

# Banknote Sorter S-75 User Manual



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# 1. Introduction

## 1.1 Preface

Thanks for buying our product. The user manual includes the operation steps and matters need attention.

In order to use the machine correctly, please read this manual carefully. If you meet any difficulty please contact your local distributor immediately.

We keep the right to modify the content of the manual without notice.

## 1.2 Notice

This product is used to sort and count banknotes, If any loss caused due to incorrect use, or any modification to the machine not done by our company or our distributor, our company will not be responsible for it. Please contact your distributor if you want to install or transport this machine to avoid the wrong installation or damage during the transportation.

- This product is used for counting and sorting the mentioned banknotes in user manual. Please don't use this machine for other purpose.
- Due to different power supply standard and safety standard, please do not use this machine in countries with disaccorded power supply.
- Some content may be modified without notification, please kindly understand.
- We are working continuously for improving the quality of products, so the actual machine may be a little different with the manual.
- If the machine is changed or modified by user without our notice, our company will not be responsible for it.

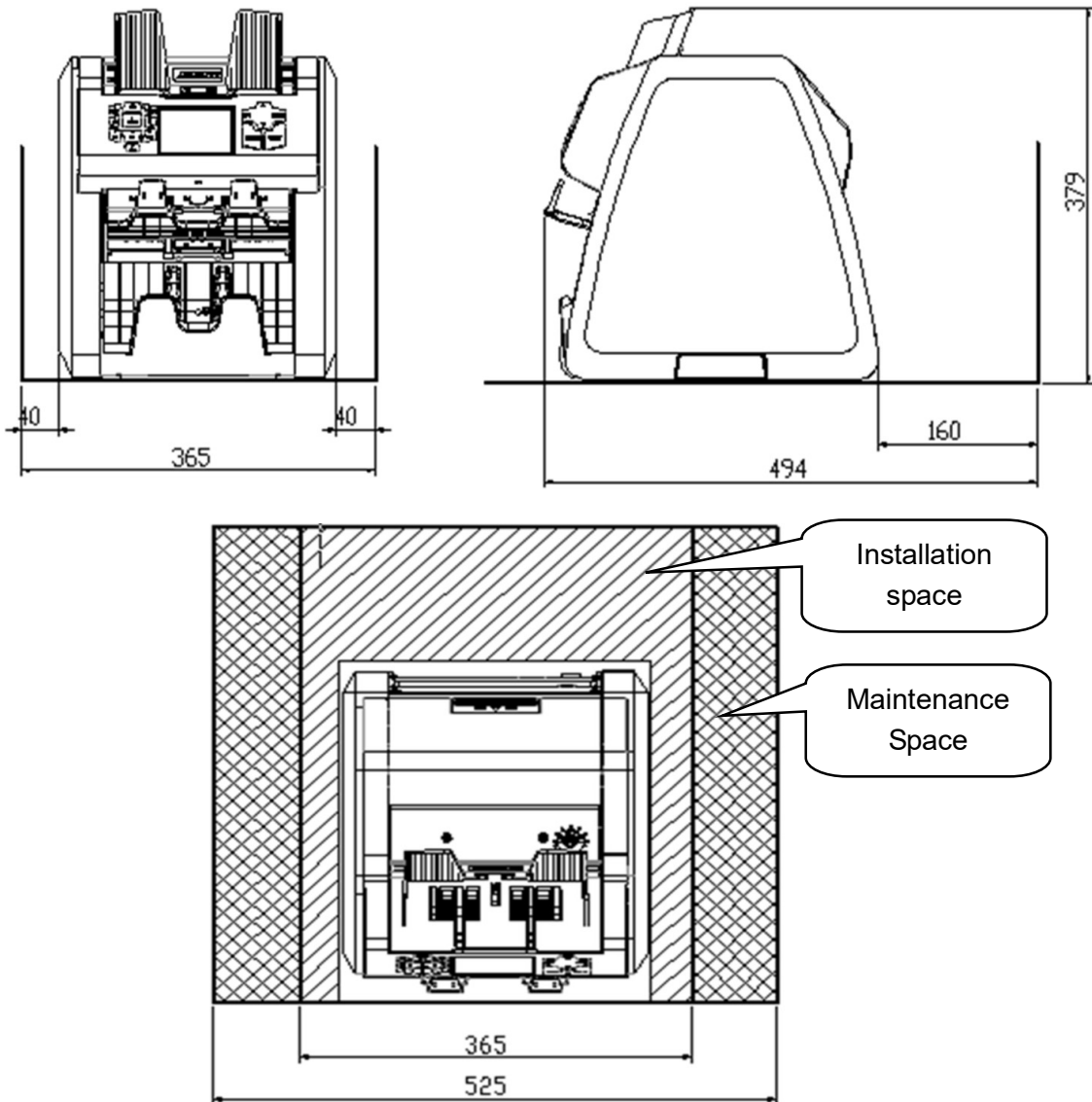
## 2. Installation Notice

### 2.1 Installation Notice

- 1) If you need to install this product, please contact the nearest distributor or our authorized distributor.
- 2) The machine is only suitable for indoor use, please do not install it and use it outdoor.
- 3) Please install the machine in an even place which can hold the weight of this machine.
- 4) Please do not use or put flammable or volatile items around the machine, such as diluents.

### 2.2 Installation place notice

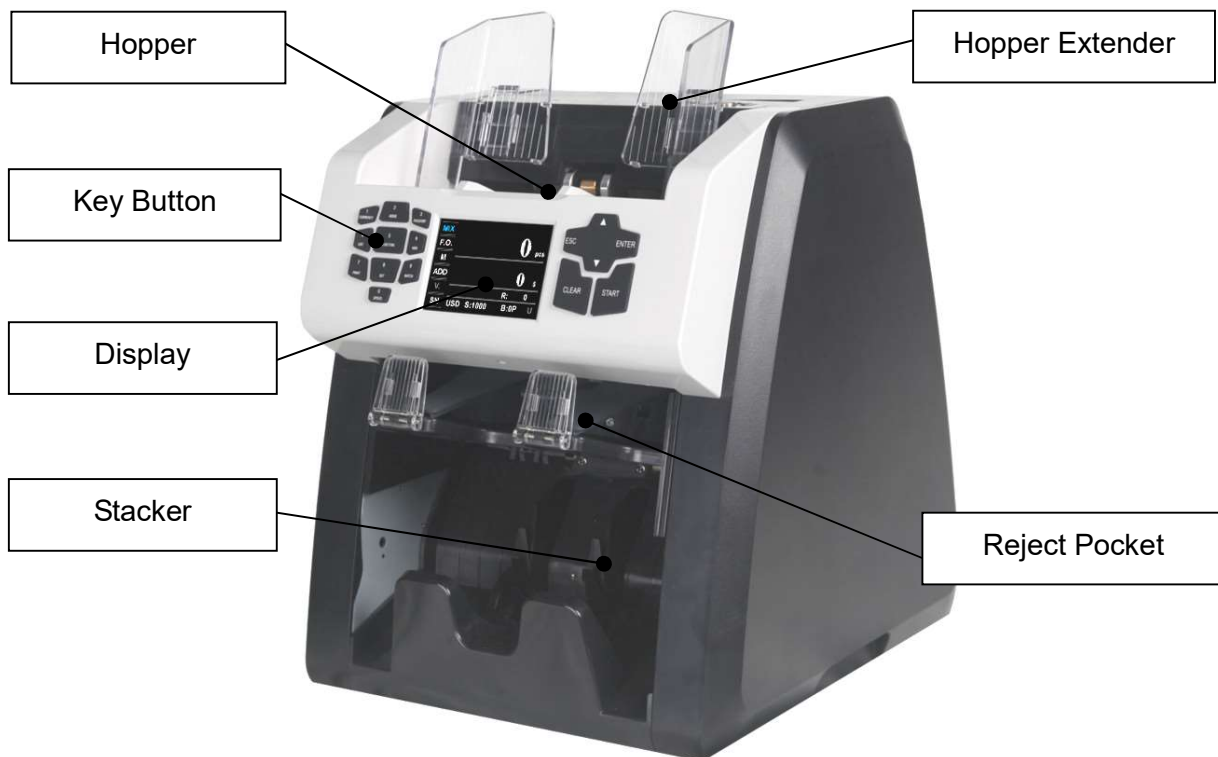
Install the machine as below , there should be enough space for your operation, such as putting the notes, opening and closing the cover and doing maintenance.



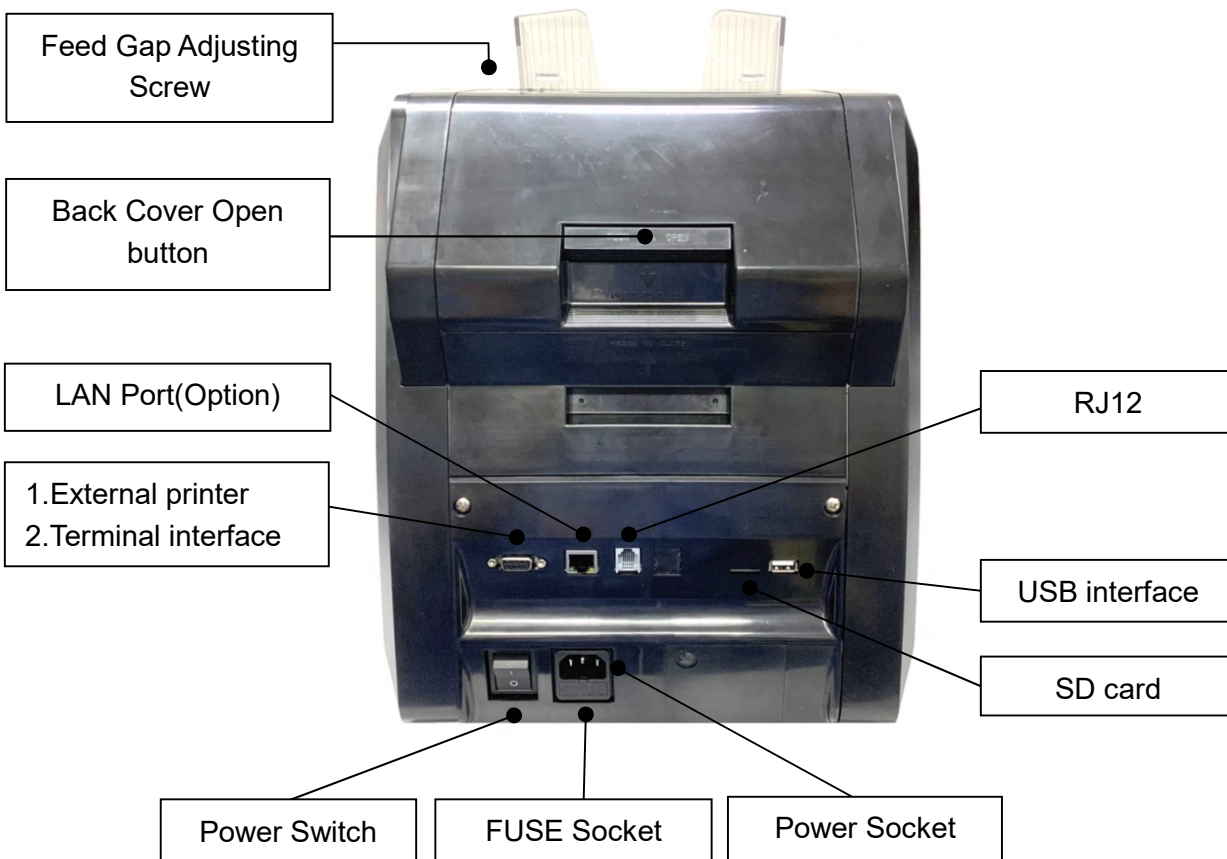
Unit(mm)

### 3. Diagram

#### 3.1 Front Diagram



#### 3.2 Back Appearance

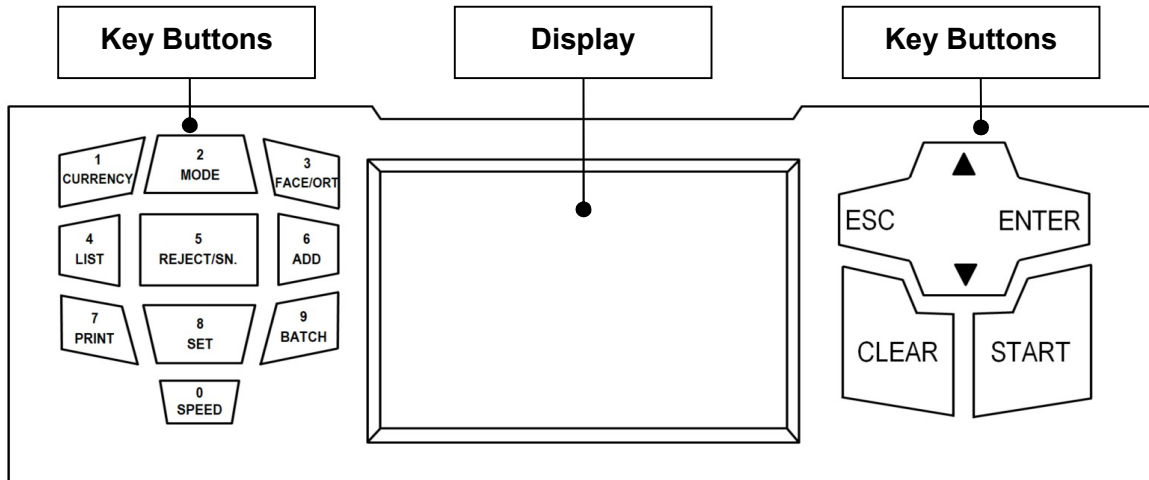


## 4. Specification

Dimension(W×L×H)	340mm×340mm×380mm
Weight	About12.5KG
Hopper Capacity	600pcs
Stacker	200pcs
Reject Pocket Capacity	100pcs(brand new)
Display	3.5 inch TFT Screen
Interface	RS-232/LAN/RJ12/SD/USB
Currency Support	Maximum 20 currencies
Sortable Notes Size	Width: 100mm~180mm Length: 50mm ~90mm
Sortable Notes Thickness	0.05mm~0.12mm
Counting Speed	800/1000pcs/min (MIX/SDC mode) 800/1000/1200pcs/min (CNT modes)
Sorting Modes	MIX Counting Mode, FACE Sorting Mode, Denomination Sorting Mode, Orientation Sorting Mode, Pieces Counting Mode
Batch No.	0~200
Counterfeit Detection	UV/MG/MT/IR
Power Supply	AC 220V 50Hz ±10% AC 110V 60Hz ±10%
Power Consumption	Sleeping Mode ≤15W During Operation ≤70W
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)

# 5. Display and Operation interface

## 5.1 Display Interface

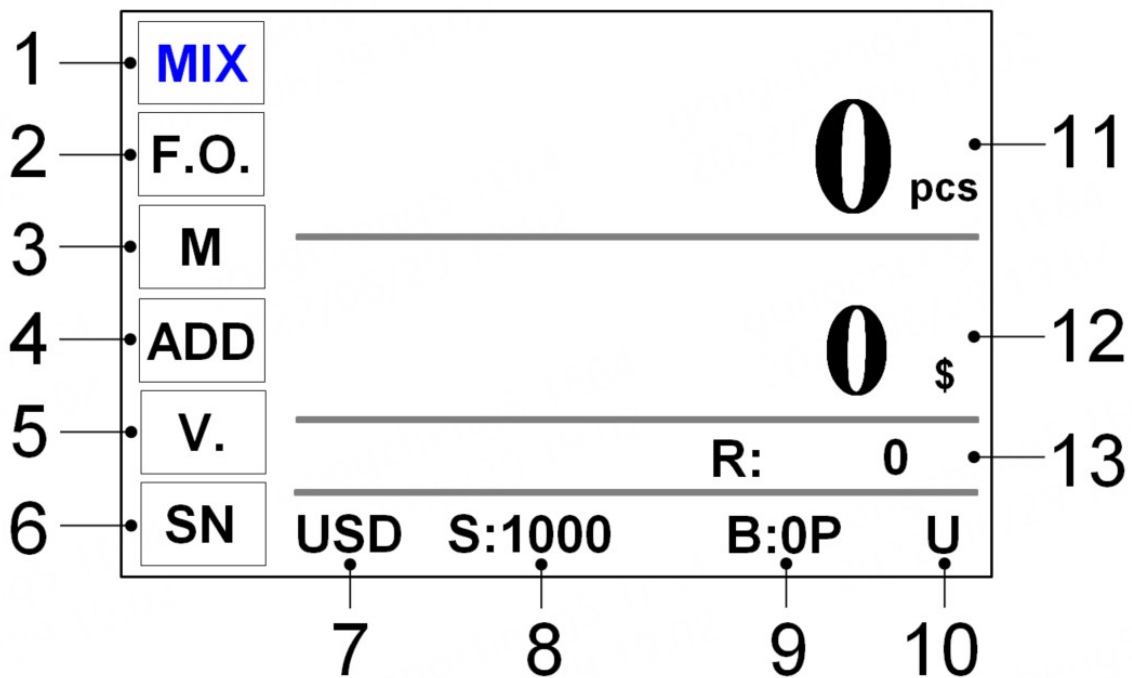


## 5.2 Key Function Explanation

	Currency selection and numeric key 1		Quantity/Amount batch or numeric key 9
	Counting modes selection or numeric key 2		Speed selection or numeric key 0
	Face/Orientation selection or numeric key 3		Move the cursor up
	Check counting details or numeric key 4		Move the cursor down
	Suspected notes checking and serial number checking or numeric key 5		Exit or Cancel or Return
	Accumulation function switch or numeric key 6		Function enter or confirmation or Save
	Printing or numeric key 7		Clear function or error code
	User setting or numeric key 8		Start the machine manual



## 5.3 Software Interface Explanation



1. Operation Modes

8. Counting Speed

2. Face Sorting

9. Batch

3. Function Setting

10. USB connection sign

4. Accumulation Mode

11. Total Qty of Notes

5. Version Sorting

12. Total Amount of Notes

6. Serial Number

13. Total Qty of Suspected Notes

7. Currency Code

## 6. Operation Instruction

### 6.1 Turn on the machine

Connect the machine with power supply and then turn on the machine , it will enter into loading interface and self-testing interface, as shown in Figure 1. Then please wait for about 30 seconds and the machine will initialize successfully and enter into main interface, as shown in Figure 2.

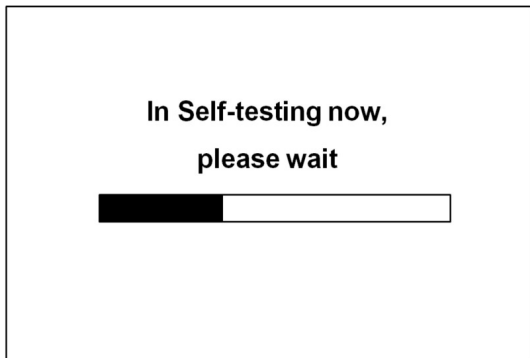


Figure 1

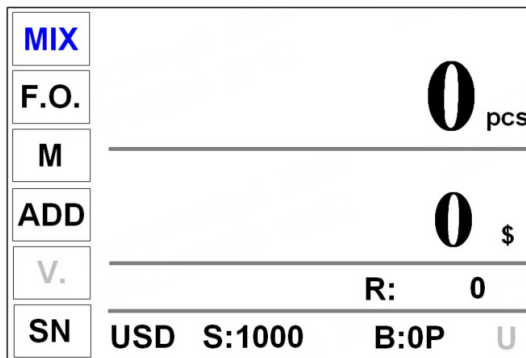


Figure 2

### 6.2 Currency Setting

**\*Note:** Before counting, please check the currency code area and confirm if the currency is correct. If not, please adjust the currency according to the below instructions (take USD for example).

Press “1 CURRENCY” key to enter into currency selection mode, as shown in Figure 3. Touch the screen to select the currency, then the machine will automatically return to the main interface. (Figure 4 is to select the currency to be USD).

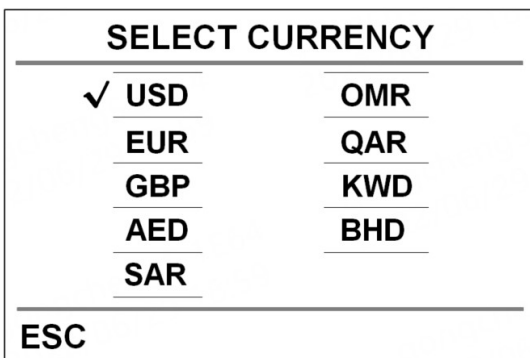


Figure 3

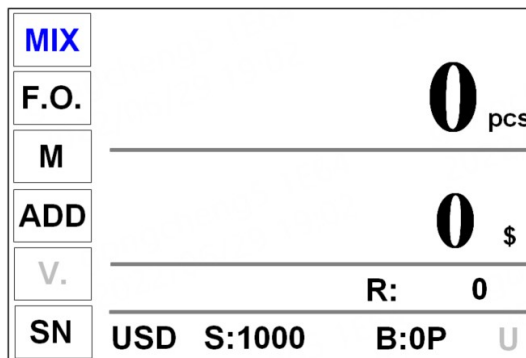


Figure 4

If the machine you ordered is only programmed single currency, then it will be not able to select currency.

## 6.3 Counting Modes Selection

Press “2 MODE” to switch three counting modes from MIX→SDC→CNT in circle, as shown in Figure 5. Every time after you set the operation mode, the machine will memorize it until you adjust the default setting for operation mode by referring to User Setting.

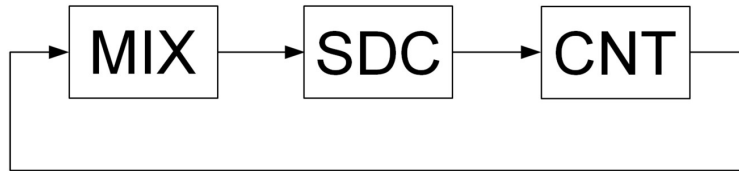


Figure 5

### 6.3.1 <MIX> Mix Counting Mode

The Figure 6 shows the Mix counting mode under automatic counting status. Under this mode, the machine will keep the detailed information of notes in stacker including total quantity and total amount and detailed information for notes in reject pocket. Under this mode, the machine will count notes under a default speed at 1000pcs/min and detect the notes in a strict way.

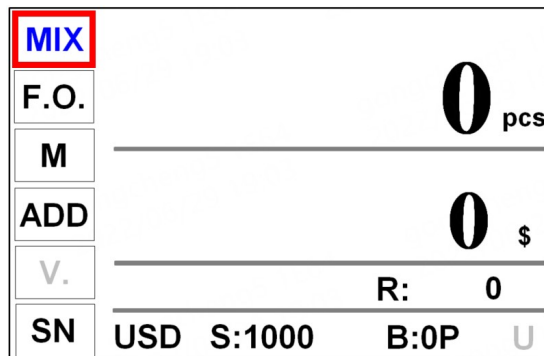


Figure 6

### 6.3.2 <SDC> Single Denomination Counting Mode

The Figure 7 shows the machine in SDC mode under auto state. Under this mode, the machine will sort the notes according to the first note it counts , in the meantime, it will calculate and save the total amount, total quantity in stacker and quantity in reject pocket.

Note: the notes rejected under this mode will give a size error code reminding. The default speed under this mode is 1000pcs/min and the counterfeit detection level is same as MIX mode.

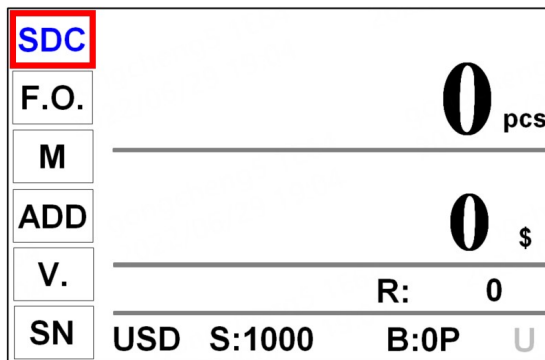


Figure 7

### 6.3.3 <CNT> Pieces Counting Mode

The Figure 8 shows the CNT mode under auto state, the machine only calculate the quantity of notes regardless currencies. Under this mode, the machine will count the notes in a default speed at 1000pcs/min without counterfeit detection, but the machine has DB detection, based on the thickness of first note, the machine possibly reject some notes due to different thickness. So under CNT mode with DB function ON, the machine is more suitable for counting the same denomination of same currency. In order to ensure the smooth counting, we suggest turn off the DB function. For more detailed information please refer to User Setting.

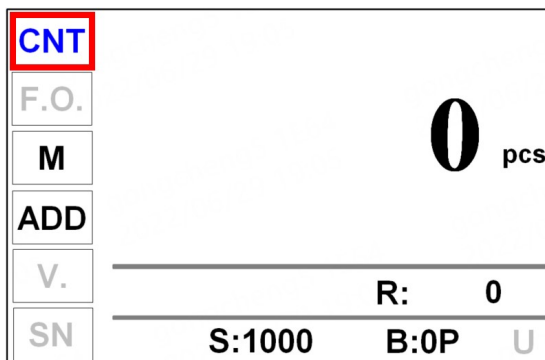


Figure 8

## 6.4 Quantity Batch and Amount Batch Setting

### 6.4.1 Quantity Batch (suitable for MIX/SDC/CNT mode)

Under counting interface press “9 BATCH” key or click “B: 0P” on the touch screen to enter into Quantity Batch setting interface, as shown in Figure 9. Click numeric key to enter Quantity setting interface, users can select batch qty from 0 to 200pcs, press OK key to save the setting, as shown in Figure 10. The machine will stop automatically when the quantity reaches batch quantity.

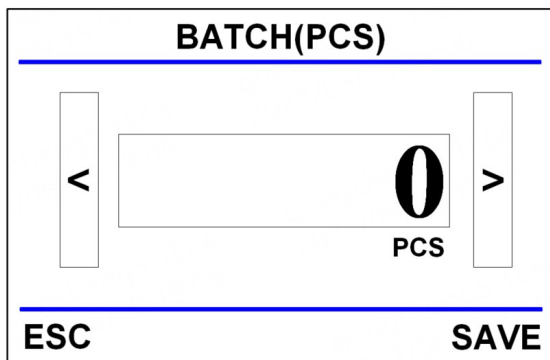


Figure 9

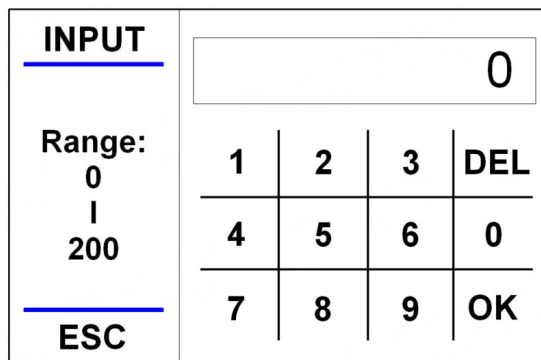


Figure 10

### 6.4.2 Amount Batch(only available for MIX mode)

Only under mix counting mode, Amount Batch can be used normally.

Under mix counting mode, press "9 BATCH" or click "B: 0P" on the touch screen to enter into Pcs Batch setting interface , as shown in Figure 9.Click ">" key to enter Amount Batch setting interface, as shown in Figure 11.

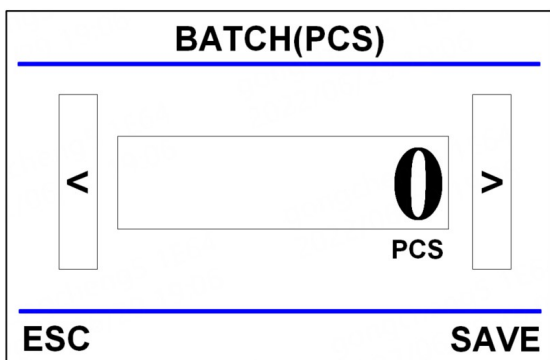


Figure 9

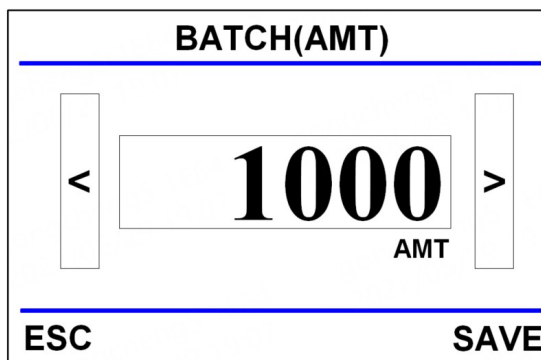


Figure 11

Under Amount Batch mode interface as shown in Figure 11, press number on the middle of the display to enter the Quantity setting interface. Input the numeric key to be set (for example: input the value 1500), as shown in Figure 12. After the value input is completed, touch "OK" to save, and the display will automatically back to the Amount Batch mode interface, as shown in Figure 13.

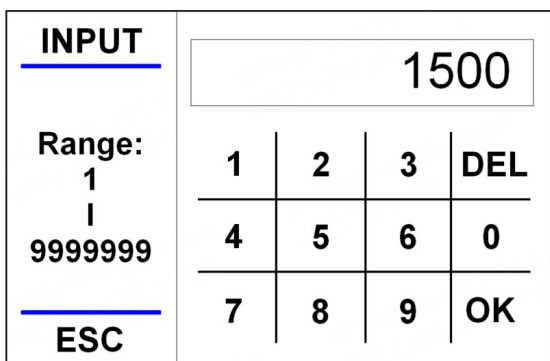


Figure 12

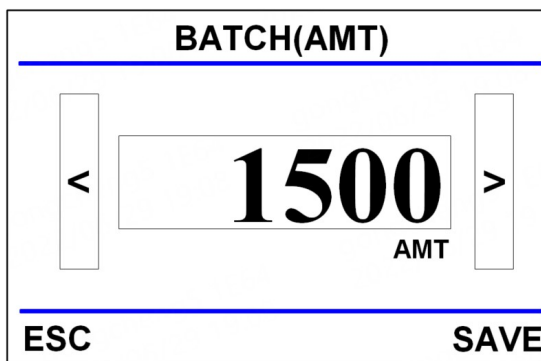


Figure 13

Under the interface of Figure 13,press the right side of the display screen "SAVE" , and the display will automatically back to the main interface, and the lower right side will show "B: 1500A", as shown in Figure 14.

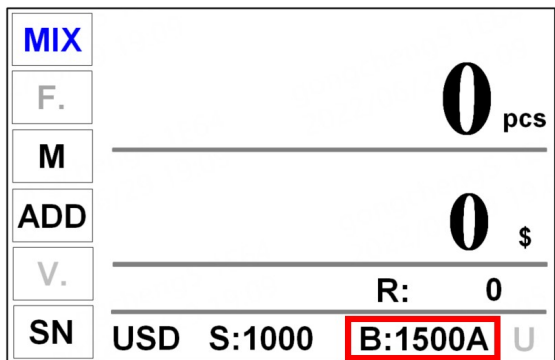


Figure 14

## 6.5 Face/Orientation Sorting Setting

This function is only valid for MIX/SDC mode, the user can settle the face/orientation by pressing “3 FACE/ORT” key. “F.” and “O.” characters turn blue to indicate that the function is on, and black to indicate that the function is off. Press one time, the main interface will show “F.”, press two times it will show “O.”, press three times it will show “F.O.”, press again to turn off this function. When F. Is turned on, the banknotes with the same face will go to stacker; When O. Is turned on, the same orientation banknotes will go to stacker; When F.O. Is turned on at the same time, the banknotes with same face and same orientation will go to stacker. The F. O. will highlight on the interface, the Figure 15 shows the machine is under MIX counting mode with face and orientation sorting function turned on.

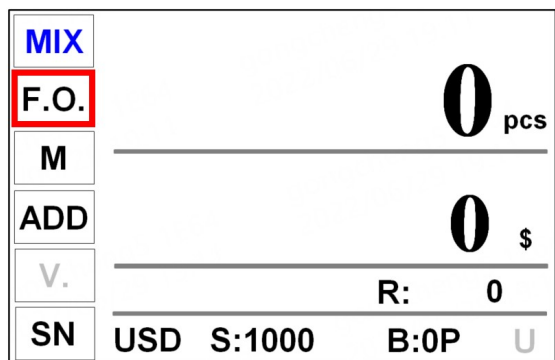


Figure 15

## 6.6 Counting Speed Setting

The counting speeds has 3 levels to select 1200, 1000 and 800(note: 1200 is only available for CNT mode), the default setting under 3 modes is 1000pcs/min. If you want set the speed, please press “0 SPEED” key to switch different speeds under any kind of counting mode. The Figure 16 shows the speed is 800 under MIX counting mode.

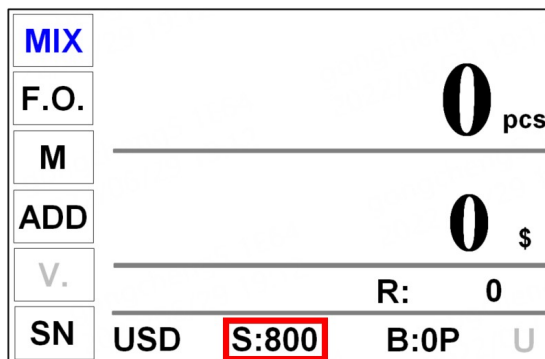


Figure 16

## 6.7 Accumulation Function

Press “6 ADD” key under any kind of counting mode to turn on accumulation function. The black "ADD" character on the left side of the display indicates that the function is turned off, and the blue indicates that the function is turned on. The Figure 17 shows the Accumulation function is turned on.

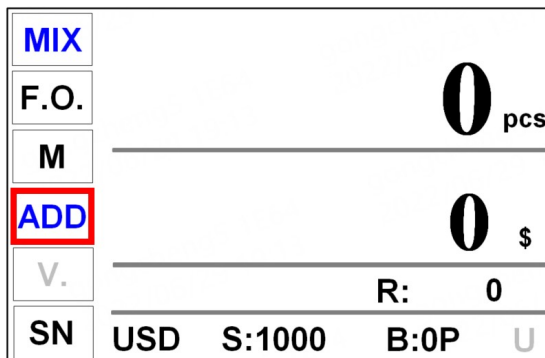


Figure 17

## 7. Check counting result and printing information

### 7.1 Check counting result

Under MIX mode or SDC mode, after counting, press “4 LIST” key to check the counting details as shown in Figure 18.

DENOM.	QTY	AMT
\$100	0	\$0
\$50	0	\$0
\$20	0	\$0
\$10	0	\$0
\$5	0	\$0
\$2	0	\$0
\$1	0	\$0
<b>Total:</b>	<b>0</b>	<b>\$0</b>

Figure 18

This interface is for checking the quantity and amount for each denomination you counted, as well as the total amount.

## 7.2 Check Suspected Notes Details and Serial Number

### 7.2.1 Check Suspected Notes Details

After finish counting, if there are suspected notes in reject pocket and want to check reject reason, please press “**5 REJECT/SN.**” key to enter into following interface (Figure 19) to check detailed information. To exit from current interface you can press “**ESC**” key or put notes on hopper to count directly.

REJECT INFORMATION		
Code	Reason	Count
<b>ESC</b>	<b>Total: 0</b>	

Figure 19

### 7.2.2 Check Serial Number

Notes: Under MIX and SDC mode, and the counting speed at 800 pieces/min , the serial number reading function of the machine can be turned on. Check the notes serial number as follows:

- 1) The counting mode is under MIX or SDC, the counting speed is adjusted to 800 pieces/min . On the main interface, press the left side of the display screen "SN" to enable the serial number reading function (blue characters mean ON, black characters mean OFF).



2) Take a batch of banknotes and count it. After finish counting, press "5 REJECT/SN." on the left to enter "REJECT INFORMATION" interface as shown in Figure 19. Press "5 REJECT/SN." again to enter "SERIAL NUMBER" interface, as shown in Figure 20.

SERIAL NUMBER		
No.	Denom.	Serial Number
1	\$50	JC0930601A
ESC		

Figure 20

### 7.3 Printing Information

When external printer is connected and is ready for printing, after counting, press LIST key to enter into list checking interface, then press "7 PRINT" key the printer will print the counting list and total amount automatically. Under the interface of serial number reading, press PRINT key to print the serial number.

## 8. User Setting

Press "8 SET" key or tap the "M" button on the left side of the display to enter into User Setting interface as Figure 21 shows:

USER SETTINGS
CF Sensitivity
General Settings
Cash Information
About
ESC

Figure 21

Click the screen to enter into next menu, and press "ESC" key to return to last menu.

## 8.1 Counterfeit Detection Setting

Click the touch screen shown as Figure 21 to choose “**CF Sensitivity**” key to enter into counterfeit detection setting. Press “>” key in Figure 22 to enter into interface as Figure 23 . Press “>” key again to enter into interface as Figure 24 .

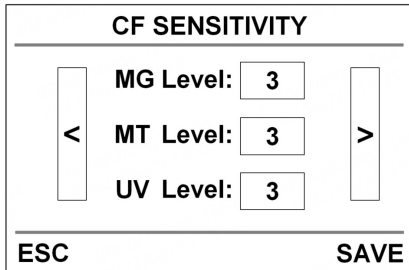


Figure 22

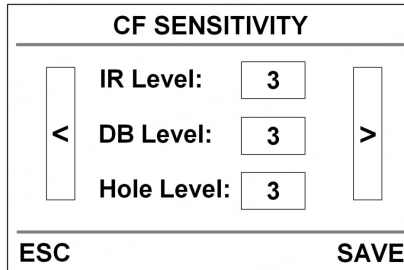


Figure 23

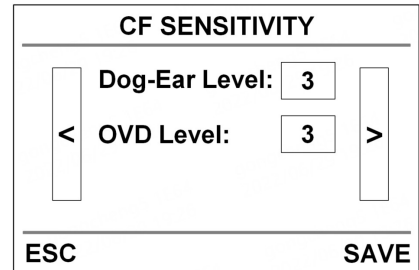


Figure 24

The detailed explanation for each function for Figure 22, Figure 23, Figure 24 is as below:

No.	Function	Explanation
1	MG	Side MG detection level setting
2	MT	MT detection level setting
3	UV	UV detection level setting
4	IR	IR detection level setting
5	DB	DB level setting
6	Hole	Hole detection level setting
7	Dog-Ear	Folded corner detection level setting
8	OVD	Optical variable strip detection setting

Choose numeric key on the touch screen, and press “**SAVE**” key to save the setting, press “**ESC**” key to return to last menu. Previous data will not be altered until user press “**SAVE**” key.

### 8.1.1 MG Counterfeit Detection Setting

Under Figure 22 interface, choose right numeric key on the touch screen to enter into MG setting interface as Figure 25 shows:

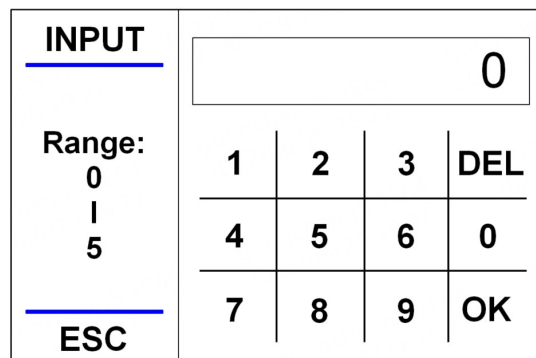


Figure 25

Under this interface there are five different levels for selection and 1 option to disable the detection. The higher the level the more sensitive it is. After choose the proper level press “OK” key to save setting, the default setting is Level 3.

### 8.1.2 MT Counterfeit Detection Setting

Under Figure 22 interface, choose right numeric key on the touch screen to enter MT setting interface as Figure 26 shows

<b>INPUT</b>	0			
Range: 0   5	1	2	3	DEL
	4	5	6	0
<b>ESC</b>	7	8	9	OK

Figure 26

Under this interface there are five different levels for selection and 1 option to disable the detection. The higher the level the more sensitive it is. After choose the proper level press “OK” key to save setting, the default setting is Level 3.

### 8.1.3 UV Counterfeit Detection Setting

Under Figure 22 interface, choose right numeric key on the touch screen to enter UV setting interface as Figure 27 shows.

<b>INPUT</b>	0			
Range: 0   5	1	2	3	DEL
	4	5	6	0
<b>ESC</b>	7	8	9	OK

Figure 27

Under this interface there are five different levels for selection and 1 option to disable the detection. The higher the level the more sensitive it is. After choose the proper level press “OK” key to save setting, the default setting is Level 3.

### 8.1.4 IR Counterfeit Detection Setting

Under Figure 23 interface, choose right numeric key on the touch screen to enter IR counterfeit detection setting interface as Figure 28 shows:

<b>INPUT</b>	0			
Range: 0   5	1	2	3	DEL
	4	5	6	0
<b>ESC</b>	7	8	9	OK

Figure 28

Under this interface there are five different levels for selection and 1 option to disable the detection. The higher the level the more sensitive it is. After choose the proper level press “OK” key to save setting, the default setting is Level 3.

### 8.1.5 Double banknotes detection setting

Under Figure 23 interface, choose right numeric key on the touch screen to enter double banknotes detection setting interface as Figure 29 shows.

<b>INPUT</b>	0			
Range: 0   5	1	2	3	DEL
	4	5	6	0
<b>ESC</b>	7	8	9	OK

Figure 29

Under this interface there are five different levels for selection and 1 option to disable the detection. The higher the level the more sensitive it is. After choose the proper level press “OK” key to save setting, the default setting is Level 3.

### 8.1.6 Hole Counterfeit Detection Setting

Under Figure 23 interface, choose right numeric key on the touch screen to enter Hole counterfeit detection setting interface as Figure 30 shows:

<b>INPUT</b>	0			
Range: 0   5	1	2	3	DEL
	4	5	6	0
<b>ESC</b>	7	8	9	OK

Figure 30

Under this interface there are five different levels for selection and 1 option to disable the detection. The higher the level the more sensitive it is. After choose the proper level press “OK” key to save setting, the default setting is Level 3.

### 8.1.7 Dog-Ear Counterfeit Detection Setting

Under Figure 24 interface, choose right numeric key on the touch screen to enter Dog-Ear counterfeit detection setting interface as Figure 31 shows:

<b>INPUT</b>	0			
Range: 0   5	1	2	3	DEL
	4	5	6	0
<b>ESC</b>	7	8	9	OK

Figure 31

Under this interface there are five different levels for selection and 1 option to disable the detection. The higher the level the more sensitive it is. After choose the proper level press “OK” key to save setting, the default setting is Level 3.

### 8.1.7 OVD Counterfeit Detection Setting

Under Figure 24 interface, choose right numeric key on the touch screen to enter OVD counterfeit detection setting interface as Figure 32 shows:

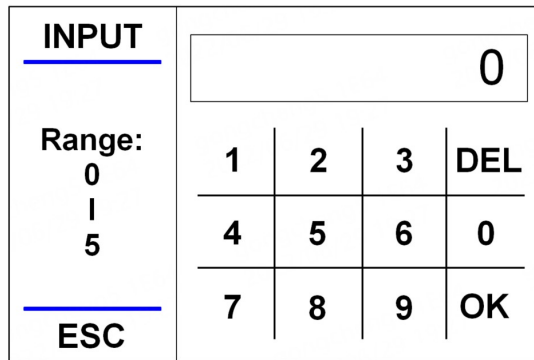


Figure 32

Under this interface there are five different levels for selection and 1 option to disable the detection. The higher the level the more sensitive it is. After choose the proper level press “OK” key to save setting, the default setting is Level 3.

## 8.2 Basic setting

Under Figure 21 interface, choose “General Settings” key on the touch screen to enter general function setting as shown in Figure 33, Figure 34, Figure 35.

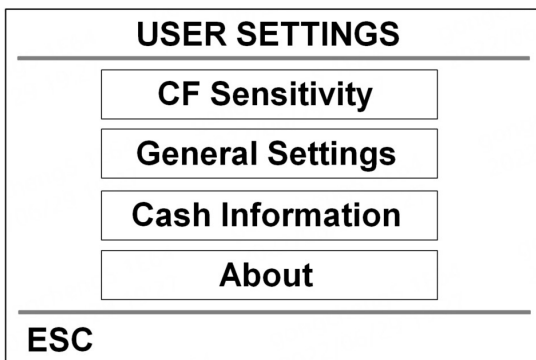


Figure 21

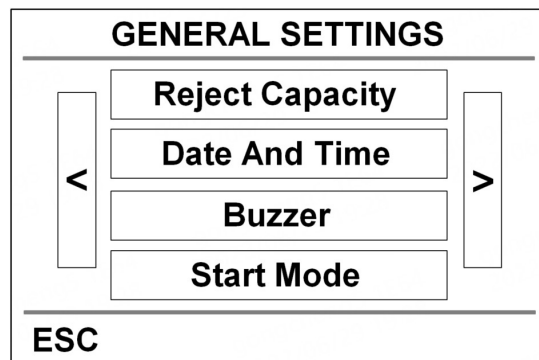


Figure 33

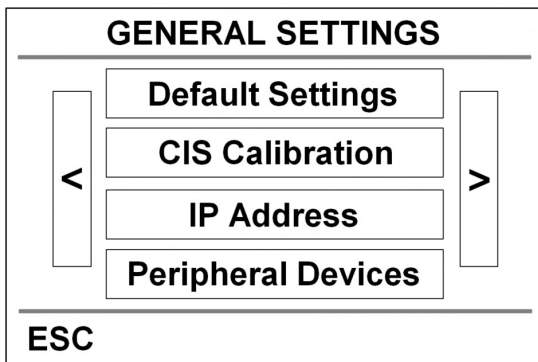


Figure 34

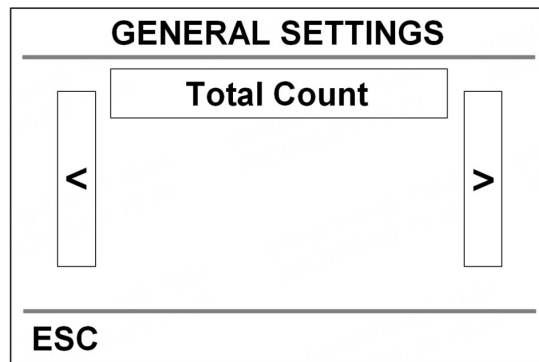


Figure 35

### 8.2.1 Reject pocket capacity setting

Under Figure 33 interface, choose “**Reject Capacity**” key on the touch screen to enter reject pocket capacity setting as Figure 36 shows:

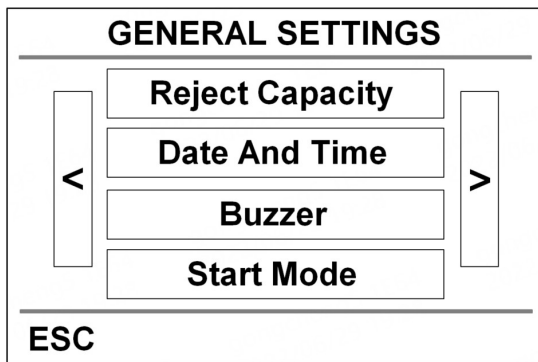


Figure 33

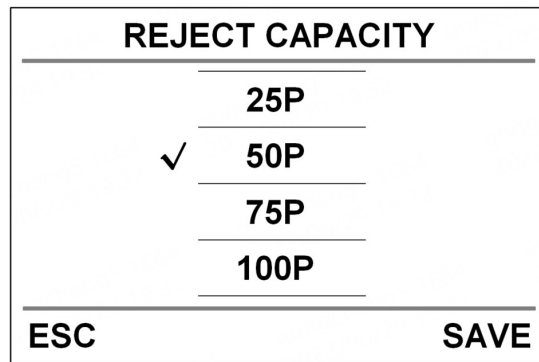


Figure 36

### 8.2.2 Date & time setting

Under Figure 33 interface, choose “**Date And Time**” key on the touch screen to enter date & time setting as Figure 37 shows. For example, click numeric key “**2022**” and press OK key to save the data, then screen will display year 2022 as Figure 38 shows:

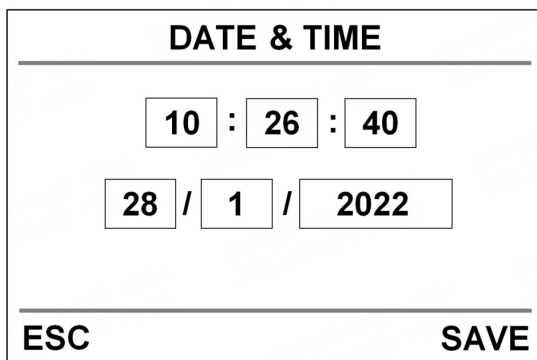


Figure 37

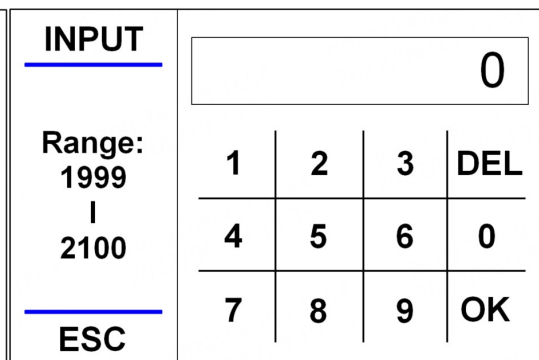


Figure 38

### 8.2.3 Buzzer setting

Under Figure 33 interface, choose “**Buzzer**” key on the touch screen to enter buzzer setting as Figure 39 shows:

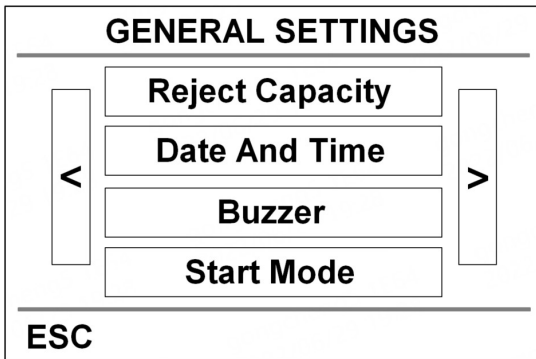


Figure 33

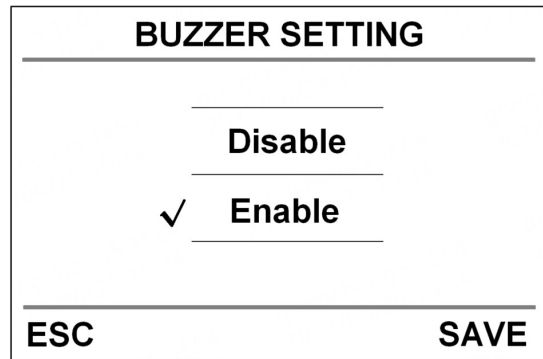


Figure 39

Click the touch screen to enable or disable the interface to set, press “**SAVE**” key to save data and return to last menu, press “**ESC**” key to exit directly without data-saving.

The default setting is buzzer on.

### 8.2.4 Start mode setting

Under Figure 33 interface, choose “**Start Mode**” key on the touch screen to enter start mode setting as Figure 40 shows:

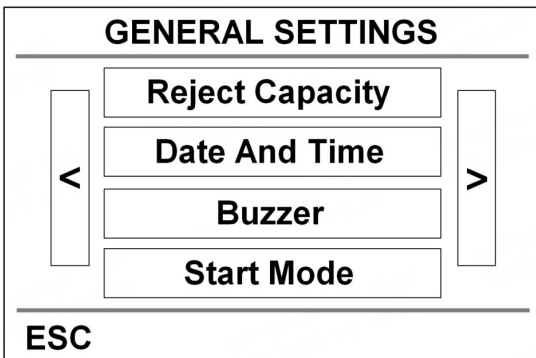


Figure 33

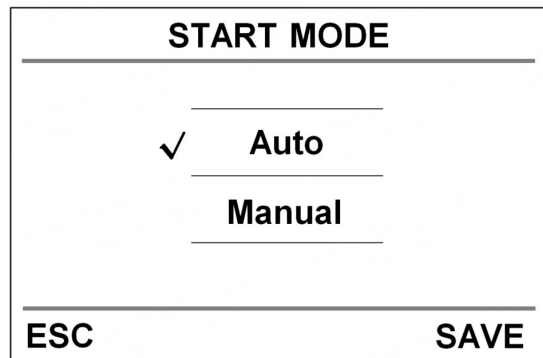


Figure 39

Click Auto or Manual key on the touch screen to choose automatic machine start or manual machine start. After setting, press “**SAVE**” key to save. Press “**ESC**” will quit from the interface.

The default setting is auto start.

### 8.2.5 Default setting

Under Figure 34 interface to click “**Default settings**” on the touch screen, Enter the password input interface, as shown in Figure 40 below.



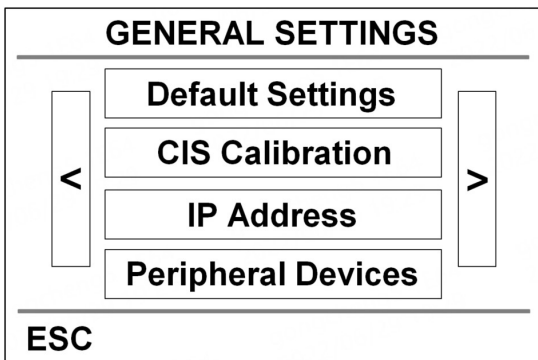


Figure 34

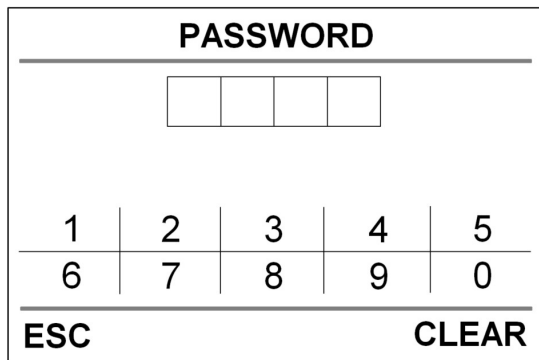


Figure 40

After inputting the passwords 1234, it will come into the following interface, as shown in Figure 41. By choosing “HERE” key, the machine will enter into default setting state. After restoring successfully, it will display the messages “Default setting is OK!”, as shown in Figure 42.

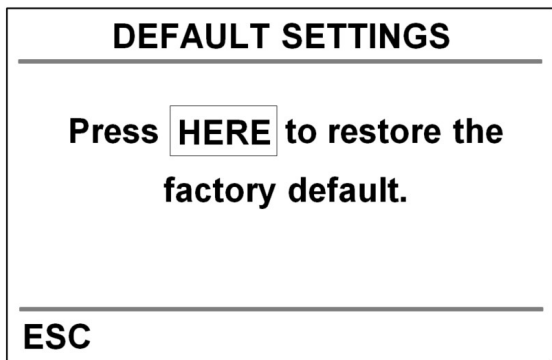


Figure 41

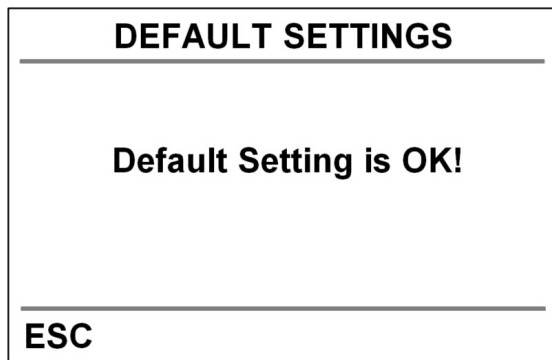


Figure 42

Press “ESC” key under Figure 42 interface shows to quit data and return to the previous menu.

### 8.2.6 CIS calibration

Under Figure 34 interface to choose “CIS calibration” on the touch screen, Enter the password input interface, as shown in Figure 43 below.

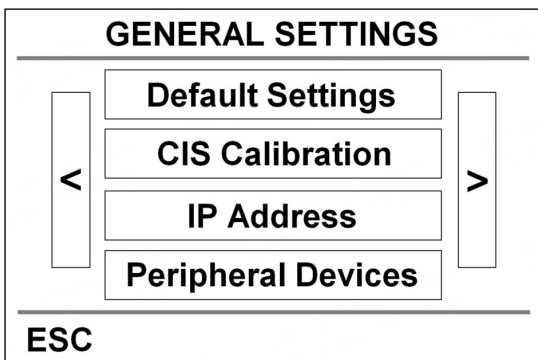


Figure 34

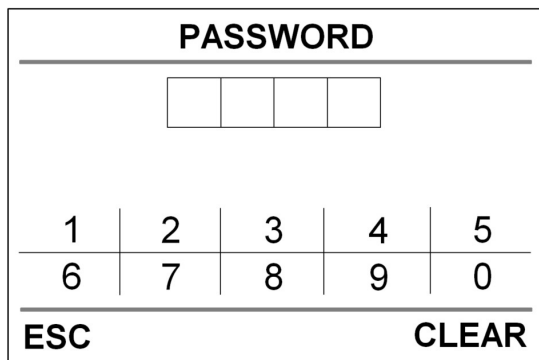


Figure 43

After inputting the passwords 0508, it will come into the following interface, shown as Figure 44:

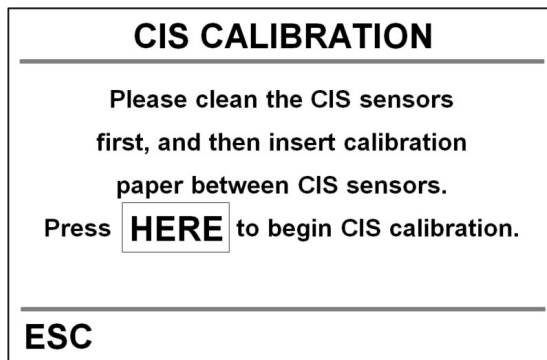


Figure 44

Before you begin the CIS calibration, please make sure you have inserted the calibration bar correctly, otherwise it will cause problem. The calibration bar must cover the whole CIS sensor.

CIS calibration is in progress, as shown in Figure 45 below. The CIS calibration is complete, as shown in Figure 46 below. After the calibration is complete, please restart the machine.

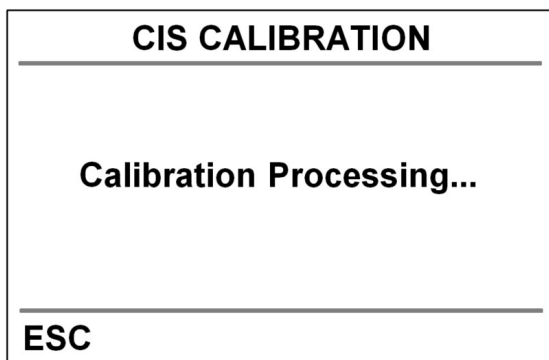


Figure 45

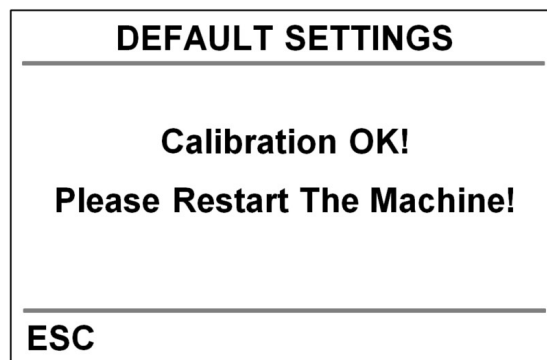


Figure 46

### 8.2.7 IP address setting

Under Figure 34 interface to choose “IP Address” on the touch screen, shown as Figure 47.

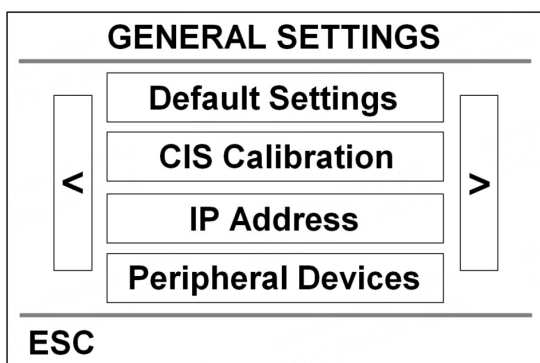


Figure 34

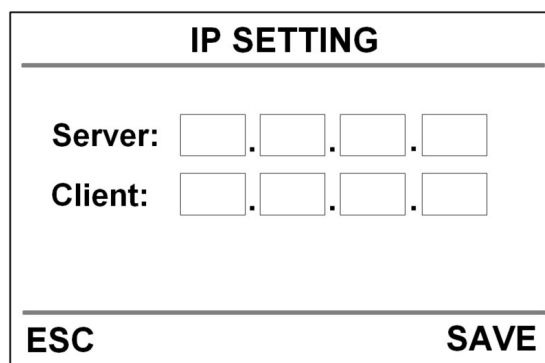


Figure 47

Under Figure 47 interface, click numeric key on the touch screen to set IP address (shown as Figure 49) by referring to following interface, then press SAVE key to save the setting data.

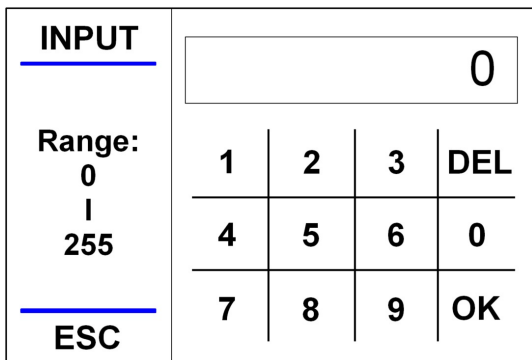


Figure 48

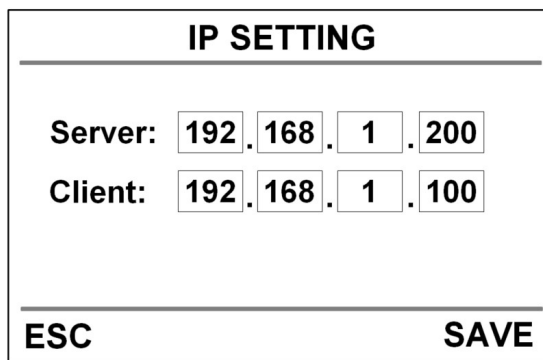


Figure 49

## 8.3 Image information collection

Under Figure 21 interface to choose “Cash information” setting on the touch screen, shown as Figure 50 and Figure51.

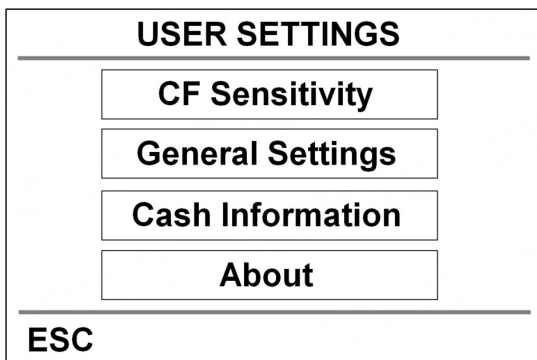


Figure 21

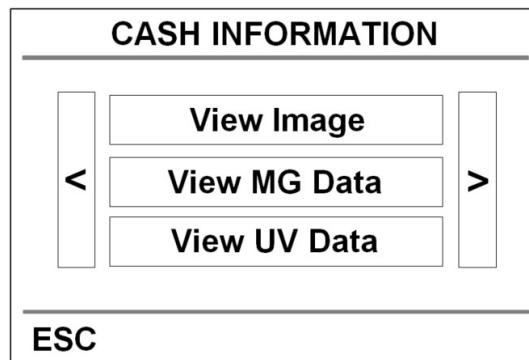


Figure 50

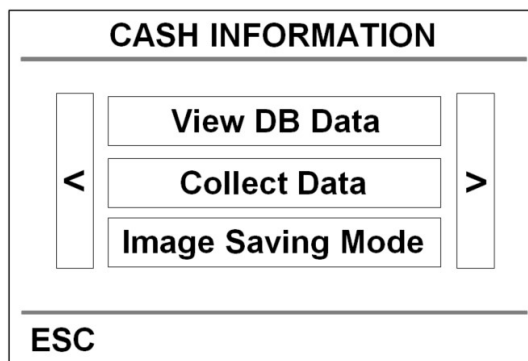


Figure 51

Click the touch screen to view cash information, press “ESC” key to return to last menu.

### 8.3.1 Image information collection

Under Figure 50 interface to choose “View Image” on the touch screen, shown as Figure 52.

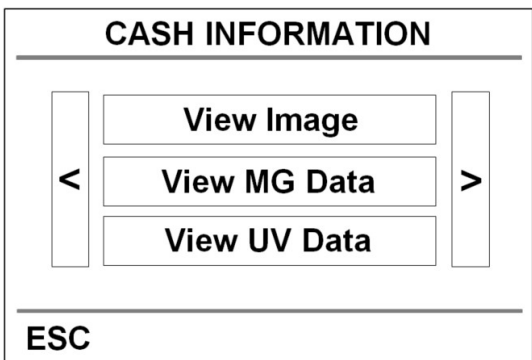


Figure 50

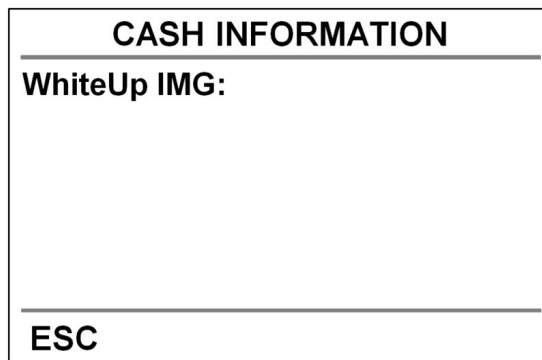


Figure 52

Put one banknote to count, the display will show its image on the screen, shown as Figure 53.

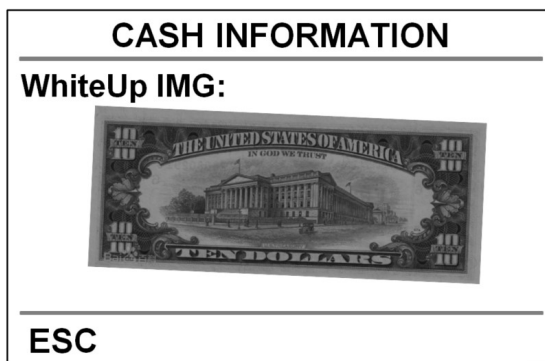


Figure 53

By pressing “Δ” or “∇” key to turn on the pages under Figure 53 interface, you will get total five different images.

This image collection function is only valid under MIX and SDC modes.

### 8.3.2 UV/MG/DB information collection

Under Figure 50 interface to choose “View MG Data”, “View UV Data”, “View DB Data” one by one, you could collect the banknote’s UV/MG/DB information, shown as Figure 54, of which method are similar to image information collection.

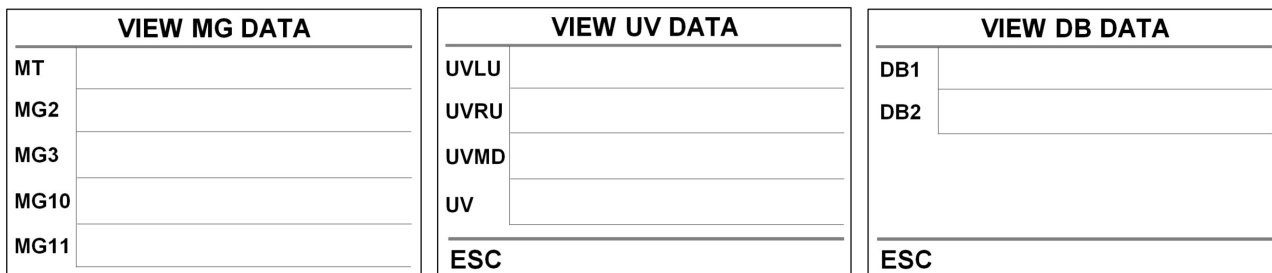


Figure 54

### 8.3.3 Data Collection setting

Under Figure 51 interface to choose “Collect Data” setting on the touch screen, shown as Figure 55.

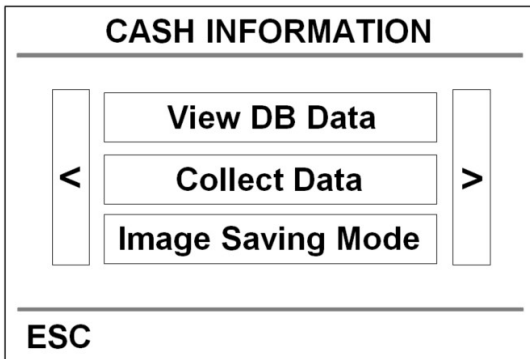


Figure 51

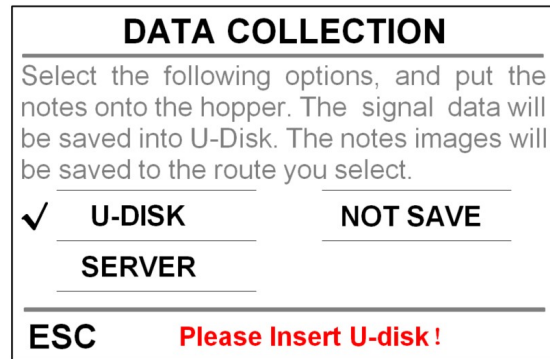


Figure 55

Put banknote to count under interface Figure 55 after choosing saving method (Notes: please make sure the USB flash drive is well inserted, as shown in Figure 56). If quantity is over than 10pcs, then machine will count 10pcs automatically, and stop working after counting quantity reaches. At the same time, UV/MG/DB information of all banknotes will be saved automatically, shown as Figure 57.

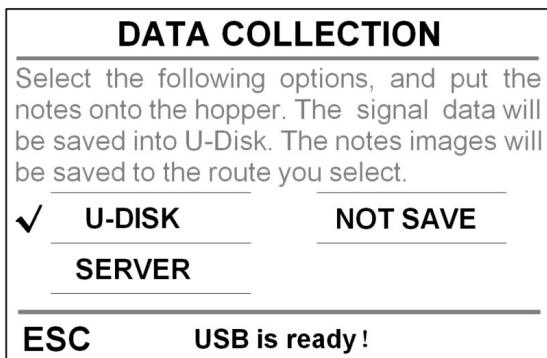


Figure 56

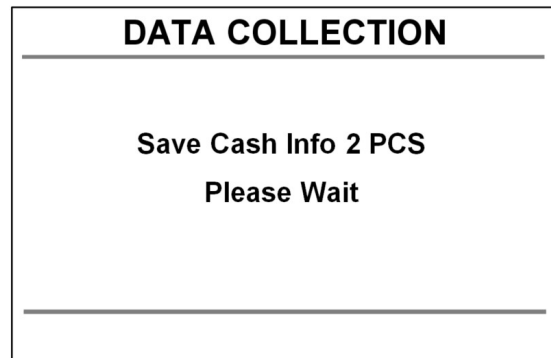


Figure 57

When all image information is collected, the machine will continue to count next batch and repeat collection process. After image saving, it will create automatically files named CASHINFO under root directory of USB, all images will be saved to the file according to date.

**\*Notes: As image saving process for such a large file will take a long time, please wait patiently.**

### 8.3.4 Image saving setting

**\*Notes:** Before you collect the images, please make sure the USB flash drive is well inserted. There will be a blue sign of “U” on the bottom right screen corner if the drive is successfully connected, shown as Figure 58.

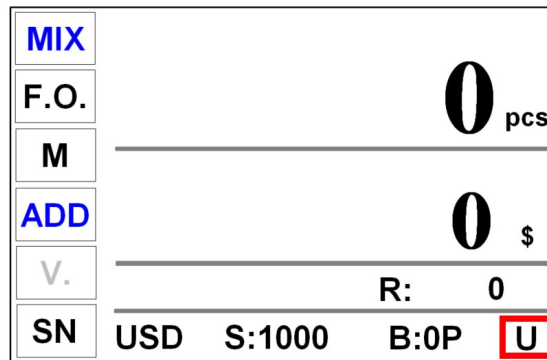


Figure 58

Under Figure 51 interface to choose “Image Saving Mode” setting on the touch screen, shown as Figure 59.

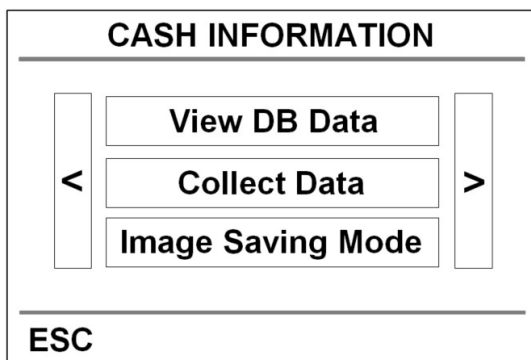


Figure 51

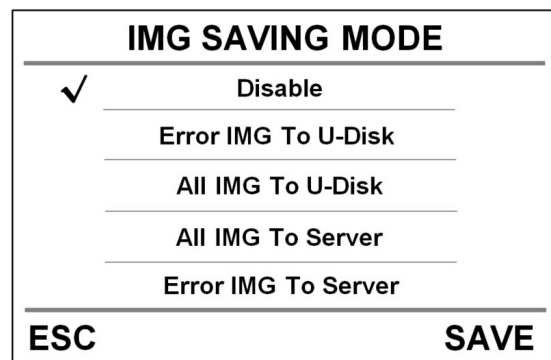


Figure 59

The default setting is saving disable. Item 2 is only to save error images for those rejected banknotes from the reject pocket to USB flash drive. Item 3 is to save all images for all counted banknotes from both reject pocket and stacker to USB flash drive. After image saving, it will create automatically files named IMGERR (for error images only) and IMGALL(for all images), all images will be saved to the file according to date.

After image collection is finished, the screen will display main menu automatically. But please note that the whole process will take a long time, so please wait patiently.

### 8.3.5 Software version review

Under Figure 21 interface, choose “**About**” setting on the touch screen shown as Figure 60 to view the software version.

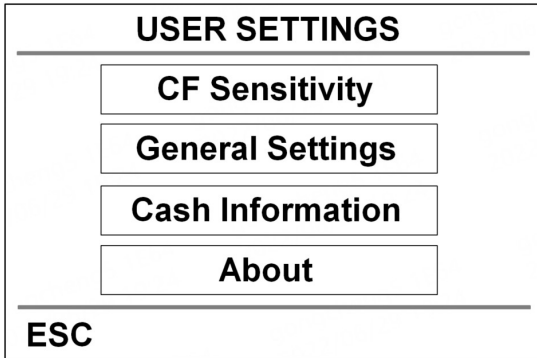


Figure 21

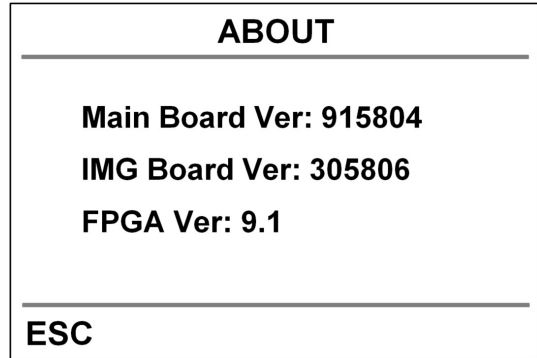


Figure 60

### 8.4 Sensitivity Setting for QT sensor

Turn on the power switch and press “**8 SET**” key to enter into **SYSTEM TEST** interface, as shown in Figure61, Figure62, Figure63.

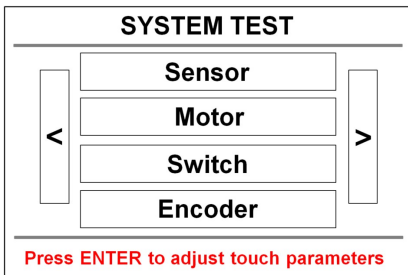


Figure 61

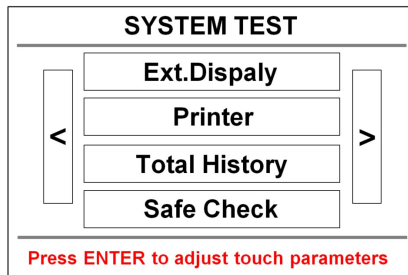


Figure 62

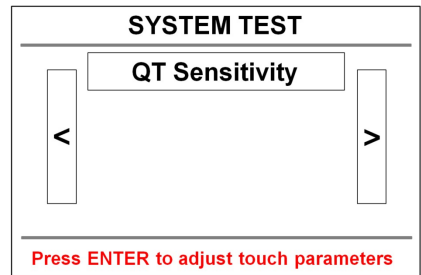


Figure 63

Choose “**QT Sensitivity**” to enter into **QT sensitivity level setting interface**. The factory default setting is level 3, means highest sensitivity. Level 1 means lowest sensitivity. Tap to select the detection level to save, as shown in Figure 64.

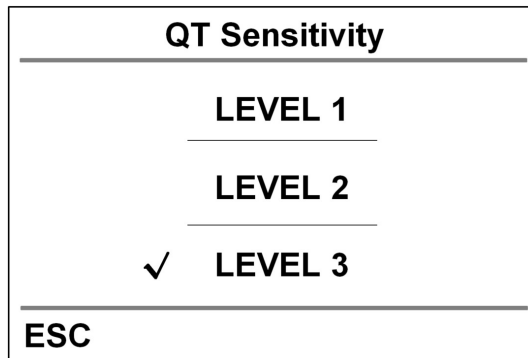
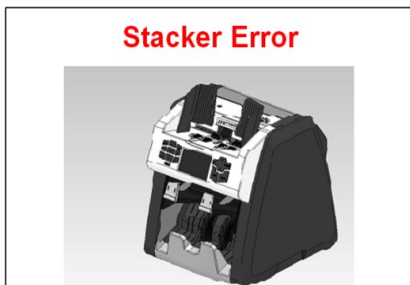
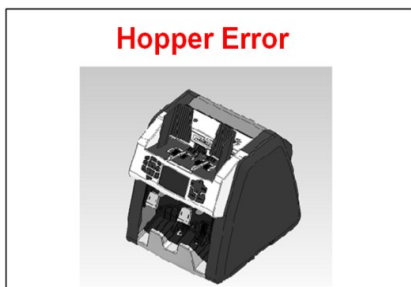


Figure 64

# 9. Trouble shooting

## 9.1 Common errors

During use of machine, sometimes you may meet some abnormal situation and the machine cannot work normally, and the machine will display error messages. The following sheet shows the error message, possible reason and detailed solution. Please do trouble shooting according to the following solution. If you cannot solve the problem with the provided solution, please contact your local distributor.



**IMG TEST ERROR**

---

**IMG Board INIT Failed !  
Please check the IMG Board !**

---

**ESC**

IMG Board connect unsuccessfully



## 9.2 Banknote jamming and solution

If the notes get jammed during counting progress, there will be warning messages displayed on the screen. You need to take out the jammed notes firstly and then press “**START**” key to check if there is still hidden jammed notes. Last, press “**CLEAR**” key to clear warning message. If the machine still displays “**JAM**”, you will need to open the machine and take out the notes from interior passage.

Once jamming happens, please recount the notes to avoid counting mistake.

\*After clean the sensor and passage well, please press “**CLEAR**” key to clear the error interface and enter into main interface to go on counting.

\*If after checking, there is no foreign items blocking the sensor, and after press “**CLEAR**” key there is still error interface, please refer to service manual to do trouble shooting.

### Error code list:

Error code	Explanation
Stacker Full	The stacker is full
MG Quantity	Side MG quantity is not correct
MG Position	Side MG position is not correct
MT Quantity	Middle MG quantity is not correct
MT Code	Middle MG code is not correct
UV	UV mark is abnormal
Double	Double note is detected
Half	Half note is detected
Long	Banknote image is too long
Short	Banknote image is too short
Gap	Chain notes are detected
IMG Timeout	Image processing is timed out
IMG Size Unknown	Image size is unknown
IMG ORT Unknown	Image orientation is unknown
IMG Version	Image version is not correct
IMG FACE	Face image is not correct
IMG ORT	Orientation image is not correct

IMG Angle	Image angle is not correct
IR OVD	OVD image is not correct
IR MT	IR metal thread is abnormal
IR Hole	Hole is detected
IR Dog-Ear	Dog-ear image is detected
IMGDIRT	Dirty image is detected
IRFeature1	IR feature 1 is detected
IRFeature2	IR feature 2 is detected
IRFeature3	IR feature 3 is detected
IRFeature4	IR feature 4 is detected
IRFeature5	IR feature 5 is detected
IRFeature6	IR feature 6 is detected
IRFeature7	IR feature 7 is detected
IRFeature8	IR feature 8 is detected
IMG FACE ORT	Image face and orientation is abnormal
OCR1	Serial No.is wrong 1
OCR2	Serial No.is wrong 1

## 10. Software Upgrade

This model adopts flash drive (USB) upgrading method for software upgrade. Please copy the upgrading file into the flash drive, and insert the flash drive into the USB port at the back of machine. Hold on pressing the START key, and then turn on the power switch, you will find the choosing interface as follows:

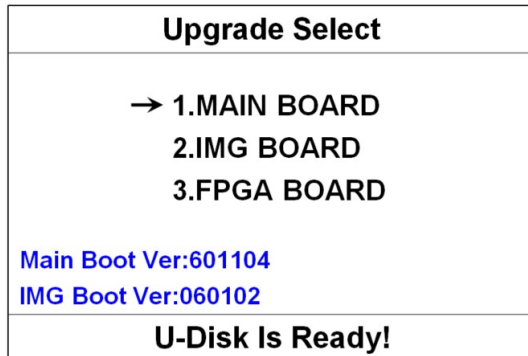


Figure 65

Select upgrade item



Figure 66

USB is not connected

**\*If the USB flash drive is inserted well, the display will show “USB is Ready!”, otherwise it will show “Please insert the U-Disk!”.**

For the upgrading file, it is not allowed to change its name and format, otherwise will cause upgrade failure.

### 10.1 MAINBOARD upgrading

Under interface Figure 65, press “△” or “▽” key to choose “1.MAIN BOARD”, and then press “ENTER” key to start software upgrading, shown as Figure 67. If there is no software file or file name is not correct, it will display warning messages.

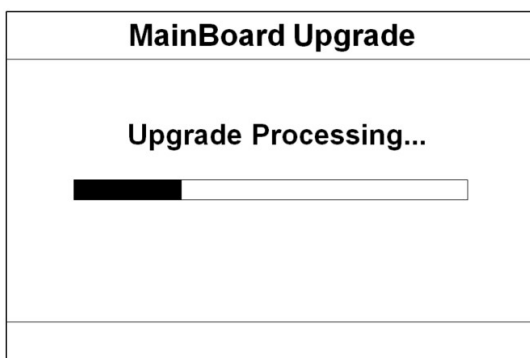


Figure 67

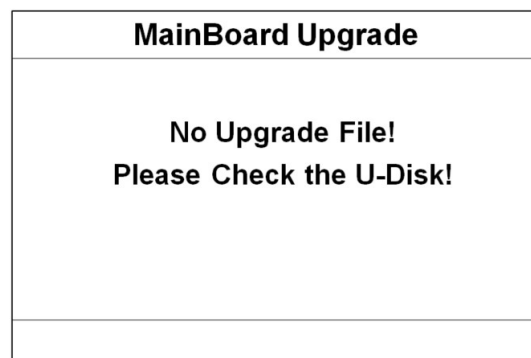


Figure 68

After software upgrade, please restart the machine referring to the following message.

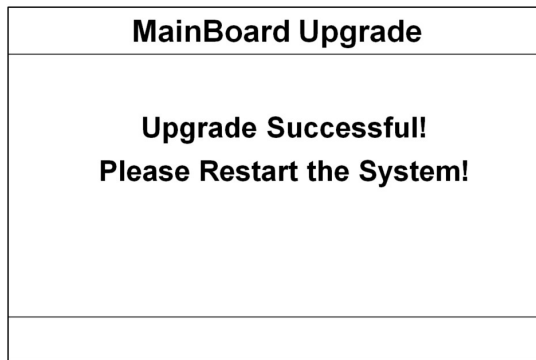


Figure 69

## 10.2 IMAGEBOARD upgrading

Under interface Figure 65, press “ $\Delta$ ” or “ $\nabla$ ” key to choose “**2.IMG BOARD**”, and then press “**ENTER**” key to start software upgrading, , shown as Figure 70 and Figure71.

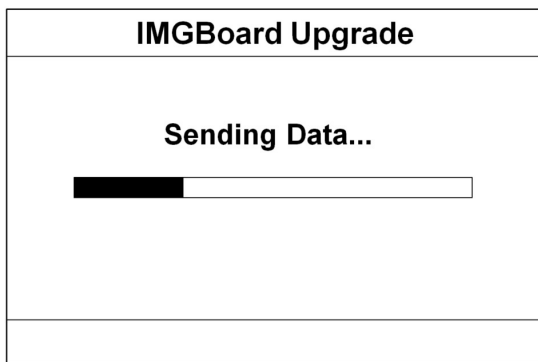


Figure 70

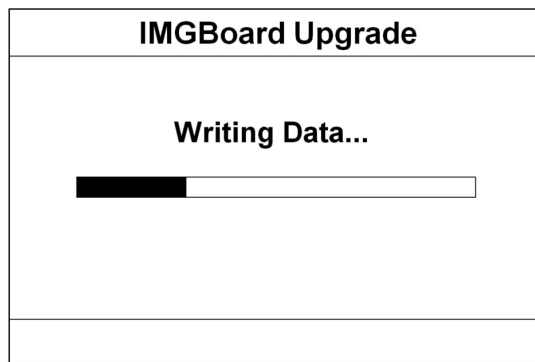


Figure 71

If there is no software file or file name is not correct, it will display warning messages shown as Figure 72. After software upgrade, please restart the machine referring to the following message.

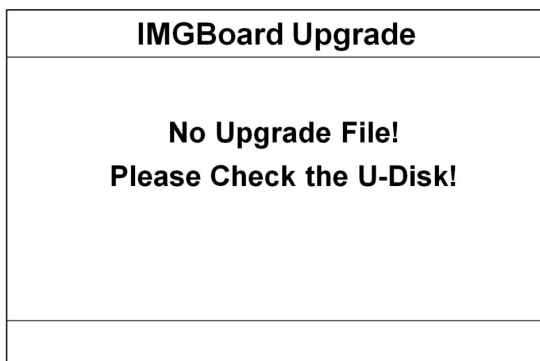


Figure 72



Figure 73

# 11. Image Collection through PC

## 11.1 Configure the IP address of PC

Unzip the PC image acquisition software "ServerForM152\_V7.0.zip" , and you can see named "ServerForM152\_V7.0".

This software only run under Windows XP or above systems, and also need install ".NET4.0" software. Please check whether there is a folder named V4.0 "C:\WINDOWS\Microsoft.NET\Framework" of the C Disk. If not, please install the "Microsoft.NET.exe" software.

## 11.2 Configure the IP Address

### 11.2.1 Configure the IP address of PC

Windows xp, Windows 7, Windows 10 all need to set the PC IP address, subnet mask and router, and all need to be set the same to the following:

IP address (I): 192.168.1.200

Subnet Mask (U): 255.255.255.0

Router (D): 192.168.1.100

The IP address setting methods of different Windows systems are as follows:

Windows XP system: Open "Control Panel > Network Connections", right-press "Local Area Connection", press "Properties", press twice "Internet Protocol (TCP/IP)", set the IP address, and press "OK" to save, in the properties interface press "OK" again to save.

Windows 7 system: Open "Control Panel > Network and Internet > Network and Sharing Center > Change Adapter Settings" , right-press "Local Area Connection", press "Properties", press twice "Internet Protocol Version 4 (TCP/IPv4)", and perform IP Address settings, and press" OK" to save, press "OK" again on the property interface to save

Windows 10 system: Open "Settings>Network & Internet>Network and Sharing Centre>Change adapter settings", right-press "Ethernet", press "Properties", press twice "Internet Protocol Version 4 (TCP/IPv4)", configure the address As shown in Figure 74 , and press "OK "to save, press "OK" again on the property interface to save

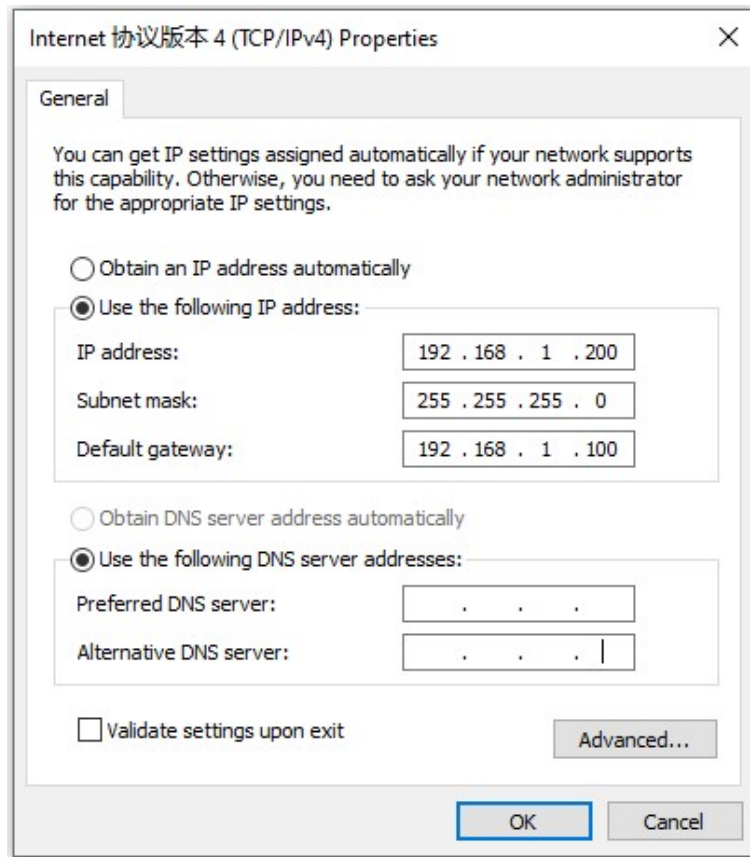


Figure 74

### 11.2.2 Configure the IP of machine

The factory default setting of IP address is as below:

IP SETTING	
Server:	192 . 168 . 1 . 200
Client:	192 . 168 . 1 . 100
<div style="display: flex; justify-content: space-between;"> <span><b>ESC</b></span> <span><b>SAVE</b></span> </div>	

Figure 75

If it is not the IP address as Figure 75, you need to revise it, go to the user setting “**User Settings**”---“**General Settings**”---“**IP Address**” and set the IP address as Figure 75.

## 11.3 Notes collection

There are two ways for collection, USB collection and LAN port collection, You can collect notes images and notes information

### 11.3.1 Error images collection

The error images collection is used when machine have frequent error code or feeding is not smooth. You can only collect notes images, and it can collect 40pcs notes at one time.

a) If you use USB to collect (it takes one minute to collect one note, so we suggest to use LAN to collect if there are many notes), please connect USB to machine (>=1G, format 32), and choose setting “**Error IMG To U-Disk**”, and return to main interface (you can put 40pcs notes at most and CAN NOT choose EUR mode.)

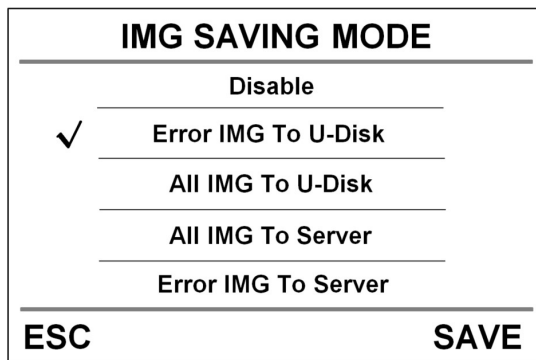


Figure 76

b) If you use PC software to collect, please connect the machine with PC, and choose “**Error IMG To Server**”, open the PC software, return to main interface and collect .(you can put 40pcs notes at most and CAN NOT choose EUR mode)

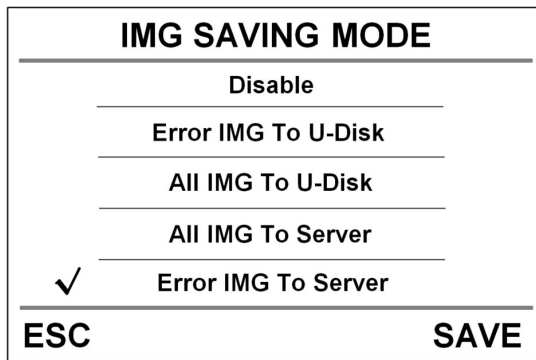


Figure 77

### 11.3.2 Notes information collection

Notes information collection is used to develop new currency software and analyze fake notes. The data is more complete, the operation steps are as below:

a) If you use USB to collect, please connect USB to machine (>=8G, format 32), and choose setting as below picture, and put the notes into the hopper, the notes information will be collected automatically. You can check the information in Data menu (You CAN NOT choose EUR mode to collect).

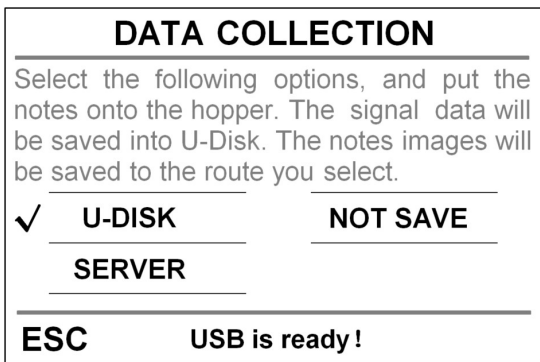


Figure 78

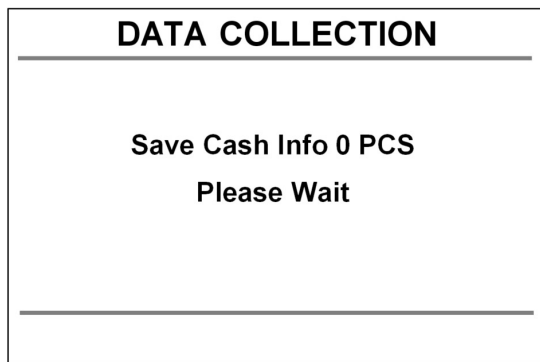


Figure 79

b) If you use PC software to collect, please connect the machine with PC, and choose setting as below picture, open the PC software, you can put notes into the hopper and the it will start collection automatically, you can check the information under Data menu(you CAN NOT choose EUR mode).

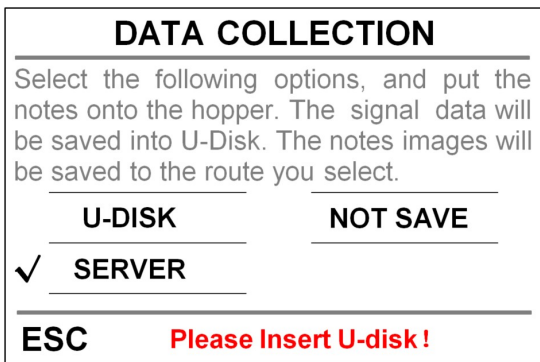


Figure 80

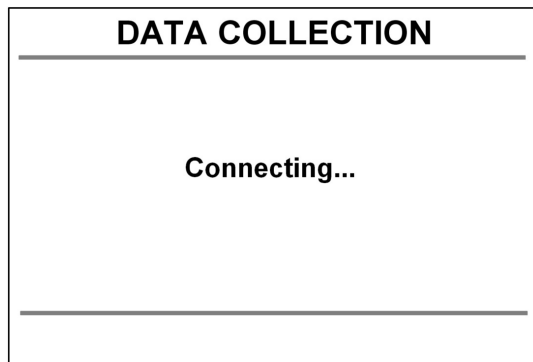


Figure 81

At this time, upper monitor software shown in Figure 82 :

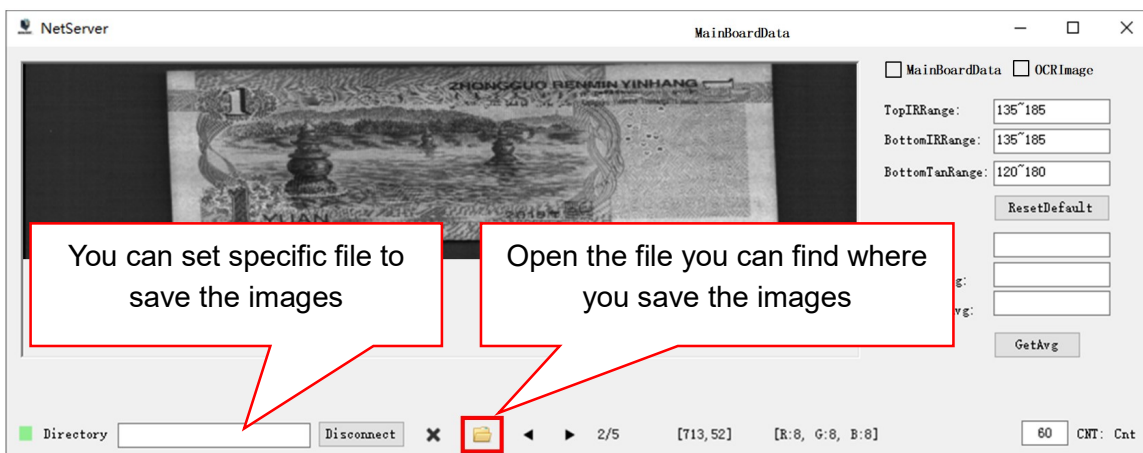


Figure 82

Press the file shown in Figure 82 to open the collected image file, you can see as shown in Figure 83,



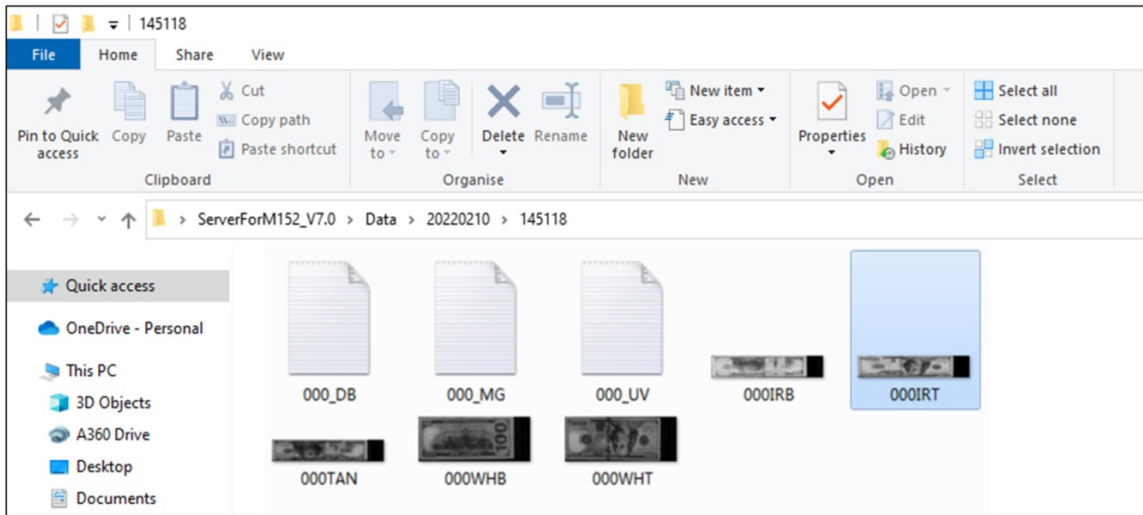


Figure 83

## 11.4 Notes

If there are many notes rejected during counting, you need to collect Error notes images according to 11.3.1, the maximum quantity you put on hopper is 40pcs.

For new currency development, please choose NON-EURO mode, under Data Collection interface (the machine will stop to save data every 10pcs notes). Please prepare 200pcs notes for each denomination, collect at ABCD four different orientations and save into four separate files. Please refer to 11.3.2.

For fake notes collection, you need to choose the corresponding currency, under Data Collection interface (the machine will stop to save data every 10pcs notes). Please prepare 200pcs notes for each denomination, collect at ABCD four different orientations and save into four separate files. Please refer to 11.3.2.

**For Euro notes collection, no matter to collect Error notes image or collect notes information, you need to set the speed under 800 or 1000.**

## 12. Daily Maintenance

Any dust, dirty objects or other substances can stick to the sensors and disturb the normal work of the sensors and then cause inaccurate counting result, so please clean the sensors and rollers everyday with the provided cleaning kit.

Please turn off the power switch before starting the cleaning in order to avoid any risk of electric shock or other injury.

Please do not use any chemical agent or water such as benzene, thinner which may cause the color fading or crack of the machine.

### 12.1 Clean the hopper sensor

Please use a brush or clean cloth to clean the hopper sensor (QT).

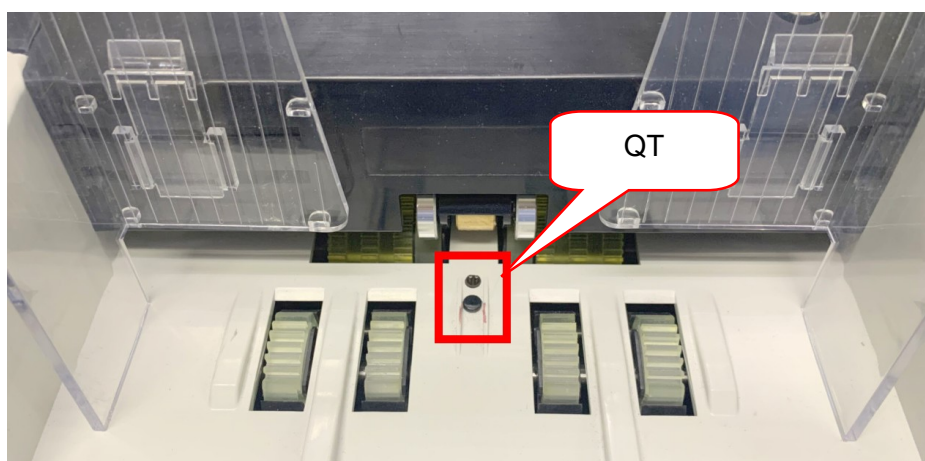


Figure 84

### 12.2 Clean the drum roller shaft and feed roller shaft

Please use a brush or clean cloth to clean the drum roller shaft and feed roller shaft.

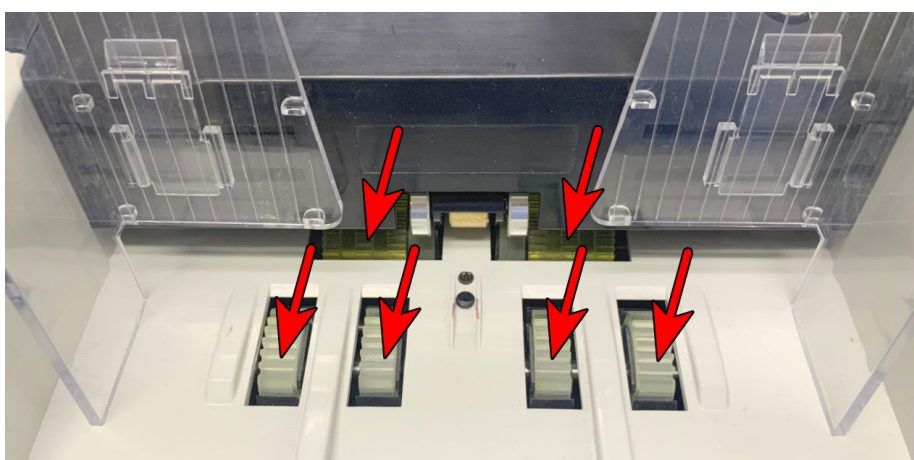


Figure 85

## 12.3 Clean the leak sensor

Please use a nylon brush or clean cloth to clean the leak sensor (ST), circled in below picture.

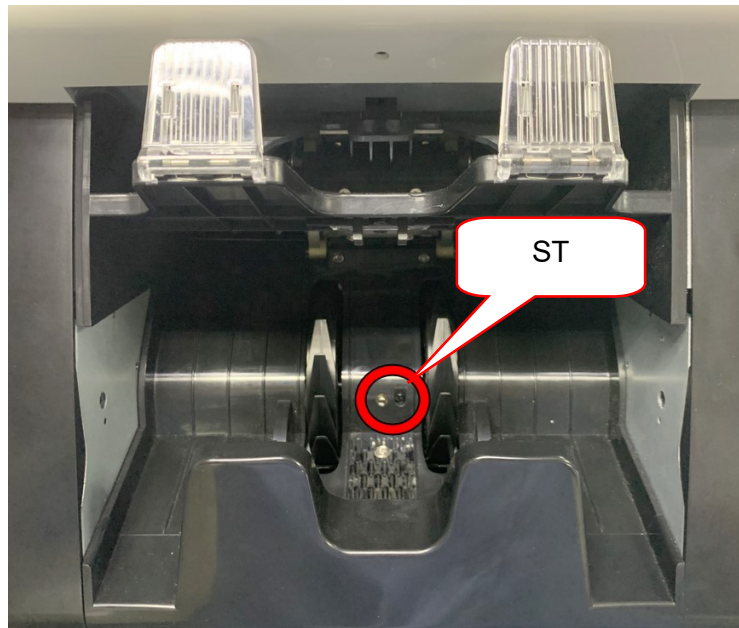


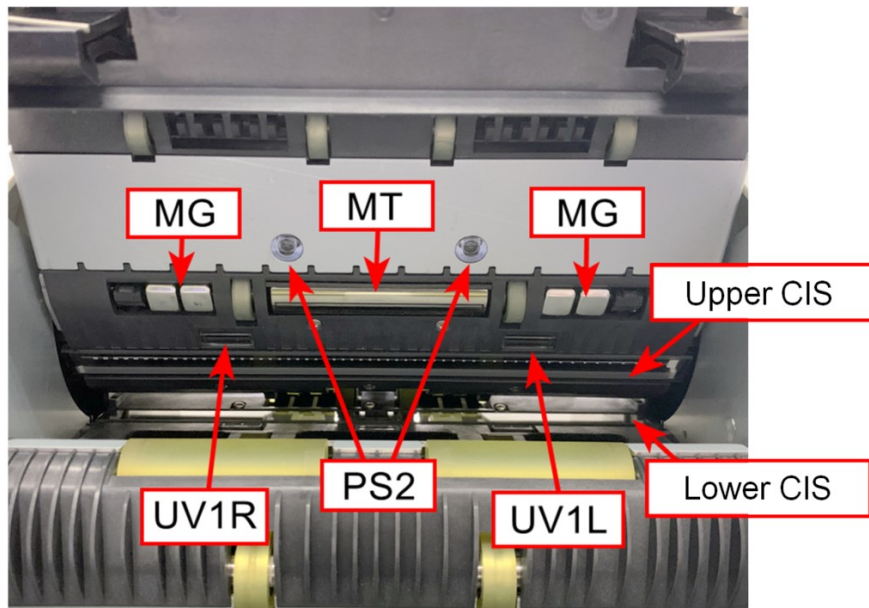
Figure 86

## 12.4 Clean the inside sensors

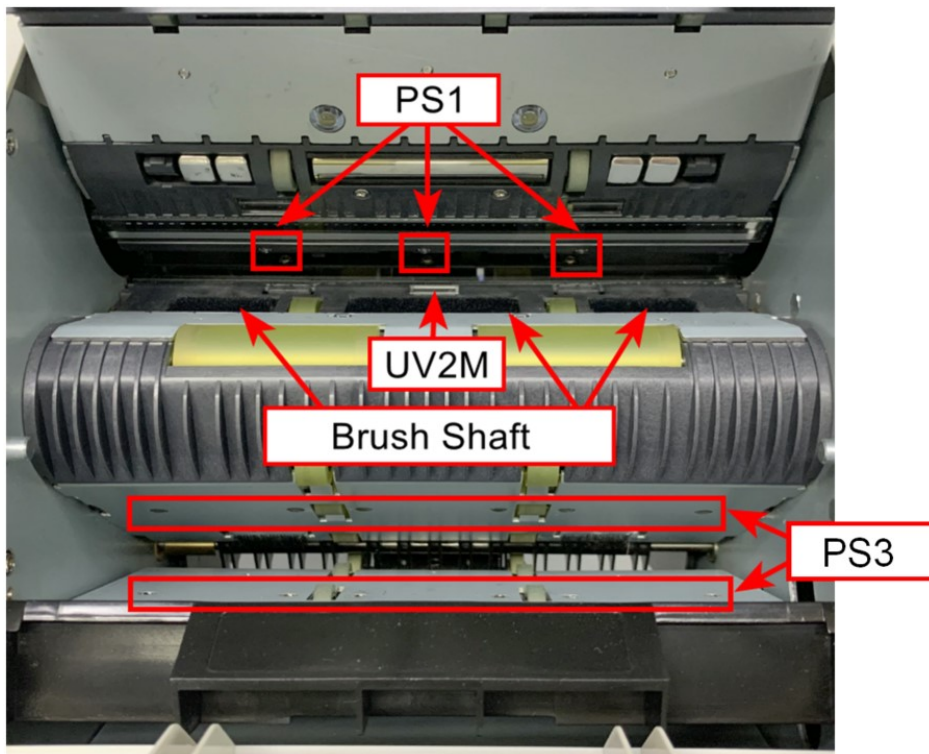
1) Pull the button to open the back cover.



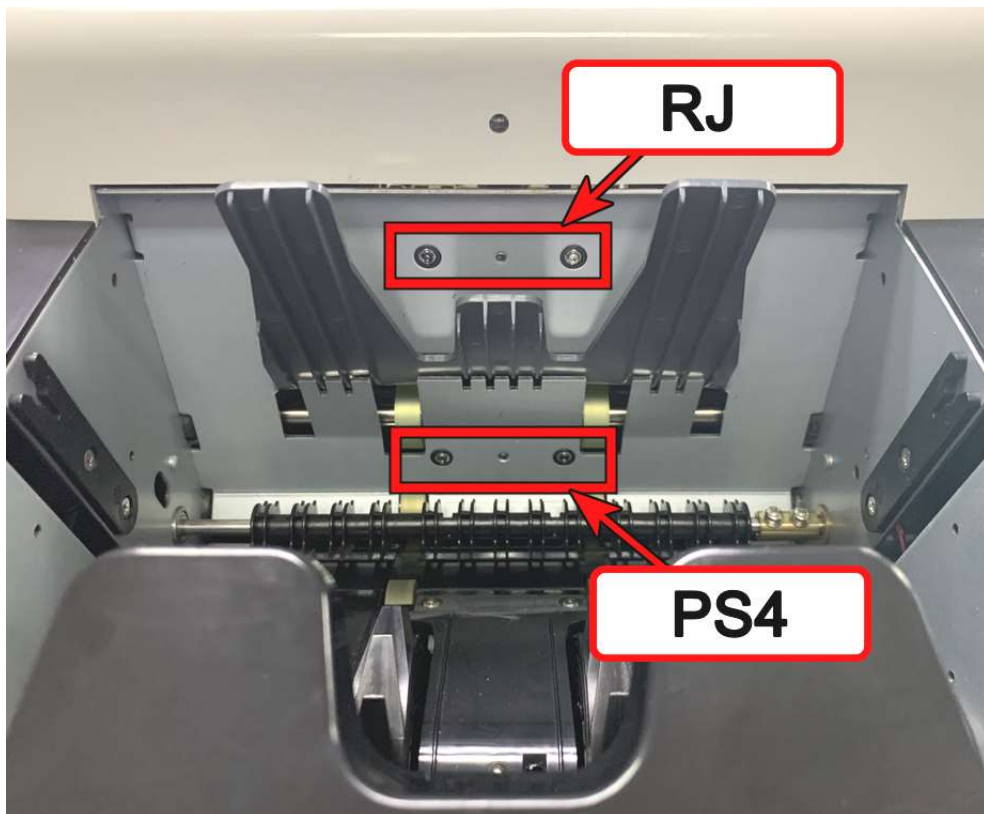
2) Clean the following sensors **PS2, MG, MT, CIS** and **UV1**.



3) Clean the following sensors **PS1**, **UV2M**, **PS3** and brush shaft.



4) Take out the reject pocket as following picture and then clean the sensors **PS4** & **RJ**. When you install back the reject pocket, you must protect the banknotes pressing plate.



## 13. Accessories

1. Power Cord	1PCS
2. Plastic Brush	1PCS
3. Operation Manual	1PCS
4. Ethernet cable	1PCS
5. Check package (Option)	1PCS
6. External Display (Option)	1PCS
7. External Printer (Option)	1PCS

**\*\*\* In the interests of our policy of continual product improvement, specifications are  
subject to change without notice \*\*\***