Currency Counter BC-40 User Manual



Contents

Contents	1
1. Machine Overview	2
1.1 Safety Instruction	2
1.2 Installation Instruction	3
1.3 Machine & Accessories	3
1.4 Appearance	4
1.5 Technical Parameters	5
1.6 Start-up	6
1.7 Notes Placement	7
1.8 Counting error code	8
2. Function Introduction	9
2.1 Function Introduction	9
2.1.1 Display Interface and Touch Screen Description	9
2.1.2 Operating Instructions for Function Keys	9
2.1.3 Manual/Automatic Setting	. 10
2.1.4 Selection of Counting Mode	. 10
2.1.5 Counting Speed Setting and Function Description	. 14
2.1.6 Check counting details on Machine	. 15
2.1.7 Batch Setting	. 15
2.1.8 Accumulative Function Setting	. 18
2.1.9 Counterfeit Detection Setting	. 19
2.1.10 Time and Date Setting	. 22
2.1.11 Buzzer Setting	. 23
2.1.12 Software Version Viewing	. 24
2.1.13 Counting History Information	. 24
2.1.14 Restore Factory Setting	. 25
2.2 Printer Introduction	. 26
2.3 Introduction of uploading the counting data	. 29
2.3.1 Serial cable connection	. 29
2.3.2 Machine Setup	. 30
2.3.3 Instruction of Data collection PC software	. 31
2.4 Instruction of External display	. 32
3. Maintenance Instruction	. 35
3.1 Software Upgrade	. 35
3.1.1 U-disk Preparation	. 35
3.1.2 Software Upgrade	. 36
3.2 Daily Clean instruction	. 36
3.2.1 Clean the Hopper Sensor	. 37
3.2.2 Clean the Drum Roller Shaft and the Feed Roller Shaft	. 37
3.2.3 Clean the Stacker Sensor	. 37
3.2.4 Clean the Channel Internal Sensors	. 38
3.3 Common Errors and Corresponding Descriptions	. 40

1. Machine Overview 1.1 Safety Instruction

NOTE:

- This product is used for counting banknotes described in the specification. Please do not use this product for any other purposes.
- This product is only used in corresponding countries or regions and may not be used in other countries or regions due to the difference between power supply specifications and safety standards.
- Please understand that the contents of this manual are subject to change without prior notice.
- The appearance and technical specifications of this product are subject to change without prior notice. Therefore, the actual product may be different from the instructions in this manual.
- This product may not be changed or modified in any form without the explicit written authorization of our company.
- Please contact your nearest sales store or our designated distributor if you need to install this product.
- This machine is specially designed for indoor use. Please do not install or use it outdoors.
- Please do not install it in places that cannot bear the weight of this product or in places that are inclined or uneven.
- Do not use or place combustible materials, inflammables and volatile items such as thinners around/inside this product.
- Do not bend the power cord excessively, or place heavy or sharp objects on top of the machine.
- Do not use this product in an excessively humid environment.
- Please avoid strong light and strong magnetic field interference.
- When the machine is not in use, please turn off the machine switch. Prevent curtains and various entangled materials from getting caught in the machine.
- When cleaning the machine, turn off the machine switch.

1.2 Installation Instruction

As shown in the Figure 1, please stay away from the surrounding walls and reserve sufficient operation space for placement of banknotes, opening or closing of the cover plate, as well as for maintenance.



Figure 1

1.3 Machine & Accessories

Machine	1PCS
Note guider (left)	1PCS
Note guider (right)	1PCS
User manual	1PCS
Power cord	1PCS
Clean brush	1PCS

1.4 Appearance

1.4.1 Front Appearance



1.4.2 Back Appearance



1.5 Technical Parameters

Overall dimensions (L×W×H)	300mm×247mm×287mm
Weight	5.5KG
Banknote capacity	Max 4 currencies in one machine
Power requirement	AC100V-240V 50/60Hz ±10%
Counting mode	Mix counting mode, single counting mode, piece counting mode,
Counting mode	automatic recognition mode, multi-country mix counting mode.
	Value counting mode (MIX/SDC):
Counting opend	L (800 PCS/min)/M (1000 PCS/min)/H (1100 PCS/min) speed
Counting speed	Piece counting mode (CNT):
	L (1000 PCS/min)/M (1100 PCS/min)/H (1500 PCS/min) speed
Counterfeit function	UV/MT/IR/IRT/CIS/3D-size
Preset number	0~200
Display	3.5-inch TFT touch screen
Hopper capacity	500pcs
Stacker capacity	200pcs
	Length: 120mm~180mm
Size range of sonable	Width: 50mm ~90mm
bankholes	Thickness: 0.05mm~0.15mm
Machine power	standby≤15W,normal operation≤50W
Noise from machine operation	No load<60dB,operation<75dB
Software upgrade	USB upgrade
External display	Optional
Llee environment	Ambient temperature (0~40°C)/humidity (40~90%)
Use environment	Air pressure (70-106kpa)
Character any interview and	Ambient temperature (-40~55°C)/humidity (10~95%)
Slorage environment	Air pressure (70-106kpa)

1.6 Start-up

Reminder: To ensure smooth counting please install the left and right Note Guider in the box. Please

check below Figure 2.



Figure 2

1) Take out the left Note Guider, install the click into the rail of the Note Guider, and press the Note Guider until you hear a clicking sound, it means the Note Guider is installed in position, as shown in the Figure 3.



Figure 3

2) Then take out the right Note Guider, intall it in the same way. After you finish both, the machine looks like this:



Figure 4

3) Connect the machine to the power supply and turn on the power switch. First, the machine enters the loading interface. After loading, the machine enters the self-check interface, as shown in Figure 5 below. The machine will enter the main interface after self-checking succeeds, as shown in Figure 6 below:



1.7 Notes Placement

1) Please put the handle of the machine on the back of the machine first.

2) The banknotes to be counted should be sorted according to size and then put into the hopper. The banknotes counted should be pre-arranged and straightened out when they encounter folds, and arches, which can increase the one-time pass rate.

3) During the banknote counting process, the note guider should be limited according to the maximum size of currently counted notes to ensure that the banknotes can be accurately identified by the relevant sensors. Taking US dollars as an example, please arrange the banknotes first, and then limit the note guider according to the largest size banknote. Finally, put the banknotes into the hopper and start counting, as shown in the Figure 7:



Figure 7

1.8 Counting error code

Error reporting code	Reason for error
ERROR-001	Banknotes not recognized
ERROR-002	Different denominations (Single Counting Mode)
ERROR-003	Suspicious UV reflection
ERROR-004	Suspicious MG
ERROR-005	Suspicious MT
ERROR-006	Banknote size
ERROR-007	Timeout Error
ERROR-008	Different Currency
ERROR-009	Chained Notes
ERROR-010	Double Notes
ERROR-011	IR1 Error
ERROR-012	IR2 Error
ERROR-013	IR3 Error
ERROR-014	IR4 Error
ERROR-015	IR5 Error
ERROR-016	IR6 Error
ERROR-017	IR7 Error
ERROR-018	IR8 Error
ERROR-019	IR9 Error
ERROR-021	Notes not in center
Power Abnormal!	Power Abnormal
JAM	Notes jam in the passage
Passage Abnormal!	Passage Abnormal
Stacker Error!	Stacker sensor is blocked

2. Function Introduction

2.1 Function Introduction

2.1.1 Display Interface and Touch Screen Description



- 1. Currency selection key
- 2. Counting mode
- 3. Preset quantity
- 4. Counterfeit level
- 5. Automatic/manual
- 6. Number of banknotes counted
- 7. Counting amount
- 8. PC or printer mode
- 9. U-disk logo
- 10. Accumulation
- 11. Counting speed

2.1.2 Operating Instructions for Function Keys



Start key, start the machine manually; Save key after selecting and entering, conf

modifying the function.

2.1.3 Manual/Automatic Setting

The "Auto", key in the upper right corner of the display is the manual/automatic switch key. Touch it and the mode will be changed.

Automatic mode: the word "**Auto**" will appear in the upper right corner. The machine will count the banknotes automatically when they are put into the banknote hopper, as shown in Figure 9.

Manual mode: the words "Manual," will appear in the upper right corner. Put the banknotes into the banknote hopper, after pressing START key, the machine will count the banknotes.





2.1.4 Selection of Counting Mode

2.1.4.1 Single Country Currency Model

The currencies of different countries can be selected by pressing the " key on the keyboard

plate or touching the "flag pattern in the upper left corner of the display, as shown in Figure 10 below:



Figure 10

Take US dollars as an example. After the touch of "see" key, the display returns to the main interface, and the top left corner displays the "see" flag graphic, indicating that the machine is in the mode of counting US dollars. By pressing the "BD" key or touching the "MIX" key above the display, the three counting

By pressing the "______" key or touching the "______" key above the display, the three counting modes can be cyclically switched. In each mode, the machine will work with the default value of the system. The corresponding order of each mode is shown in Figure 11 below.



Figure 11

2.1.4.1.1 <MIX> Mix Counting Mode

Figure 12 and Figure 13 below show the interface of Mix Counting Mode in the automatic state of the machine. In this mode, the machine will count all the denominations of the same currency and record the detailed information of the counted banknotes, including the total amount and the total number of banknotes in the stacker for the convenience of users to view. When this mode is selected, the machine will count at the default speed (L: 800/M: 1000/H:1100 PCS/min. 3 levels for option).



Figure 12



2.1.4.1.2 <SDC> Single Counting Mode

Figure 14 and Figure 15 below show the interface of Single 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 same denomination of the same currency, and at the same time the detailed information of the counted banknotes, including the total amount and the total number of banknotes in the stacker, will be

counted, and saved in detail for the convenience of users to view (note: different denominations rejected in this mode will be prompted with an error in size). When this mode is selected, the machine will count at the default speed (L: 800/M: 1000/H:1100 PCS/min. 3 levels for option).



2.1.4.1.3 <CNT> Count Mode

Figure 16 and Figure 17 below show the interface of CNT Count Mode in the automatic state of the machine. This mode does not limit the currency and only counts the number of PCS. When this mode is selected, the machine will count at the default speed (L: 1000/M: 1100/H:1500 PCS/min), and only the counterfeit function is reserved.



Note: In MIX Counting Mode and SDC Single Counting Mode, the machine has the functions of image acquisition, magnetic detection, ultraviolet detection and duplicate detection. While in CNT Counting Mode, there is only a double detection function.

2.1.4.2 Multi-country Mix Counting Mode

Multi-country Mix Counting: A mixture of national currencies placed in a machine to count, displaying the number and amount of each currency according to its currency name. Note: The machine

can only recognize the supported national currency displayed by the machine. The currency not supported will be stopped.

Press the " key or the " flag in the upper left corner of the display to enter the

\$£¥

currency selection interface as shown in Figure 10. Then click "MLUT" Multi-country Mix Counting Mode, and the display screen will automatically switch to the main interface. At this time, the currencies of the four existing countries in the software will be displayed (depending on customer requirements, the currencies of different countries will be displayed) as shown in the following figure 18:





\$£¥)	MIX B:OFF	CF:M Auto
CURREN	CY PCS	AMT
USD	0	0
EUR	0	0
CAD	0	0
GBP	0	0
≡ 🕬 A	DD SP:M 15:3	0



Example: Put a handful of banknotes (including USD, EUR, CAD, GBP) into the machine to count. Details of counting after counting are shown in the following Figure 19:

\$£¥) MIX	B:OFF	CF:M Auto
CURRENCY	PCS	AMT
USD	5	50
EUR	10	200
CAD	10	200
GBP	10	100
	P:M 15:30	



2.1.4.3 Automatic Recognition Mode

Automatic recognition: Refers to the automatic recognition of banknote counting mode. In the process of counting banknotes, the machine uses the first banknote passing through the sensor as the judgment rule to recognize banknotes of all denominations of the same country. When banknotes from other countries are recognized, the machine will alarm and stop. At this time, banknotes from other countries need to be taken out, and the machine will continue counting. The machine can only recognize the currency of the country displayed in the program.

Press the " key or the "

" flag on upper left corner of the display to enter the currency

[A.]] selection interface, as shown in Figure 10 below. Click the "Auto" automatic identification mode, and the display screen will be automatically adjusted to the main interface after selection, as shown in Figure 20 below:





Figure 20

In the automatic recognition mode, there are two counting modes: Mix Counting Mode and SDC Single Counting Mode. Customers can choose operation according to their needs. It is recommended that customers choose Mix Counting Mode for automatic recognition.

2.1.5 Counting Speed Setting and Function Description

The counting speed is divided into three options: H, M, L (high, medium, and low). Under any counting mode, different counting speed can be changed by pressing the "Figure 21. The letter H means high level. If medium or low level is selected, SP:M or SP: L will be displayed accordingly.

MIX B:OFF	CF:M Auto
	O PCS
	0.
ADDSP:H 15:30	V Þ

Figure 21

The corresponding counting speed of each level under each counting mode is shown in the following table:

Counting mode	Н	М	L
MIX	1100PCS/min	1000PCS/min	800PCS/min
SDC	1100PCS/min	1000PCS/min	800PCS/min
CNT	1500PCS/min	1100PCS/min	1000PCS/min

2.1.6 Check counting details on Machine

Under MIX counting mode or SDC counting mode, after finish counting and press left side button

", you can check the counting details as Figure 22 shows, Figure 23 is the interface after finish

counting:

VALUE 100	PCS 0	АМТ 0	LIST	VALUE 100	PCS 2	АМТ 200	LIST
50	0	0	ESC	50	4	200	ESC
20	0	0	Next	20	2	40	Next
10	0	0		10	5	50	
5	0	0	Back	5	2	10	Back
2	0	0	Duint	2	10	20	Drint
1	0	0	Print	1	10	10	Print
Total	0	0		Total	35	530	

Figure 22

Figure 23

This interface is used to check the number of banknotes of various denominations and the total amount of this denomination, as well as the total amount of all amounts. At the same time, banknotes can also be counted by directly placing them under this interface. To exit this interface, please press ESC or touch the "ESC" key in the upper right corner of the display.

2.1.7 Batch Setting

2.1.7.1 Default Preset Number

Press the "¹ key or touch the "B:OFF," key on the main interface to select the preset number. The default is 10/25/50/100/200/OFF. (For example, Figure 24 is the preset number 25, and Figure 25 is the preset number 50). The preset number of the previous "10/25/50/100" can also be changed. When the preset number is off, the default preset number of the machine is 200. When the preset number reaches 200, the machine will automatically stop running.



Figure 24



2.1.7.2 Modify Default Batch

1) Press the "*****," key to enter the main interface of USER MENU, as shown in Figure 26 below, Press "**1.Preference**" to enter into PREFERENCE SETTING interface, as figure 27.





Figure 27

2) Press "2.Batch parameter" under Figure 26 to enter into Batch Setting interface, as figure 28.

ESC BATCH SETTING SAVE Range: 5-200			
BATCH1 10	9	8	7
BATCH2 25	6	5	4
BATCH3 50	3	2	1
BATCH4 100	Clr	0	Del



3) BATCH1, BATCH2, BATCH3 and BATCH4 on the right of the figure above are the four default preset values of the system. If one or more of the default four values are not available to customers, they need to be changed to other values.

4) Example: The default preset number of 25 is not required by the customer. The customer needs a

value of 155. Then the operation is as follows:

5) Touch "BATCH 25" and the key will turn yellow, as shown in Figure 29 below:

ESC BATCH SETTING SAVE Range: 5-200			
BATCH1 10	9	8 7	
BATCH2 25	6	5 4	
BATCH3 50	3	2	
BATCH4 100	Clr		



6) Press "155" directly on the right digit key and the "BATCH2" value will also become 155, as shown in

Figure 30 below. Please press the "**SAVE**," key in the upper right corner to save the data.

ESC BATCH SETTING SAVE Range: 5-200			
BATCH1 10	9	8	7
BATCH2 155	6	5	4
BATCH3 50	3	2	1
BATCH4 100	Clr	0	Del



7) Please press the "ESC/CLEAR" key to return to the main interface, and then press the "B: " key at

the top of the display screen to switch to the previously set value of 155, as shown in Figure 31 below:

MIXB	:155	CF:M Auto
		0
ADD SP:M	15:30	- +

Figure 31

2.1.7.3 Customized Shortcut Key for Preset Number

1) Hold down the " key under the main interface for 3 seconds until the preset interface pops

out, as shown in Figure 32 below:



Figure 32

PS: "Range:5~200" means that the preset value must be between 5 and 200, or it will not be saved

with the "SAVE," key.

2) At this point, we enter the example value: 155 in the input field, as shown in Figure 33. Click the "SAVE," key in the upper right corner of the display again. The machine automatically jumps to the

main interface, and the current preset number also jumps to 155, as shown in Figure 34 below:

ESC 155 SAVE	MIX B:155 CF:M Auto
1 2 3 Delete	
4 5 6 0	
7 8 9 Clear	U\$
Range:5-200	□ ADD SP:M 15:30
Figure 33	Figure 34

2.1.8 Accumulative Function Setting

In any counting mode, the accumulative function of PCS can be opened by pressing the " key. At the same time, the word "ADD" in the bottom left corner of the counting interface changes from gray font to white font (ADD—ADD). Figure 35 shows the closed state of accumulative function, and Figure 36shows the open state of accumulative function.

MIX B:155 CF:M Auto	MIX B:OFF CF:M Auto
O _{PCS}	O _{PCS}
0,	0,
⊑ 🔊 ADD SP:M 15:30	□ ADD SP:M 15:30

Figure 35

Figure 36

1) When the accumulative function is on: Put a batch of banknotes on the hopper, when counting is finished, the machines will show the total amount and quantity of this batch counting. Remove the banknotes and put a new batch of banknotes on the hopper, and the current counted amount and quantity will be accumulated with last batch result.

2) When the accumulative counting function is off: Put a batch of banknotes on the hopper, when the first counting is finished, the machine will show the total amount and quantity of this batch counting. Remove the banknotes and put a new batch of banknotes on the hopper, when counting is finished, the machine will show the total amount and quantity of the second counting as the banknotes are not yet taken from the stacker. When the banknotes are taken out of the stacker, the machine accumulates the amount and quantity of the second time with the first time. Currently, press CLEAR one time to clear the first counting information, and press CLEAR again to clear all counting information.

3) During counting if any error detects, the machine will automatically delete the counting information and remind to perform the count again.

4) The accumulative function will be disabled when switching currencies in automatic mode.

2.1.9 Counterfeit Detection Setting

2.1.9.1 Simple Setting of Counterfeit Detection Level

The "**CF:M**" key on the display screen is the simple level adjustment key. Touching it will switch in the three levels (H, M, L).

H: High level, with the highest counterfeit sensitivity, as shown in Figure 37.

M: Medium level, with the moderate counterfeit sensitivity, suitable for the daily count of all national currencies.

L: Low level, with the relatively weaker counterfeit sensitivity.



Figure 37

2.1.9.2 Precise Setting Counterfeit detection

1) Press the " key to enter the main interface of USER MENU, as shown in Figure 26 below,

Press "1.Preference" to enter into PREFERENCE SETTING interface as Figure 27.



Figure 26



2) Touch **"1. Counterfeit level"** to enter the interface of counterfeit level setting, as shown in Figure 38 below:

ESC CF SETTING SAVE			
CF:M	USD	CURRENT	NEW
	MG	3	3
	UV	3	3
	IR	3	3
	DB	3	3

Figure 38

3) "**CF:M**," means that the counterfeit gear is in the medium level, and the default value of the counterfeit capability is 3. Touch the "**CF:M**," key in the upper right corner to check the counterfeit gear (H, M, L).

Gear		Counterfeit sensitivity			
	MG	UV	IR	DB	
H (High)	5	5	5	5	
M (Medium)	3	3	3	3	
L (Low)	1	1	1	1	

4) The customer selects the corresponding counterfeit gear according to the actual counting requirements. If he wants to adjust the counterfeit gear for a certain item or several items, he can directly contact the value of the NEW row after the counterfeit item on the screen.

5) Example: If the customer wants to reduce the level of MG's counterfeit capacity under the medium gear, please operate as follows:

a) The initial parameters of the medium gear are shown as follows. The default counterfeit gear of MG is3, and the default NEW row value is 3, as shown in Figure 39 below:

ESC CF SETTING SAVE				
CF:M US	D CI	JRRENT	NEV	/
M	G 3		3	
U	V 3		3	
IR	3		3	
D	B 3		3	



b) Touch the value 3 in the NEW row corresponding to MG, and the following interface appears, as shown in Figure 40. Each counterfeit capacity has 6 positions from 0 to 5. 0 represents closed counterfeit capacity, 1 represents the weakest counterfeit capacity and 5 represents the strongest counterfeit capacity. At this point, the gear Level of MG's counterfeit capacity needs to be reduced, so touch "Level 2" to set the gear value to 2, as shown in Figure 41.

ESC CF SETTING SAVE			
CF:M	USD	Select	NEW
	MG	Level 0	3
		Level 1	U
	UV	Level 2	3
	IP	Level 3	2
		Level 4	5
	DB	Level 5	3



ESC CF SETTING SAVE				
CF:M USD	Select	NEW		
MG	Level 0 Level 1	3		
UV	Level 2	3		
IR	Level 3 Level 4	3		
DB	Level 5	3		

Figure 41

c) After selecting "Level 2", the NEW row value corresponding to MG on the display interface will become 2, as shown in Figure 42 below. Please click the "SAVE," key in the upper right corner to save the value, as shown in Figure 43.

ESC	CF SETTING SAVE			
CF:M	USD	CURRENT	NEV	N
	MG	3	2	
	UV	3	3	
	IR	3	3	
	DB	3	3	

Figure 42

ESC	С	IG SAVE	
CF:M	USD	CURRENT	NEW
	MG	3	2
	UV	3	3
	IR	3	3
	DB	3	3

Figure 43

d) Click "Save", and the display interface will jump back to the interface shown in Figure 38.

e) Then touch the **"1.Counterfeit level"** key to enter the counterfeit interface, and it can be seen that the

value of the counterfeit gear of MG becomes 2, as shown in Figure 44 below:

ESC	CF SETTING SAVE			
CF:M	USD	CURRENT	NEW	
	MG	2	2	
	UV	3	3	
	IR	3	3	
	DB	3	3	

Figure 44

2.1.10 Time and Date Setting

1) Press the " key to enter the main interface of USER MENU, as shown in Figure 26 below,

Press "2.General" to enter into GENERAL SETTING interface as Figure 45:





2) Touch "1. Time and date" to enter the time & date setting interface, as shown in Figure 46 below:





Touch the value of time and date, and the font shading will turn yellow. At this time, the customer

can modify the time and date according to their needs. After modification, please click the "**SAVE**," key in the upper right corner to save.

2.1.11 Buzzer Setting

1) Press the " key to enter the main interface of USER MENU, as shown in Figure 26 below,

Press "2.General" to enter into GENERAL SETTING interface as figure 47.



2) Touch "2. Buzzer On/Off" to enter the buzzer setting interface, as shown in Figure 48 below:



Touch the open or close button, and the shading will turn yellow.

Touch "**ENABLE**" to open the buzzer switch, and then click the top right "**SAVE**" key to save. Touch "**DISABLE**" to open the buzzer switch, and then click the top right "**SAVE**" key to save.

2.1.12 Software Version Viewing

Press " key to enter into USER MENU interface, as shown in figure 26, Press "**4.Version**" to check the software version as figure 49.



Figure 26

Figure 49

2.1.13 Counting History Information

1) Press the " key to enter the main interface of USER MENU, as shown in Figure 26 below,

then press the " key again for two consecutive times to enter debugging mode, as shown in

Figure 50 below:



ESC	MAINTENANCE SETTING
	1. Historical data
	2. Factory setting
	3. Cash Information
	4. Speed Test



Figure 50

2) press "1.Historical data" as showsn in figure 50 to check historial data as shown in figure 51:

ESC HISTORICAL DATA						
	NO.1	NO.2				
Total	640	59	Reset			
Suspicious	12	2	Reset			
Currency	USD	EUR	Reset			
Error code	ERR-002	ERR-001				

Figure 51

"Total 64059" represents the historical total number of counting.

"Suspicious 122" represents the historical total number of suspicious currency.

"Currency USD EUR" represents the 2 currencies with the max counting numbers.

"Error code ERR-002 ERR-001" represents the two error codes with the max errors.

3) Press the "Reset", key corresponding to the right to clear the data, and the interface will be displayed as shown in Figure 52 below:

ESC HISTORICAL DATA						
	NO.1	NO.2				
Total	0		Reset			
Suspicious	0		Reset			
Currency			Reset			
Error code E	ERR-000	ERR-000				

Figure 52

2.1.14 Restore Factory Setting

1) Press the " key to enter the main interface of USER MENU, as shown in Figure 26 below,

then press the " key again for two consecutive times to enter debugging mode, as shown in Figure 50 below:



Figure 26

Figure 50

2) Touch the **"2. Factory setting"** key to enter the interface of restoring factory setting, as shown in Figure 53 below:





3) Click the "**OK**" key to restore factory setting, which will restore all other settings except the initial time & date setting to the initial state. Please restart the machine after restoring factory setting, as shown in Figure 54 below:



Figure 54

2.2 Printer Introduction

2.2.1 Print Paper Cutting Setting

If you have purchased the serial thermal printer, please check if it comes with a cutting function according to the manual.

If the printer does not come with a cutting function, this operation setting can be skipped.

If the printer with a cutting function, print paper cutting setting needs to be opened, as follows:

1) Press " , to enter the main interface of USER MENU, as shown in Figure 26. Press "2. General"

to enter into the interface of "GENERAL SETTING" as shown in Figure 47.

ESC USER MENU	ESC GENERAL SETTING
1. Preference	1. Time and date
2. General	2. Buzzer On/Off
3. Data Collection	3. Serial port mode
4. Version	4. Printer Cut

Figure 26

Figure 47

2) Click "4. Printer Cut" to enter the interface of cut setting, as shown in Figure 55.



Figure 55

3) Click "ENABLE" and click the "SAVE" button in the upper right corner to save, indicating that the cut function is turned on.

4) Click "DISABLE" and click the "SAVE" button in the upper right corner to save, indicating that the cut function is turned off.

2.2.2 Baud Rate Setting

1) If you buy a serial thermal printer. Please confirm the corresponding baud rate first according to the printer's instructions.

2) Press " key to enter into USER MENU as figure 26, then press "**2.General**" to enter into GENERAL SETTING interface as figure 47:



Figure 26



3) Press **"3.Serial port mode"** under figure 55 and enter into SERIAL PORT MODE interface as shown in figure 56.





4) In the "SERIAL PORT MODE" interface, first touch to select "**PRINTER**" in the MODE column on the left, and then touch to select the baud rate "115200" in the BUAD RATE column on the right. After the

selection is complete, click the button "**SAVE**," in the upper right corner to save, as shown in Figure 57 below.





5) Connect the printer to the power source, connect one end of the RS232 cable in the printer box to the printer, and the other end to the 232 interface of the machine.

6) When the external printer has been connected and can be printed, after counting, press the "

key to enter the detail list checking interface, and then press the "_____" key or touch the "Print",

key, the printer will print the detail and total amount of counting. The format printed is shown in Figure 59 below.

CUSTOMER	ID :	
USD		
Deno.	Count	Value
100	5	500
50	2	100
20	0	0
10	0	0
5	30	150
1	21	21
Total:	56	771
	11/09/2021	11:14:30

Figure 58

7) If you encounter other problems, please contact US, we will provide the perfect solution.

2.3 Introduction of uploading the counting data

If the customer wants to upload the machine's point currency detail data to the PC, the customer needs to do the following:

ficeds to do the following.

2.3.1 Serial cable connection

Take a USB to 232 serial cable, connect the USB end to the PC, and insert the 232 serial end into

the machine, as shown in Figure 59



Figure 59

2.3.2 Machine Setup

1) Press the " key to enter the main interface of USER MENU, as shown in Figure 26 below,

Press"2.General" to enter into GENERAL SETTING interface, as figure 47.



2) Press NO.3 under figure 45 "3.Serial port mode" to enter SERIAL PORT MODE interface as figure60:





3) In the "SERIAL PORT MODE" interface, first touch select "**PC**" in the MODE column on the left, and then touch 4800, 9600 or 115200 to select the corresponding baud rate according to the actual situation of the external device. The factory default baud rate of the machine is "115200". After the selection is

complete, click "SAVE," on the upper right corner to save, as shown in Figure 61 below.

ESC SERIAL PORT SETTING SAVE				
	MODE	BAUD RATE		
	PC	4800		
	PRINTER	9600		
		115200		

Figure 61

2.3.3 Instruction of Data collection PC software

1) Open the upper computer software provided by our company "UpperMonitor", as shown in Figure 62 below.

Currency	List					-	- 🗆	×
Port	\sim	Buad	Rate	\sim	Ope	en	Next	Clear
Deno	mination			Quantity			Amou	unt



2) Select serial port and baud rate, and the baud rate must be consistent with the baud rate selected on the machine, as shown in Figure 63 below.

Currency List		- 🗆 X
Port COM8 V Bua	Rate 115200 V Ope	en Next Clear
Denomination	Quantity	Amount



3) Press the Open key again, the font of serial port and baud rate will be dimmed, OPEN will be changed

to CLOSE, and then counting can be performed and the counting information can be checked, as shown in Figure 64 and Figure 65 below.

Curre	ncy List					_		×
Port	COM8	Buad R	ate	115200	Close	•	Next	Clear
Denomination			Quantity			Amour	nt	

Currency List				- 🗆	×
Port COM8	Buad Rate	115200	Close	e Next	Clear
Denominatio	n	Quantity		Amoun	
100		0		0	Counting details
50		1		50	
20		0		0	
10		1		10	
5		1		5	
2	0			0	
1		2	_	2	
Total:		5		67	

Figure 64

4) At the same time, the folder stored in the upper computer will automatically generate a Data folder

"Data". Open the "Data" folder to find the corresponding list information, as shown in Figure 67 below.

名称 个	修改日期	类型	大小
163444_038.pdf	2021/10/9 16:34	Foxit Reader PD	12 KB
🙎 163447_720_SN.pdf	2021/10/9 16:34	Foxit Reader PD	0 KB

2.4 Instruction of External display

2.4.1 External Display Version Setting

If you have not purchased our external display, then you can ignore this setting operation.

If you have purchased our external display, please check and set the following when you use the external display.

1) Our external display has two versions, V2.1 and V1.1, which have differences in display functions.

2) Please turn on the machine, connect the external display to the RJ12 interface on the back of the machine, the external display will start automatically, at this time the software version will be displayed in the upper left corner of the external display.



Figure 67

3) Press the "¹, key to enter the "USER MENU" interface, as in Figure 26. Then click the "1. Preference" key to enter the "PREFERENCE SETTING" interface, as in Figure 27. PREFERENCE SETTING" interface, as in Figure 27.





Figure 27

4) Click "3. Exdisplay version" to enter the external display software version setting interface, as shown in Figure 68 below.





5) According to the software version number displayed, select the corresponding software version in the

interface of Figure 55, and then press the "SAVE" button in the upper right corner to save it.

6) Please unplug the external display and reinsert it into the machine to use it normally.

2.4.2 External Display Description

1) After turn on the machine and select the currency of the corresponding country, the code of the corresponding country will also be displayed on the external display.

2)Example: The machine selects the US dollars currency mixed point mode, as shown in Figure 69, at this time the word "USD" will appear on the external display, as shown in Figure 70:





Figure 70

3) Put in a bundle of US dollars to count. After counting ends, the total number and total amount of counted banknotes will appear on the display, as shown in Figure 71 below. At this time, there will also be two lines of values on the external display: the first line is the number of banknotes, and the second line is the total amount, as shown in Figure 72:



Figure 71



3. Maintenance Instruction 3.1 Software Upgrade

3.1.1 U-disk Preparation

1) The software upgrade of this product adopts the U-disk upgrade method.

2) Please plug the U-disk into your PC first, and create a new folder named "GIN" at the bottom of the root directory of the U-disk, as shown in Figure 73 below.





3) Please extract the application software in .rar or .zip format provided by our company (e.g. BC40 _ GLImage.rar) and get the application software with the suffix ".GIN" (e.g. BC40_GLImage.GIN). GIN" format (e.g.BC40_GLImage.GIN).



4) Copy the application in ".GIN" format to the bottom of the folder named "GIN" in the root directory of the USB flash drive, as shown in Figure 74 below.



Figure 74

Special reminder: Please do not modify the name or suffix name (i.e. .GIN) of the application software, otherwise the machine will not recognize the software in the USB flash drive, resulting in software upgrade failure.

3.1.2 Software Upgrade

1) Insert the U-disk into the USB interface of the machine when the machine is off, as shown in Figure 73

below:





2) Turn on the power of the machine, and the software in the U-disk is automatically read by the machine for upgrading. The upgrade interface as shown in Figure 74 appears. After the software upgrade is successful, the machine will conduct self-check and enter the main interface of counting, as shown in Figure 75 below:

Boot Version:100104 ******	
	Build-in self-check Please wait

Figure 74

Figure 75

3) The machine automatically enters the main interface, so the software upgrade of machine is completed.

3.2 Daily Clean instruction

Any dust, dirt or other substances sticking to the sensor will interfere with the normal operation of the sensor and cause erroneous counting results. Therefore, the sensor and roller shaft shall be cleaned with the attached cleaning tools as necessary every day. Please turn off the power switch before cleaning to prevent electric shock or other injury accidents.

Please do not use chemicals such as benzene, thinner or water, which may cause fading or cracking of the machine.

3.2.1 Clean the Hopper Sensor

As shown in the Figure 76, clean the start-up sensor with clean brush or cleaning cloth.



Figure 76

3.2.2 Clean the Drum Roller Shaft and the Feed Roller Shaft

As shown in the following Figure 77, clean the drum roller shaft and feed roller shaft with clean brush or cleaning cloth.



Figure 77

3.2.3 Clean the Stacker Sensor

As shown in the following figure, clean the sensor with clean brush or cleaning cloth. (ST)



Figure 78

3.2.4 Clean the Channel Internal Sensors

1) Pull the back cover in the direction shown in the figure to open the back cover.



2) Wipe the light strip of mark 1 in one direction with a dust-free cloth.



Figure 85

3) Wipe the CIS of mark 1 in one direction with a dust-free cloth, and then clean the lower UV lamp of mark 2 with a nylon brush.



Figure 86

3.3 Common Errors and Corresponding Descriptions

In the process of using the machine, the machine may show abnormal state, resulting in abnormal operation, and the machine will display corresponding fault information. The following provides the phenomenon when the machine malfunctions. Please refer to the maintenance manual for specific handling methods. If the user still cannot solve the problem according to the maintenance manual, please contact the local agent.

Code	Error position	Cause	Troubleshooting
QT(101)	Hopper	The hopper is blocked	Check if hopper sensor is covered by dust or blocked.
ST(102) Stacker		The stacker is	Check if stacker sensor is covered by dust or blocked.
	blocked	Check if the sensor cable is loose.	
UVD(105)	Lower UV	UV signal is abnormal	Check the channel for foreign bodies.
			Check whether the encode disk cable is loose.
ENC(107) Enco	Encode	ode Encode disk signal is abnormal	Check whether the starting motor is running normally.
			Check whether the encode sensor is abnormal.
	Dowor	Power supply is	Check whether the power cable is loose.
PVVK(108) Power	abnormal	Replace the power supply box.	

Error description of boot self-check:

***Our company reserves the right to change the Manual in order to continuously improve

our products.***