

MAGNER 150 *User's Manual*

2 Pocket Currency Counters / Discriminators

Excellent solution for currency discrimination

Excellent Counterfeit Detection
Non-stop Throughout
Large Easy-to-read LCD Display
Easy software upgrade
Easy maintenance
Desktop type
Graceful design



- Thank you for purchasing our product.
- It is more convenient reading this manual before using the machine.
- You must read '**Important Safety Precautions**' before getting started.



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- Important Safety Precautions -

- ✓ Do not plug several products in one multi-outlet.
- ✓ Do not bend the cable by force or leave it under any heavy object.
- ✓ Install the machine on the stable surface
- ✓ Unplug the machine before it is moved
- ✓ Do not pull the cable it unplugged.
- ✓ Do not plug in or unplug with your hands wet.
- ✓ Use only approved accessories and do not try to disassemble, repair or remodel it for yourself.
- ✓ Do not let coin or other foreign objects in the machine.
- ✓ Do not keep and operate the machine at a place with high temperature and humidity.



- Warning-

- ✧ **Adjust the Gap Adjustment Knob before you start to count the notes.**
- ✧ **Do not let coin or other foreign objects in the machine.**
- ✧ **When folded note is inserted or notes are placed wrong on the HOPPER, the machine does not work properly.**
- ✧ **Before counting, adjust the HOPPER GUIDE.**
- ✧ **If you catch Rear Cover Knob when you move the machine, it will be possible setup value is changed or fatal error caused.**
- ✧ **When you close the Front Cover or Rear Cover, be careful not to get hurt.**
- ✧ **Do not look at directly of UV sensor in the Detector Module.**

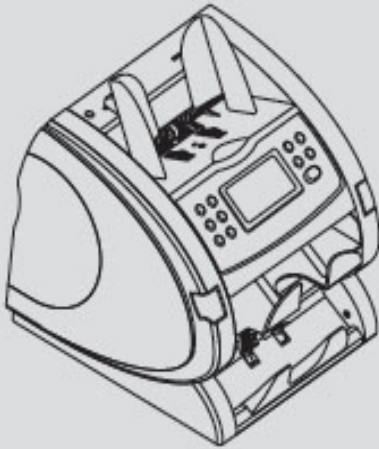
User's Manual

1. START

MAGNER150

1-1. Packing List

MAGNER150



Manual

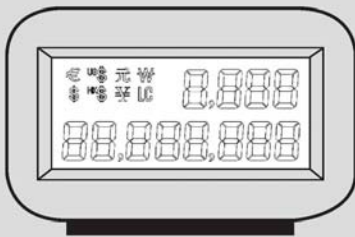


Power Cable

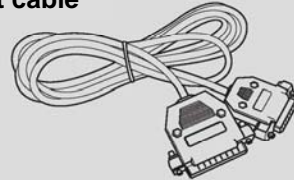


1-2. Options

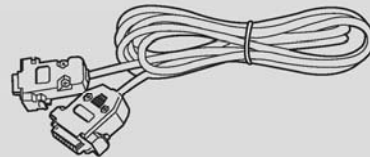
External Display



Serial Print cable



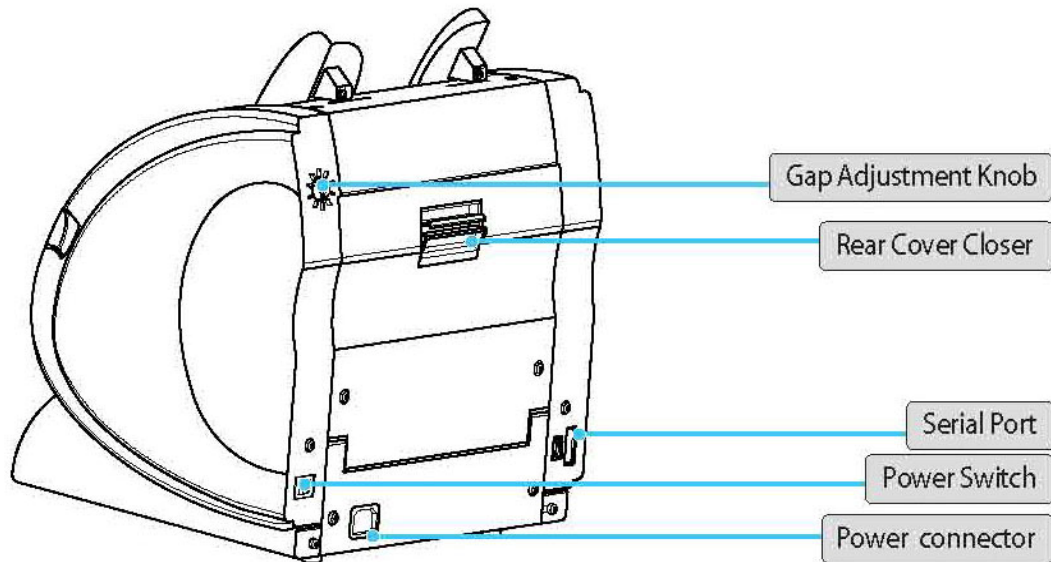
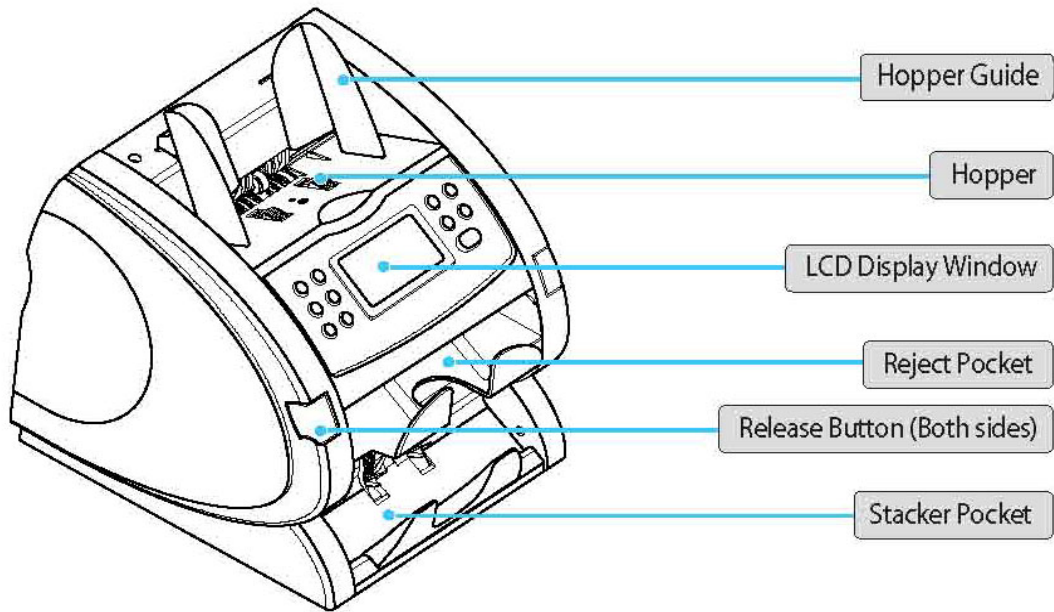
RS232C cable



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1-3. Appearance

MAGNER150



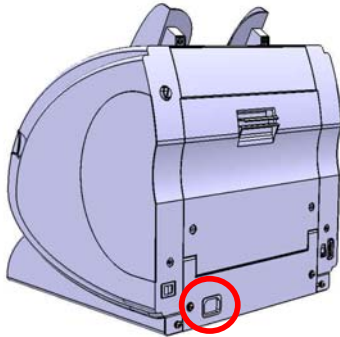
User's Manual

2. BASIC OPERATION

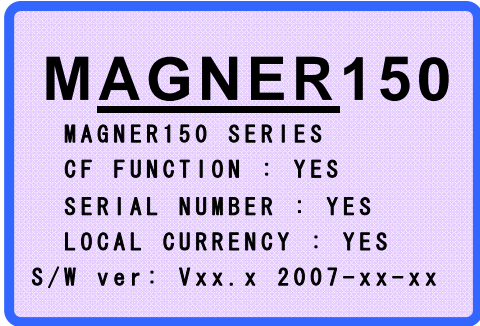
MAGNER150

2-1. Self-Diagnosis

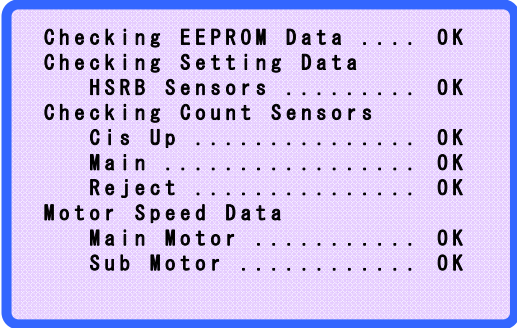
Plug the power cable into the machine.
Turn on the power switch.



The machine starts self-diagnosis and check-lists are shown on the display.

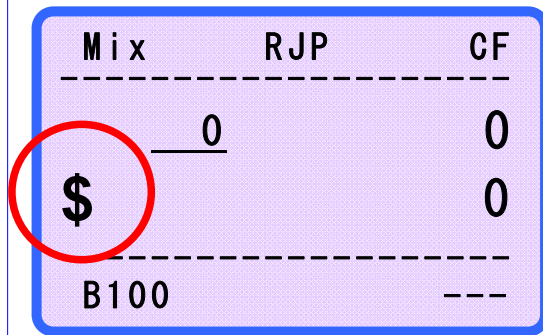


The machine shows below message on the LCD DISPLAY for a short time during checking the Memory.



If there is a problem in the system, error message will be blinking on the Display.

After self-diagnosis, display shows as below.
When the machine turns on again, the latest used mode will be shown.



User's Manual

2-2. Counting Notes

MAGNER150

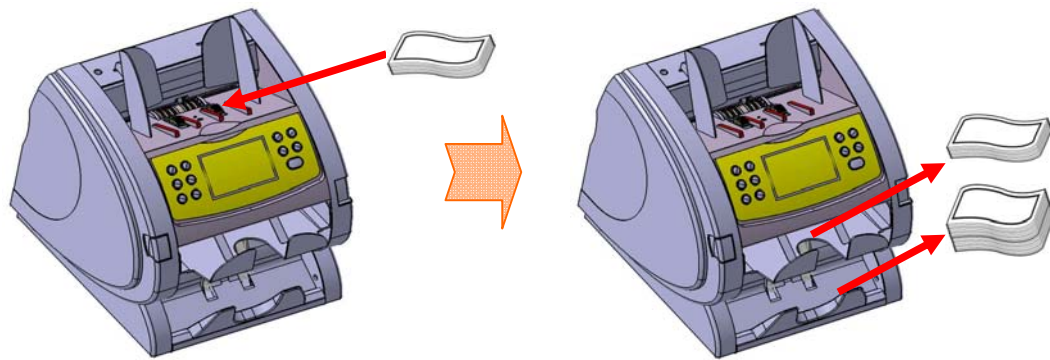


Press **CURRENCY** key and select any mode you will.

Display shows as below.

COUNT	RJP	---
<u>0</u>		0
		0
B100		---

Counting Mode is for counting all currencies without detection.



When you place the notes on the HOPPER, machine starts running.

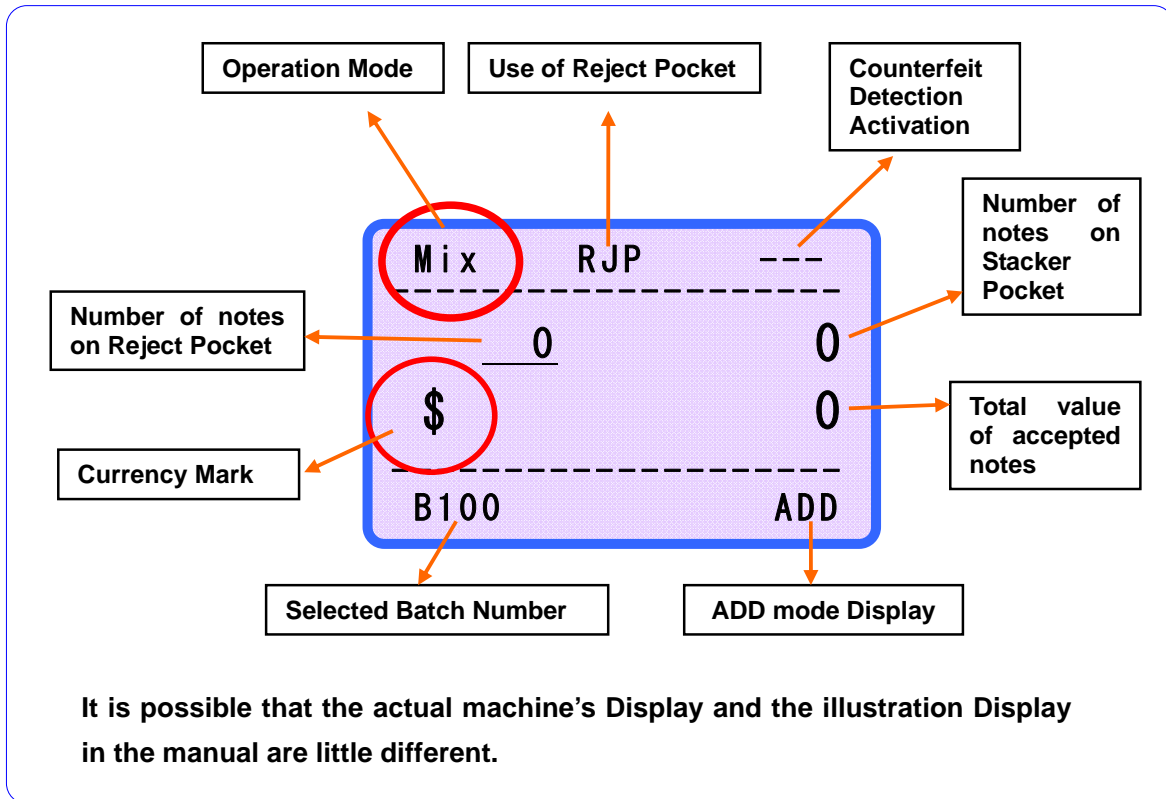
Counted notes stack at the STACKER Pocket and trouble notes are sent to REJECT Pocket.

If you remove the rejected note during counting, it is possible that displayed reject counts differ from number of notes in the REJECT POCKET.

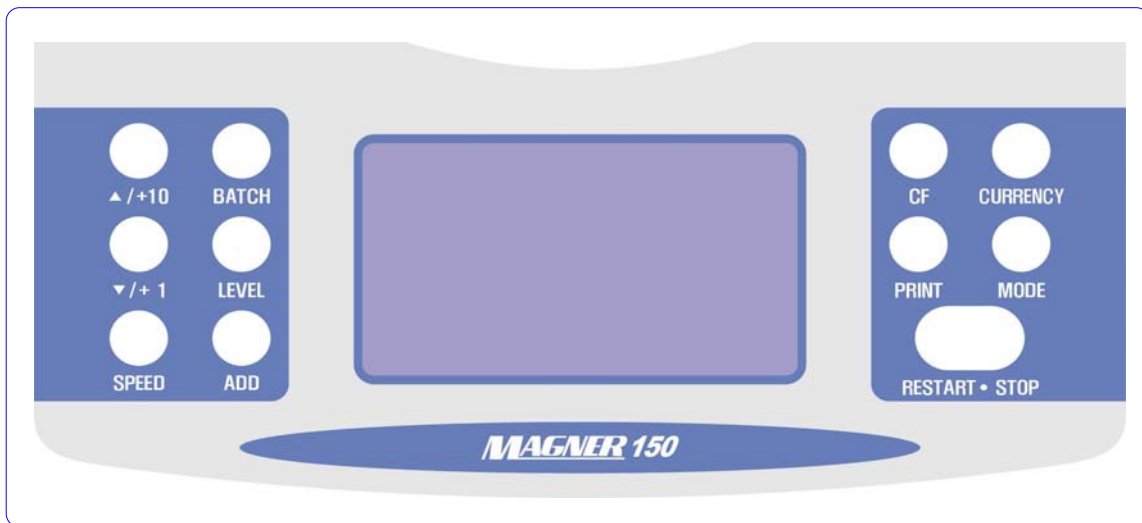
User's Manual

2-3. Display Function

MAGNER150



2-4. Operation Key Function



▲/+10 When press and hold down, enter User setting Mode and Serial Print Mode.

BATCH Batch function Key. When press and hold down the key, the function is released.

▼/+1 Menu selector.

LEVEL Select the double detection level in Count Mode.

SPEED Change the count the speed in Count Mode. After pressing, adjust the speed by pressing +10 or +1 key.

ADD When press and hold down the key, you can enter the ADD Mode.

CF Counterfeit detection function key.

CURRENCY Choose currency

PRINT Show the denomination information. In Serial Number Print Mode, print the information by printer or display.

MODE Choose operation mode.

RESTART•STOP Clear counting value information in Display. In special mode, exit the menu.

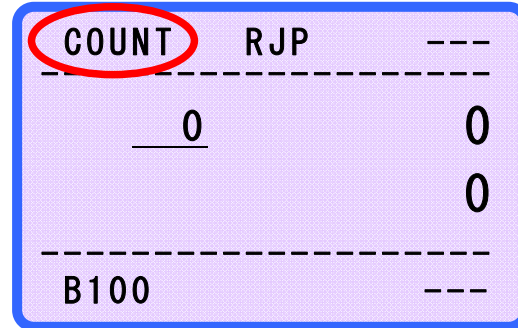
3. Basic Mode

3-1. Count Mode



Press **CURRENCY** key and select any mode you will.

Display shows as below.

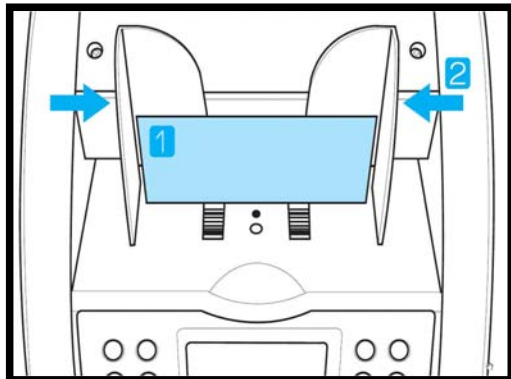


Counting Mode is for counting all currencies without detection.

How to place notes properly on HOPPER

Adjust the hopper guide, before counting

If you not adjust the hopper guide, the machine does not work properly.



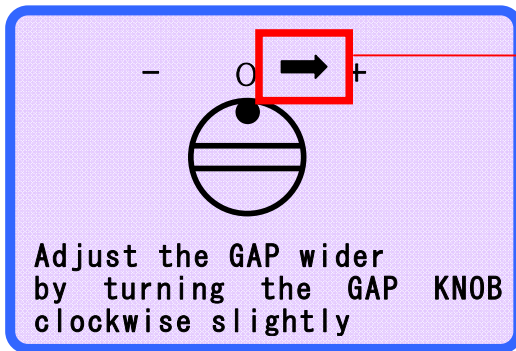
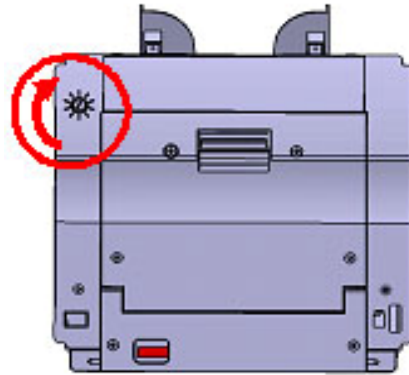
1. Place a note on the HOPPER referring to following figure.
2. Move the HOPPER guide to make the guide size is the same with the note size.
3. If you use to USD or Euro, refer to symbol of Hopper sticker.



Gap Adjustment

If CIS skew error or Jam error occurs frequently, adjust the GAP wider by turning the Gap Adjustment Knob clockwise slightly.

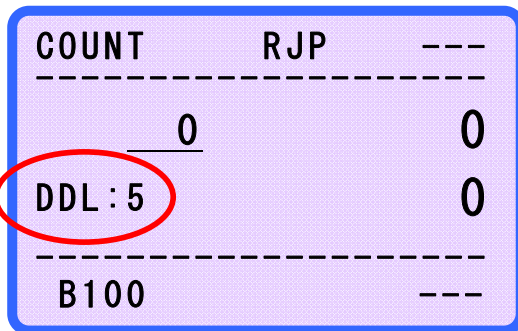
In **serial number print mode**, if the inserted gap is narrow, display shows as below.



This mark will be blinking.

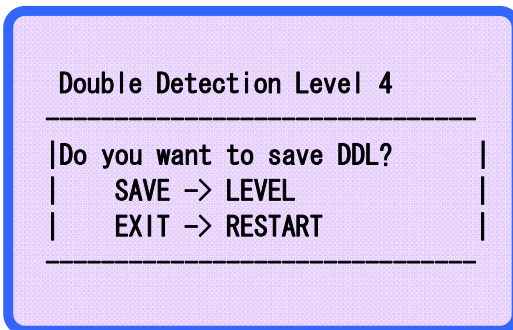
If you want to exit, press **RESTART/STOP** key.

Level key function



If you want to change the DDL, press the **LEVEL** key and select level.

When you save the DDL value, press and hold down the **LEVEL** key.



If you press the **LEVEL** key, DDL value save and go to the **COUNT** mode.


DDL means Double Detection Level.

User can select the level and the range from 1 to 9.

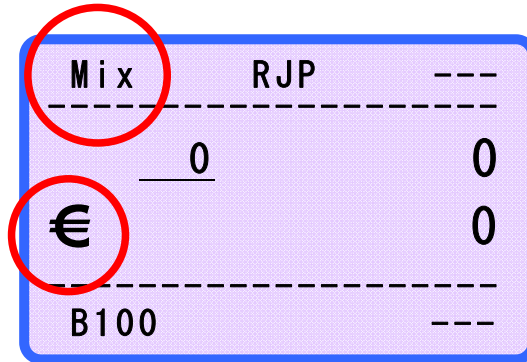
- DDL 1: Euro, USD.
- DDL 2-8: Local currency
- DDL 9: If the notes are darker than EURO or USD or the notes are so old, user can select this level to detection double notes. But when counts normal notes in this level, the machine do not detect the double notes. Please take care.

3-2. Euro Mode

 Select Euro currency pressing **CURRENCY** key.

 Press the **MODE** key and select operation mode.


Display shows as below.



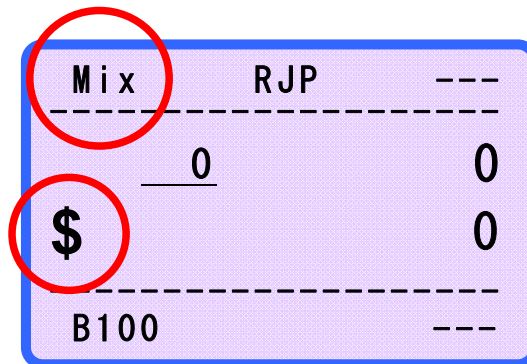
It is possible that the machine denominates Euro.

3-3. USD Mode

 Select USD currency pressing **CURRENCY** key.


 Press the **MODE** key and select operation mode.


Display shows as below.



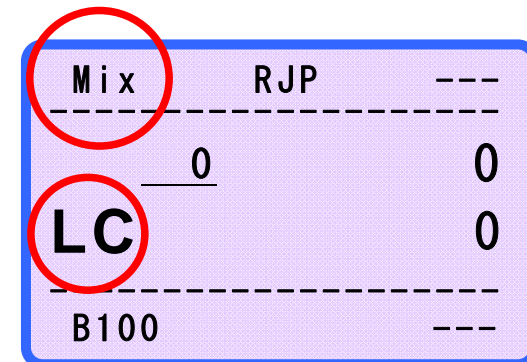
It is possible that the machine denominates USD.

3-4. Local Currencies Mode

 Press **CURRENCY** key and select local currency.

 Press the **MODE** key and select operation mode.

Display shows as below.



According to optional local currency, LC is ₩, ¥, ZAR, AUD, SYP and etc.

4-1. Batch Mode



BATCH

If you want to activate Batch function, press **BATCH** key. But Display has no change.

After activating Batch function, if you press **BATCH** key again, you can select Batch Number. Batch Number is changed continuously when you press **BATCH** key.

If you press and hold down **BATCH** key, Batch function is inactive and Batch Number becomes zero.

Display shows as below.

Mix	RJP	CF
0		0
€		0
B100		---

Mix	RJP	CF
0		0
€		0
B 0		---

4-2. CF Mode



CF

If you want to detect the counterfeit, press **CF** key before counting.

Display shows as below.

Mix	RJP	CF
0		0
€		0
B100		---

CF function is performed with other mode, except Count Mode and Serial Number Print Mode, at the same time.

4-3. ADD Mode



ADD

When press and hold **ADD** key, you can enter ADD Mode or GRAND TOTAL Mode.

To enter ADD Mode, press +1 key.

In ADD Mode, you can cumulate the counted result.

In ADD Mode, if press CURRENCY Key, previous ADD value is cleared.

It means ADD value is **not** saved per currency.

Display shows as below.

SELECT KEY

+10 -> OFF (COUNT)
 +1 -> ADD
 SPEED -> GRAND TOTAL

Mix	RJP	CF
		Add
	0	0
\$		0
B100		ADD

When count the notes

Mix	RJP	CF
		current
	0	43
\$		523
B100		ADD

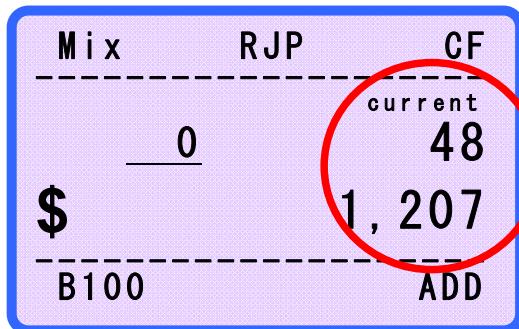
Display shows current counted information.

When remove the notes from stacker

Mix	RJP	CF
		Add
	0	43
\$		523
B100		ADD

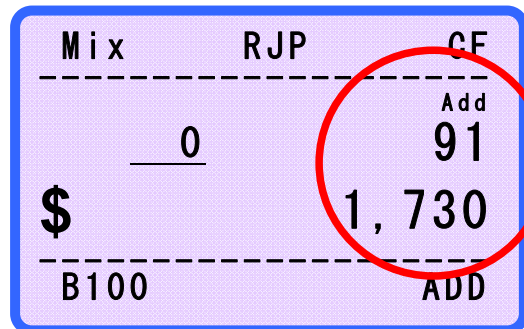
Display shows added information between current and ahead counted notes.

When count the notes again




Display shows current counted information

When remove the notes from stacker again



Display shows added information between current and ahead counted notes.

If you want to see the result

 Press and hold down
PRINT PRINT key.

Print the receipt: **PRINT** key

Clear Data: **RESTART•STOP** key.

Ex) The result of cumulate mode in USD Mode

ADD VALUE (USD)		
\$5	: XXX,XXX	|
\$10	: XXX,XXX	|
\$20	: XXX,XXX	| Total Notes
\$50	: XXX,XXX	| : X,XXX,XXX
\$100	: XXX,XXX	|
\$200	: XXX,XXX	| Total Value
\$500	: XXX,XXX	| : XX,XXX,XXX

EXIT - RESTART KEY		

When active this mode is active, it is possible that the machine detects the counterfeit and recognizes the denomination of notes

4-4. Grand Total Mode



When press and hold **ADD** key, you can enter ADD Mode or GRAND TOTAL Mode.

To enter Grand Total Mode, press SPEED key.

In Grand Total Mode, you can settle accounts daily.

In Grand Total Mode, the counted value **is not erased**, even if turn off power.

Display shows as below.

SELECT KEY

+10 -> OFF (COUNT)
 +1 -> ADD
 SPEED -> GRAND TOTAL

Mix	RJP	CF

		Grand Total
	0	0
\$		0

B100		G. TOTAL

When count the notes

Mix	RJP	CF

		current
	0	24
\$		153

B100		G. TOTAL

Display shows current counted information.

When remove the notes from stacker

Mix	RJP	CF

		SubTotal 1
	0	24
\$		153

B100		G. TOTAL

Display shows SubTotal 1 value.

If you want to save SubTotal 1, press and hold down ADD Key again.

Mix	RJP	CF

		SubTotal 1
	0	24
\$		153

B100		G. TOTAL

SELECT KEY		
ADD	->	CONTINUE
SPEED	->	ADD TO GRAND TOTAL
BATCH	->	CLEAR SUB-TOTAL
+10	->	CLEAR GRAND-TOTAL
+1	->	OFF (COUNT)

If press ADD key, return the previous screen and count SubTotal xx continuously.

Mix	RJP	CF

		SubTotal 1
	0	24
\$		153

B100		G. TOTAL

If press SPEED key, SubTotal xx value is saved to Grand Total.

And when start to count again, SubTotal xx+1 is started.

Mix	RJP	CF

		Grand Total
	0	24
\$		153

B100		G. TOTAL

Mix	RJP	CF

		SubTotal 2
	0	65
\$		1702

B100		G. TOTAL

If press BATCH key, SubTotal xx is cleared and Grand Total value which is saved until SubTotal xx-1 is shown.

Mix	RJP	CF

		Grand Total
	0	24
\$		153

B100		G. TOTAL

If press +10 key, Grand Total value is cleared.

Mix	RJP	CF
		Grand Total
<u>0</u>		0
\$		0
B100		G. TOTAL

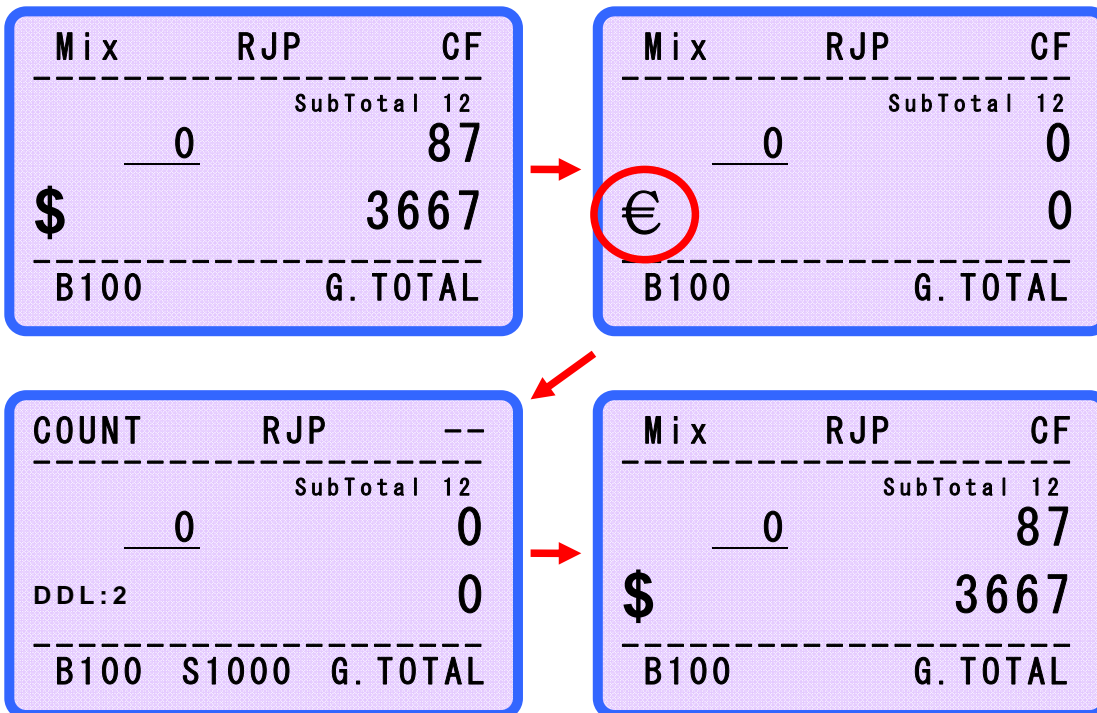
If press +1 key, exit Grand Total Mode.

Mix	RJP	CF
<u>0</u>		0
\$		0
B100		---

In **GRAND TOTAL Mode**, although changes CURRENCY and counts other currency, previous SUB-TOTAL value is deleted.

If return to previous currency mode, previous SUB-TOTAL value is reloaded.

It means SUB-TOTAL value is saved per currency and only it is deleted by Menu item, +10 Key.



Receipt of Operation, ADD and Grand Total Mode

User can print the counted result to printer. There are three types of Receipt.

Normal Operation Mode

Ex) Mix Mode

10/24/2005	12:00:00	--
USD VALUE COUNTING		1/1
Denom.	Units	VALUE
\$1	37	37
\$2	6	12
\$5	3	15
\$10	7	70
\$20	6	120
\$50	0	0
\$100	4	400
Main	63	654
Reject Note	0	
Total Note	63	
Printed by "User's NAME"		

In ADD Mode

10/24/2005	12:00:00	--
USD VALUE COUNTING (ADD VALUE)		1/1
Denom.	Units	VALUE
\$1	102	102
\$2	11	22
\$5	11	55
\$10	16	160
\$20	11	220
\$50	4	200
\$100	8	800
Total	163	1,559
Printed by "User's NAME"		

In Grand Total Mode

10/24/2005	12:00:00	--
SUB-TOTAL (1)		USD
Denom.	Units	VALUE
\$1	60	60
\$2	3	6
\$5	8	40
\$10	9	90
\$20	5	100
\$50	4	200
\$100	4	400
TOTAL	93	896
Printed by "User's NAME"		

10/24/2005	12:00:00	--
GRAND-TOTAL (1)		USD
Denom.	Units	VALUE
\$1	60	60
\$2	3	6
\$5	8	40
\$10	9	90
\$20	5	100
\$50	4	200
\$100	4	400
TOTAL	93	896
Printed by "User's NAME"		

During counting SubTotal xx, if press PRINT key, the receipt for SubTotal is printed.

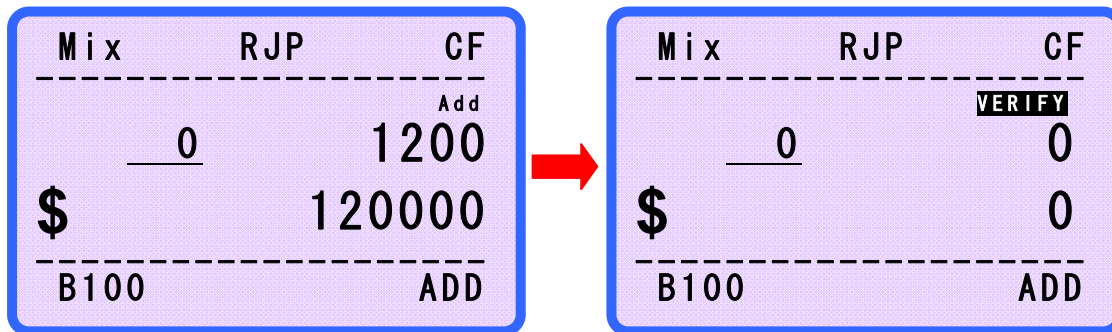
After saving SubTotal xx, if press PRINT key, the receipt for Grand Total xx is printed.

Verify function

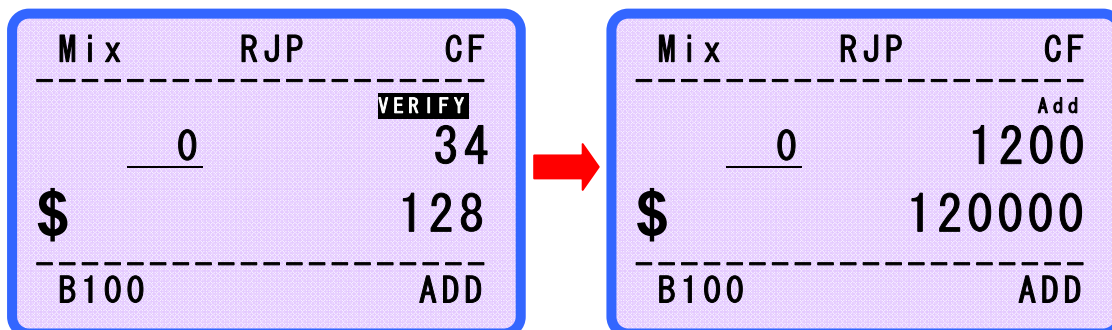
During counting in ADD or GTOTAL mode, use can verify counting result which already counted after activating ADD or GTOTAL function or new bundle of note which is independent with ADD or GTOTAL counting result.

EX) ADD mode

After activate ADD function, use counts 1200 notes. But he wants to count again some notes which were already counted or count new bundle. In this case, if press ADD Key shortly, verify function is activated. When verify function is turned on, use can count new notes which is no relation with 1200 notes. After completes verifying counts, if press ADD Key shortly again, machine returns to previous.



Press ADD Key shortly and
VERIFY function is activated.



Count notes which you want to check
or verify

After verifying, press ADD Key shortly
again. The screen which is before verifying
is shown again.


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
5. Operation Mode II

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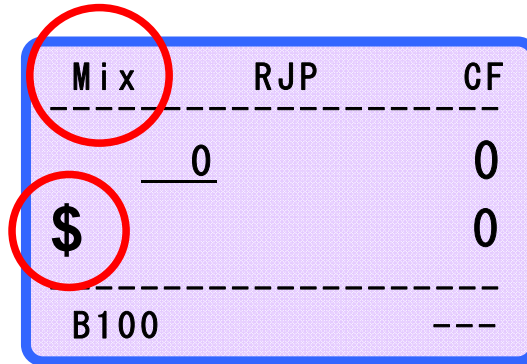
COUNTING FUNCTIONS	
Mix MODE	Count all denomination of selected currency.
DISPENSER MODE (Option)	User can count notes as their wish.
SP MODE	The machine saves information from first inserted note. (Different notes will be separated into the Reject Pocket)
SP-ver MODE (Option)	Sp mode plus discrimination of old and new version notes.
SP-verA MODE (Option)	Mix mode plus discrimination of old & new & very new version notes. (USD only)
SG MODE	Before counting, the user can select a specific denomination to be counted.
SORTING FUNCTIONS	
Dir-MF MODE	Separation mode by Facing function (all denominations). The machine separates front side or rear side of the notes.
Dir-MO MODE	Mixed separation mode by Orientation function (all denominations). The machine separates different direction notes.
Dir-SF MODE	Separation mode by Facing function (Single denomination).
Dir-SO MODE	Separation mode by Orientation function (Single denomination).
SPECIAL FUNCTION	
SERIAL NUMBER MODE (Option)	Prints out the printer and saves the PC to discriminate the serial number of notes.

5-1. Mix Mode

 Select currency pressing **CURRENCY** key.


 Press the **MODE** key and choose Mix mode.


Display shows as below.




You can count all denomination of selected currency without any selection.

5-2. Dispenser Mode

 Press **CURRENCY** key to select currency.

 Press **MODE** key to select Mix mode.

 Press **+10** key or **+1** key to enter the DISPENSER setting **OR**

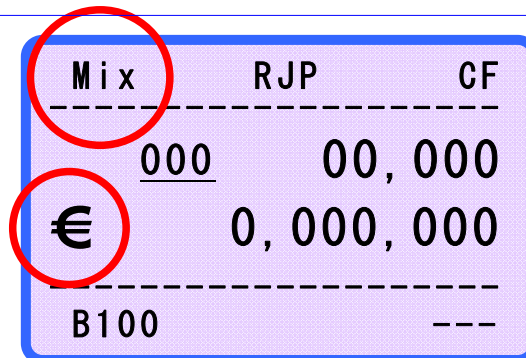
 **+1**

+10 key: After count and remove the note from Stacker Pocket, Dispenser function is off automatically.

+1 key: Even if remove the note from Stacker Pocket, the function is activated continuously. If press **+1** key again, Dispenser function is off manually. Or when select another mode by pressing **MODE** key, exit Dispenser Mode.

Using the key command, you can set the value which you want.

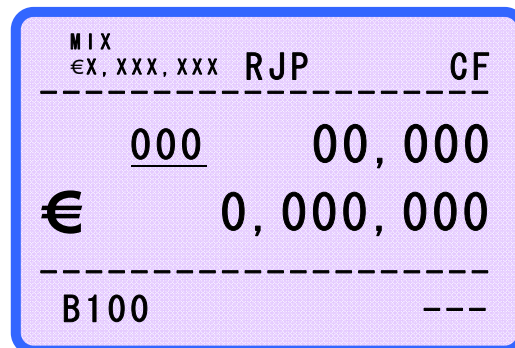
After set the value, exit the MENU using **RESTART** key.




MIX DISPENSER MENU


MIX VALUE : € * * * * 0

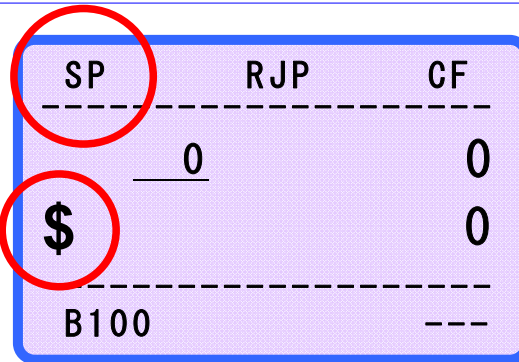
INCREASE - UP/+10 KEY
 DECREASE - DOWN/+1 KEY
 CLEAR VALUE - BATCH KEY
 MOVE CURSOR - MODE KEY
 EXIT - RESTART KEY



5-3. Separate Mode (SP Mode)


 Press **CURRENCY** key and choose the mode, you want.


 Press the **MODE** key and choose SP mode.




The machine sorts out the same denomination with first inserted note.

5-4. SP-ver Mode (Separate Mode by Old & New version)

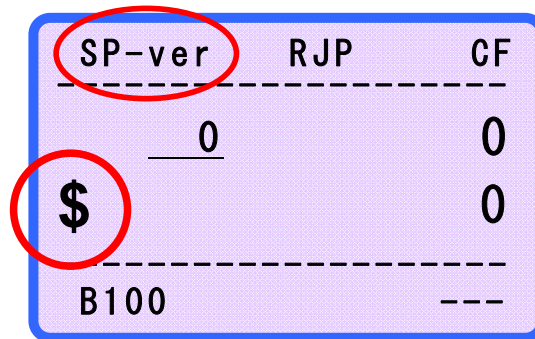
 Press **CURRENCY** key to select currency.

 Press **MODE** key to select SP mode.

 Press **+1** or **+10** key and select SP-ver mode


OR


 **+1**




If user selects this mode, the machine sends notes to Stacker which have same denomination and version (old and new & very new) with first inserted note.

5-5. SP-verA Mode (Separate Mode by New & Very New version)

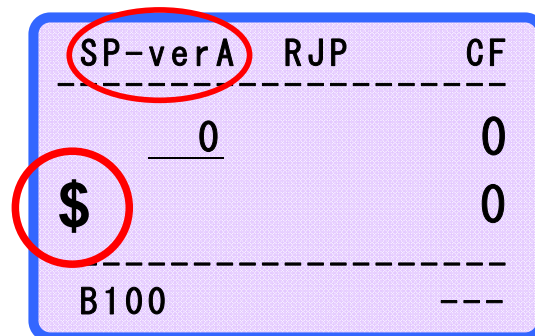
 Press **CURRENCY** key to select currency. (**USD only**)

 Press **MODE** key to select SP mode.

 Press **+1** or **+10** key and select SP-verA mode






OR

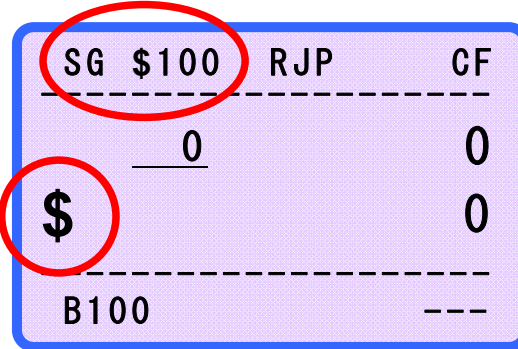
 **+1**



If user selects this mode, the machine send note to Stacker which has same denomination with the first inserted note.



5-6. Single Mode (SG Mode)

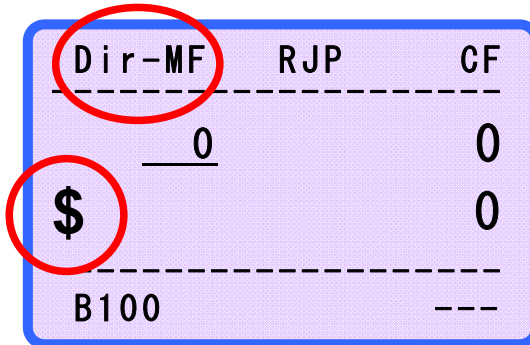
-  Press **CURRENCY** key and choose the mode, you want.
-  Press the **MODE** key and choose SG mode.
-  Press the **+1** or **+10** key and choose denomination.
- OR**  



You can sort the selected denominations.





5-7. Dir-MF Mode

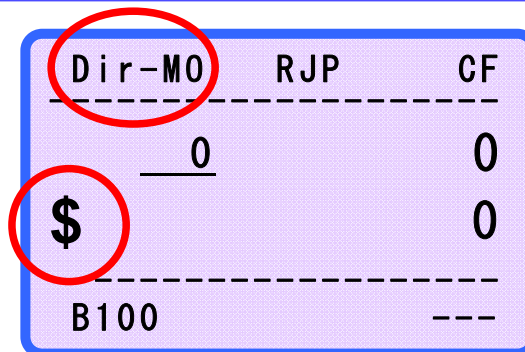
-  Press **CURRENCY** key and choose the mode, you want.
-  Press the **MODE** key and choose Dir-MF mode



Regardless of denomination, the machine saves the front or rear information of the first inserted note and sorts the same things.


5-8. Dir-MO Mode


-  Press **CURRENCY** key and choose the mode, you want.
-  Press the **MODE** key and choose Dir-MO mode
-  Press the **+1** or **+10** key and choose Dir-MO mode.
- OR** 




Regardless of denomination, the machine saves the direction information of the first inserted note and sorts the same things.

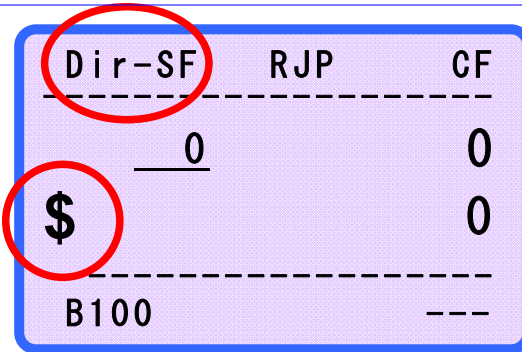
5-9. Dir-SF Mode

 Press **CURRENCY** key and choose the mode, you want.

 Press the **MODE** key and choose Dir-MO mode


 **OR** Press the **+1** or **+10** key and choose Dir-SF mode


 **+10**




The machine saves the denomination and front or rear information of the first inserted note and sorts the same things.

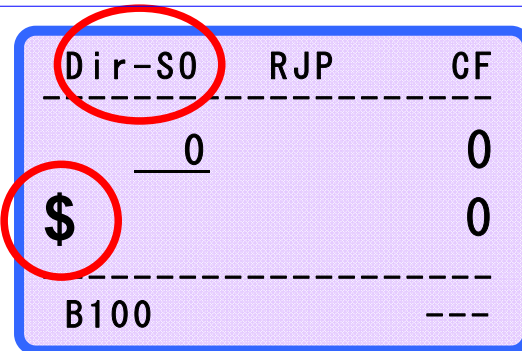
5-10. Dir-SO Mode

 Press **CURRENCY** key and choose the mode, you want.

 Press the **MODE** key and choose Dir-MO mode

 **OR** Press the **+1** or **+10** key and choose Dir-SO mode.

 **+10**



The machine saves the denomination and direction of the first inserted note and sorts the same thing.

Print the Error Report

When the counted notes are rejected, user can receive the error report by the LCD Display or printing receipt.

- Error report on the LCD Display.

When the notes are rejected, do not remove the note from reject pocket, press and hold down **MODE** key.

The display shows as below.

Reject Reasons	
Count	Detail Reasons
1	Value Error (E101)
2	Jam Error
3	E-M1
4	E-C1
5	E-UH
6	Double Error
7	Skew Error

HELP - CF KEY

Count means the number of rejected notes.

User can move next or previous page pressing **+10** key or **+1** key.

When pressing **MODE** key, Display shows the list of type of error.



MODE



Type of Error	Number
Count Error	3
Function Error	0
Value Error	1
UV, MG Error	3
No CIS Result	0
No UV, MG Result	0
	7

HELP - CF KEY

When pressing **MODE** key again, return to previous display.

If want to exit, press **RESTART•STOP** key.

Count Error: This error is caused by counting states. For example, double notes inserted, the note is skewed, etc.

Function Error: This error is caused in SP, Single and Direction Mode.

Value Error: When CIS sensor data is wrong, this error is caused.

UV, MG Error: When the machine detects the counterfeit, this error is caused.

No CIS Result: When the machine does not get the CIS sensor data, this error is caused.

No UV, MG result: When the machine does not get the UV and MG data, this error is caused.

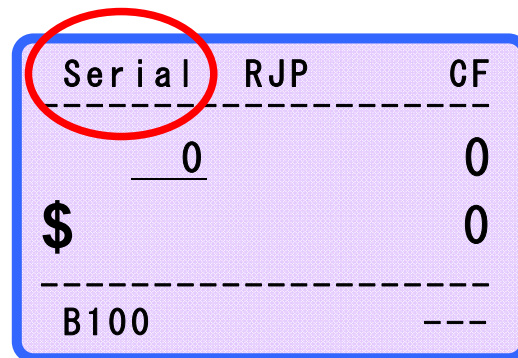
5-11. Serial Number Print Mode



Press **CURRENCY** key and choose the mode, EURO or USD

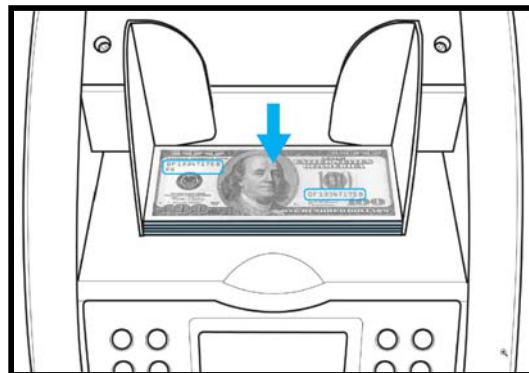
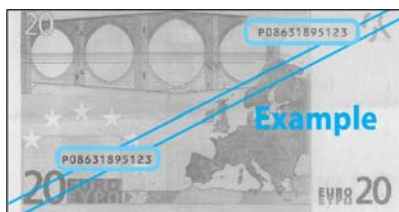


Press the **MODE** key and choose Serial mode

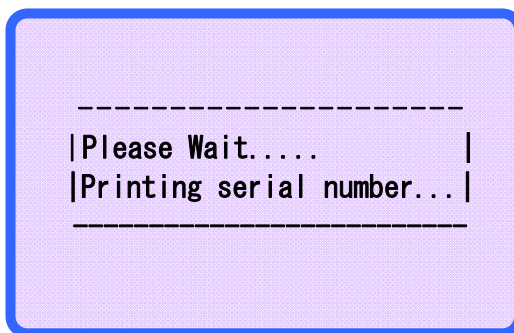


You can count all denomination of selected currency without any selection.

Before counting in serial number print mode, please arrange the notes that the serial number printed side is faced upward.
For example, USD is front side and Euro is rear side.



After counting, the LCD Display will display the message as below.



If you wants to count other notes continually, place the note on the HOPPER not remove the notes in the Stacker Pocket.
The printer prints out the serial number successively.
After finishing counting if you remove the notes from the Stacker Pocket, prints out the total notes.

- ▶ In this mode, the machine could not detect the counterfeit.
- ▶ This mode operates only for be exist SRAM in MAIN BOARD. (Option)
- ▶ If you want to know more detail of serial printer, refer to CHAPER 6.

How to store Serial Number to PC

MAGNER150 allows storage of Serial Number to PC by special PC program, Serial Number Manager. If you want to use Serial Number Manager, please contact manufacture.



CF function in Serial Number Print Mode

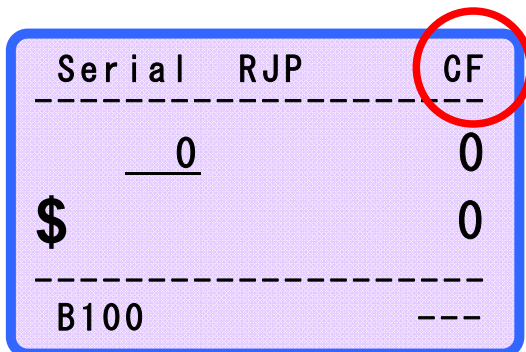
Please note.

This function is only available with special hardware.

If you want to use counterfeit detection in Serial Number Print Mode,

Please contact manufacture.

Although the machine doesn't have special hardware, user can turn on or off CF function in Serial Number Print Mode. (Please refer to User Setting Mode item 17) But it will not work properly.



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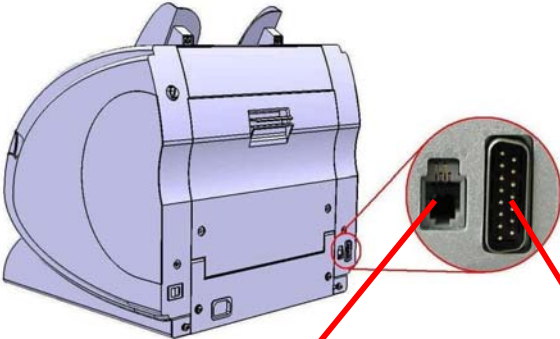
6. SERIAL PRINTER

MAGNER150

6-1. Descriptions of Serial Printer (RS232c)

- ☑ Emulation MODE : EPSON or STAR
(EPSON Emulation MODE is a Default Value of Factory)
- ☑ Baud Rate : 2,400 bps ~ 115,200 bps
(115,200 bps is a Default Value of Factory.)
- ☑ Data Bits : 8 bits
- ☑ Stop Bits : 1 bit
- ☑ Handshaking : DTR/DSR
- ☑ Parity Check : Disable
- ☑ Available Serial Printer :
SAMSUNG : SRP-370
Web Site : [HTTP://WWW.SAMSUNGMINIPRINTERS.COM/](http://www.samsungminiprinters.com/)
EPSON : TM-T88III, etc.
Web Site : [HTTP://POS.EPSON.COM/](http://pos.epson.com/)

6-2. Descriptions of Serial Port



The diagram shows the back of the printer with a callout to the serial port area. A red circle highlights the port, which is connected to a 25-pin D-sub connector. Below this, another red circle highlights the internal header pins, labeled TXD, GND, VCC+5V, and empty. A legend indicates TXD TRANSMISSION DATA: HIGH('1') : 5V, LOW('0') : 0V.

For only external display

There are two types of interface.

1. SPI (Serial Peripheral Interface)
 - For Upgrade
 - PIN1: GND
 - PIN2, 3, 4, 5, 6, 7, 9, 10, 11, 13, 14, 15: for SPI
2. RS232C
 - For PC communication
 - For serial printer
 - For other devices with RS232C
 - PIN1: GND
 - PIN12: TXD
 - PIN8: RXD

6-3. How to set the Serial Printer

Press and hold down **+10** key.

```
Serial RJP CF
-----
      0      0
  $  _0_    0
-----
B100      ---
```

```
+10 -> USER MENU

PRINT -> PRINT MENU
```

By pressing and holding down **+10** Key in any mode, you can enter special mode.

Display of special mode

Press **PRINT** key to enter PRINT MENU

```
SERIAL PRINTER MENU (1/2)
-----
>>1.EXIT(PRESS RESTART KEY)
2.Find SERIAL PRINTER
3.How to print ---- *Manual
4.Printout Type --- *Receipt
5.Blank of tail ----- *5
-----
NEXT          HELP - CF KEY
```

```
SERIAL PRINTER MENU (1/2)
-----
1.EXIT(PRESS RESTART KEY)
2.Find SERIAL PRINTER
>>3.How to print ---- *Manual
4.Printout Type --- *Receipt
5.Blank of tail ----- *5
-----
NEXT          HELP - CF KEY
```

Menu selection: **MODE** key

Value selection: **PRINT, +10 or +1** key

When you press **RESTART** key after changing a setting value, Display shows the message "Wait... Setting Data Saving..."

6-4. Descriptions of Menu

SERIAL PRINTER MENU (1/2)

>>1.EXIT(PRESS RESTART KEY)
 2.Find SERIAL PRINTER
 3.How to print ---- *Manual
 4.Printout Type --- *Receipt
 5.Blank of tail ----- *5

NEXT PAGE - BATCH KEY

SERIAL PRINTER MENU (2/2)

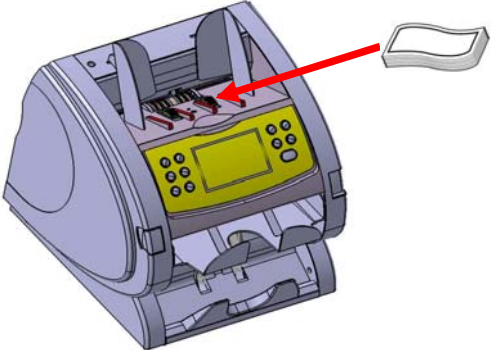
6.Emulation ----- *EPSON
 7.Baud Rate ----- *9600bps
 8.ROLL PAPER Size --- *3inch
 9.Font Size ----- *12 * 24

NEXT PAGE - BATCH KEY

1. **EXIT** Quit the menu
 2. **Find SERIAL PRINTER** Check the connection of machine and printer.
 3. **How to print** Manual – If you want to print the results, you have to press the print key.
 Auto – When the counted notes removed from stacker pocket, printing starts automatically.
 4. **Printout Type**
 Receipt – print the receipt information
 Detail – Print the detail information (ex) denomination information, error information and etc.
 CIS Info – User cannot use this type.
 CF Info – User cannot use this type.
 IR Info – User cannot use this type.
 All Info – User cannot use this type.
 5. **Blank of tail** User set up the blank of tail.
 6. **Emulation** Set up the print type. **Machine can offer only EPSON Emulation.**
 7. **Baud Rate** Set up the baud rate between machine and printer.
 8. **ROLL PAPER Size** Set up the size of printer paper.
 9. **Font Size** set up the font size.
- * means the encourage value.
- When you quit the all menu, press the RESTART/STOP key.

6-5. Print the Receipt

After counting, **PRESS** key shortly,



Mix	RJP	CF
0		910
\$	134,500	
B100		---

Display shows the message "Please Wait...
 Printing the data...".

The machine prints the receipt.

USD VALUE COUNTING		
Denom.	Units	VALUE
\$1	..... XXXX	XXXX, XXXX
\$2	..... XXXX	XXXX, XXXX
\$5	..... XXXX	XXXX, XXXX
\$10	..... XXXX	XXXX, XXXX
\$20	..... XXXX	XXXX, XXXX
\$50	..... XXXX	XXXX, XXXX
\$100	..... XXXX	XXXX, XXXX

MAIN	XXXXX	XXXX, XXXX
Reject Note	XXXXX	XXXX, XXXX
Total Note	XXXXX	XXXX, XXXX

Printed by "User ID"		

If serial printer connected, the result is printed to the printer.

After counting, press and hold down **PRINT** key,

USD VALUE COUNTING		
\$5	: XXX,XXX	|
\$10	: XXX,XXX	|
\$20	: XXX,XXX	| Total Notes
\$50	: XXX,XXX	| : X,XXX,XXX
\$100	: XXX,XXX	|
\$200	: XXX,XXX	| Total Value
\$500	: XXX,XXX	| : XX,XXX,XXX

EXIT - RESTART KEY		

If serial printer does not connect, the result prints to the screen.

If the notes remain at the Reject Pocket while user presses **PRINT** Key, following message is displayed.

 | Please Check..... |
Make rej. Pocket empty

6-6. Form of the Receipt

2005/10/26 14:20:34 ①		CF ②
EURO VALUE COUNTING		
Denom.	Units	VALUE
E5	..... 0	0
E10	..... 0	0
E20	..... 0	0
E50	..... 0	0
E100	..... 0	0
E200	..... 0	0
E500	..... 0	0

Main	0	0
Reject Note	0	
Total Note	0	

Printed by "NONE "		

- ① Printing date and time: This function is **optional**. (Real time checking hardware is needed)
- ② CF enable or disable is printed. When CF function enables, "CF" is printed. And if CF function is not enable, "--" is printed.

User's Manual

7. USER SETTING MODE

MAGNER150

7-1. How to set the User Setting Mode

Press and hold down +10 Key.

Serial	RJP	CF
0		0
\$		0
B100		---

+10 -> USER MENU
PRINT -> PRINT MENU

By pressing and holding down **+10** key in any mode, you can enter special mode.

Display of special mode

Press +10 Key to enter USER MENU

```

USER SETTING MODE (1/2)
-----
>>1.EXIT(PRESS RESTART KEY)
2.ID --- NONE
3.USER s ID PRINTING - *YES
4.REJECT POCK. ACTIVE - *YES
5.REJECT POCK. SIZE - *60
6.NUMBER OF PRINTOUT - *1
7.PRE-BATCH PCS. SETTING
8.SCREEN SAVER^^^ - NONE
9.BUZZER VOLUME^^ - Middle
-----
NEXT PAGE - BATCH KEY
    
```

```

USER SETTING MODE (1/2)
-----
1.EXIT(PRESS RESTART KEY)
2.ID --- NONE
>>3.USER s ID PRINTING - *YES
4.REJECT POCK. ACTIVE - *YES
5.REJECT POCK. SIZE - *60
6.NUMBER OF PRINTOUT - *1
7.PRE-BATCH PCS. SETTING
8.SCREEN SAVER^^^ - NONE
9.BUZZER VOLUME^^ - Middle
-----
NEXT PAGE - BATCH KEY
    
```

Menu selection: **MODE** key

Value selection: **PRINT, +10 or +1** key

When you press **RESTART•STOP** key after changing a setting value, Display shows the message "Wait... Setting Data Saving..."

7-2. Descriptions of Menu

```

USER SETTING MODE      (1/3)
-----
>>1.EXIT(PRESS RESTART KEY)
2.ID --- NONE
3.USER s ID PRINTING - *YES
4.REJECT POCK. ACTIVE - *YES
5.REJECT POCK. SIZE - *60
6.NUMBER OF PRINTOUT - *1
7.PRE-BATCH PCS. SETTING
8.SCREEN SAVER^^^ - NONE
9.BUZZER VOLUME^^ - Middle
-----
NEXT PAGE - BATCH KEY
    
```

```

USER SETTING MODE      (2/3)
-----
>>10.PRINT WARNING - YES
11.STOP CONDITION - DISABLE
12.BAR CODE SEND TO COMPUTER
13.*USING : CENTER
14.*TYPE : 2 OF 5
15.*LENGTH : 18
16.CF KEY - EXCEPTION
17.SERIAL CF MODE- ON
18.BATCH FUNCTION- CLEAR
-----
NEXT PAGE - BATCH KEY
    
```

```

USER SETTING MODE      (3/3)
-----
>>19.Face&Orientate - NORMAL
20.See the result - NOTMAL
21.Reject Number- SHOW
22.Serial Cutting - 200
23.Stacker Warning- NONE
-----
NEXT PAGE - BATCH KEY
    
```

- | | |
|--------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 1. EXIT(PRESS RESTART KEY) | Quit the menu. |
| 2. ID | Type the user name. |
| 3. USER's ID PRINTING | The use of the Reject Pocket or not. |
| 4. REJECT POCK. ACTIVE | you can select whether use the Reject Pocket or not. |
| 5. REJECT POCK. SIZE | Set up the limit quantity of Reject Pocket. (30 ~ 90 Sheets) |
| 6. NUMBER OF PRINTOUT | Set up the number of printed sheets. (1~3 sheets) |
| 7. PRE-BATCH PCS. SETTING | You can choose any batch number. |
| 8. SCREEN SAVER | If user does not use the machine during regular time, the machine enters screen save state. User set the regular time.
When press the key or take the notes on the HOPPER, return back operation state. |
| 9. BUZZER VOLUME | Select buzzer volume. |
| 10. PRINT WARNING | Message of printing status is shown or not. |
| 11. STOP CONDITION | Stop Condition means when the note goes to reject pocket,
User can select the machine works continuously or not.

Disable: although a note is rejected, the machine works continuously.
CF error: if a note is rejected with CF error, the machine stops to work.
All error: if a note is rejected with any error, the machine stops to work |
| 12. BAR CODE SEND TO COMPUTER | User can select to print bar code to PC or Printer. |
| 13. *USING : CENTER | Select position of printed bar code |
| 14. *TYPE : 2 OF 5 | User can select bar code type |
| 15. *LENGTH: 18 | Length means bar code length and user can select this.
(1~26) |

16. CF KEY - EXCEPTION

NORMAL: Machine detects all counterfeits.

EXCEPTION: Machine detects counterfeits except special note or denomination.

17. SERIAL CF MODE- ON Activate or inactivate CF function in Serial Mode.

This function is only available with special hardware. If you want to use counterfeit detection in Serial Number Print Mode, please contact manufacture.

18. BATCH FUNCTION- CLEAR

CLEAR – After batch count and remove note from stacker, value and count go to zero.

CONTINUE – After batch count, counting information is accumulated.

19. Face&Orientate – NORMAL

NORMAL: User can sort the notes with 4 directions, Face-Front, Face-Rear, Back-Front and Back-Rear.

CONTINUE: User can sort the notes only Face-Front.

20. See the Result – NORMAL

NORMAL: If press PRINT Key shortly, counting result is printed to serial printer.

If press and hold down PRINT Key, counting result is printed to the display.

SCREEN: If press PRINT Key shortly, counting result is printed to the display.

21. Reject Number – SHOW

SHOW: Reject count number is shown on the display.

HIDE: If select this, reject count number becomes invisible.

22. Stacker Warning – NONE

User can select wait time for Stacker Warning. (10sec ~ 300sec)

* means the encourage value.

When you quit the all menu, press the **RESTART•STOP** key.

If you want to go to next page immediately, press BATCH Key.

How to input ID

1. Press **MODE** key to move the ">>" make to select "2. ID-" and press **PRINT** key to enter.
2. Display shows following display.
Move to left: CF
Move to right: CURRENCY
Move to up: +10
Move to down: +1
Delete a character: Select "BackSpace" and press **PRINT** key.
3. If want to type a selected character, press **PRINT** key.
4. When finish typing ID, press **RESTART•STOP** key.

```

WRITING USER's ID
-----
! " # $ % & ' ( ) * + , -
. / 0 1 2 3 4 5 6 7 8 9 : ;
< = > ? @ A B C D E F G H I
J K L M N O P Q R S T U V W
X Y Z [ \ ] ^ _ ' a b c d e
f g h i j k l m n o p q r s
t u v w x y z BackSpace
-----
USER's ID:
    
```

PRE-BATCH PCS. setting

```

USER SETTING MODE          (1/2)
-----
>>1.EXIT(PRESS RESTART KEY)
2.ID --- NONE
3.USER NAME PRINTING - *YRS
4.REJECT POCK. ACTIVE - *YES
5.REJECT POCK. SIZE - *60
6.NUMBER OF PRINTOUT - *1
7.PRE-BATCH PCS. SETTING
-----
NEXT PAGE - BATCH KEY
    
```

```

PRE-BATCH PCS. ADJUSTING
>>EXIT<<   DEFAULT   SAVE
-----
The Unit of Calc. : 10
BATCH 1 --- 100
BATCH 2 --- 50
BATCH 3 --- 25
BATCH 4 --- 20
BATCH 5 --- 10
BATCH 6 --- 0
-----
    
```

```

-----
|Please Wait.....|
|Setting Data Saving..|
-----
    
```

1. Press **MODE** key to move the ">>" make to select "7.PRE-BATCH PCS.SETTING" Then press **PRINT** key to enter the "7.PRE-BATCH PCS.SETTING"
2. The LCD Display will display as below.
EXIT : Exit the menu.
DEFAULT : Return the standard value.
SAVE : Saves the setting value.
3. If you want to change the BATCH value, press the **MODE** key and select the BATCH number.
4. Change the value using the ▲/+10 or ▼/+1 key.
5. After finishing, move the ">>" make to select "**SAVE**" then press the **PRINT** key.
6. Display shows the message as left.
7. Press the **RESTART•STOP** key.

SPECIFICATION OF THE MAGNER150-----

-Technical Specification

Available currencies	EURO, USD, LOCAL(OPTION)		
Dimension(mm)	330(W)×350(D)×370(H)	Display	4.1 inch Graphic LCD
Weight	Approx. 16 Kg	Denomination Detection	Full Line Image Sensor
Countable Notes Size	60 × 90mm ~ 100 × 180mm	Counterfeit Detection	UV, FL, MG (Magnetic Thread Detection), IR
Countable Note Thickness	0.08 ~ 0.12mm	Speed	Denomination Count 1000 notes/min
Hopper Capacity	300 notes (circulated notes)	Piece Count	Max. 1500 notes/min
Pockets	1 pocket and 1 reject	Feed System	Roller friction system
Main Pocket Capacity	200 notes (circulated notes)	Power Supply	100 ~ 240V AC, 50/60Hz
Reject Pocket Capacity	Max. 90 notes (circulated notes)	Power consumption	Max. 110 Watts

-Options

Local Currency	Max. 3 currency	IR Detection	Full Line IR Sensor
External Display	LCD type for customer	Bill Printout	With RS232C Interface for PC and external printer, Print user name
Serial Number Recognition	Max. 400 notes/min		
Discrimination Function	Discriminate between old and new	Real Time Clock	For Local time printout

- ERROR CODE AND DISPLAY MESSAGE

ERROR CODE	DISPLAY MESSAGE	CAUSE OF ERROR	Procedure for removing the cause of error
E001	Jam Error	Jamming in the machine	<ol style="list-style-type: none"> 1. Remove notes from the HOPPER, REJECT and STACKER POCKET. 2. Open rear cover and remove notes in the machine. 3. Open front cover and remove notes in the machine. 4. Restart counting operation.
E002	Skew Error	Skew bill fed	<ol style="list-style-type: none"> 1. Remove notes from the HOPPER, REJECT and STACKER POCKET. 2. Restart counting operation.
E003	Rear Cover Opened	Rear Cover is opened. A note is in the machine.	<ol style="list-style-type: none"> 1. Open rear cover and remove notes in the machine. 2. Restart counting operation.
E004	Chain Error	Chain bills were fed	<ol style="list-style-type: none"> 1. Remove notes from the REJECT POCKET and STACKER 2. Restart counting operation.
E005	Double Error	Doubled bills were fed	
E006	Half Error	Half bill was fed	
E007	Dispenser Full	Dispenser function is completed	
E008	Separator Err.	There is no time to operate separator.	<ol style="list-style-type: none"> 1. Open front cover and remove notes in the machine. 2. Restart counting operation.
E009	Front Cover Opened.	Front cover is opened. A note is in the machine.	
E011	Batch Full	Batch Counting is completed.	Remove notes from the STACKER POCKET and Restart
E012	Reject Pocket Full	Reject Pocket is full.	
E013	Stacker Pocket Full	Stacker Pocket is full.	
E014	No Value Result	Communication Error between Main and CIS board	Restart counting operation.
E015	No UV, MG Result	Communication Error between Main and CF board	
E016	No IR Result	Communication Error between Main and CF board	Restart counting operation.

- ERROR CODE AND DISPLAY MESSAGE FOR VALUE

ERROR CODE	DISPLAY MESSAGE	CAUSE OF ERROR	Procedure for removing the cause of error
E101	Value Error (E101)	Skew (Left)	1. Check and adjust the insert gap. 2. Restart counting operation.
E102	Value Error (E102)	Skew (Right)	
E103	Value Error (E103)	Dimension (Original X Length)	
E104	Value Error (E104)	Dimension (Original Y Length)	
E105	Value Error (E105)	Dimension (Original X,Y Length)	
E106	Value Error (E106)	Dimension (Currency X Length)	
E107	Value Error (E107)	Dimension (Currency Y Length)	
E108	Value Error (E108)	Dimension (Currency X,Y Length)	
E109	Value Error (E109)	Uncertain Error	
E110	Value Error (E110)	Different Currency	
E111	Value Error (E111)	Chain error	
E112	Value Error (E112)	Different Slope of Left and Right	
E113	Value Error (E113)	Fanwise (Original X Length)	
E114	Value Error (E114)	Fanwise (Original Y Length)	
E115	Value Error (E115)	Fanwise (Original X,Y Length)	

- ERROR CODE AND DISPLAY MESSAGE FOR UV

ERROR CODE	DISPLAY MESSAGE	CAUSE OF ERROR	Procedure for removing the cause of error
E201	E-UH	UV1 high level error	Suspect Note. Check and restart counting operation.
E202	E-UL	UV1 low level error	
E203	E-BH	UV2 high level error	
E204	E-BL	UV2 low level error	
E205	E-FH	FL high level error	
E206	E-FL	FL low level error	

- MG ERROR CODE

ERROR CODE	DISPLAY MESSAGE	CAUSE OF ERROR	Procedure for removing the cause of error
E211	E-M1(all currencies)	MG Total ERROR	Suspect Note. Check and restart counting operation. 1. Check the note condition which is dirty or wear out 2. Check the rear cover closed..
E212	E-M2(all currencies)	MG Information Error 1	
E213	E-M3(all currencies)	MG Information Error 2	
E214	E-M4(local only)	MG Information Error 3	
E215	E-M5(all currencies)	MG Denomination ERROR	
E216	E-M6(local only)	MG Information Error 4	
E217	E-M7(local only)	MG Information Error 5	

- CF ERROR CODE FOR COUNTING

ERROR CODE	DISPLAY MESSAGE	CAUSE OF ERROR	Procedure for removing the cause of error
E221	E-C1	Abnormal note is mixed	Restart counting operation.
E222	E-C2	A Note is skewed	
E223	E-C3	A Note with Hole is mixed	
E224	E-C4	A Note with Half is mixed	
E225	E-C5	A Note with Size is mixed	

- Error Code of IR part

ERROR CODE	DISPLAY MESSAGE	CAUSE OF ERROR	Procedure for removing the cause of error
E303	IR Error (E303)	IR front fill error	Suspect Note. Restart counting operation.
E304	IR Error (E304)	IR front empty error	
E305	IR Error (E305)	IR front deep fill error	
E306	IR Error (E306)	IR Rear fill error	
E307	IR Error (E307)	IR Rear empty error	
E308	IR Error (E308)	IR Rear deep fill error	
E309	IR Error (E309)	IR Rotate error	
E310	IR Error (E310)	IR Hole error	
E311	IR Error (E311)	IR Half error	
E312	IR Error (E312)	IR Size error	
E313	IR Error (E313)		

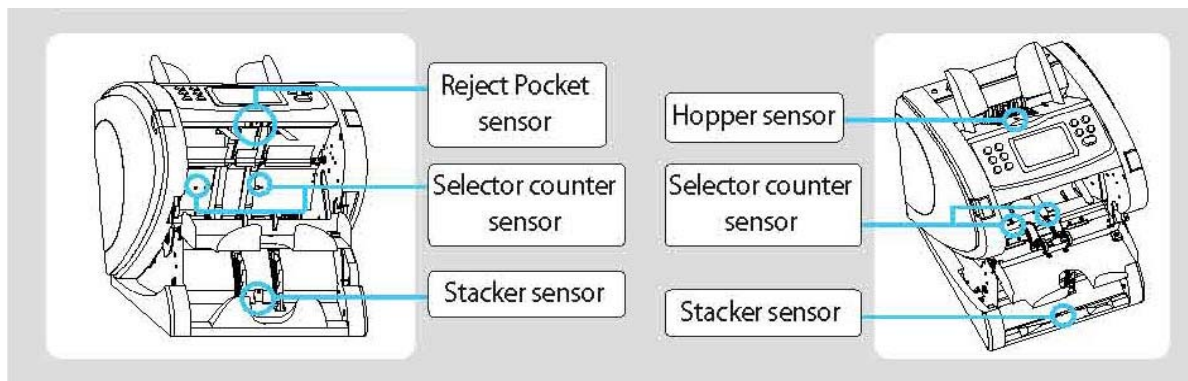
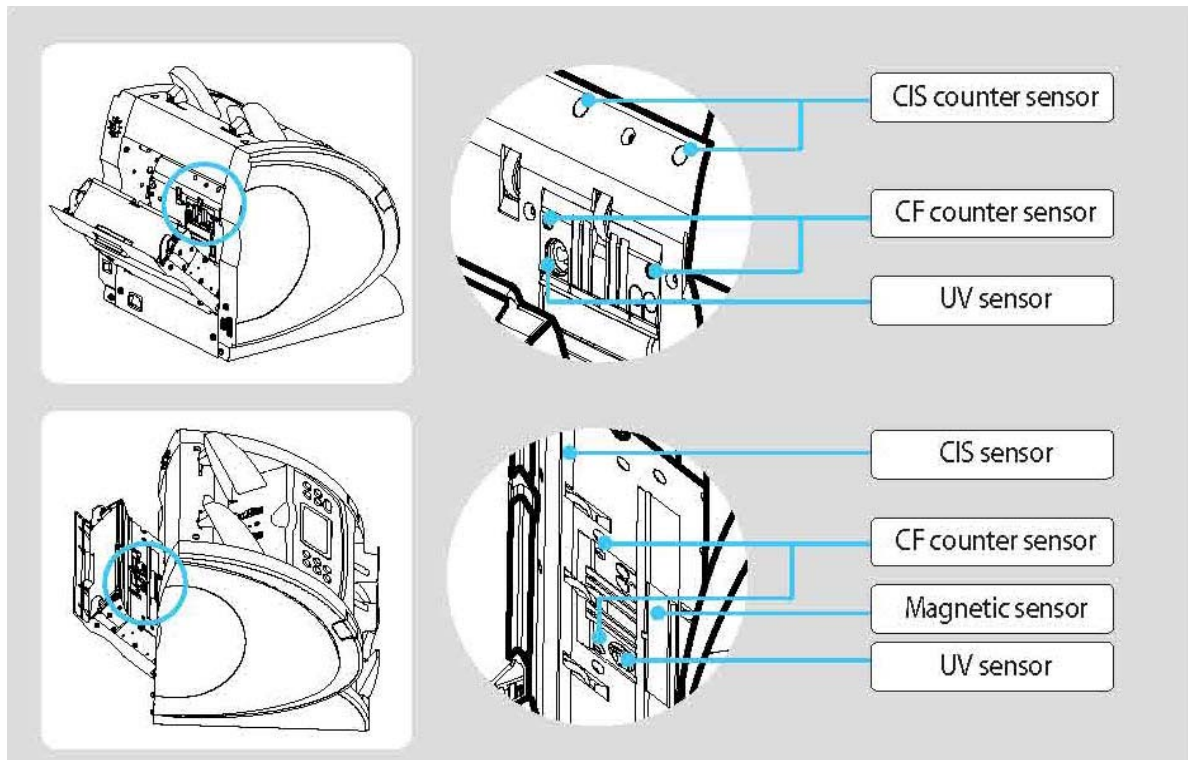
REGULAR CLEANING OF THE MACHINE-----

The machine has a many sensitive sensor to perform high technology functions, for example counterfeit detection, denominations, recognition of serial number and etc.

Users are recommended to clean the machine sensors at least once a week.

Refer to following section and clean the machine regularly.

※ Please turn the power off before clean the machine.





MAGNER 150

MAGNER INTERNATIONAL CORPORATION

2901 SW 149TH AVENUE-SUITE 100 MIRAMAR, FLORIDA 33027 USA
Tel: (954) 342-6000 / Fax: (954) 342-6001
www.magnerinternational.com

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