

S6500

USER GUIDE

MIXED BILL

VALUE COUNTER



SILVER®

Thank you for purchasing a *SILVER* product.

It is highly recommended to read this user guide carefully to get familiar with all its functions before starting to operate the machine.

SILVER®

For more information on our products visit
www.SILVERMoneyCounters.com

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Safety Instructions

Warning



Do not use this product in areas where it may be exposed to water or other liquids.



Unplug this product from the electric outlet before cleaning. Do not use liquid or aerosol cleaners. To clean, use a damp cloth.



To reduce the risk of electric shock, do not disassemble this product. Take it to qualified service personnel when service or repair work is required. Opening or removing covers may expose you to dangerous voltages or other risks. Incorrect reassembly can cause electric shock when the appliance is subsequently used.



Only use the cable provided with the unit. The use of other cables may result in electric shock, fire, or cause serious damage to the unit.



Do not operate the unit in areas with high temperature or high humidity since it may prevent it from working correctly.

Caution

When unplugging the power cord, do not pull it by the cord, but rather grip the plug to pull it out. Not following these instructions may result in electric shock, fire, or damage to the unit.

Do not use the unit if the power cord is damaged or if the plug socket contact is loose. Not following these instructions may result in electric shock, fire, or other hazards.

Do not place heavy objects over the cord and do not bend it excessively since it could get damaged. Not following these instructions may result in electric shock, fire, or other hazards.

When not using the unit for a long time, remove the power plug from the electric outlet.

Safety Instructions (cont.)

- Read and understand all of the safety instructions.
- Follow all warnings and instructions marked on the unit.
- This product is meant to be operated in an indoor environment with proper ventilation.
- Do not place near direct sunlight, heat sources, or air conditioners.
- This product should only be operated with the power cord supplied and the type of power source indicated in this user guide. If you are not sure of the type of power supply in your location, consult your vendor or local power company.
- To avoid the risk of fire or electric shock, never push objects into the unit through the case slots or openings, since they may touch dangerous voltage points or shortcut parts. Do not disassemble the unit.
- Never spill liquids of any kind on the product.
- Unplug this product from the wall outlet and refer servicing to qualified service personnel under the following conditions:
 - When the power supply cord or plug is damaged or frayed*
 - If liquid has been spilled into the unit, or it has been exposed to rain or water*
 - If the product has been dropped or the case has been damaged*
 - If the product shows a noticeable change in performance

**Not covered under warranty*

NOTE: Do not remove the "ground" prong from the power cord. It is a safety feature meant to protect the user from harm and the equipment from damage.



If the unit does not operate normally while following the instructions, adjust only those controls covered by the operating instructions. Improper adjustment of other controls may result in damage and will often require extensive work by a qualified technician to restore the product to normal operation.

1. Introduction

The S6500 Bill Counter is the perfect solution for a fast, accurate, and reliable bill counting process. This machine is designed to meet the most demanding applications in today's financial market.

Its versatility allows users to process cash using 4 different operating modes (depending on their needs): **MIX-SORT-COUNT-LOCAL**.

With its heavy-duty construction and functional design, this machine features sophisticated image processing technology, providing a great solution to all sorting operations: piece count, denomination count, and serial number count.

Equipped with full-line sensors, it can accurately analyze the properties of each bill to greatly minimize the risk of accepting counterfeit bills. This machine is intended to create a more robust approach to managing cash.

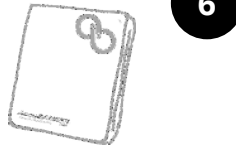
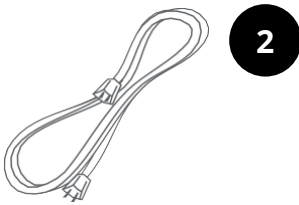
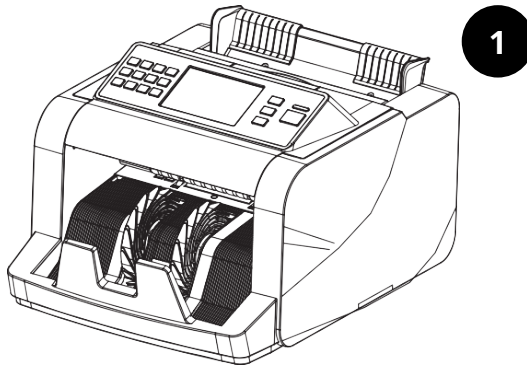
The S6500 has been designed with maximum flexibility for users to be able to handle each of its functions easily. It is simple to learn and use and ensures smooth integration with the cash processing procedure.

As durable as it is reliable, the S6500 is guaranteed to exceed your expectations, thanks to its outstanding performance!

2. Box Contents

When opening the box, verify that all the items detailed below are included. If any item is damaged or missing, contact the dealer where the unit was purchased.

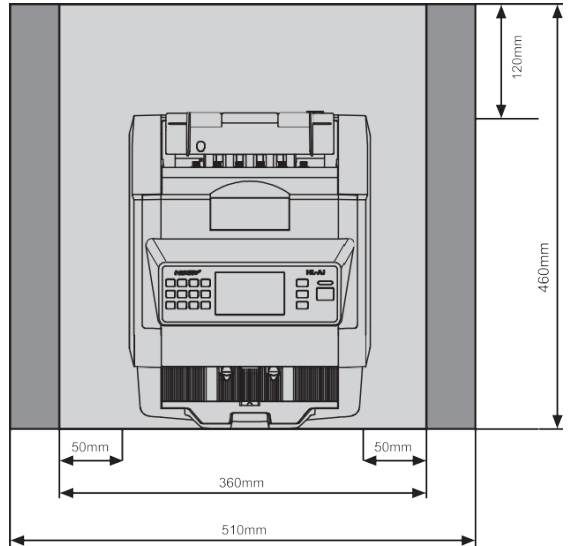
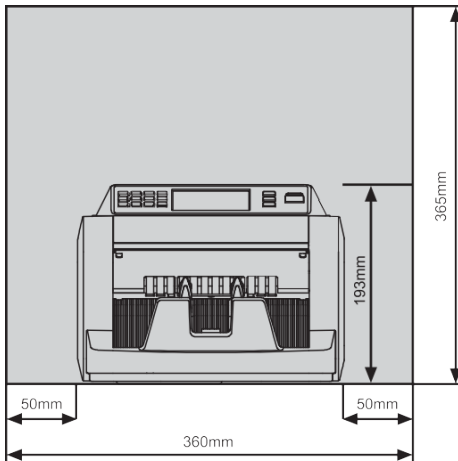
1. S6500 Bill Counter
2. Power Cord
3. Auxiliary External Display
4. Microfiber Cloth
5. CIS Calibration Paper
6. User Guide
7. Warranty Booklet



3. Installation

Before use:

- This product is designed for indoor use; please do not install outdoors.
- Please do not install the machine where its weight cannot be supported.
- When installing the machine, please leave enough space to make sure that the machine can freely open and close for smooth operation.



4. Placing Bill

Do not count damp or severely damaged bills.

Do not count broken or wrinkled bills, this may cause a jam.



Folded



Curled



Torn



Adhesive

Beware of paper clips, stitching needles, rubber bands etc. on bills to avoid counting errors or jammed bills.



Staples



Paper Clips



Rubber Bands

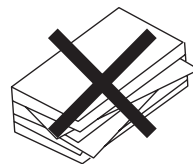
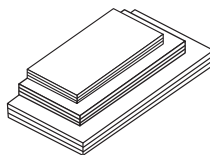
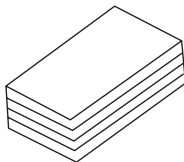


Coins

After making sure the bills are not stuck together, place them in the hopper.

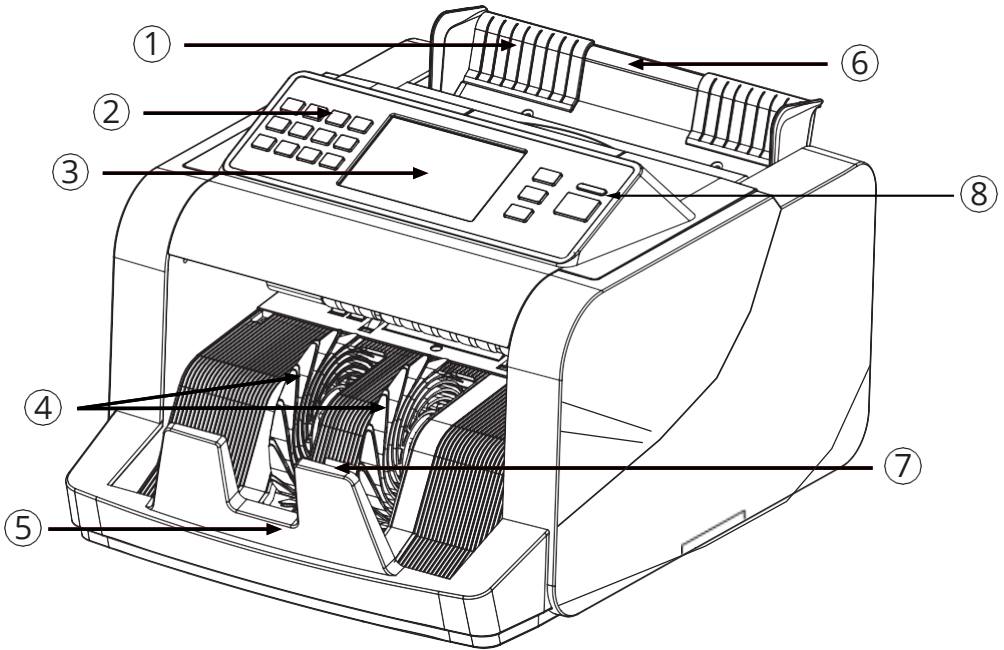


Place the bills correctly in order as shown below.



5. Equipment Overview

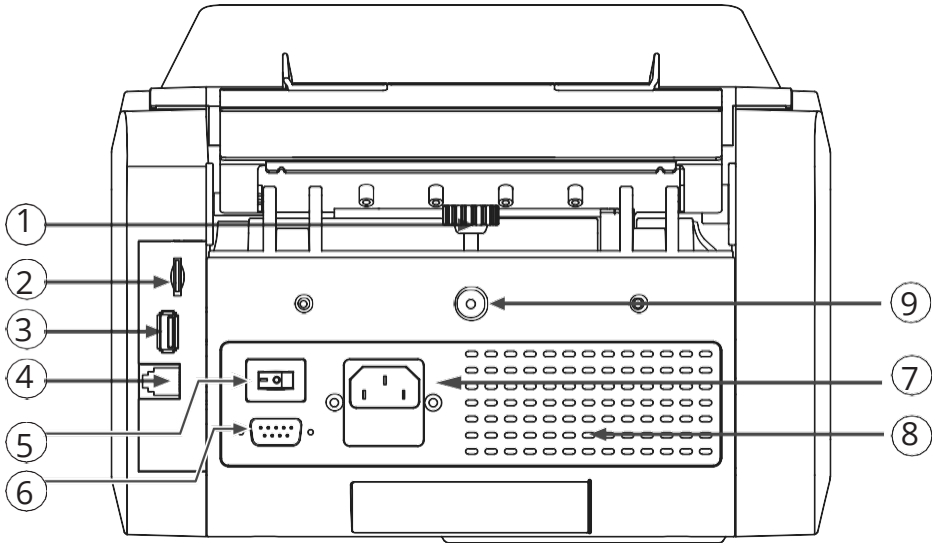
5.1 General Control and Parts



1. **Hopper Guiders:** Align the bills to be counted Control Panel:
Operates the unit
2. **Control Panel:** Operate the unit
3. **Main Display/Touch Screen:** Displays counting results and settings
4. **Stacker Wheels:** Receives the counted bills
5. **Stacker Plate:** Collects counted bills
6. **Hopper Plate:** Where bills to be counted are placed
7. **Stacker Sensor:** Senses the bills deposited on the stacker
8. **LED Indicator:** Indicates counting errors

5. Equipment Overview (cont.)

5.1 General Control and Parts (cont.)



1. **Adjustment Screw:** Calibrates the feeding gap of bills
2. **SD Port:** For service updates
3. **USB Port:** For software updates
4. **External Display Port:** Connects the external display
5. **Power Switch:** Turns the machine on and off
6. **Serial Port:** Connects the printer or PC
7. **Power Outlet:** Connects power cord
8. **Cooling Holes:** Cools down the motor
9. **Adjustment Screw Lock:** Locks the Adjustment screw

5. Equipment Overview (cont.)

5.2 Control Panel Functions



The Batch mode and Value mode selector (default value zero)

BAT/VAL



Selects the start mode, automatic, manual, or adding function



Prints count reports (printer sold separately)

SET



Shows the total number of bills counted and serial numbers



Selects the counting mode (MIX, SORT, COUNT, or LOCAL)



Clears the value or go back

BACK



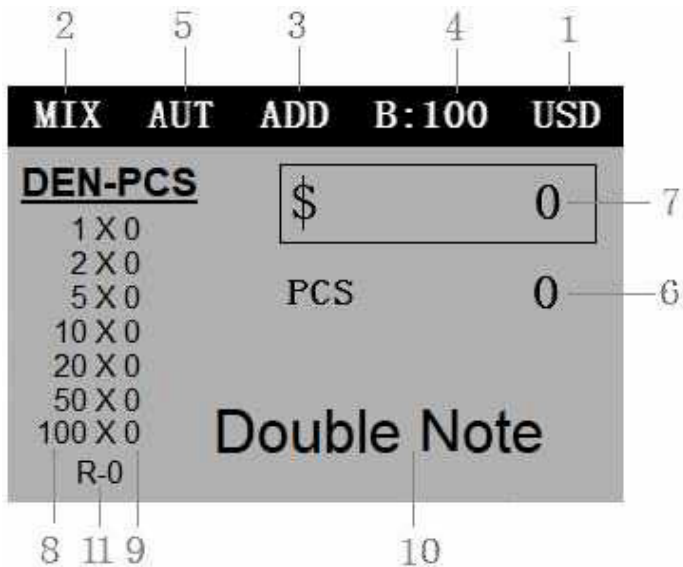
Moves around the functions



Starts counting or restarts operations and confirm settings

5. Equipment Overview (cont.)

5.3 Display Description



1. Currency
2. Operation mode
3. Addition function
4. Selected batch quantity
5. Automatic/Manual mode
6. Quantity of counted bills
7. Total amount counted
8. Denomination value
9. Value per denomination
10. Error message
11. Quantity of rejected bills

6. Operation



VERY IMPORTANT

Back-loading machines are very sensitive to the proper positioning of the bills on the hopper. Continuous errors may occur during counting due to incorrect positioning of the bills. Proceed with the following instructions for placing bills on the hopper properly.

Proper positioning of the bills on the hopper plate:

1. Place the bills at an angle between the guides as shown in Figures 1 and 2.
2. Swiftly, push the bills with a finger (see Figure 3) to make them rest on top of the hopper plate, in the correct counting position.

Figure 1

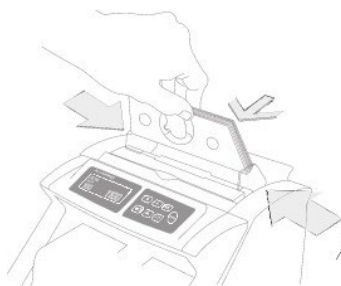


Figure 2



Figure 3



6. Operation (cont.)

6.1 Counting Modes

1. MIX

Used to count mixed denominations of programmed currencies. The result is the total amount of money, as well as the total amount of bills counted by denomination.

2. SORT

Counts bills of the same denomination and rejects any other that could be mixed within the lot to be counted. The unit will stop counting after finding a different denomination to allow the user to remove the detected bill.

3. COUNT

To count a batch of bills of a specific denomination, the user must separate the bills by denominations. Only pieces will be counted and the denomination of each bill will not be recognized. You can count other currencies not programmed in the device.

4. LOCAL

To count other currencies not programmed in the device. It will be able to configure and save the customized detection settings, it will only show the total of pieces counted, not the denomination.

MIX		USD	
DEN-PCS			
1	X	0	\$ 0
2	X	0	
5	X	0	
10	X	0	
20	X	0	
50	X	0	
100	X	0	
		PCS	0

SORT		USD	
DEN-PCS			
1	X	0	\$ 0
2	X	0	
5	X	0	
10	X	0	
20	X	0	
50	X	0	
100	X	0	
		PCS	0

COUNT	ADD		
		PCS	0
		TOTAL	0

LOCAL	ADD		
		PCS	0
		TOTAL	0

6. Operation (cont.)

6.2 Modes of Operation

A/M: Selects automatic or manual counting. It is used to activate or deactivate automatic mode. The machine will start counting automatically when the bills are placed in the input tray while in AUTO mode.

MODE: Selects the counting mode. Press the key continuously to select the desired counting mode.

CLEAR/BACK: Deletes the counting information. Press continuously to eliminate the counting information on the screen. It is also used to return to the previous screen while browsing the user menu.

ADD: Enables adding mode during operation. Each count will be added to the previous one while the function is activated.

BAT/VAL: For batch counting, press the key until B: 0 appears on the screen, then use the keypad to enter the desired quantity. To select the value mode, press the key until V: 0 appears on the screen, then use the keypad to enter the amount of the desired value to count. The device will stop counting when it reaches the number of pieces selected in the BAT mode (Batch) or the total value of the bills entered in the VAL (Value) mode.

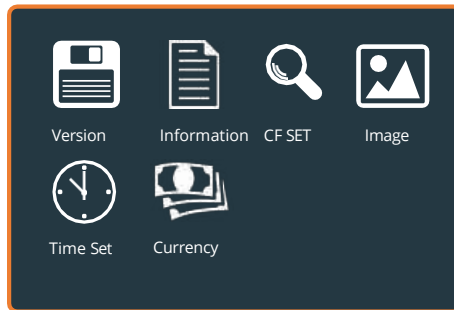
SHOW: Shows a detailed list of counted bills by denomination. Press the key again to show the summary of the serial numbers of the counted bills in MIX or SORT mode (USD and EUR only). Press the PRT key to print each of them shown summaries.

PRT: Prints the count report when the count summary is displayed during the SHOW function. Enter the SHOW function and then press the PRT key to print the report displayed on the screen (only the serial numbers for USD and EUR currencies will be shown and printed).

7. User Menu Overview

1. Main menu

Press and hold the "SET" (PRT) key for 3 seconds to enter the menu.



Press ▲▼ (SHOW or MODE) to select the options, then press the "START" key to enter the different menu options or select by touching the screen to enter each option.

2. Version

The software and equipment versions will be displayed.



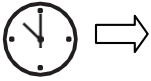
3. Information

This will only be used by technical support.

7. User Menu Overview (cont.)

4. Time Set

Sets the date and time on the equipment.



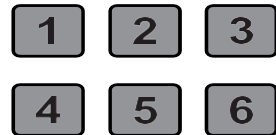
PRESS <NUM KEY> TO SET TIME.
PRESS <UP> <DN> TO SELECT.
PRESS <START> TO ENTER SET.

2016-06-27
11:46

After setting the date and time press the "START" key to confirm the change.

5. Currency

Selects the type of currency to count.



Use the numeric keypad to select the currency to work or touch the screen.

AUTO: Automatically recognizes the currency during counting. If currencies are mixed, they must be separated and machine must be previously programmed.

7. User Menu Overview (cont.)

6. 🔍 CF SET

Enter "CF SET" to configure the detection mode.



→ 1. CF Mode Set: Currency
2. CF SET
3. BLACKLIST MANAGEMENT

Press ▲▼ keys to select between the options.

6.1 CF MODE SET

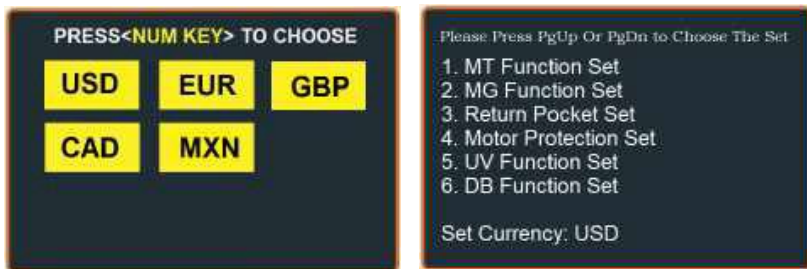
The unit can be configured to work in one of two parameters, Currency or Work mode.

The unit is configured by default with specific sensitivity levels for each function. Parameters can be adjusted according to specific needs. In Currency mode, the unit will work with the detection parameters defined for each specific currency. In Work mode the

7. User Menu Overview (cont.)

6.2 CF SET

Select the values and parameters for detection. The unit can be configured to work with different parameters and sensitivities for the detection sensors by mode (Work mode) or by each of the types of currencies (Currency mode).



1. **MT Function Set.** Detects the magnetic thread present on EUR bills. The MT function must be deactivated for other currencies.
2. **MG Function Set.** Used to detect ferromagnetic ink present in bills, commonly USD. Sensitivity can be adjusted: 0 is disabled, 1 is low sensitivity, 2 is high sensitivity.
3. **Return Pocket Set.** This function should only be used by technical service. Do not modify. **Return Max Set** should be at 100.
4. **Motor Protection Set.** This function should only be used by technical service. Keep the value as default, **Motor Speed Set** 20.

7. User Menu Overview (cont.)

7.2 CF Set (cont.)

5. **UV Function Set.** Used to detect the level of ultraviolet fluorescence in bills. This is one of the most common methods of detecting counterfeit bills. The UV sensitivity can be adjusted. It can be set between 1-30, 0 is disabled and 30 is the highest level of sensitivity. The factory default setting has UV detection disabled. The UV sensitivity can be adjusted depending on your currency or preference.

***Note:** Some bills are contaminated by certain chemicals. This may lead to false UV counterfeit detection.*

6. **DB Function Set.** This is used to detect the thickness of bills. This will detect when the counted bills are stuck together, when the bills have tape on them, or are made with suspicious paper.

7. User Menu Overview (cont.)

6.3 BLACKLIST MANAGEMENT

This will store up to 5 serial numbers of suspicious bills, which will then be compared with the serial numbers of the counted bills. Once the unit recognizes one of these stored serials, it will stop the count and notify the user with a "BLACKLIST ERROR" alarm message.

1. Enter the "BLACKLIST MANAGEMENT" mode.
2. To save the serial number list, you must press "SAVE."
3. Return to the main work mode and count each bill to be included in the list of suspicious serial numbers.
4. Check if the serial numbers were recorded in the list correctly.
5. Return to BLACKLIST MANAGEMENT mode, select the currency of the scanned bill then confirm if it is in the list.

1. CF Mode Set: Currency
2. CF SET
→ 3. BlackList Management



After having scanned the bill to be included in the list, return to verify if the serial number was included satisfactorily.

USD BLACKLIST		
1	HA49274695A	DEL

Press the "BACK" button to exit the mode. To delete the number from the list, select the serial number and then press "DEL".

7. User Menu Overview (cont.)

7. Image

Enter the mode and select "CIS ADJUST" to adjust the calibration of the Contact Image Sensor (CIS).



1. DISPLAY IMAGE
2. SAVE IMAGE TO U DISK
- 3. CIS ADJUST

Technical Support
available
Monday – Friday
9:00 AM - 5:00 PM EST
1-888-993-2228

Note: Please contact our technical support team to provide information about this procedure. These applications should only be attempted under supervision of our technical support team.

8. Instructions for updating the software

To start the software update, the machine must be turned off. Connect the USB flash drive containing the new version of the software to the back of the device and turn the machine on again. The new software will be installed.

Read File Now

Program Now

Program Finish

Restart Please

8. Jamming

If a bill gets jammed inside the machine, the unit will notify the user.

- a. Proceed to open the top compartment
- b. If you notice you can reach the bill easily using your fingers, then proceed to remove it carefully. But if you notice it is difficult to reach or it is stuck in the rollers, then proceed to turn the unit OFF before proceeding to remove it.
- c. Do not use any tool or metallic instrument to remove the bill as it might damage other unit's components accidentally.
- d. Make sure to remove any remaining debris in case the bill is broken.
- e. Close the compartment properly after removing the bill.

9. Unit Maintenance

9.1 Maintenance and Calibration

Proceed with this calibration when the bills are not fed smoothly through the machine or several error messages are occurring too often like DOUBLE NOTES, CHAIN, or miscounting errors.

Other reasons that might require readjusting the feeding gap are:

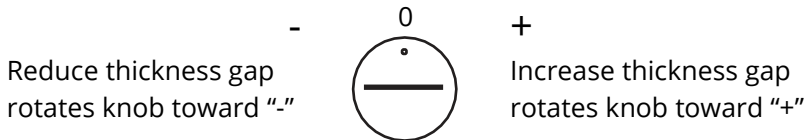
- The counting of new or mint condition bills
- The counting of poor or bad fitness condition bills
- Polymer bills and Paper-made bills counted together

Having the correct feeding gap will ensure a smooth counting process.

Trial and error attempts are recommended before making the final adjustment.

NOTE: For new bills, it is recommended to leave the gap narrow. For used and worn bills, it is recommended to widen the gap.

- For new (thinner) bills, as well as Polymer notes, adjust toward "-" to reduce the gap.
- For used (thicker) bills, adjust toward "+" to increase the gap.
- Small adjustments towards the "+" direction work best.



9. Unit Maintenance (cont.)

9.2 Periodic Cleaning Routines

Following these periodic cleaning routines will help keep the unit in the optimum condition for ensuring a trouble-free operation, as well as to extend the unit's lifespan.

Daily routine: Perform the following steps on a daily basis:

- a. Turn Off the unit when not in use.
- b. With a clean dry cloth or a brush, remove the dust deposited on the hopper and the stacker area.

Weekly routine: Perform the following steps on a weekly basis:

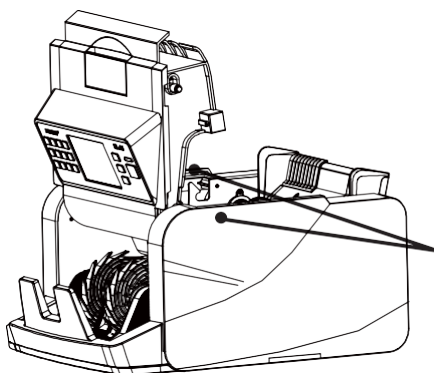
- a. Turn off the unit and unplug its power cord.
- b. Open the top cover carefully.
- c. Use an air duster can and a brush to carefully remove the dust from the bill passage areas.
- d. Inspect the CIS sensors, in case they are stained with ink, and use a cloth soaked in alcohol to clean the CIS sensor's surface.



WARNING

Be careful with your hands when opening and/or closing the top cover.

Turn off the unit before maintenance.



10. Warning and Error Messages

The unit will notify the user if an error is detected during the boot-up procedure or in case any abnormal incident occurs during the operation. Proceed as the table indicates for each error message.

ERROR	CAUSE	SOLUTION
Ultraviolet Error (UV)	Suspicious UV feature	<ul style="list-style-type: none"> - Remove the suspicious bill - Consider reducing UV sensitivity
Magnetic Error (MG)	Suspicious MG feature	<ul style="list-style-type: none"> - Remove the suspicious bill - Consider reducing MG sensitivity
CHAIN Error	Two or more bills passed together (partially overlap)	<ul style="list-style-type: none"> - Adjust thickness adjustment knob - Verify the bill's fitness quality - Count everything again
DOUBLE NOTE Error	Two or more bills passed together(one on top other)	<ul style="list-style-type: none"> - Fan the bills - Adjust thickness adjustment knob - Consider reducing IR sensitivity
Infrared Error (IR-)	Suspicious IR feature	<ul style="list-style-type: none"> - Check the quality of the bills - Consider reducing IR sensitivity
HOPPER Error	Incorrect positioning of bills in the Hopper Plate	<ul style="list-style-type: none"> - Place bills correctly following steps 1 and 2 (page 14)
SLANT Error	Bill passed is slanted or is damaged	<ul style="list-style-type: none"> - Repeat the count - Press START to eliminate the error
NOT RECOGNIZED	Suspicious bill, damaged, wrinkled or very deteriorated	<ul style="list-style-type: none"> - Repeat the count - If it persists, manually check
SIZE Error	Bill not recognized	<ul style="list-style-type: none"> - Remove last bill counted
BLACKLIST Error	Serial number included in the "BLACKLIST"	<ul style="list-style-type: none"> - Check if the bill is blacklisted

10. Warning and Error Messages (cont.)

ERROR	CAUSE	SOLUTION
DENOMINATION Error	Bill passed with different denomination than the previous bill, when counting in the SORT mode. Only the same denomination counted in SORT mode.	<ul style="list-style-type: none"> - Remove last bill counted. - Consider switching to MIX mode to count bills of different denominations
WIDTH Error (DD)	Abnormal size or chained bills	<ul style="list-style-type: none"> - Check the last two bills - Count everything again
Stacker Sensor Error	Stacker sensor blocked or damaged	<ul style="list-style-type: none"> - Remove the bill from the Stacker plate
JAM Error	Bill jammed in the counting channel	<ul style="list-style-type: none"> - Remove jammed object (see section 9: Jamming) - Close the top cover - Press START to eliminate the error
Count Sensor Error (R)	Open top cover or right counting sensor damaged	<ul style="list-style-type: none"> - Clean the counting sensors - Close the top cover - Press START to eliminate the error
Count Sensor Error (L)	Open top cover or left counting sensor damaged	<ul style="list-style-type: none"> - Clean the counting sensors - Close the top cover - Press START to eliminate the error
Count Sensor Error (M)	Open top cover or middle counting sensor is damaged	<ul style="list-style-type: none"> - Clean the counting sensors - Close the top cover - Press START to eliminate the error
Hopper Sensor Error	Hopper sensor blocked or damaged	<ul style="list-style-type: none"> - Remove the bills from the Hopper Plate

11. Specifications

Temperature	32° - 104°F (0° - 40°C)
Humidity	25% - 80%
Display	LCD (touchscreen)
Counting Speed (new bills)	1,000 bills/minute
Feeding System	Roller Friction System
Feeding Type	Back-loading
Hopper Capacity	200 bills (new bills)
Stacker Capacity	200 bills (new bills)
Power Source (INPUT)	100 - 240 VAC 60/50 Hz
Power Consumption	50 Watts Max. (7.2 Watts Standby Max.)
Accepted Banknote Type	Paper, Polymer, etc.
Accepted Banknote Dimensions (L x W)	3.9 x 2 - 6.7 x 3.2 in 10 x 5 - 17 x 8 cm
Printer	Printer Compatible (Sold Separately)
Thermal Printer Paper Dimensions	Dimension: 2.25" x 125' Max. Core Diameter: 0.5"
Product Dimensions (L x W x H)	13 x 10.2 x 7.8 in (33 x 26 x 20 cm)
Product Weight	13.5 lb (6.1 kg)

7104 NW 50th St. • Miami, FL 33166
9AM- 5PM ET Monday through Friday
www.SILVERMoneyCounters.com

SILVER®