

# **Cashwork Coin300(DS)**

**Mix-Value-Counter and Sorter for Coins**



## **User Manual**

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## Introduction

**COIN300 (option DS)** is a coin sorter with counterfeit detection function. The diameter, thickness, material, quantity of the metal coins will be detected simultaneously by advanced sensor, and converted into characteristics parameters. Based on these parameters, **COIN300(DS)** can automatically identify other foreign coins, counterfeit coins and metal tokens etc. Then according to the rules which are set by users, different denomination coins will be sorted. In addition, **COIN300(DS)** can be connected to external printer and PC through RS-232 port. It also can be upgraded program by the USB port.

## Safety Precautions

To ensure correct use of the machine, please read the safety precautions carefully. The signs that appear in this manual are described as follows.

 BAN	The contents with "BAN" sign must be prohibited, otherwise it may cause damage to the machine or endanger to personal safety.
 WARNING	The contents with "WARNING" sign involve machine safety. Please strictly enforce it.
 WARM PROMPT	The contents with "WARM PROMPT" sign are matters that need attention. Please enforce it.

### BAN

To reduce the risk of using, please use the power cord with the machine. Prohibit replace the power cord at random.

Prohibit move the machine before cutting off the power.

Prohibit maintain the machine before cutting off the power.

### WARNING

Please use the machine within the required operating temperature and humidity, and avoid direct sunlight.

Please ensure the machine has be earthed effectively before using the machine.



## WARNING

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Please don't open the Right Front Cover and the Left Front Cover while the machine is running.

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Please store the machine within the required temperature and humidity.

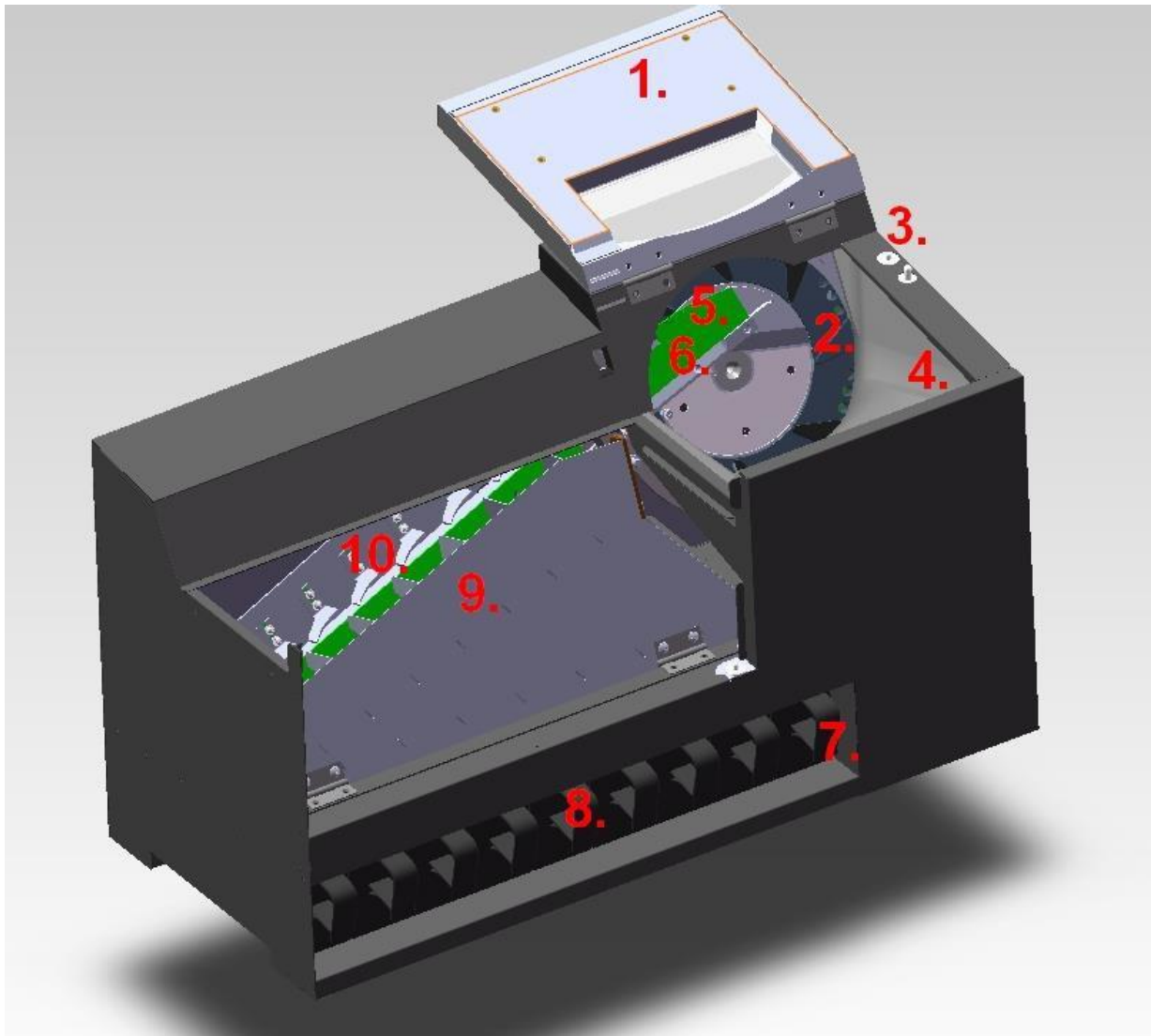
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Please clean the machine in strict accordance with the requirements.

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## Name of Parts

### Machine Body



1: Hopper Cover

3: Safety Switch

5: Backplate

7: Reject Drawer

9: Sorting Box

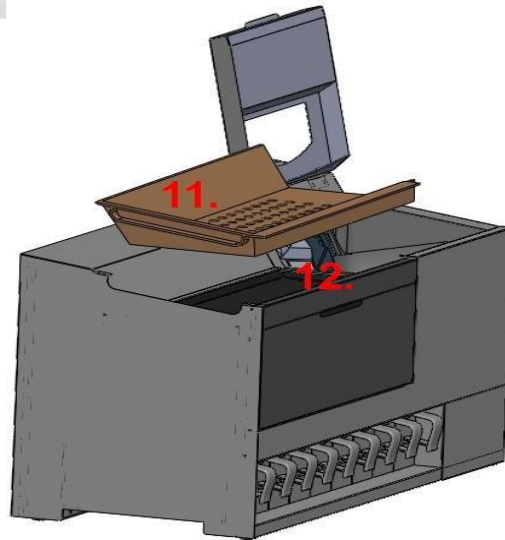
2: Feed Disc

4: Feed Hopper

6: Coin Rail

8: Coin Drawers

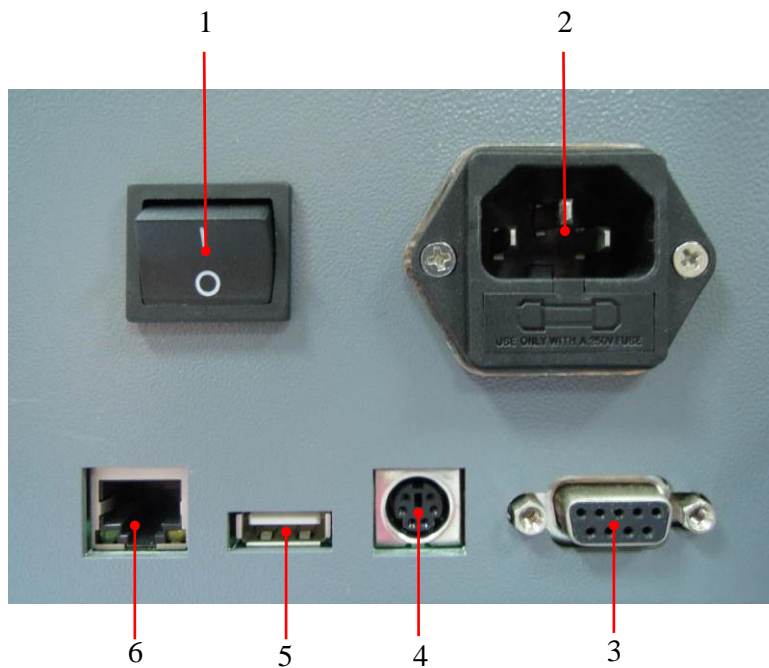
10: Sorting Deflectors



11: Presort-Tray

12: Dirt-Tray

## Socket Board



1: Power Switch

2: Power Socket








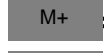
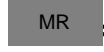


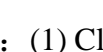

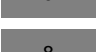


3: RS232

4: PS2

5: USB

6: RJ45 (optional)



-  : (1) Page up
-  : (1) Page Down
-  : (1) Enter a menu                      (2) Confirm the selection
-  : (1) Return to last menu                      (2) Clear rejected coins information
-  : (1) Select the count mode
-  : (1) Check count information details
-  : (1) Store count information
-  : (1) Recall stored information
-  : (1) Set Batch number
-  : (1) Clear stored information                      (2) Decimal Point
-  ~  : Numeric key
-  : (1) Numeric key 8                      (2) Switch the tool of receiving coins
-  : (1) Numeric key 9                      (2) Print the count information manually
-  : (1) Clear actual coins information                      (2) Clear ERROR tips
-  : (1) Start or Stop the machine

## Operation

### Power On Self Test



Connect the power supply. In order to ensure safety, the earth wire must be earthed effectively.



Turn on the power switch, the machine will enter a state of warm-up and self-test.

Welcome to use  
The Product : COIN 200  
IN SELF TEST  
Please wait for 10

This state takes about 10 seconds. The time that needs waiting for will be showed on the display. After self-test, if there is no error, the interface will appear two cases:


(1) If the ID function is not opened, the interface will be shown below:

COUNT	BAG		
VAL:		0.00	EUR
QTY:	0	RJ:	0

Then, press  to count coins directly, or press  to enter the “MENU” and open the ID function according to [“ID Function” on page 13](#).

(2) If the ID function is opened, the interface will be shown below:

ID NUMBER SETTING  
ID NUMBER: 01  
PRESS <SET> TO SELECT  
PRESS <UP> & <DOWN> TO EDIT

Then, select the required ID number according to [“ID Function” on page 13](#). After completing setup, press  to return to the main interface.



If the machine don't pass the self-test, the interface will display the fault code. Please eliminate trouble in accordance with [“ERROR 01” on page 19](#).



**COIN 300** has three count modes: COUNT, SORT and BATCH. BATCH is subdivided into BOX, TUBE and BAG. Look at the following table:

COUNT	SORT	BATCH		
		BOX	TUBE	BAG
		Use boxes to receive coins	Use tubes to receive coins	Use bags to receive coins
		Different BATCH mode has different default number. Please look at <a href="#">“(3) BATCH Mode” on page 8.</a>		
All actual coins will be sorted into the Coin Drawer. All Rejected coins will be sorted into Reject Drawer.	The selected denomination will be sorted into the Coin Drawer. Other actual coins and rejected coins will be sorted into Reject Drawer.	Firstly, users set the preset number that they need. When the number of sorted coins reaches the preset number, the machine will automatically stop, and other coins on the Coin Rail will be kicked into Reject Drawer.		



In the main interface, pressing **MODE** can switch among count modes.

### (1) COUNT Mode

- 1) In the main interface, press **MODE** to select “COUNT” mode.
- 2) Press **8** to select the tool of receiving coins. There are two tools: “BAG”, “BOX”.

Their difference is the number of full-alarm.

- 3) Load coins into Feed Hopper and press  to start the machine.
- 4) After completing counting, press  again to stop the machine or let it stop automatically. The interface will be shown below:

COUNT	BAG
VAL:	65.50 EUR
QTY:	150 RJ: 1

Displayed symbols and their meaning is indicated in the following table:

Symbols	Meaning
COUNT	Represent that the count mode is “COUNT”.

Symbols	Meaning
VAL	Represent the total amount of actual coins.
QTY	Represent the total number of actual coins.
EUR	Represent that the category of coins is EUR.
RJ	Represent the total number of rejected coins.
BAG	Represent that the bag is used to receive coins.
□/▷	□ represents that the machine is stopped.
	▷ represents that the machine is running.

## (2) SORT Mode

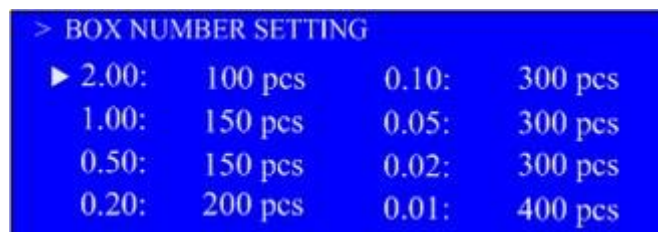
- 1) In the main interface, press **MODE** to select “SORT” mode.
- 2) Press **8** to select the tool of receiving coins, “BAG” or “BOX”.
- 3) Press **▲** or **▼** to select the desired denomination.
- 4) Load coins into Feed Hopper and press **START STOP** to start the machine.
- 5) After completing counting, press **START STOP** again to stop the machine or let it stop automatically. For example, select 1.00, the interface will be shown below:



## (3) BATCH Mode

- 1) In the main interface, press **B** to set preset numbers. Continue press **B** to switch among BOX, TUBE and BAG.

Select BOX mode, the interface will be shown below:



Select TUBE mode, the interface will be shown below:



## > TUBE NUMBER SETTING


▶ 2.00:	25 pcs	0.10:	40 pcs
1.00:	25 pcs	0.05:	50 pcs
0.50:	40 pcs	0.02:	50 pcs
0.20:	40 pcs	0.01:	50 pcs


Select BAG mode, the interface will be shown below:


## > BAG NUMBER SETTING


▶ 2.00:	500 pcs	0.10:	1000 pcs
1.00:	500 pcs	0.05:	1000 pcs
0.50:	400 pcs	0.02:	1000 pcs
0.20:	1000 pcs	0.01:	2000 pcs

2) Press  or  to select the desired denomination.

2) Press  to confirm the selection.

3) Enter the preset number by numeric keys and press  to confirm it. The preset number can be selected from 0 to 9999.

4) Press  to return to the main interface.

5) Press  to select the desired BATCH mode.

Select BOX mode, the interface will be shown below:




SORT-BOX	BATCH: 0
0.50	
VAL:	0.00 EUR
QTY: 0	RJ: 0

Select TUBE mode, the interface will be shown below:


SORT-TUBE	BATCH: 50
0.50	
VAL:	0.00 EUR
QTY: 0	RJ: 0

Select BAG mode, the interface will be shown below:

SORT-BAG	BATCH: 1000
0.50	
VAL:	0.00 EUR
QTY: 0	RJ: 0

6) Press  or  to select the desired denomination. Then Press  to count coins. When the machine counts a preset number of coins, it stops. Then the interface displays prompt. For example, select BAG mode and set the preset number of 0.5 denomination to 500.




**“0.50 STOPP OK”** represents that the number of 0.50 denomination has reached its preset number. Replace or empty corresponding bag. Then press  to continue count coins.

The situations that may occur while the machine is counting coins are described as follows:

- ★ Sometimes, some actual coins are mistaken for rejected coins because of a big change of characteristic parameters that cause by excessive wear and so on. At the moment, please count the coins in the Reject Drawer again. The machine will accurately identify actual coins.
- ★ Sometimes, Feed Hopper will be blocked by too many coins piling up. At this time, please wait for moment patiently. If the Alloy Sensor doesn't detect coins in 2 seconds, the program will send instruction to make the Feed Disc reverse. After coins running normally, the Feed Disc will back to forward rotation.

## Check Count Information Details

After completing counting, the machine stops. At the moment, press  to check the number and the amount of each denomination.

COIN	QTY	VALUE	⤴
0.20	12	2.40	
0.10	20	2.00	
0.05	100	50.00	⤵

Displayed symbols and their meaning is indicated in the following table :

Symbols	Meaning
COIN	Represent each denomination.
Symbols	Meaning

↑↑	Represent that there is content above.
↓↓	Represent that there is content below.

Press **DETAIL** again or **◀◀** to return to the main interface.

## Use the Memory

### (1) Store Count Information

After completing counting, the machine stops. At the moment, press **M+** to store the number and the amount of each denomination. These information are being stored while they are twinkling. At the appearance of “MEMORY”, the data has been accumulated in the storage, and previous result has been cleared.



COUNT BAG  
VAL: 0.00 EUR  
QTY: 0 RJ: 1  
MEMORY

### (2) Recall Count Information

In the main interface, press **MR** to recall the count information that has been stored in the storage.



COUNT BAG  
VAL: 65.50 EUR  
QTY: 150 RJ: 1  
MEMORY

## Clear Count Information

### (1) Clear Stored Count Information

Press **•** to clear the count information that has been stored in the storage.





CLEAR MEMORY?  
PERSS<.> TO CONTINUE  
PERSS<◀◀> TO CANCEL

According to the prompt, press **◀◀** to cancel clearing. Otherwise press **•** to confirm clearing. Then the all count information in the storage will be cleared. At the same time,

“MEMORY” disappears.

COUNT	BAG
VAL:	0.00 EUR
QTY:	0 RJ: 1


## (2) Clear Actual Coins and Rejected coins Information

If the number of rejected coins is not zero, press  firstly to clear the number of rejected coins, press  secondly to clear the number and amount of actual coins.


COUNT	BAG
VAL:	65.50 EUR
QTY:	150 RJ: 1

COUNT	BAG
VAL:	65.50 EUR
QTY:	150 RJ: 0

COUNT	BAG
VAL:	0.00 EUR
QTY:	0 RJ: 0

If the number of rejected coins is zero, press  to clear actual coins information.

### Print Count Information

Use RS-232 port to connect to external printer. Set the printer mode according to [“Printer Setting & LID” on page 15](#). If the printer mode is “AUTO”, the machine will automatically print the count information of each denomination after completing counting. If the printer mode is “MANUAL”, press  to print the number and amount of actual coins.



The count information of rejected coins can't be stored and printed.

## Function Settings

In the main interface, press **SET** to enter function settings.



(1) In the “MENU”, press **▲** or **▼** to select “SYSTEM” and press **SET** to enter.



Press **◀** to return to the previous menu.

(2) In the “MENU”, press **▲** or **▼** to select “INFORMATION” and press **SET** to enter.



Press **◀** to return to the previous menu.

## ID Function

1) In the “SYSTEM”, press **▲** or **▼** to select “ID FUNCTION”.

2) Press **SET** to enter.



3) Press **SET** to make the ID function be edited.



4) Press **▲** or **▼** to select.

5) Press **SET** to confirm the selection.

6) Press **◀◀** to return to the previous menu.

If “ID FUNCTION” is “ON”, turn off the power switch and turn on it again, you will be prompted to select ID number. It looks like below:



Press **SET** to set ID number. Then press **▲** or **▼** to select the desired ID number and press **SET** to confirm it. The ID number can be selected from 1 to 10. After completing setting, press **◀◀** to return to the main interface. The selected ID number will be displayed in the lower left corner of the main interface.

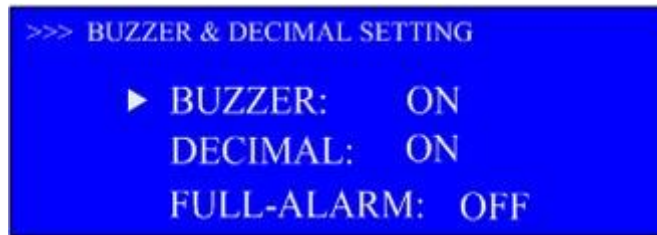








After completing counting coins, pressing **M+** can save the count information to the storage of corresponding ID. Next time select the same ID, the saved data can be retrieved for further use.




## Buzzer & Decimal

- 1) In the “SYSTEM”, press  or  to select “BUZZER & DECIMAL”.
- 2) Press  to enter.






- 3) Press  or  to select the desired item.
- 4) Press  to make the item be edited.
- 5) Press  or  to select “ON” or “OFF”.
- 6) Press  to confirm the selection.







The buzzer is opened while “BUZZER” is “ON”, or it is closed. The point will be displayed while “DECIMAL” is “ON”. So far, “DECIMAL” is just can be set to “ON”. If “FULL-ALARM” is “OFF”, when [“ERROR 03” on page 19](#) appears, the machine will not sound an alarm. Otherwise it will make a sound.


- 7) Press  to return to the previous menu.

## Printer Setting & LID

- 1) In the “SYSTEM”, press  or  to select “PRINTER & LID”.
- 2) Press  to enter.




- 3) Press  or  to select the desired item.
- 4) Press  to make the item be edited.
- 5) Press  or  to select.
- 6) Press  to confirm the selection.



The machine will print automatically while “PRINT MODE” is “AUTO”. Otherwise it will be printed by pressing . If the “LID” is “ON”, open the Right Front Cover, the machine will display the following prompt:

CHECK RIGHT FRONT COVER

Close the Right Front Cover, the prompt disappears. And the machine returns to the main interface to continue running automatically. While “LID” is “OFF”, the machine will not give an alarm in the same situation above.

7) Press  to return to the previous menu.

## Date & Time


1) In the “SYSTEM”, press  or  to select “DATE & TIME”.


2) Press  to enter.


3) The time is refreshed in seconds. Press  to make the time be edited.




>>> DATE & TIME SETTING  
16-06-2014  
23:44:32



(4) Press  to select the item that needs to change.

(5) Press numeric keys to enter the time. If you want to clear the date, please press .

(6) After all items finish setting, press  to confirm them.

7) Press  to return to the previous menu.



## Language


1) In the “SYSTEM”, press  or  to select “LANGUAGE”.

2) Press  to enter.






>>> LANGUAGE SETTING  
GERMAN  
ENGLISH




3) Press  or  to select.

4) Press  to return to the previous menu.




## LCD Contrast

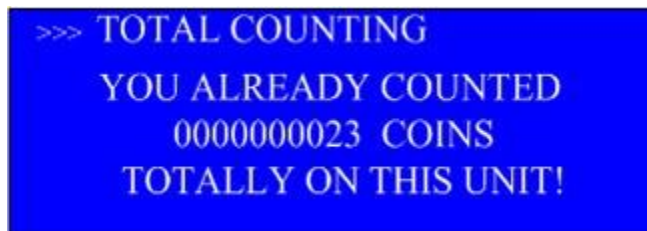
- 1) In the “SYSTEM”, press  or  to select “LCD CONTRAST”.
- 2) Press  to enter.




- 3) Press  or  to adjust the contrast of the display.
- 4) Press  to return to the previous menu.

## Total Counting

- 1) In the “INFORMATION”, press  or  to select “TOTAL COUNTING”.
- 2) Press  to enter. The total number of counting coins for this machine can be viewed.



- 3) Press  to clear the number.



- 4) According to the prompt, continue press  to clear the number, otherwise press  to return to the previous menu.

## Software Version

In the “INFORMATION”, select “SOFTWARE VERSION” and press  to enter. The software version of the Main Board, the Display Board and the AD Board about the machine can be viewed.

>>> SOFTWARE VERSION

MainBoard M2.0  
DispBoard D1.12  
AD Board A0.5

## ERROR Codes List

In the “INFORMATION”, select “ERROR CODES LIST” and press **SET** to enter.  
Each error code and its corresponding solutions can be viewed by pressing **▲** or **▼**.

>>> ERROR CODES LIST      ERROR 01  
ALLOY SENSOR PROBLEM  
CONTACT WITH LOCAL  
DISTRIBUTOR FOR HELP      ▼

>>> ERROR CODES LIST      ERROR 02      ▲  
IR SENSOR PROBLEM  
CONTACT WITH LOCAL  
DISTRIBUTOR FOR HELP      ▼

>>> ERROR CODES LIST      ERROR 03      ▲  
TRAY: X FULL  
PLEASE EMPTY THE TRAY      ▼

>>> ERROR CODES LIST      ERROR 04      ▲  
RIGHT FRONT COVER  
IS OPENED  
CHECK RIGHT FRONT COVER

## Troubleshooting

Sometimes, the machine will become disabled while it is self-testing or running. It may display the Error Codes. Please look at following table:

Error Code	Display Interface	Reason	Solution
ERROR 01	ERROR 01 CHECK THE ALLOY SENSOR	①The self-test failed. ②The signal of Alloy Sensor is abnormal.	Please contact your supplier.
ERROR 02	ERROR 02 CHECK THE IR SENSOR	The infrared diode of the Alloy Sensor is abnormal.	①Clean the infrared diode of the Alloy Sensor by tube brush. ②Check the Alloy Sensor cable.
ERROR 03	ERROR 03 TRAY IS FULL PLEASE EMPTY THE TRAY	The Coin Drawer is full of coins.	Replace or empty the Coin Drawer.
ERROR 04	CHECK RIGHT FRONT COVER	①The Right Front Cover is opened while the machine is running. ②The Safety Switch doesn't work.	①Close the Right Front Cover. ②Replace the Safety Switch.

1) When troubleshooting, please operate in order of the listed solutions. If the problem hasn't be solved yet, please contact your supplier.



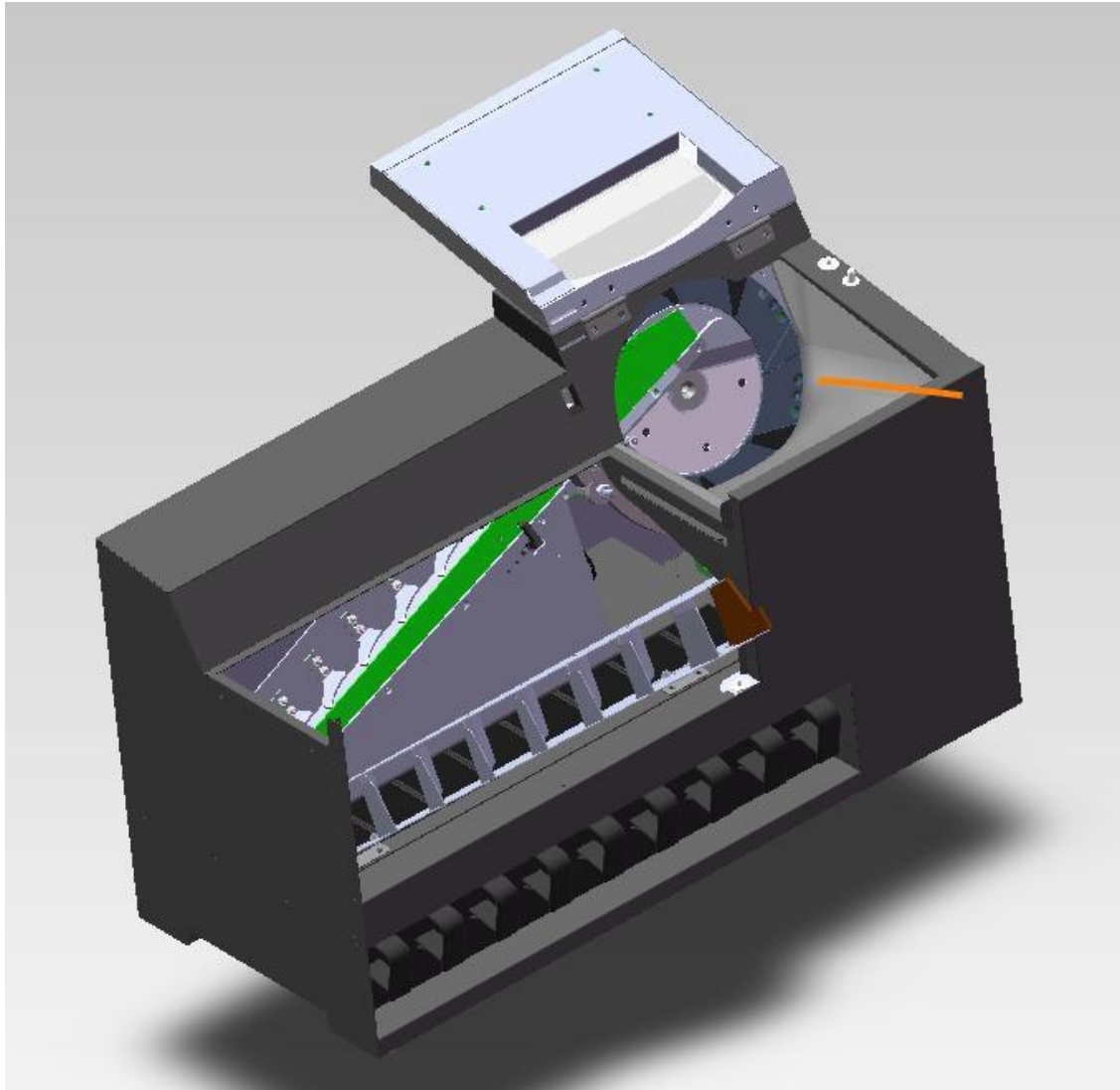
2) After each troubleshooting, press  to return to the main interface.

3) If the fault that is not listed occurs, please contact your supplier.

## Daily Maintenance



Before cleaning, please cut off the power. Then lift up the Left Front Cover and the Right Front Cover.



- ◆ Use hairbrush to clean Coin Rail at least once every day.
- ◆ Use hairbrush to clean Feed Disc and Feed Hopper at least once every day.
- ◆ Use a strip of cloth and alcohol to clean Backboard at least once every day.
- ◆ Use tube brush to clean Alloy Sensor at least once every day.

## Accessories

Name	Quantity
the Power Cord	1
Hairbrush	1
Presort Spatula	1

## Technical Specifications

Counting Speed	Max. 900 coins/minute	Coin Category	8 kinds of coins	
Feed Hopper Capacity	Max. 3.000 coins	Display	LCD	
Coin Range	Diameters: 14 ~ 32mm Thickness: 1 ~ 3.5mm	Dimension	Length	600mm
			Width	280mm
			Height	300mm
Frequency	50Hz	Weight	22kg	
Operating Voltage	AC(110/220)V±10%	Rated Power	60W	
Operating Temperature	5 ~ 40. C	Operating Humidity	30~75%	
Storage Temperature	-10 ~ 60. C	Storage Humidity	30~75%	