CURRENCY SORTER

MANUAL





I. Instructions before the Operation:

A. Connect the machine to the power supply:

Plug the power cord to the power supply of 220V~50Hz/110~60Hz;

If the user needs to print the counting result, please connect the printer to the printer interface;

If the user needs to store the data to a U disk, please connect the U disk to the USB interface; Please make sure that the machine is well grounded for safety and anti-static electricity; Please make sure the operation desk is secure, durable and without inclination;

B. The Correct Way:

Before starting to count the banknotes, please first tidy up the banknotes on an even desk, and then set the position of the paper guide to be 2mm to 3mm longer than the banknotes to be counted. Finally put the banknotes onto the input hopper of the machine and start to count.

SAFTY USE NOTICE !

- 1. This machine volt adopt to: AC 220V 50HZ $\slash\hspace{-0.4em}/$ AC 110V 60HZ.
- 2. Shall use ground protection socket.
- 3. Cut off the power when the machine is not in use for a longtime
- 4. Do not drop conductive objects such as paper clips, pins, coins, etc. into the machine or splash oil into the machine to prevent internal short circuit.
- 5. Do not clean the machine with chemical solvents such as gasoline, benzene, and acidic liquids.
- 6. If you need to open the back cover for maintenance or other needs, cut off and disconnect the power.



II. Brief Introduction to the Machine:



A. Machine Introduction



B. Main Display:



- 1. The current date and time;
- 2. The current counting mode;
- 3. The current counting currency ;
- 4. The current counting speed;
- 5. The summary area for the display of denomination and pieces counted;
- 6. The function of face or orientation sorting
- 7. The total pieces of the banknotes counted;
- 8. The total value of the banknotes counted.



C. The Functional Keys on the Front Panel



MODE	The button is used to switch among CNT mode (count),SDC mode (Single Denomination Count) & MDC mode (Mixed Denomination Count)
START	Short press this button is starting or back to upper level. Long press this button is used to switch the manual counting/auto counting function.
CUR	This button is to show up the available currency names in your machine and press the key to choose the current counting currency.
ватсн	Short press this button is used to switch on/off batch mode.When BATCH is on, then use numeric buttons to input the batch number. Long press this button is aging test for the machine.
ADD	Short press this button is used to switch on/off Add mode. Long press this button is used to enter Sensor dates of the machine.
SORT	Press this button is used turn on/off the face or orientation sorting function under the main interface
REPORT	Press to check the count details, denomination& PCS& serial numbers Press twice to check serial numbers
† /+	Upward navigation button. When BATCH is on, press to add 1. Also can choose speed 800/1000/1200 notes/min for CNT mode, 800/1000 notes/min for SDC & MDC modes





III. Technical Parameters

Dimensions	W300XD330XH 370mm		
Package	W480XD480XH 480mm		
N.Weight	Approx.11.0Kg		
G.Weight	Approx.11.0Kg		
G. weight	· · · · · · · · · · · · · · · · · · ·		
Counting Speed	800/1000 notes/min(MDC SDC and CNT		
	MODE) 1200 notes/min(CNT MODE only)		
Display	TFT 3.5		
Display Language	English or Customized		
	Maximum 185x90 mm		
Size of Countable notes	Minimum 110x60 mm		
	Thickness: 0.08~0.12		
	mm		
Available Currencies	8 Currencies		
Feed system	Roller Friction System		
Hopper Capacity	Approx.500 notes		
Stacker Capacity	200 notes		
Deiest Steeler Conseits	Approx.50 notes(Adjustable from 25~100		
Reject Stacker Capacity	notes)		
Power Supply	AC 100~240V ±10%50/60 Hz		
Maximum 1.8A(100~240 VAC)			
Power Consumption	Iding 0.2A(100~240 VAC) 120W		
Tempareature 0°C~35°C(Operating)			
Usage Environment	-10°C~60°C(Stock)		
Humidity	20%~90%(no condensation)		
PC Terminal	Interface(RS-232C)		
Interface	Printer Inter Interface(RS-232C)		
U Disk	USB2.0 USB3.0 Interface		



IV.Operation Modes

1. CNT mode

Press button MODE to select CNT mode. In this mode , you can switch on ADD or BATCH or ADD + BATCH .

2. SDC mode

Press button MODE to select SDC mode. This mode is to count a single denomination bill . The system will take the first note as the benchmark , and will stop counting when meeting a different denomination .

3. MDC mode

Press button MODE to select MDC mode. This mode is value counting mode for mixed denominations , and press REPORT button to check the counting details .

V. Setting Menu

1. User Menu and Service Menu

(1) Press button "OK" button for 5 seconds, you will be requested to input a password with the following interface. The default password is 5555:

SET MENU		
HON	1E	
	1 User Menu	
	2 CIS Calibration	
	3 CIS ColorBalance	
	4 Version Number	
	5 Data Collection	OFF
	6 Restore Factory Settings	
OK/Ch	oice Up, Down/Adj START/Save BAT/RET	

Use the cursor to select which sub-menu you want to enter, and press OK button to confirm, press BAT to back and press button START to Save.

After enter "1.User menu", there are four pages interface will be the showed :



		SET MENU		
SET MENU		HOME=>USER MENU		
OME=>USER MENU		7-UV Threshold		
1-Image Sensitivity		8-Width Threshold		
2-MGS Sensitivity		9-Height Threshold		
3-MGB Sensitivity		10-Start Sensor Sensitivity		
4-Double Sensitivity		11-Clear Sensor Sensitivity		
5-Sensor Static data		12-Backlight Time		
6-Sensor Dynamic data		OK/Choice -/Adj START/Exit BAT/RET		5
SET MENU		SET MENU		
		HOME=>USER MENU		
IOME=>USER MENU			ON	
IOME=>USER MENU 13-Screen Brightness		HOME=>USER MENU	ON	
OME=>USER MENU 13-Screen Brightness 14-Printers Baud Rate Set		HOME=>USER MENU 19-Buzzer Switch		
IOME=>USER MENU 13-Screen Brightness		HOME=>USER MENU 19-Buzzer Switch 20-Currency Switching Mode	ON	
IOME=>USER MENU 13-Screen Brightness 14-Printers Baud Rate Set 15-Stacker Capacity		HOME=>USER MENU 19-Buzzer Switch 20-Currency Switching Mode 21-Debug Print Mode 	ON OFF	
OME=>USER MENU ► 13-Screen Brightness 14-Printers Baud Rate Set 15-Stacker Capacity 16-Brake Time Correction	NO COUNT	HOME=>USER MENU 19-Buzzer Switch 20-Currency Switching Mode 21-Debug Print Mode 22-Power Off Memory 	ON OFF ON	

Use the cursor to select which sub-menu you want to enter, and press OK button to confirm, press BAT to back and press button START to Save.

(Please do not change the default dates without communicating with the manufacturer or your local distributor.)

2TIME SETTING

PIs find the 3th page and enter "**17.**Time setting ",you will see the following interface,input your time and dates **by press** ↑↓ **to choose it** , **then press** "**OK**" **to save it**.

SET MENU	
HOME=>USER MENU	
13-Screen Brightness	
14-Printers Baud Rate Set	
15-Stacker Capacity	
16-Brake Time Correction	
17-Time Setting	
18-Alarm Counting Selection	NO COUNT
OK/Choice +-/Adj START/Exit BAT/RET	-3-





2.CIS Calibration +3. CIS Color Balance

Step1:firstly ,do CIS Calibration

a. open the behind cover and put the white plastic strip in the machine, when need ,pls clear the sensors firstly:





b .Enter the "SET menu ",choose option "2.CIS calibration " to press "OK" to start it.





(when CIS adjust succeed)





Note:After put the white plastic film in the machine, the mostly important thing is closing the back cover should smoothly, if have resistance, pls shift the white plastic film , otherwise white film will be broked and affect the CIS sensors working.

Step2 :next do CIS Color Balance

After you do the "**2.CIS Calibration**", take the white plastic film out ,press "OK" button to continue "CIS Color Balance", put the red bills to count it,



steps for CIS adjustment.



4..VERSION NUMBER:



5.Date Collection

- press "OK" button to choose "OFF", "Warning","All".
- "OFF": close the dates collection
- "Warning": collect the Error bills images
- "All":collect all the bills images

6.RESTORE FACTORY SETTINGS

press"OK" button to enter it ,you can find the following warning:





If Yes, pls press"OK" button to restore ,if No ,pls press "BATCH" button to cancel.

VI.Maintenance and troubleshooting

After start ,the machine will go on self-check automatically. If preset window show the following error code ,generally speaking, it is because of dust on the surface or sensor blocked by notes. So please clear the dust of the surface or sensor with brush or soft cloth, or take the notes away. Then restart the machine.

1.Self check Error Code



A.Hopper Sensor Error (Something cover the hopper Sensor or the hopper sensor damaged).



B.Stacker Sensor Error (Something covered the stacker sensor or stacker sensor damaged.)



C.Main motor Error (Motor problem or speed sensor damaged)



2. Error code reference

①Main Erro Code

ERROR	SENSOR PROBLEM
CE01	UV SENSOR
CE02	SPEED SENSOR
CE03	RIGHT COUNTING SENSOR
CE04	LEFT COUNTING SENSOR
CE05	STACKER START (HOPPER) SENSOR
CE06	MG SENSOR
CE07	KEYBOARD
CE08	STACKER SENSOR

②Other Error code reference

· Suspicious Note Detected .	·Remove the suspicious Note .
\cdot The image or integrated UV	·Follow the cleaning
feature of notes may become	procedure if the error persists
weaker when a note is old,	·Consider reducing the UV
heavily used or when it has	sensitivity
accidentally been washed .	
Two or more notes passed	•Ensure that there are no
together (partially overlap).	banknotes stuck , folded or
	glued together .
	· Check the banknote quality .
	If no obvious visible issues are
	found, count the notes again
	and check if the problem
	persists .
	• The hopper may be set too
	loose . Adjust the hopper
	screw in clockwise direction.
	Check Thickness Wheel
	Adjustment Procedure .
	-
An incomplete, torn or half-size	· Check the banknote quality .
note has been detected	If no obvious visible issues are
	found, count the notes again
	and check if the problem
	persists .
	The image or integrated UV feature of notes may become weaker when a note is old , heavily used or when it has accidentally been washed . Two or more notes passed together (partially overlap).



E10IMAGE ERROR	•Suspicious note by CIS Image detection .	• Try pass it again and If the error persists , proceed with the CIS calibration
E11WIDTH ERROR (DB)	·Suspicious Non - conforming size has been detected	 Check the banknote quality . If no obvious visible issues are found , count the notes again. Contact the Support Team
E13FACE IMAGE ERROR	•Different denomination notes detected	•Ensure the bills are stacked in an orderly manner and count the notes again
E14DENOMINATION ERROR	•Different denomination notes detected in SDC mode	•Remove the top note from the stacker and resume the count
E15 IMAGE SIGNAL ERROR	·No Image Signal	·Contact the Support Team
E16FACE ERROR	•Different Side detected from the Initial note side	•Remove the top note from the stacker and resume the count
E17ORIENT ERROR	•Different Side or Direction detected from the Initial note side and direction	•Remove the top note from the stacker and resume the count
E20MT ERROR	·Incorporated in the center MG	•Adjust the MG Sensitivity or Replace the Center MG
E21MG ERROR	•Suspicious Note Detected (Side MG)	•Remove the suspicious Note .Follow the cleaning procedure if the error persists .Consider reducing the MG sensitivity
E30IR ERROR	•Suspicious Note Detected •The image or integrated IR feature of notes may become weaker when a note is old , heavily used or when it has accidentally been washed	 Remove the Suspicious Note If you encounter too many IR errors , proceed with CIS calibration if the error persists , contact the Support Team



3. hopper adjustment:

When improper feeding of bills occur, adjust the bills thickness in

the hopper by turning the bill adjustment which local in the top of

the machine.

When the hopper is too tight ,pls loosen it by turn to "-"

When the hopper is too loose ,pls tighten it by turn to "+"

VII. The positions where can be opened the machines:

When bills are stucked in the machines ,pls open the machine the take bills out .









