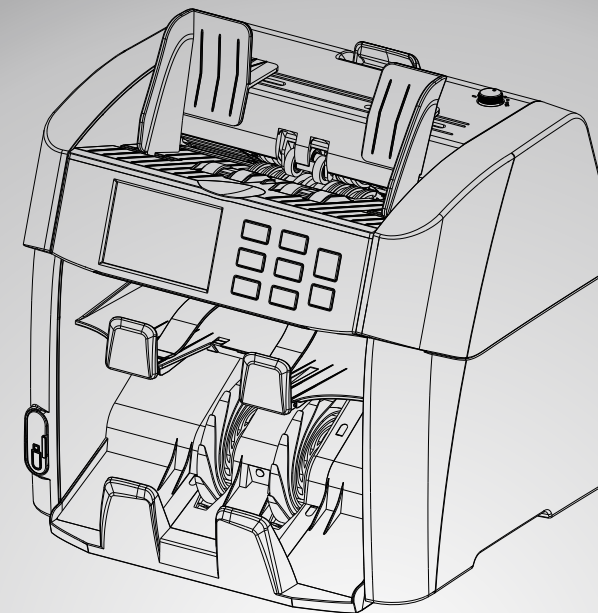




1+1 Pockets Multi-Currency Discriminator

User Manual

FedPro CR1450



Carnation Enterprises
Contact Phone: 1-800-296-2779
E-mail: info@carnation-inc.com
Website: www.carnation-inc.com

Contents

1 Introduction	1
1.1 Important Notes and Safety Instructions	1
1.2 Unpacking	1
1.3 Figures Used	1
2. Model Overview	2
2.1 Front View	2
2.2 Rear View	2
2.3 Control Panel Overview	3
3. Operation	4
3.1 Power ON/OFF	4
3.2 How to Handle and Place Banknotes	4
3.3 Main Screen Overview	5
3.4 Currency Selection	5
3.5 ADD Mode	6
3.6 Batch Counting & Value Batch counting	6
3.7 Counting Modes	7
3.8 Print Function	8
3.9 View Counting detail	9
3.10 Change Counting Speed	9
4 Setting Up	10
4.1 Auto Start	10
4.2 Setting R-P Capacity	10
4.3 Batch Add Mode	11
4.4 Date & Time	11
4.5 Beep Setup	12
4.6 Capture Image option	13
4.7 Version	13
4.8 External Display Setting	14
4.9 Auto Cur Selection	14
4.10 Multi Cur Selection	15
4.11 Default Currency	16
5 Technical Specifications	17
6. Appendix Error Message	18

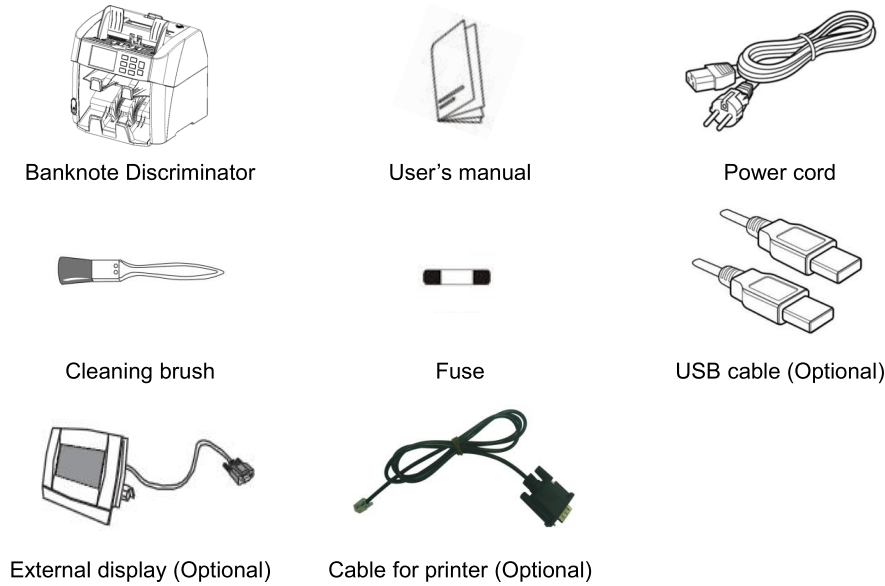
1 Introduction

1.1 Important Notes and Safety Instructions

- The machine is intended for indoor use only. Do not use it outdoors.
- Do not attempt to disassemble the machine. If any operational issues arise, please contact the authorized distributor for assistance.
- Avoid exposing the device to liquids or extreme humidity/moisture.
- Operate the device away from environments with strong magnetic and electromagnetic fields. For example, keep it away from magnets and other electrical appliances.
- Always use the supplied power cord with a properly grounded outlet.

1.2 Unpacking

Before proceeding, inspect the machine's appearance to ensure it is in good condition. Additionally, verify the presence of all accessories included in the package. Inside the package, you should find the following items:

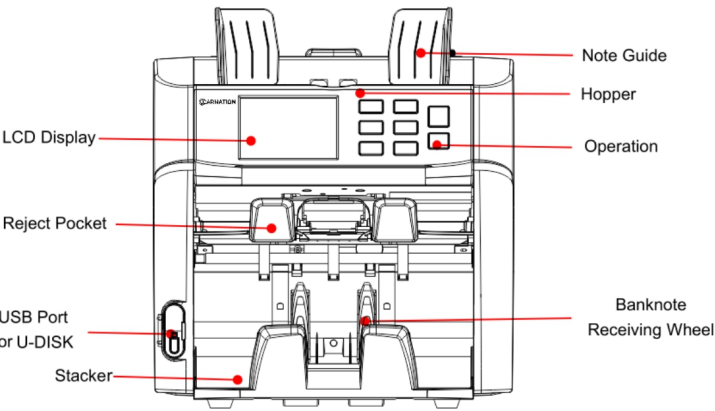


1.3 Figures Used

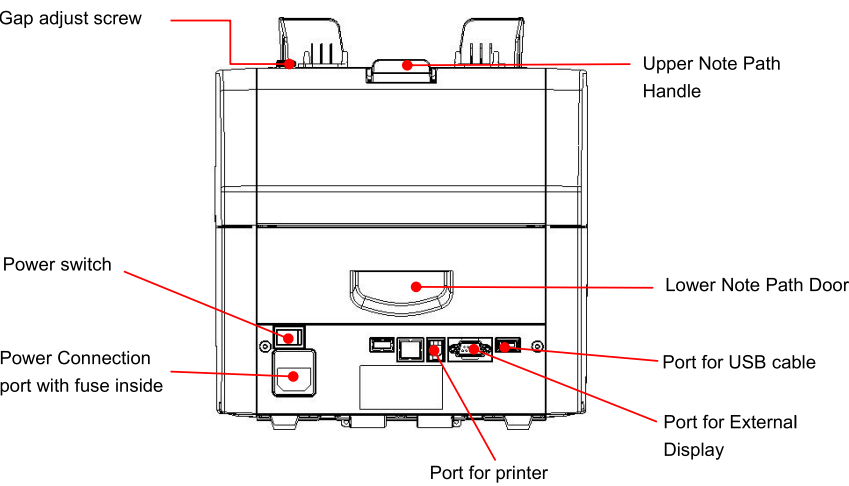
The figures in this manual are for illustrative purpose only.

2. Model Overview

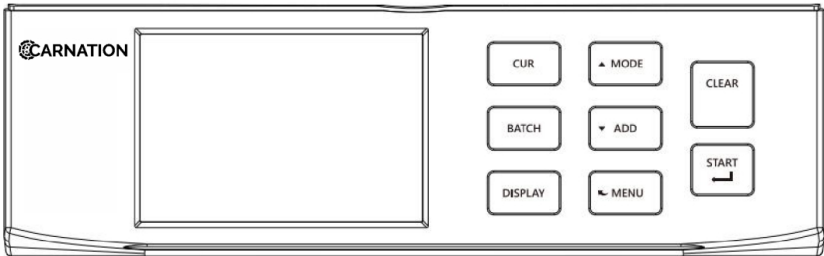
2.1 Front View



2.2 Rear View



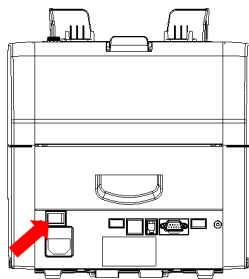
2.3 Control Panel Overview



Key	Description
CUR	1. Selection of desired currency. 2. Utilized as the "+1" function in the menu interface.
BATCH	1. Batch function ON/OFF, and set batch number. 2. Utilized as the "-1" function in the menu interface.
DISPLAY	1. View the counting detail. 2. Long press to print the counting detail.
MODE	1. Select counting mode: Mix→Single→Face→Orient→Count 2. Navigate using the "↑" key in the menu interface.
ADD	1. "ADD" function ON/OFF. 2. Navigate using the "↓" key in the menu interface.
MENU	1. Press to enter the User menu. 2. Press to return to the previous menu in the menu interface.
CLEAR	1. Clear the number of counted banknotes. 2. Clear the unsaved settings. 3. Press to turn the batch function OFF.
START	1. Start counting. 2. Confirm selection in menu interface.

3. Operation

3.1 Power ON/OFF

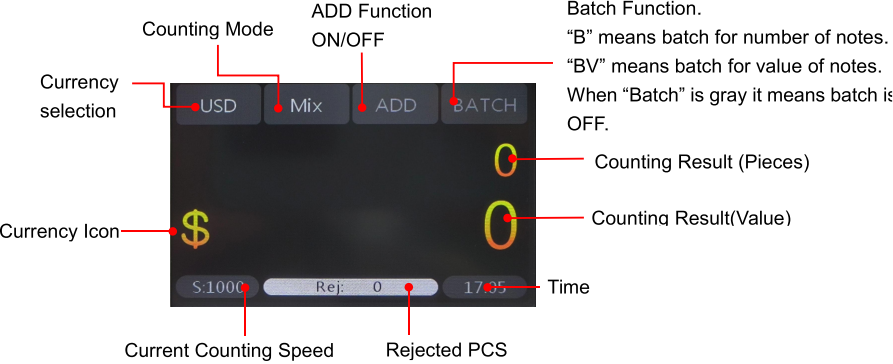


- Switching ON the device:
- Connect the machine to the power outlet using the power cable.
 - Press the Power Switch button located on the rear side of the machine.
 - After a brief boot-up and self-test, the machine will enter the main counting interface.
- Switching OFF the device:
- Press the power switch button to turn the machine off.

3.2 How to Handle and Place Banknotes

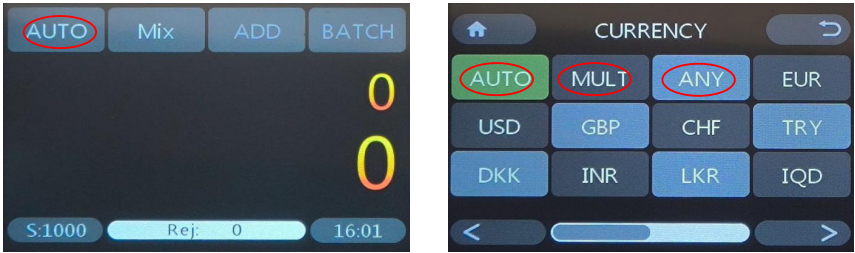
- To ensure smooth banknote counting, please adhere to the following guidelines:
1. Avoid counting wet, excessively dirty, or damaged notes.
 2. Check for foreign objects mixed with the notes, such as paper clips, rubber bands, clips, or dust, as these may jam the note path or damage the sensors.
 3. Straighten any folds or curls in the notes before placing them in the hopper.
 4. Ensure all corners and edges of the notes are aligned, as unevenness could result in errors.
 5. Place the notes in the center of the hopper and adjust the hopper guides if necessary.

3.3 Main Screen Overview



3.4 Currency Selection

1. Press the CUR key to select the desired currency. Alternatively, tap the "AUTO" area on the display to enter the currency selection interface.
2. Note:
 - Selecting "ANY" currency allows you to count any currencies. It will only count the number of banknotes without denominations or any counterfeit detection.
 - Selecting "AUTO" currency enables the machine to automatically detect the currency.
 - Selecting "MULT" currency allows you to count mixed currencies. The machine will count them together automatically.



3.5 ADD Mode

- In ADD mode (accumulative counting), the machine will summarize the results of multiple counting sessions.
- Press the ADD key or tap the ADD icon to toggle the ADD function ON/OFF.
- When ADD mode is activated, "ADD" will appear on the top line of the display.
- When ADD mode is deactivated, "ADD" will be grayed out on the display.



3.6 Batch Counting & Value Batch counting

How to Count a Preset Number of Banknotes:

- Use the Batch key to select or set the banknote batch number.
- For Normal batch mode, the cycle switches as follows: ---, 100, 50, 25, 10, ---.
- For Value batch mode, the cycle switches as follows: ---, 500000, 400000, 300000, 200000, 100000, 50000, 30000, 20000, 10000, 5000, 2500, 2000, 1000, 500, 100, 50, 10, ---.

How to Perform Batch Counting:

- Tap the Batch icon or long-press the Batch key to enter the Batch counting & Value Batch counting number setting interface.
- Input the desired number using the touch keyboard.
- Tap the "OK" button or press the START key to save the setting. (The largest batch value can be set up to 999, and the Batch value can be set up to 9,999,999.)
- The machine will count the set number of notes and values and then stop.

How to Turn Off the Batch Function:

- Set the value as "0" to disable the batch counting function.
- Tap "OFF" in the "BATCH SETUP" interface to turn off the batch function.



3.7 Counting Modes

- Tap the MODE ICON or press the MODE key to select the desired counting mode.
- The current counting mode will be displayed sequentially in the middle area of the top line of the display. Modes include Mix, Single, Face, Orient, and Count (5 modes in total).



- Definition of the Counting Modes

Mix	Mixed Value Mode	The machine counts mixed denomination banknotes. Suspicious notes will be routed to the reject pocket.
Single	Single Value Mode	The machine counts banknotes with the denomination of the first detected genuine note. Suspicious banknotes and those with a deviating denomination are routed to the reject pocket.
Face	Face Sorting Mode	Counts banknotes with the face of the first detected, genuine one. Banknotes with different faces and suspicious notes are delivered to the reject pocket.



Face Up (Obverse)

		<p>Face Down (Reverse)</p>
Orient	Orient Sorting Mode	<p>The machine counts banknotes with the orientation of the first detected genuine one. Suspicious banknotes and those with deviating orientations are routed to the reject pocket.</p> <div> <p>SIDE 1 (Front: upright)</p> </div> <div> <p>SIDE 2 (Front: upside down)</p> </div> <div> <p>SIDE 3 (Back: upright)</p> </div> <div> <p>SIDE 4 (Back: upside down)</p> </div>

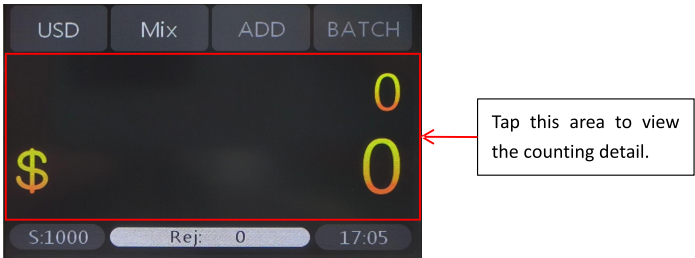
3.8 Print Function

- 1.How to Print the Counting Result as a Receipt Using an External Printer:
2. Connect a printer to the printer port at the rear of the machine.
3. After a counting job is finished, long-press the DISPLAY key.
4. Alternatively, navigate to the counting detail interface and tap the "Print" icon to print the counting result.

	USD	PRINT
Deno	Pcs	Value
1	2	2
2	0	0
5	2	10
10	2	20
20	3	60
50	3	150
100	2	200
Total	14	442

3.9 View Counting detail

After counting is finished, tap the area below or press the DISPLAY key to enter the counting detail interface.

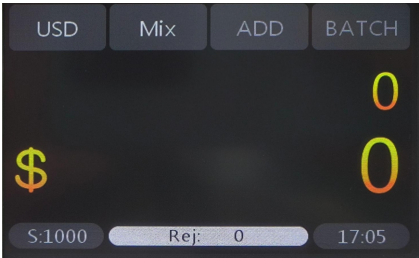


The counting detail interface displays the number of banknotes and their total values for each denomination counted in the batch. You can also tap the virtual "Print" button to print the counting detail.

USD		
Deno	Pcs	Value
1	2	2
2	0	0
5	2	10
10	2	20
20	3	60
50	3	150
100	2	200
Total	14	442

3.10 Change Counting Speed

- To change counting speed:



1. Touch the "S:1000" area to adjust the counting speed.
2. Speed options: 1000 and 1200 notes/min.

Note: The 1200 notes/min speed is only available in "ANY" currency mode.

4 Setting Up

To set up the counter:
While on the main screen, press the **MENU** key to enter the User Menu.
In the User Menu interface, the MODE key serves as the Up-navigation key, while the ADD key serves as the Down navigation key.

MODE: Up
ADD: Down
CUR: +1
Batch: -1

Use the navigation keys to highlight the desired item.
Press the **START** key to confirm your selection.
Press the **MENU** key to return to the previous interface. Note: You can also set or change every item in the User Menu by touching the screen.

4.1 Auto Start

To choose the counting start mode when banknotes are placed in the hopper:

- Manual: Manually start counting by pressing the START key.
- Auto: Automatically start counting. The machine will begin counting automatically when it detects banknotes in the hopper.



1. Highlight the "Auto Start" option.
2. Press the BATCH or CUR key to toggle between Auto and Manual modes.
3. Press the MENU key to exit and return to the previous menu.
4. You can also change this setting by touching the display.

4.2 Setting R-P Capacity

- To set R-P(Reject Pocket) capacity:



1. Highlight the "R-P Capacity" option.
2. Press the BATCH or CUR key to adjust the reject pocket capacity. Options include 50, 40, 30, and 20.
3. Press the MENU key to exit and return to the previous menu.
4. You can also perform the above actions by touching the display.

4.3 Batch Add Mode

When you enable this function and proceed to count notes, the machine will check the following two situations upon displaying "batch reached":

1. If the hopper is empty at this point, the counting result in the main counting interface will be cleared to "0" when you clear the stacker.
2. If there are any notes remaining in the hopper, the counting result in the main counting interface will accumulate when you clear the stacker.



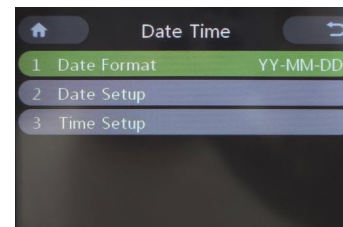
1. Highlight the "Batch Add Mode" option.
2. Press the BATCH or CUR key to toggle between ON and OFF.
3. Press the MENU key to exit and return to the previous menu.
4. You can also change this setting by touching the display.

4.4 Date & Time

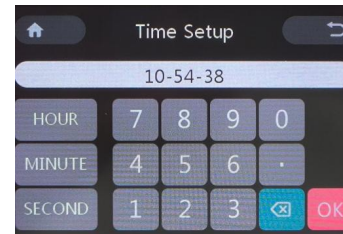
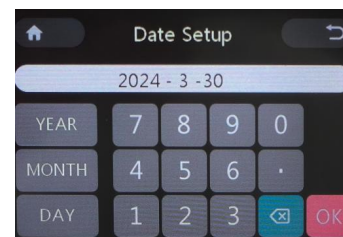
- To set date and time:



1. Highlight the "Time & Date" option.
2. Press the START key to confirm and enter the Time & Date interface.
3. Date Format: Use the BATCH key to cycle through date format options ("YY-MM-DD" / "DD-MM-YY" / "MM-DD-YY").
4. Date Setup: Double-click to enter the date setup interface.
5. Time Setup: Double-click to enter the time setup interface.
6. Press the MENU key to exit.



7. You can also change this setting by touching the display.

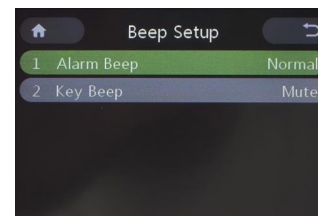


4.5 Beep Setup

- To change beep setup:



1. Highlight the "Beep Setup" option.
2. Press the START key to confirm and enter the Beep Setup interface.
3. Use the MODE or ADD key to select the desired item that needs to be changed.
4. Press the BATCH or CUR key to toggle between Mute and Normal.
5. Press the MENU key to exit.
6. You can also change this setting by touching the display.



4.6 Capture Image option

To specify which banknote data will be collected before scanning the notes image data:

Accept: When "Accept" is selected, the machine will only collect the image data of banknotes that are accepted by the machine during the collection process. It will not collect data for banknotes that are rejected.

Reject: When "Reject" is selected, the machine will only collect the image data of banknotes that are rejected by the machine during the collection process. It will not collect data for banknotes that are accepted.

ALL: When "All" is selected, the machine will collect the image data of all banknotes counted by the machine during the collection process.



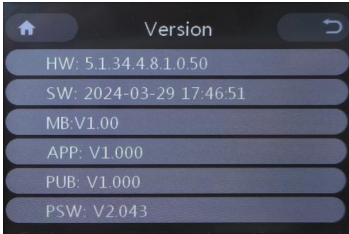
1. Highlight the "Capture Image option" option.
2. Press the BATCH or CUR key to toggle between "All", "Reject", and "Accept".
3. Press the MENU key to exit and return to the previous menu.
4. You can also change this setting by touching the display.
5. Note: This function is only available when using a USB cable to collect image data.

4.7 Version

- To view the firmware version information:

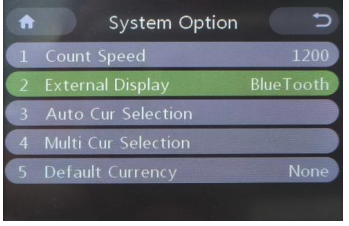
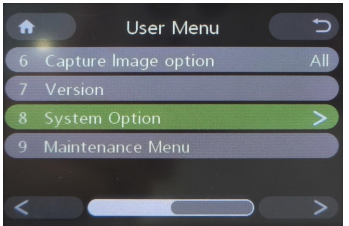


1. Highlight the "Version" option.
2. Press the START key to confirm and enter the version interface.
3. The version information will be displayed on the screen.
4. Press the CUR key to switch to the currency database version information interface.
5. Use the MODE and ADD keys to page up and down through the information.
6. Press the MENU key to exit and return to the previous menu.
7. You can also view this information by touching the display.



4.8 External Display Setting

To change the external display type, you must select your external display model when working with an external display:



1. Highlight the "System Option" option.
2. Press the START key to confirm and enter the System Option interface.
3. Highlight the "External Display" option.
4. Press the BATCH or CUR key to select the desired option.
5. Press the MENU key to exit.
6. You can also change this setting by touching the display.

4.9 Auto Cur Selection

To configure which currencies are available when using "AUTO" currency mode:



4.10 Multi Cur Selection

To configure which currencies are available when using "Multi" currency mode:

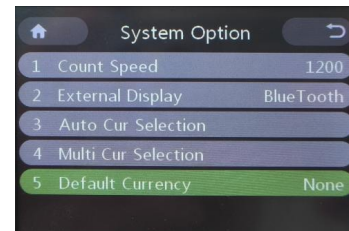
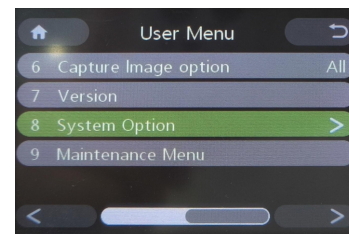


1. Highlight the "System Option" selection.
2. Press the START key to confirm and enter the System Option interface.
3. Highlight the "Auto Cur Selection" option.
4. Press the START key to confirm and enter the Auto CUR selection interface.
5. Press the BATCH or CUR key to enable or disable the item.
6. Press the MENU key to exit and return to the previous menu.
7. You can also perform the above actions by touching the display.



4.11 Default Currency

To set your default currency, choose the currency that the machine will automatically select each time it is turned on. If you choose "None," the machine will remember the last selected currency even when it is turned off.



1. Highlight the "System Option" selection.
2. Press the START key to confirm and enter the System Option interface.
3. Highlight the "Default Currency" option.
4. Press the BATCH or CUR key to select the desired currency.
5. Press the MENU key to exit and return to the previous menu.
6. You can also perform the above actions by touching the display.

5 Technical Specifications

Counterfeit Detection Sensors:	Dual CIS, MG, Dual-wavelength IR, UV
Value Count Speed:	1,000 notes/minute
Free Count Speed:	1,200 notes/minute
Hopper Capacity:	500 notes
Stacker Capacity:	200 notes
Reject Pocket Capacity:	50 notes
Power Supply:	100~240V AC, 50/60 Hz
Interface:	RJ9 x 1, DB9 x 1(RS-232), USB x 2
Dimensions(W/H/D):	10.67"(W)X10.24"(H)X10.39"(D) (271(W)X260(H)X264(D)mm)
Net Weight:	18.3lb (8.3kg)

6. Appendix Error Message

Part 1 Self-test error message display and solutions

If the following error message is displayed on the display while turning on, you can handle them as per the following solutions.

Error message	Solutions
UV Fault	<ol style="list-style-type: none">1. Place the machine in a suitable location to avoid strong light shining directly on the top cover.2. Remove banknotes from the machine and/or clean the UV sensor to remove any dust.
Right Counting Fault Middle Counting Fault Left Counting Fault	Remove the banknotes and/or clean the Group B IR sensor to remove any dust.
Right CIS IR Fault Left CIS IR Fault	Remove the banknotes from the machine and/or clean the A IR sensor to remove any dust.
CIS#1 Fault	Remove the banknotes and/or clean the CIS (Contact Image Sensor) to remove any dust.
Receiving Fault	Remove the banknotes from the stacker and/or clean the receiving sensor to remove any dust.
Rejector Fault	Remove the banknotes from the reject pocket and/or clean the reject sensor to remove any dust.
Feeding Fault	Remove the banknotes from the hopper and/or clean the feeding sensor to remove any dust.
Rotate#1 Speed Fault Rotate#2 Speed Fault	Clean the rotate speed sensor to remove any dust.
C1 IR Fault C2 IR Fault D1 IR Fault	Remove the banknotes from the C&D IR sensor and/or clean the C&D IR sensor to remove any dust.

Part 2 Detective error message display and solutions

If the following error message is displayed on the display during counting, you can handle them as per the following solutions after the machine is stopped.

Deno Diff	The denomination of this banknote is different from the first detected denomination of this counting batch.
Ver Diff	The issued version of this banknote is different from the first detected issued version of this counting batch.
Face Diff	The face direction of this banknote is different from the first detected face direction of this counting batch.
Orient Diff	If the orientation of this banknote is different from the first detected orientation of this counting batch, please follow these steps after the machine is stopped:
Image#3	1. Count again. 2. Do a sensor calibration. 3. If the problem continues, capture the image data and send it to your sales representative for further analysis.
Ir image error	1. Count again. 2. Do a sensor calibration. 3. If the problem continues, capture the image data and send it to your sales representative for further analysis.
UV-Error	1. Count again. 2. Do a sensor calibration. 3. If the problem continues, capture the image data and send it to your sales representative for further analysis.
MG-Error	1. Count again. 2. If the problem continues, capture the image data and send it to your sales representative for further analysis.
MG1-Error	1. Count again. 2. If the problem continues, capture the image data and send it to your sales representative for further analysis.

MG2-Error	1. Count again. 2. If the problem continues, capture the image data and send it to your sales representative for further analysis.
MG3-Error	1. Count again. 2. If the problem continues, capture the image data and send it to your sales representative for further analysis.
IR-Error	1. Count again. 2. Do a sensor calibration. 3. If the problem continues, capture the image data and send it to your sales representative for further analysis.
Width	1. Count again. 2. Do a sensor calibration and motor speed adjustment. 3. If the problem continues, capture the image data and send it to your sales representative for further analysis.
Slant	1. Count again. 2. Check and adjust the feeding gap. 3. If the problem continues, capture the image data and send it to your sales representative for further analysis.
Chained#1	1. Count again. 2. Check and adjust the feeding gap. 3. If the problem continues, capture the image data and send it to your sales representative for further analysis.
Double	1. Count again. 2. Check and adjust the feeding gap. 3. If the problem continues, capture the image data and send it to your sales representative for further analysis.
Half	Check if the banknote got damaged.
Length	1. Count again. 2. Do a sensor calibration. 3. If the problem continues, capture the image data and send it to your sales representative for further analysis.
Old Ver	Check if the banknote already out of circulation.
Others	1. Count again. 2. If problem persists, record the operational details before and after the problem occurred, capture the image data and send it to your sales representative for further analysis.



Part 3 Alarm message display and solutions

If the following error message is displayed on the display when operating the machine, you can handle them as per the following solutions.

Error message	Solutions
Batch Reached	Counting result reaches preset batch value. Remove the banknotes from the stacker.
Stacker Full	Capacity of stacker is full. Remove the banknotes from the stacker.
Rejector Full	Capacity of reject pocket is full. Remove the banknotes from the reject pocket.
Cover Open	1. Close the top cover. 2. If the top cover is not open, there may be notes inside the machine, remove it.
Back Drawer Open	Close the back drawer.
JAM	Some foreign substance falls inside the machine or notes are blocked, open the back cover to remove them.
Mainloop Broken	Turn off the machine and restart it.
Check Stacker	Remove the banknotes from the stacker.
Clean IR Sensor A1 Clean IR Sensor A2 Clean IR Sensor B1 Clean IR Sensor B2	Remove the dust or banknotes from the A&B IR sensors.