function will be turned off.

2. **Serial Number Identification**

In user menu interface, After selecting " 2:SERIAL" item, press the "RESET" key to enter, and then you can select to turn the serial number identification function on or off.

```
2:SERIAL
--------------------
SERIAL ON
SERIAL OFF
```
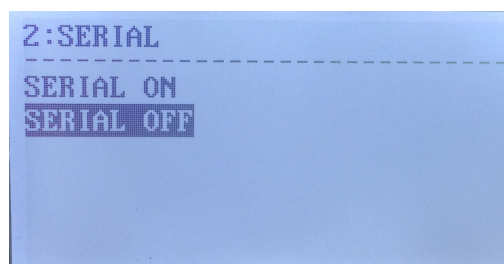
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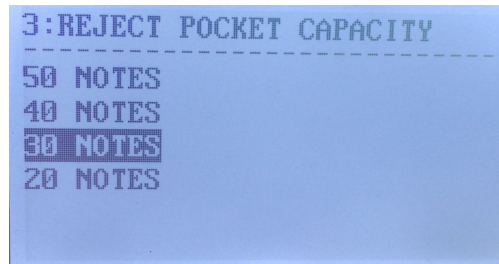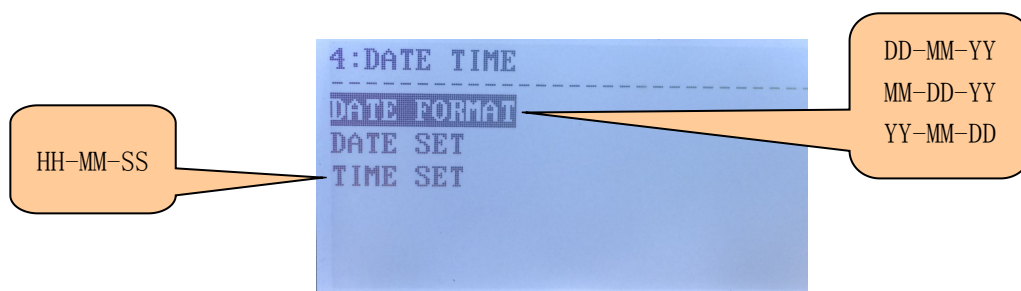3. **Capacity of the Reject Pocket**

In user menu interface, After selecting " 3:REJECT POCKET CAPACITY" item, press the "RESET" key to enter, and then you can select the capacity of the reject pocket.

```
3:REJECT POCKET CAPACITY
-------------------------
50 NOTES
40 NOTES
30 NOTES
20 NOTES
```

4. **Date and Time Setting**

In user menu interface, After selecting " 4:DATE TIME" item, press the "RESET" key to enter, and then you can set date format, and modify the parameter of date and time by pressing the " +1/+10 " key.

DD-MM-YY
MM-DD-YY
YY-MM-DD

HH-MM-SS

```
4:DATE TIME
-------------------------
DATE FORMAT
DATE SET
TIME SET
```

5. **Alarm Beep**

In user menu interface, After selecting "6: ALARM BEEP" item, press the "RESET" key to enter, and then you can select to turn the alarm beep function on or off.

```
6:ALARM BEEP
-------------------------
BEEP ON
BEEP OFF
```
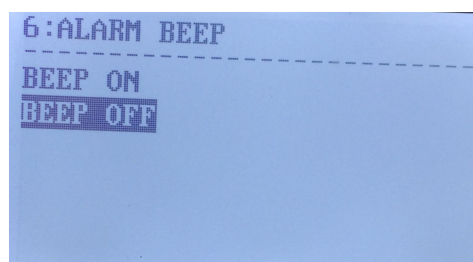
Sensitivity Parameters Setting

You may meet the following problems during counting/sorting:

■ Machine doesn't sort the notes properly;

■ Machine frequently recognizes the fit notes as unfit notes;

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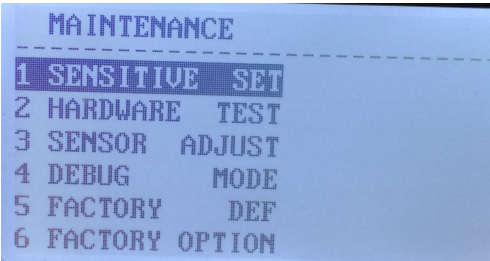Please follow the steps to change the sensitivity parameters setting:

In normal working state, press the "CLEAR" key for 5 times to enter maintenance menu, press the " [RESET] " key to enter "1 SENSITIVE SET" item;

Press the " [ADD] " or " [DISPLAY] " key to select desired item, For USD notes:

Item	Default value	Range
WIDTH LEVEL	4	0 ~ 8
LENGTH LEVEL	4	0 ~ 8
UV LEVEL	4	0 ~ 8
THICK LEVEL	4	0 ~ 8
PAPER LEVEL	3	0 ~ 8
IMAGE LEVEL	5	0 ~ 4
SN	5	0 ~ 8
IR	3	0 ~ 8
MG	5	0 ~ 8
MG1	4	0 ~ 8
MG2	4	0 ~ 8
MG3	4	0 ~ 8

Press the " [+1/+10] " key to change the parameter value; After setting, press the " [RESET] " key to save the setting result; Click " [MENU] " key to return to the previous menu.

The counterfeit detection sensitivity for different currency should be set separately.

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Resume to Factory Setting

Press the "CLEAR" key for 5 times to enter maintenance menu, press the " " or " " key to select the "5 FACTORY DEF" item, press the " " key to enter the item or save the setting result; Click " " key to return to the previous menu, these operations make the machine resume to the factory setting.
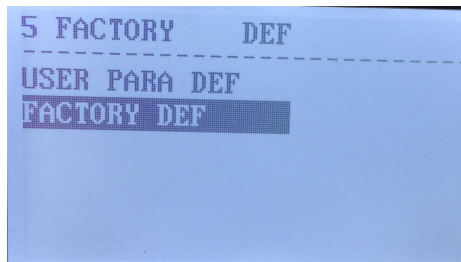
Troubleshooting

1. Remove the jammed banknotes

When the LCD displays "JAM! CODE=6, REMOVE ALL NOTES THEN PRESS RESET" error message during counting, please remove the jammed banknotes by the following steps.
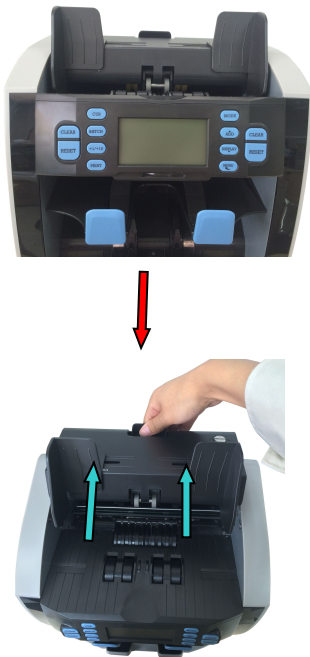
(A) Open the top cover to remove the jammed banknotes.

(B) Pull the handle of back drawer to open the back drawer, then remove the jammed banknotes.

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2. How to adjust the feeding clearance

The adjusting screw of the feeding clearance on the top cover has already been set to the best position in the factory. But when you meet the following problems during counting/sorting, it is necessary to re-adjust the adjusting screw.

■ If the machine frequently occurs jammed notes or can't count the banknotes smoothly, please turn the adjusting screw clockwise to make the clearance larger.

■ If the machine frequently frequently occurs double notes or chained notes, please turn the adjusting screw counter-clockwise to make the clearance smaller.
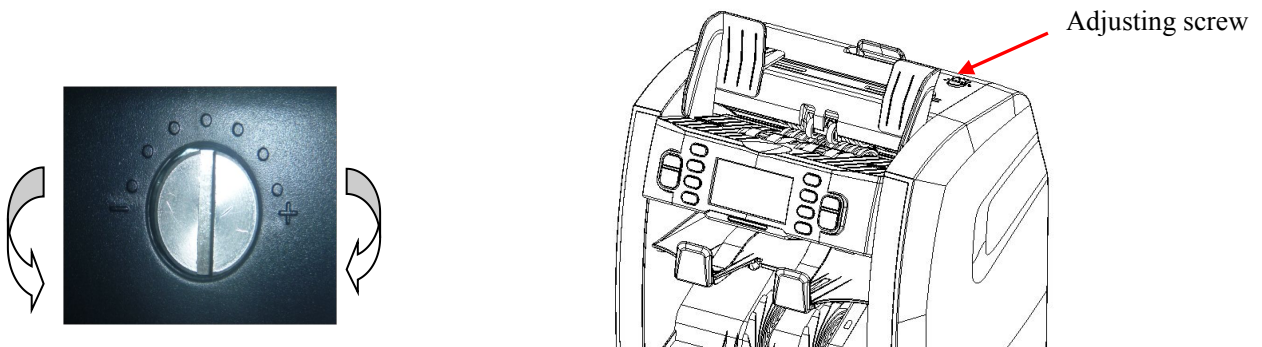
Adjusting screw

Decrease the clearance   Increase the clearance

⚠ Note: The adjusting screw is very sensitive, make only minor adjustment.

3. Self-test error message display and solutions

The machine will perform a self-test after powering on. If one of the following error messages is displayed on the LCD, usually it is because the sensor is blocked by banknotes or dusts. Pls use a brush or a piece of soft cloth to clean the dusts on the sensor or remove the banknotes, and then restart the machine.

Error message display	Solutions
Banknote feeding sensor	1.Remove the banknote and clear away the dust. 2.Replace banknote feeding sensor.
Banknote receiving sensor	1.Remove the banknote and clear away the dust. 2.Replace banknote receiving sensor.
Banknote Check Rejector	1.Remove the banknote and clear away the dust. 2.Replace check rejector sensor
Fluorescence	1. Adjust top cover to right position so as to

	avoid strong light source
	2. Re-adjust UV sensor
Left Counting	1.Remove the banknote and clear away the dust.
Right Counting	2.Re-adjust counting IR sensor
Left2 Counting SENSOR	3.Replace left/right counting receiving tube
Right2 Counting SENSOR	
Left CIS IR	1. Remove the banknote and clear away the dust
Right CIS IR	2. Replace the counting IR tube.
Rotate Speed Sensor	1. Clean away the dust and rotate speed sensor
	2. Replace rotate speed sensor
	3. Replace main motor
	4. Replace main board
Rotate2 Speed Sensor	1.Clean away the dust and rotate speed sensor
	2.Replace rotate speed sensor 2
	3.Replace main motor
	4. Replace main board
CIS Sensor 0 CIS Sensor 1 CIS Sensor 2	1. Clean away the dust
	2. Replace CIS sensor
BIS TOP	1.Adjustment of the Commutator position
BIS BTT	2.Detect gap of the reject pocket. Acceptable
BIS BOTTOM	value: 0.9~1.3MM
BIS TTB	
AD ERROR	1.Power off and restart the machine.
	2. Replace main board
BRAKE ERROR	1. Replace the motor control board
	2. Replace the feeding motor
Auto Adjust Ir Clean Counting Sensor	1. Clean away the dust
	2. Replace the counting IR sensor
(MG8) 170(MG0) (MG1)	Replace magnetic board on the left

(MG2) (MG5)	Replace MRS magnetic board
(MG4) (MT)	Replace big magnetic sensor
(MG6) (MG7) (MG9)	Replace magnetic board on the right

4. Detective error message display and solutions

If one of the following error messages is displayed on the LCD during the course of counting/sorting, please handle them as per the following solutions after the machine is stopped.

Error message display	Causes and solutions
SLANT/PASSWIDTH	Banknote tilt 1. Press "RESET" to continue the counting 2. If it is often displayed, adjust the adjusting screw toward the clockwise direction to increase clearance.
CHAINED DOUBLE TIME1 FOLLOW	Some banknotes are connected or overlapped 1. Put the banknotes on the banknote stacker back to the banknote hopper to count again. 2. If it is often displayed, adjust adjusting screw toward the counter-clockwise direction to decrease clearance.
HALF	Half piece or incomplete banknote. 1.Remove it and continue the counting
MG/MG1/MG2/MG3	Counterfeit suspicious banknote 1.Remove it and continue counting 2.Clean away the dust on magnetic sensor 3.Replace magnetic sensor
WIDTH/LENGTH	The banknotes are nonconforming in size 1. Remove them and continue the counting. 2. Adjust counting IR sensor.
DENO DF	Denomination different
JUDGE	1.Remove suspect notes and re-count.

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IR	1.Remove it and continue the counting 2.If it is often displayed, adjust CIS IR transmission light 3.Lower the sensitivity level.
UV	1.Remove it and continue the counting 2.If it is often displayed, adjust UV sensor 3. Replace UV sensor
FL	Remove it and continue the counting.
IMAGE IMAGE1 IMAGE2 IMAGE3 IMAGE4 IMAGE5 IMAGE6 IMAGE7 DOG EAR	1.Remove it and continue the counting 2.If it is often displayed, adjustment of CIS white radiation 3.Replace CIS sensor
TOP COVER OPEN!	Lock of the top cover well
BACK DRAWER OPEN!	It may be some banknotes are jammed,remove the banknote, then installation of the back drawer
JAM	Some foreign substance falls inside the machine or notes are blocked, open the back cover to remove them.
QUE	Adjust the adjusting screw to adjust feeding clearance.
SN Repeat	Remove it and continue the counting.
SN Invalid	
Reject Pocket Full	Remove the banknotes on the reject pocket.
Stacking Pocket Full	Remove the banknotes on the stacker.
COUNT	Put the banknotes on the banknote stacker back to the banknote hopper to count again
Old Ver	Remove it and continue the counting.
VER DIFF	
TIME2	Put the banknotes on the banknote stacker back to the banknote hopper to count again
FACE DIFF	Remove it and continue the counting.
ORIENT DIF	Remove it and continue the counting.

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Regular Maintenance Instruction

■ If the temperature is lower than 20℃, please turn on the machine and wait for 3 minutes before counting.

■ The machine shall be operated at places with good ventilation and kept away from strong sunshine and strong magnetic field.

■ The power plug of the machine shall be inserted to electrical socket with safety grounded.

■ The power supply of the machine shall be within the range of 100~240V AC. Otherwise it will affect the machine's normal operation.

■ Banknote twiddling wheel, contra rotating wheel, and delivering wheel can't be stained with any grease, otherwise it will slide and the counting will be inaccurate.

■ Dusts on CIS image detecting module, IR sensors, and magnetic sensor shall be thoroughly cleaned once a week at least. You may clean the machine by using the provided brush to remove any dust build-up on the exposed portions of the machine.

🛈 NOTE: Do not use any chemicals to clean this machine.

How to replace the fuse

The fuse can be replaced if it is burned-out, open the cover of fuse holder and insert a new one, and then recover it.

Fuse Holder ⟶

🛈 Note: For continued protection against risk of fire, replace only with same type and rating of fuse.

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Specifications

Counterfeit detection:	IR, MG, CIS IMAGE, MT, UV, etc
Counting speed:	800/1000/1200 notes/min, select-able
Hopper Capacity:	500 notes
Stacker Capacity:	200 notes
Reject Pocket Capacity	Max, 50 notes
Power supply:	100~240V AC, 50/60Hz
Power consumption:	≤50W
Temperature:	0℃~40℃
Humidity:	40~90%
Interface:	RS232, RJ-11, USB, SD Card
Dimensions:	251(L)×271(W)×264(H) mm
Weight:	8.5kg

✧ If the machine has some faults that you can't solve, please contact the Technical Support Dept of our company or our agent for services.

✧ Products subject to change without further notice.