

**MUNBYN**

# **IMC01 Banknote Counter**

## **Frequently Asked Questions**

**1.07**

Document Name:

IMC01 Frequently Asked Questions-1.07.docx

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## Version History

Date	By	Changes	Version
2021-2-7	Byron Zhong	<ul style="list-style-type: none"> <li>Initial Release</li> </ul>	1.00
2021-2-19	Byron Zhong	<ul style="list-style-type: none"> <li>Add section 2.9, general steps to fix the issue</li> </ul>	1.01
2021-4-23	James Hu	<ul style="list-style-type: none"> <li>Add section 2.10. How to turn off the key beep?</li> <li>Add section 2.11. How to fix the abnormal batch function issue?</li> </ul>	1.02
2021-4-26	Erik McCullough	<ul style="list-style-type: none"> <li>Marketing and US English Naturalization</li> </ul>	1.03
2021-6-21	James Hu	<ul style="list-style-type: none"> <li>Update section 2.6 When and how do I adjust the feeding gap adjustment?</li> </ul>	1.04
2021-8-27	James Hu	<ul style="list-style-type: none"> <li>Update Table 2-1 Error Codes</li> <li>Add section 2.12. What should I do if Stacker Error displayed on the screen?</li> <li>Add section 2.13. What should I do if Motor Error displayed on the screen?</li> <li>Add section 2.14. What should I do if Image/IR/UV/MT/MG Error is frequently displayed on the screen?</li> </ul>	1.05
2021-9-28	James Hu	<ul style="list-style-type: none"> <li>Update section 2.1 What should I do if Stacker Error displayed on the screen?</li> </ul>	1.06
2021-12-7	James Hu	<ul style="list-style-type: none"> <li>Update section 2.9 What should I do if the machine keeps stop counting because of Image/IR/UV/MT/MG error?</li> <li>Update section 2.14 What should I do if the IMC01 counts incorrectly or does not count?</li> </ul>	1.07

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## **1.0. Capabilities**

### **1.1. What currencies does the IMC01 supports**

The default currencies in the IMC01:

US/CA version: USD, EUR, CAD, MXN, GBP,

EU version: EUR, USD, GBP, CHF, PLN, SEK, NOK, DKK,

UK version: EUR, USD, GBP, SCO, CHF, PLN, SEK, NOK, DKK.

The IMC01 software can also support COP (Colombian Pesos), LBP (Lebanese Pesos), DOP (Dominican Republic Pesos) and up to 100 additional currencies. There is no charge for additional currencies. Please contact our support team for more details and upgrade to a new configuration.

### **1.2. Does the IMC01 recognize serial numbers?**

This machine can recognize the serial numbers of all default currencies in the IMC01.

Please note it does detect fake serial numbers.

### **1.3. Does the IMC01 work with a printer?**

Yes, the ITTP106 printer is compatible with the IMC01.

The ITTP106 can print the record of the counted banknotes, number, total currency value counted, as well as a breakdown of count by denomination, and serial number.

### **1.4. How does the external display work?**

If counting one currency (SDC mode), the quantity and value of the counted notes will be displayed on the external screen when counting one currency only. If use the multi-currency (MDC model), only the number of the counted notes will be displayed on the external screen.

### **1.5. Does the IMC01 have batch/bundling capability?**

Yes, the IMC01 has batch function for bundling. The capacity of the stacker is 200. However, you can set the batch number from 0 to 998. For example, if you set the batch number to 50, when you put 200 notes in the hopper, the IMC01 will stop once the counted quantity gets to 50 for you to bundle or strap the bills.

### **1.6. Can transfer the counted record to the computer?**

Yes. First, ensure there is a USB flash drive into the USB Port.

After counting, a log file will be exported to the flash drive. Then, simply copy the newly-created OCR\_SN txt file from the USB flash drive to the computer.

## 2.0. Trouble Shooting

### 2.1. What are the error codes displayed on the screen?

When the IMC01 reports the following Error Code, the banknote that caused the error will not be counted in the total, and you need to take the wrong one away.

Notice: When the IMC01 reports the Chain Error, the counting result will be inaccurate, please fine-tune the screw to adjust the feeding gap according to section 2.6.

Table 2-1 Error Codes

Code	Error Message	Handling Method (Recommendation)
E1	UV Fault	Remove the banknote, clean the UV sensor
E2	Double Notes	If the errors occur frequently, adjust the screw toward the anti-clockwise to decrease the feeding gap.
E3/E8	Chain Notes	
E4	Half Note	Remove the banknote
E10	Image Error	Fine tune the screw to adjust the feeding gap according to section 2.6, And perform the CIS calibration
E11/E12	Denomination Error	Remove the banknote, clean the CIS sensor; Perform the CIS sensor calibration; Collect the data of the banknote.
E13	Face Recognition Error	
E14	Size Recognition Error	
E15	Orientation Recognition Error	
E20	MT Error	Remove the banknote, clean or replace the MG sensors
E21	MG1 Error	
E22	MG2 Error	
E23	MG3 Error	
E24	MG4 error	
E30-E38	IR Error	Remove the banknote, fine tune the screw to adjust the feeding gap according to section 2.6.  Clean the CIS sensor and perform the CIS calibration;  Collect data of the banknote.
	Motor Error	Please check if there is any foreign matter stuck inside IMC01.  Follow the instructions in section 2.13 for troubleshooting.
	Stacker Error	Please refer to section 2.12 to clean the stacker sensor.

In the process of using the IMC01, the IMC01 may show abnormal state and display the error codes on the screen. The description of the error codes and the related handling method is shown in table 2-1.

## 2.2. How do I clean the IMC01?

- 1) **TURN OFF THE MACHINE.**  
Clean all 3 parts of the Hopper, using the included nylon brush.
- 2)
  - a. Hopper sensor.
  - b. Banknote processing wheel
  - c. Banknote entrance
- 3) Clean the Stacker Sensors, using the included nylon brush.
- 4) Clean the internal sensors via the opening in the back of the machine.



Figure 2-1 Direction of Back Cover Opening

- a) Using the handle, open the external back covers by pulling towards you.
- b) Pull the handle of the internal back in a slightly downward motion to open it.
- c) Clean the lower CIS with a non-lint cleaning cloth, such as microfiber or eyeglass cloths.
- d) Clean the lower UV sensor with the included nylon brush.

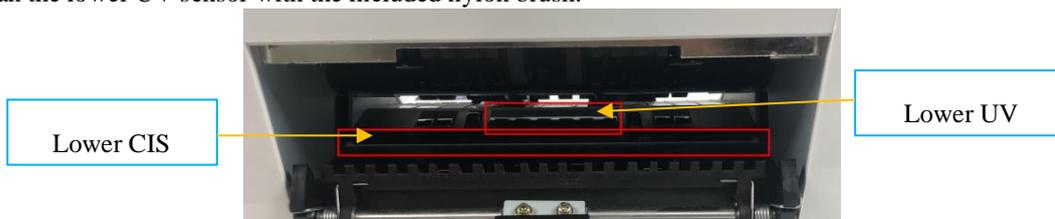


Figure 2-2 Lower Sensors

- e) Clean the upper CIS with a non-lint cleaning cloth, such as microfiber or eyeglass cloths.

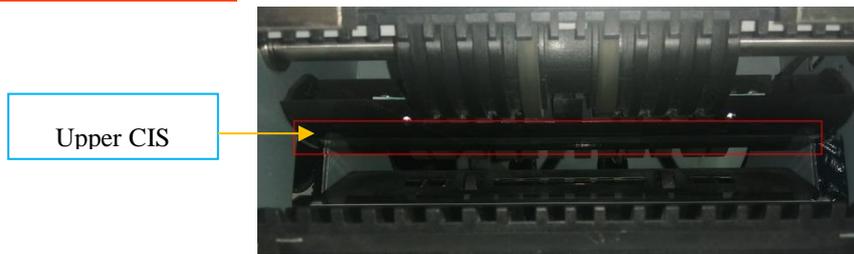


Figure 2-3 Upper CIS Sensor

For additional detail, please read the section 2 of the IMC01 maintenance manual to clean the machine.

### 2.3. How to remove a stuck banknote or bill?

If the bills are stuck inside the machine, please turn off the machine and rotate the banknote processing wheel down

CAUTION: ALWAYS ENSURE MACHINE IS OFF BEFORE PUTTING HANDS/FINGERS NEAR THE PROCESSING WHEEL OR SLOT.

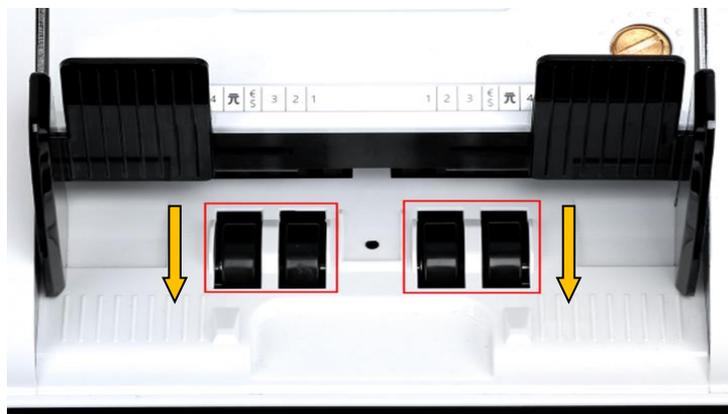


Figure 2-4 The Direction of Wheel Rotation to Take the Jammed Bill

### 2.4. How do I fix bills constantly jamming?

If you experience a jam, try the following first:

1. Check to see if there is any visible dirt, dust, or any other foreign matter inside machine (look especially for remnants of bills they may have torn). Remove any foreign matter with tweezers or your fingers.

CAUTION: ALWAYS ENSURE MACHINE IS OFF BEFORE PUTTING HANDS/FINGERS NEAR THE PROCESSING WHEEL OR SLOT.

2. Clean the machine according to the directions in FAQ 2.2, including all sensors.
3. If necessary, adjust the feeding gap according to the directions in FAQ 2.6

### 2.5. The wheels keep spinning every couple second after the machine powers on, and indicates an error, how do I fix it?

If the wheels in the hopper are consistently spinning after the machine powers on, and then stops with the “hopper sensor error” or “main motor error”, the hopper sensor is too sensitive.



Figure 2-5 Using marker pen to decrease the sensitivity of the hopper sensor  
Please use the marker pen to paint a little on the hopper sensor as shown in the above figure.

## 2.6. When and how do I adjust the feeding gap adjustment?



Figure 2-6 The Adjustable Screw

The screw above is used to control the width of the feeding gap. You can use a coin to adjust the gap easily. The width will become bigger by rotating the screw clockwise toward the biggest dot. Turn counterclockwise to decrease the gap.



Figure 2-7 Rotate the Screw to Increase the Feeding Gap



Figure 2-8 Rotate the Screw to Decrease the Feeding Gap

To fine tune the feeding gap, do the following:

- 1) As shown in the figure below, make sure that the Banknote Processing Wheel is on a smooth surface.

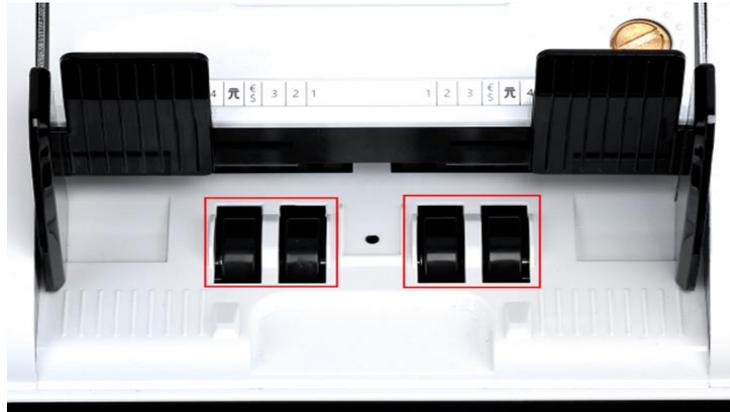


Figure 2-9 The Direction of Wheel Rotation to Take the Jammed Bill

- 2) Turn off the auto counting feature.
- 3) Insert one banknote into the gap between the rollers to check if the banknote can be inserted smoothly, as shown in the following.

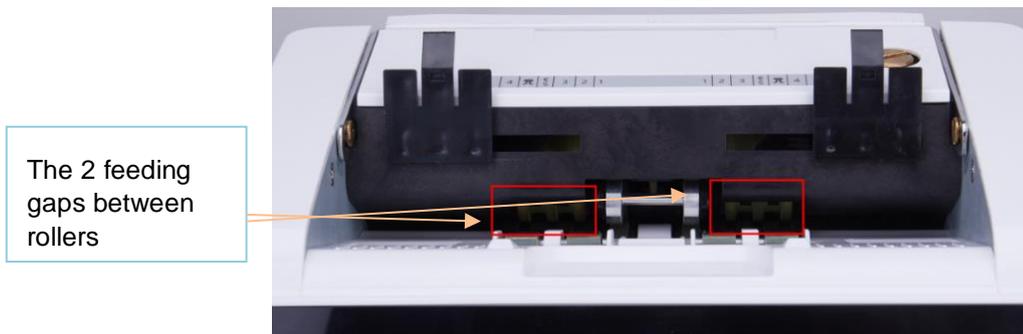


Figure 2-10 The Banknote Feeding Gap



Figure 2-11 Using a banknote to check the gap between the rollers

- 4) If the banknote is hard to insert, that means the feeding gap is too small. Rotate the screw clockwise until the banknote can be inserted smoothly. If the feeding gap is so large that two or more banknotes can be inserted to the feeding gap, please rotate the screw counterclockwise until the gap can just allow one banknote at a time.
- 5) Use the banknote to check the other sides of the gap between rollers, to make sure the banknote can be inserted into both sides of the feeding gap smoothly.



Figure 2-12 Using a coin to adjust the gap

The IMC01 needs different gaps for different currencies, but otherwise should stay consistent. Having the correct feeding gap adjusted will ensure smooth operation as well as a trouble-free experience. You may need to do some trial and error before getting it perfectly smooth.

You may also wish to make his adjustment over time, When the banknotes are not fed smoothly through the machine or several error messages are occurring often such as: Bill Double Error, Chain Notes Error or Half Notes Error.

Other reasons that might require to readjust the feeding gap are:

- The counting of new or mint condition bills.
- The counting of poor or badly deteriorated bills.
- Polymer notes and paper-made notes counted together.

## **2.7. How do I restore the unit back to factory settings?**

After fine tuning the screw and CIS calibration, if there are still some errors or the counting is still not correct, returning to the factory default setting mode is required.

- 1) 1) On the main menu, choose the service menu with the password “9999”, as shown in the following figures. Then choose “Back to Default Setting.”

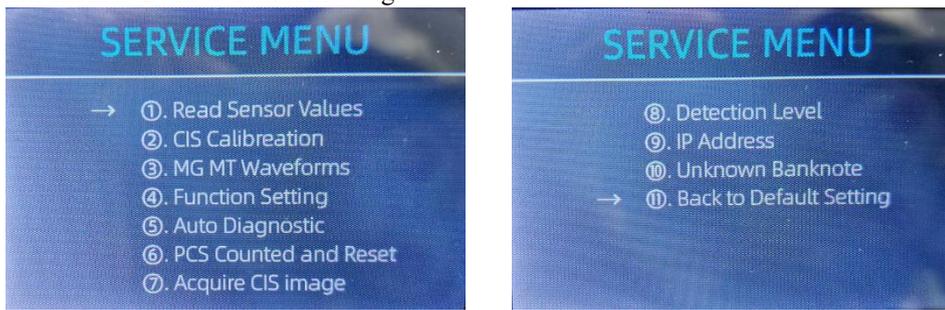


Figure 2-13 Service Menu



Figure 2-14 Default Setting Interface

- 2) After pressing start, the IMC01 will reset all the changed settings before settings to factory default.

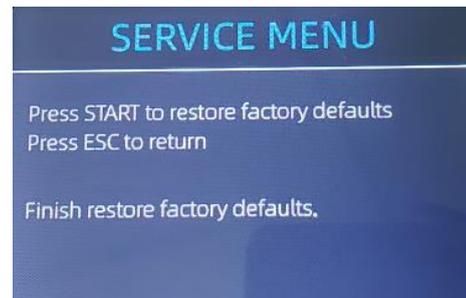


Figure 2-15 Default Setting Guide

- 3) The processing wheels and rollers in the IMC01 will run for a while.



Figure 2-16 Touch the Hopper Sensor

## 2.8. When and how to do I calibrate the CIS sensor?

CIS calibration is often needed when there are many errors during the banknote counting process.

- 1) Please enter the main menu. Next, go to the service menu with the password “9999”, as shown in the following figures.



Figure 2-17 Main Menu



Figure 2-18 Service Menu

- 2) Click the “CIS Calibration” option, shown below:

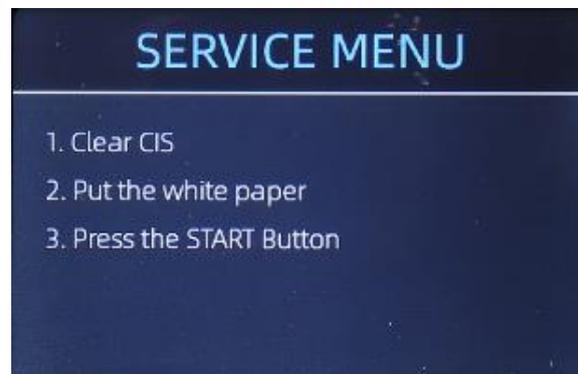


Figure 2-19 CIS Calibration Interface

- 3) Open the back cover to clean the CIS sensors with a lint-free cleaning cloth.



Figure 2-20 Open the Back Covers



Figure 2-21 Clean the Lower CIS



Figure 2-22 Clean the Upper CIS

- 4) Using the included CIS calibration sheet (white paper), place inside as seen below, and close the back covers.



Figure 2-23 Place the CIS Calibration Paper

- 5) Start CIS calibration by pressing the “RESTART” button.

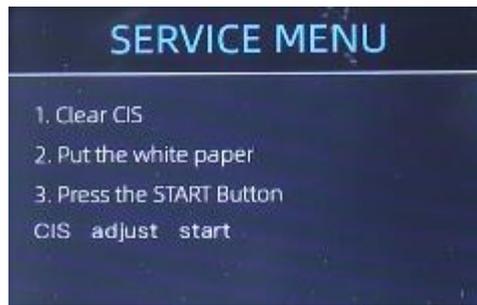


Figure 2-24 Start the CIS Calibration

- 6) After the machine finishes, just take remove the calibration paper out, close both covers, and turn off machine.
- 7) Finally, turn on the machine to finish the CIS calibration.

Demo video: <https://munbyn.biz/IMC01CIS>

## 2.9. What should I do if the machine keeps stop counting because of Image/IR/UV/MT/MG error?

### 2.9.1. Check bills

There are several conditions to make the Image/IR/UV/MT/MG Error happened.

- 1) The bill size is out of the range according to IMC01 specification.
- 2) The banknote is damaged with different ways such as lack of corner, tape, hole, tear and folded. As shown in Figure 2-28, it is not recommended to count this kind of bills.



Figure 2-25 Bill Damaged Ways

- 3) The banknote entrance is so small that the banknote cannot pass through it smoothly. In this case, you need to fine tune the screw by rotating it clockwise according to the following section.
- 4) Other abnormal operation or there is unknown thing inside the IMC01.If something inside the IMC01, you need to open the back cover to check, and clean the internal sensors.

### 2.9.2. Adjust the detection level

If there is still an error after CIS calibration, it means that the sensitivity of IMC01 is too high. We can adjust the detection level according to the following steps to increase the acceptance of IMC01 to some old banknotes.

Long Press "MENU" key → Press "Service Menu" → Enter"9999" → Choose "(8)Detection Level" → Adjust the "MT", "MG", "UV", "CIS IR" to level 1.



Figure 2-26 Detection Level

### 2.9.3. Perform CIS calibration

Please cleaning the IMC01 and refer to Section 2.8 for CIS calibration.

### 2.10. How can I turn off the key beep?

You can follow the steps below to turn off the key beep:

- 1) Enter the main menu, and go to the service menu with the password “9999”, as shown in the following screenshots.

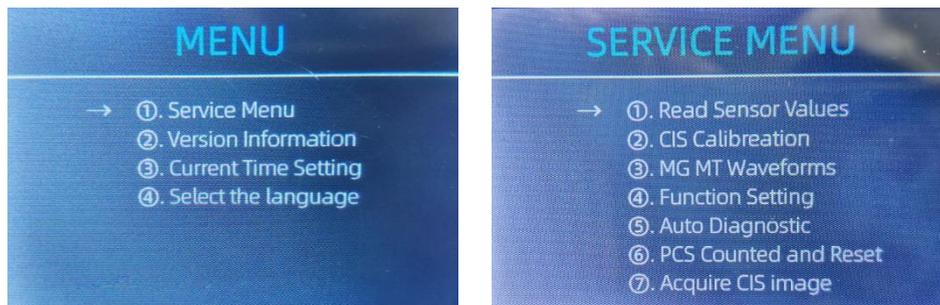


Figure 2-24 Menu and Service Menu

- 2) choose “④Function Setting” and press enter. You will see the following.

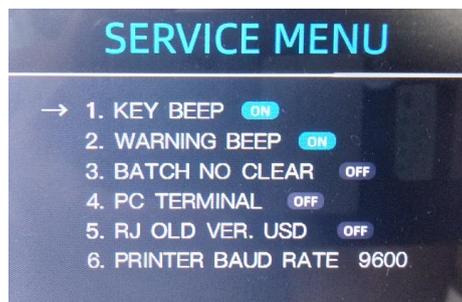


Figure 2-25 Function Setting Interface

- 3) Press key beep to toggle this setting.

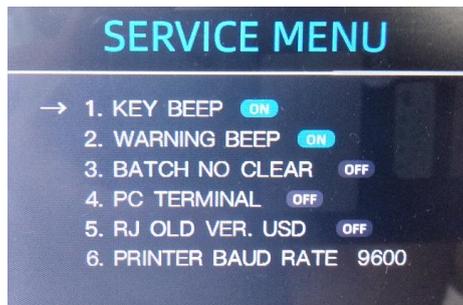


Figure 2-26 Menu and Service Menu

## 2.11. What should I do if my preset batching is not working correctly?

If the banknote counter does not stop at the correct preset batch quantity, please reset the banknote counter according to section 2.8.

## 2.12. What should I do if Stacker Error displayed on the screen?

If Stacker Error is displayed on the screen, the sensor may be covered by dirt or damaged.

Demo video: <https://munbyn.biz/IMC01Stacker>

As shown in the figure below, clean the Stacker sensor. If there is still a problem, please contact us.

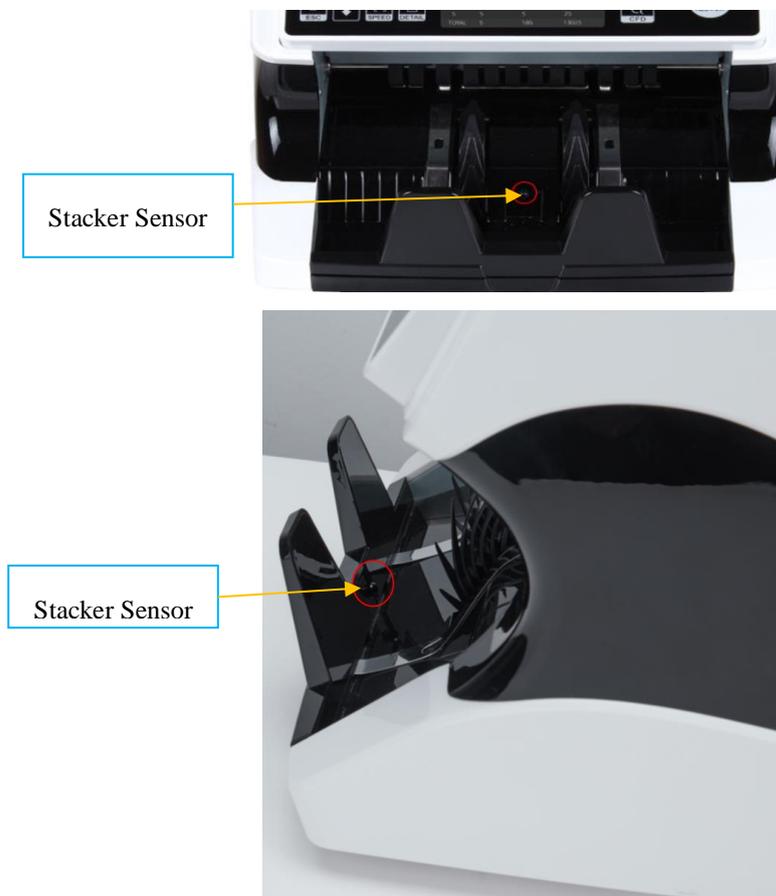


Figure 2-27 Stacker Sensors

### 2.13. What should I do if Motor Error displayed on the screen?

- 1) First confirm whether there is a banknote stuck in the feeding port. If a banknote is stuck in the feeding gap, please turn the Banknote Processing Wheel to take out the banknote, as shown in the figure below.

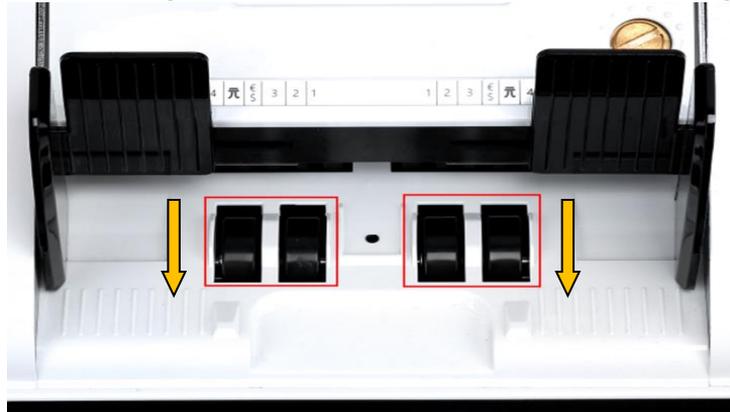


Figure 2-28 The Direction of Wheel Rotation to Take the Jammed Bill

- 2) Open the back cover to check if there is any foreign matter left inside, use the included dust-free cloth IMC01 inside, and close the back cover after cleaning.



Figure 2-29 Handle of Internal Back Cover

- 3) Click the link below to view the tutorial video.  
[Tutorial video: munbyn.biz/IMC01jamming](https://munbyn.biz/IMC01jamming)
- 4) If the problem is still not resolved, please contact us.

### 2.14. What should I do if the IMC01 counts incorrectly or does not count?

This is because the CIS sensor of IMC01 is blocked by dust and the CIS sensor does not work.

Please cleaning the IMC01 and refer to Section 2.8 for CIS calibration.

Demo video: <https://munbyn.biz/IMC01CIS>



Scan the QR code for Facebook online chat

## Contact us

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If you meet any problem during using the IMC08, please contact us.