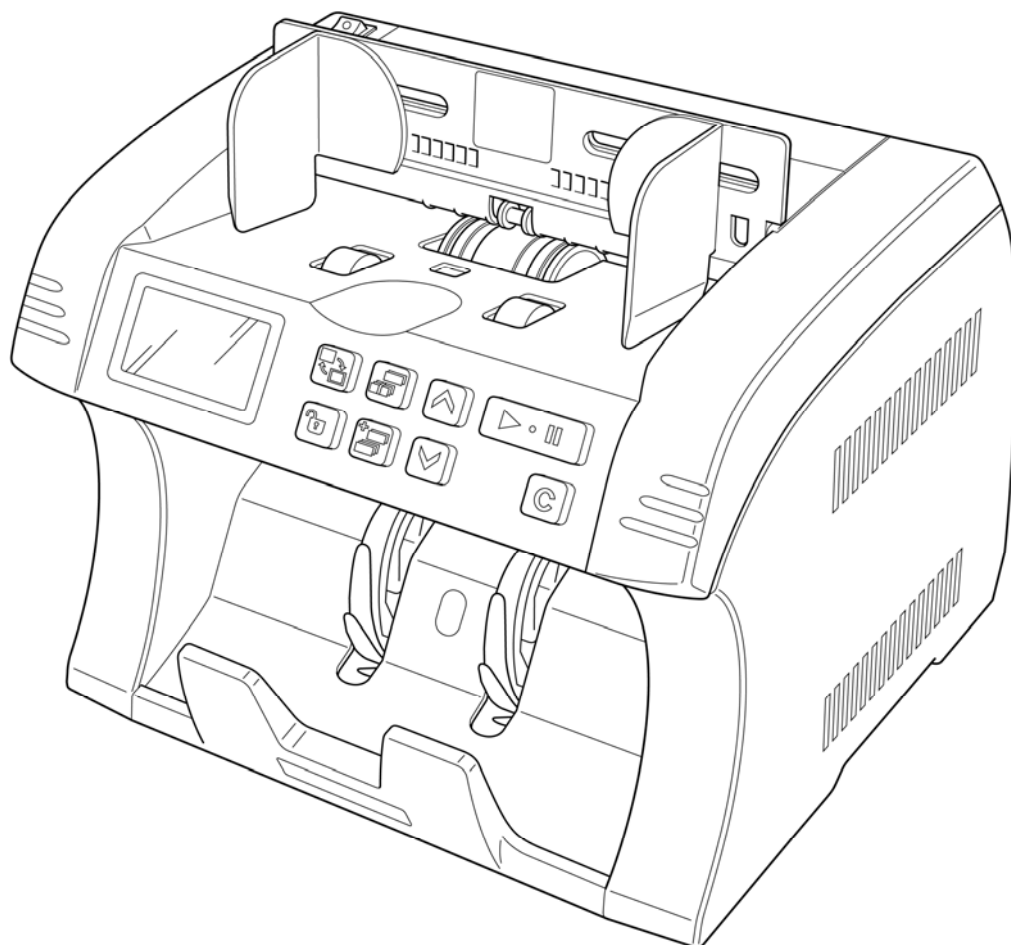




# ***COMPACT CURRENCY COUNTER***

**N-120A/13xA**

**User's Manual**



**BILLCON CORPORATION**  
(T82-0073-120417)

# SAFETY INSTRUCTIONS

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## Safety Measures You Should Know Prior to Use

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- Please use this product in the type of environment described in the specification section of this manual. Fire or electric shock can result if it is used in an environment other than as described in the specification section.
- Please do not make improvements to the product, or modify parts before installing them to the product. In addition, please do not open any part of the product where there are no specific instructions for opening it, and do not remove any part or cover that has been screwed closed. Fire, electric shock or injury can result.
- When smoke or an unusual smell or sound is emitted from the product, immediately suspend use and turn off the power switch. Then, remove the electric plug from the outlet, and contact the closest service center. Fire can result from continued utilization in this condition without repair.
- Please do not place a vase or cup filled with water on top of the product. Fire or electric shock can result if the water spills and gets inside the product and damages the insulation.
- Please do not allow metal objects like paper clips or staples to fall through open cracks in the product. Fire or electric shock can result if a metal object gets in and comes in contact with the electrical circuits inside the product.
- Please contact the nearest service center to repair the product. Fire, electric shock or injury can result if repairs are poorly done.
- Please use the electrical current specified in the manual. Fire, electric shock or injury can result if electricity is used from a source other than one specified.
- Please do not use an extension cord or plug multiple devices into the same outlet. Please use a single outlet exclusively for this product. Otherwise fire can result.
- Please inspect the electric plug and electric cord periodically. Suspend use if the plug or cord is damaged, and contact the nearest service center to have the plug or cord replaced. Fire or electric shock can result.
- Please do not place a heavy object on the electric cord, nor place it near a source of heat, nor bend it or insert it into the outlet while it is coiled up. Damage to the cord could cause fire or electric shock.
- Please do not pull on the cord when removing the plug from the outlet. Fire or electric shock can result from a damaged, electric cord, plug or outlet.
- You must turn off the power switch and remove the plug from the electric outlet before cleaning the product. Otherwise an electric shock can result.
- For safety reasons, please remove the plug from the electric outlet when the product is not going to be used for a long period of time. Overheating and fire can result from accumulated dust.
- Please do not place flammable objects near or on the product. An explosion or fire could result from heat emitted by the product or a spark from the electricity source.
- After the product has been doused with water, such as after extinguishing a fire, please do not use it. Take it to the nearest service center for repairs and request an inspection. Fire or electric shock can result if it is used without it being checked.
- When installing and using the product, please allow adequate space for opening and closing the door and cover as well as operating the product. Coming in contact with parts of the mechanism could cause injury.

## **To Increase Product Life**

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In order to ensure a longer product life, please avoid installing it in a location like that described below. In addition, the following can cause the equipment to deteriorate, get damaged or function poorly.

- Please do not install in a location that is exposed to direct sunlight.
- Please avoid installing in a location near a heater where any part of the equipment may increase in temperature or exposing it to the draft from an air conditioner.
- Please avoid installing in a location where dust accumulates or vibration exists.
- When the product is placed in a cold location and it is suddenly heated, condensation will develop inside the equipment.
- Please place the product in an environment with the following conditions:  
Temperature 5 to 35°C Humidity 30 to 70% RH (without a humidifier)
- Please do not place heavy objects on the product and avoid severe impact to the product.
- Please do not use undue force when opening and closing the door or cover or when handling individual parts of the product.
- For safety reasons, please remove the plug from the electric outlet when the product is not to be used for a long period of time. Keep the product in the same environment as where the product is used.

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# OVERVIEW

This machine counts banknotes and notes in Count, Addition and Batch modes with error detection, length (short side) detection as well as magnetic (MG) detection and ultraviolet (UV) detection to check whether banknote is genuine or not.


The following models are listed in series for their available functions.

LIST OF AVAILABLE FUNCTIONS FOR MODELS

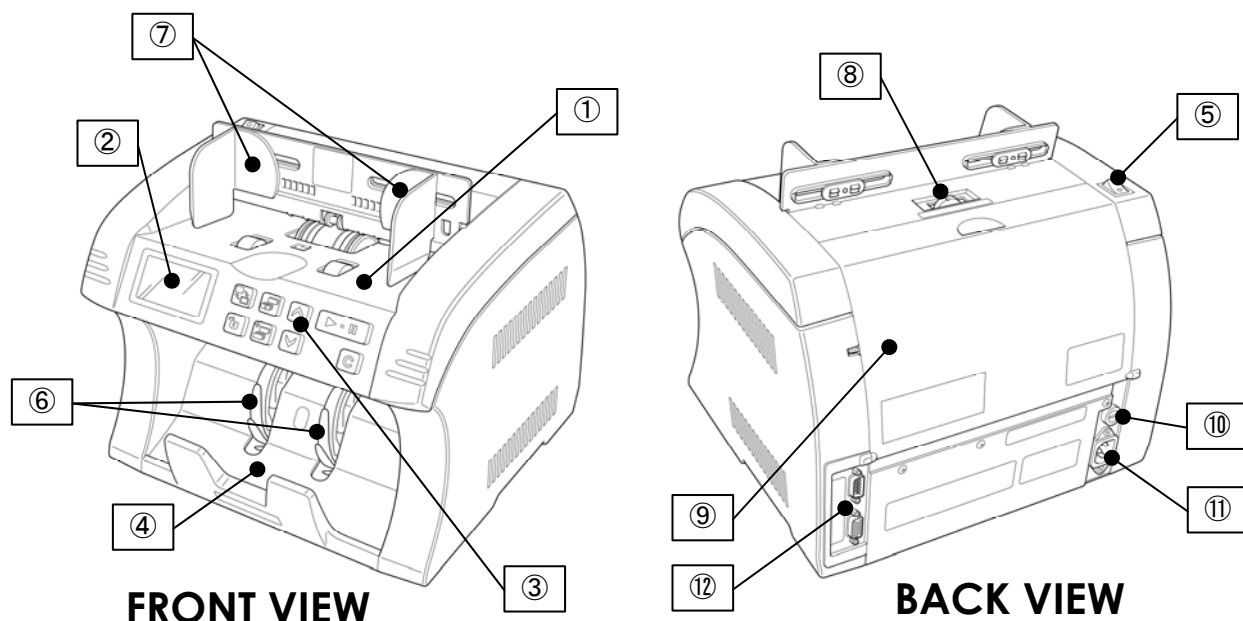
No.	MODEL	MG DETECTION	UV DETECTION	LENGTH DETECTION	REMARKS
1	N-120A			✓	✓: Available Blank: Not Available
2	N-131A	✓		✓	
3	N-132A		✓	✓	
4	N-133A	✓	✓	✓	

## ■ Cautions while using the compact currency counter

Please pay attention for the following cautions while using the currency counter.

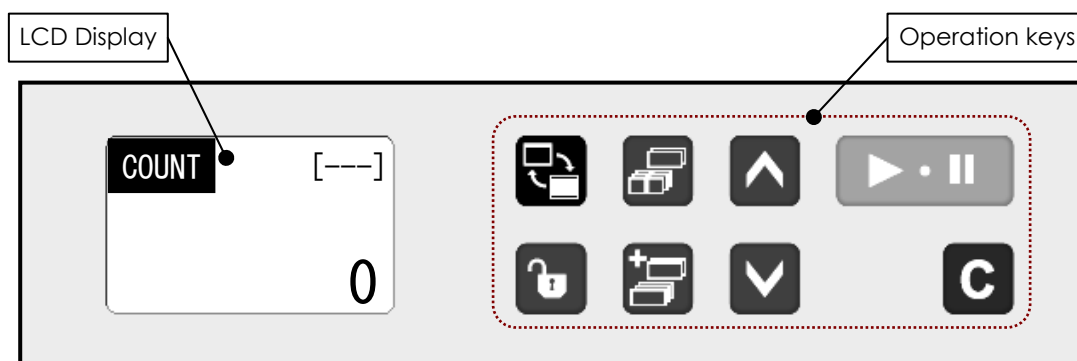
	<b>CAUTION</b>
<ul style="list-style-type: none"> <li>⊙ Do not touch the rotating units (rollers, stacker vane) during note counting.</li> <li>⊙ When opening/closing the rear top cover or rear guide, pay attention that the operator's hand or finger is not caught in the rear top cover or the rear guide.</li> <li>⊙ Never unscrew or disassemble the machine.</li> <li>⊙ Before checking, cleaning or replacing a fuse, be sure to turn OFF the power switch and disconnect the power plug from the outlet.</li> </ul>	

## ■ APPEARANCE AND NAMES OF MAJOR PARTS

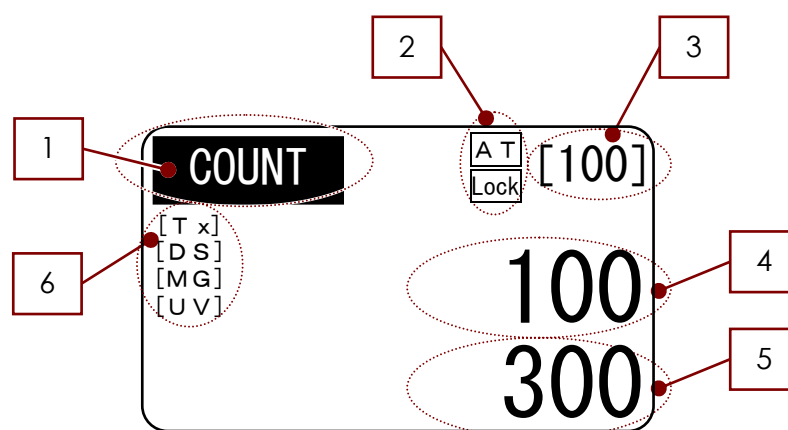


No.	NAME	FUNCTION
①	Hopper	• Place where bundle of notes to be counted is set.
②	LCD display	• Displays number of counted notes, parameters and error information.
③	Operation keys	• Use these keys for setting each function and mode. • Operation is determined by these keys.
④	Stacker	• Counted notes are stored in this unit.
⑤	Power switch	• Main power switch. (Pressing "I" side, turns power on. Pressing "O" side, turns power off.)
⑥	Stacker vane	• These vanes align and store the counted notes in the stacker.
⑦	Hopper guide	• This guide centers the notes to be counted. • Adjust its width to align to note width.
⑧	Gap adjustment dial	• This dial adjusts the gap where note on the hopper is fed inside the machine according to the note's thickness or condition.
⑨	Rear upper cover	• This cover is to be opened if notes get jammed inside the counter while cleaning the sensor.
⑩	Fuse	• Fuse for the main power supply. • If no power is supplied, check this fuse.
⑪	Power connector	• Power supply connector. Connect the power cord.
⑫	Interface connectors (Option)	• Interface connector (RS-232C port) to connect computer or equivalent. For using RS-232C port, contact your dealer.

## LCD DISPLAY



### EXPLANATION OF LCD DISPLAY



- 1** : Indicates the display is COUNT mode
- 2** : Enabled function among Automatic Start (AT) function and Lock function (Lock)
- 3** : Batch number (when Batch function is enabled)
- 4** : Number of counted notes (when Add function is enabled)
- 5** : Number of counted notes or cumulative number of counted notes (when Add function is enabled)
- 6** : Currently enabled functions of Magnetic detection (MG), Ultraviolet detection (UV), size detection (DS), and overlapped notes detection (Tx\*) for suspicious note determination are displayed. (NOTE 1)

\*1 : Currently enabled number of overlapped notes detection level (T1, T2, or T3) is displayed.

NOTE 1: The availability of the functions of Magnetic detection (MG) and Ultraviolet detection (UV) depends on the models. For details concerning available functions, refer to "LIST OF AVAILABLE FUNCTIONS FOR MODELS", OVERVIEW (page 1).

# PREPARATION FOR COUNTING NOTES

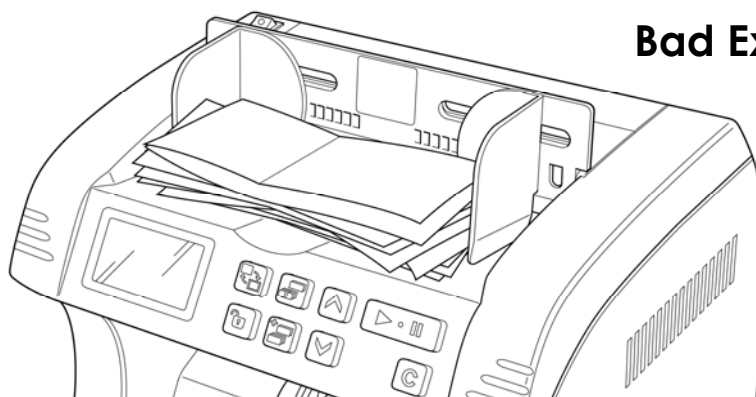
## ■ CHECK NOTES TO BE COUNTED

Follow the measures described below to prevent feed failure or jam during note counting.

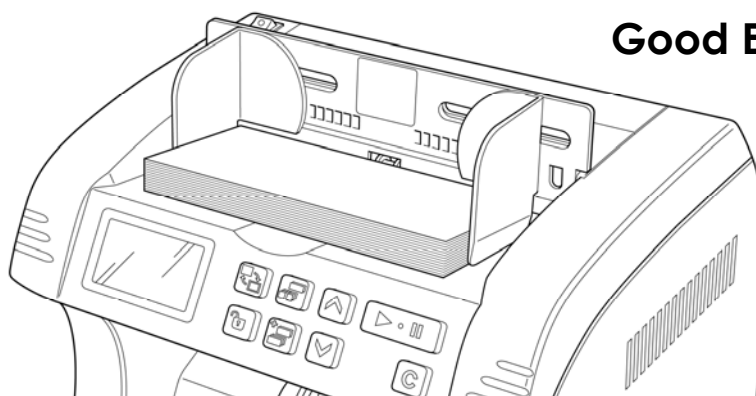
- Align the notes before placing them on the hopper.
- Remove foreign objects such as clips, paper or dust from the notes in advance.
- Coin cannot be counted. Check that no coin remains between notes before placing notes on the hopper.
- If notes are stapled, remove a staple then place them on the hopper.
- Straighten any note with dog-ear or folds before placing in the hopper.
- For "**Brick Notes**" (bundled brand-new notes), bend the stack several times to make the notes separate before placing them on the hopper.

## ■ HOW TO PLACE NOTES

To prevent errors during counting, tap the bundles of notes to align all edges before placing them on the hopper and place them centrally on the hopper using the hopper guides.



**Bad Example**






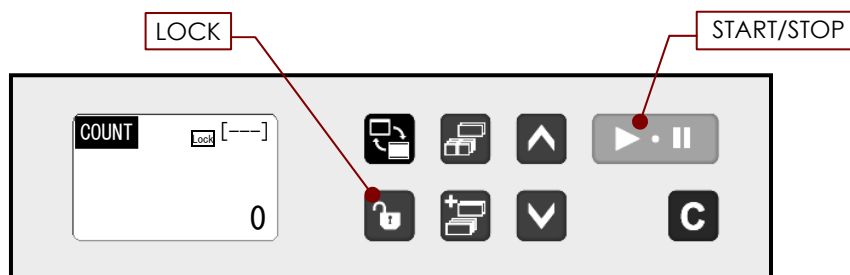
**Good Example**



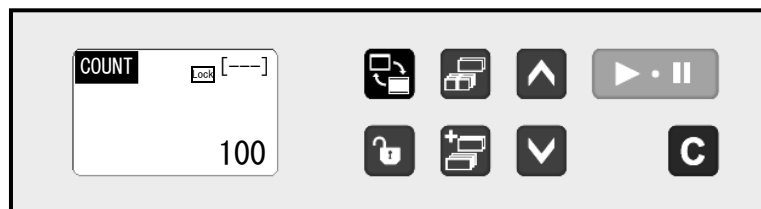
# OPERATION

## ■ COUNT MODE

1. Press  key for three seconds to cancel LOCK mode.  
(If auto-lock is set off, it is not required to press the  key.)
2. When notes are placed on the hopper, counting will start automatically when a bundle of notes is set on the hopper (If AUTO START is set to OFF, press the  key to start note counting.)



3. When the hopper sensor detects no note on the hopper, the machine will automatically stop and the number of counted notes will be displayed.

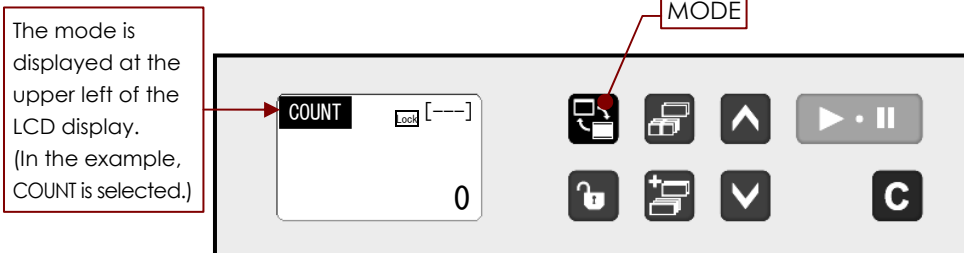



The following keys are available in COUNT mode.  
(1) BATCH (2) ADD

# OPERATION KEYS

## MODE KEY

The  key is used when selecting between the two modes (**COUNT** and **USER SETUP**).



In COUNT mode, in case pressing  Key over 1.5 sec, USER SETUP mode is selected.

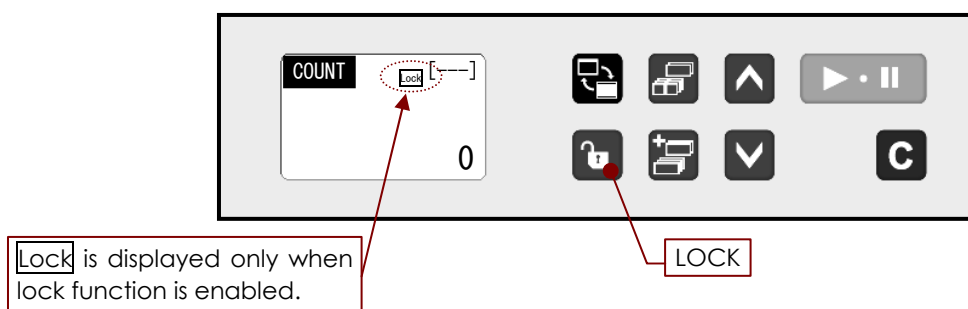
In USER SETUP mode, press  Key, COUNT mode is selected.

NOTE: Confirm that the key is unlocked before changing from each COUNT mode to USER SETUP mode. If the key is locked, unlock the key and then change mode following the aforementioned procedure.


## LOCK KEY

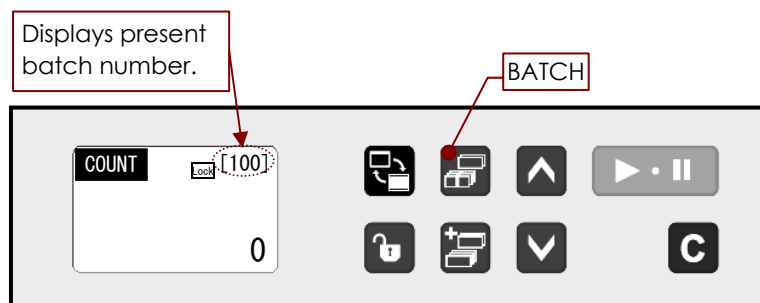
To cancel the lock of BATCH, ADD and MODE keys when Auto Lock is enabled, press this key for three seconds.

When Auto Lock is disabled, the lock and unlock status will alternately change every time this key is pressed for three seconds.



## ■ BATCH KEY


The  key is used when operating machine with batch stop function. Preset batch will be changed [100] – [50] – [25] – [20] – [10] – [---](off) when the key is pressed. "[---]" indicates the Batch setting is OFF.

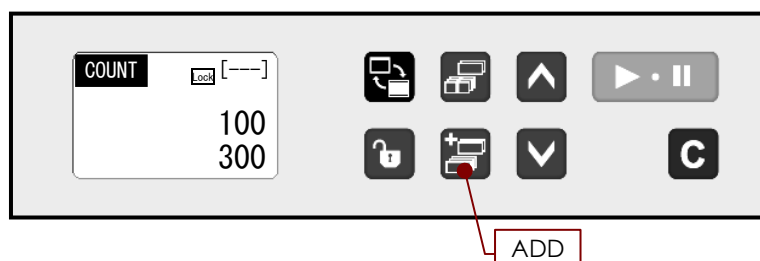


NOTE : For setting other batch numbers than preset ones, please refer to the explanation of "UP AND DOWN KEYS" on the next page.

## ■ ADD KEY

To use ADD function, press this key. The number of counted notes and accumulated total number of counted notes are displayed.

The ADD function is turned ON and OFF by every pressing the  key.



## UP AND DOWN KEYS

### ▲ key

- Setting of batch number when batch function is enabled.  
Pressing this key for a short period of time : Increases one note for each key press  
Pressing this key for a long period of time : Increases ten notes for each key press

NOTE : The maximum upper limit is 999. When ▲ key is pressed while 999 is displayed, the counter will return to 1.

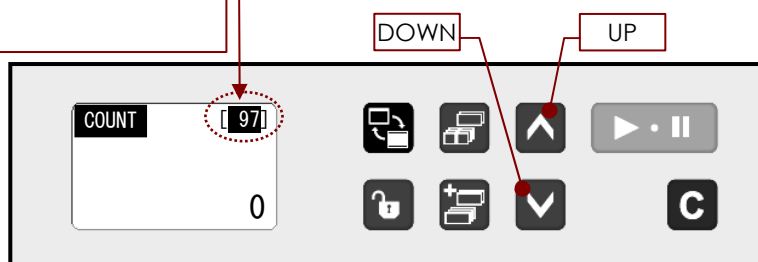
### ▼ key

- Setting of batch number when batch function is enabled.  
Pressing this key for a short period of time : Decreases one note for each key press  
Pressing this key for a long period of time : Decreases ten notes for each key press

NOTE : The maximum lower limit is 1. When ▼ key is pressed while 1 is displayed, the counter will go to 999.

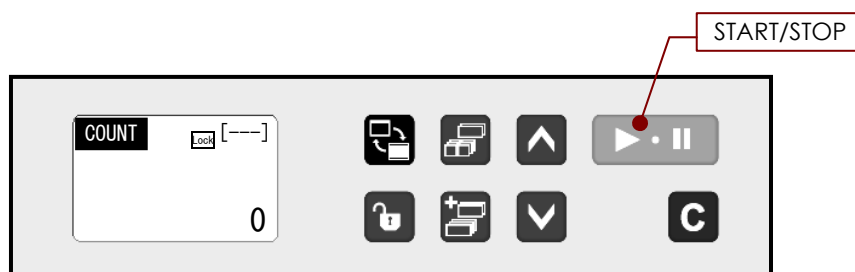
Batch number can be set by pressing  
⏏ key only when the batch number is highlighted.

Batch is enabled.



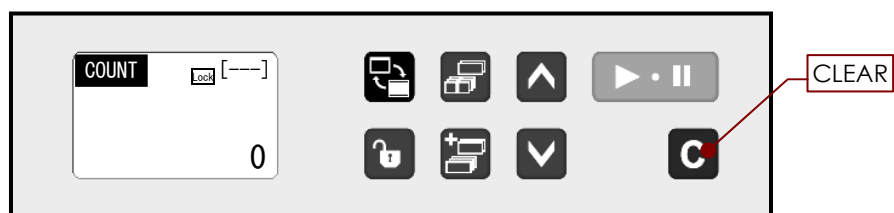
## START/STOP KEY

To start or stop the counting, press this key.



## ■ CLEAR KEY







To clear the number of counted notes or to cancel the error condition, press this key.



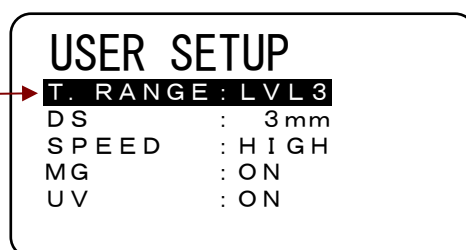
# USER SETUP MODE

This mode does the various settings of the COUNT mode. Please follow the instruction below for the operation of this mode.

## ■ HOW TO ENTER THE USER SETUP MODE





1. Press down and hold  key for 3 seconds to unlock the machine while in the COUNT mode. Then press down  key for 1.5 second, and USER SETUP mode will be displayed. (If AUTO-LOCK was disabled, please start from  key.)
2. Use  and  key and highlight the item to select.
3. To go out from USER SETUP mode, simply press  key again.

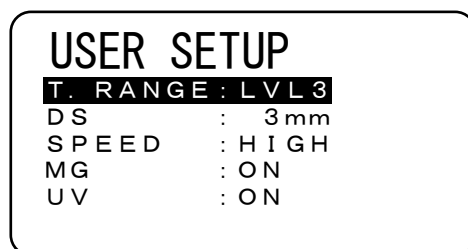
The highlight indicates the selected setting item.



## ■ TRANSPARENCY RANGE SETUP

Detection of overlapped notes (Double) is available. Set to LVL1, LVL2 and LVL3 or OFF.

1. Select [T.RANGE] by pressing  or  key, and then press the  key.  
The USER SETUP mode changes from [LVL3]→[OFF]→[LVL1]→[LVL2]→[LVL3]→[OFF] in order by pressing the  key several times. Display the value to be confirmed.



TRANSPARENCY RANGE SELECTION TABLE

	TRANSPARENCY	TRANSPARENCY RANGE
LEVEL 1	Bright	LVL1
LEVEL 2	Medium	LVL2
LEVEL 3	Dark	LVL3

The transparency range must be set in accordance with the known light transparency of the note to be counted. To prevent double or more overlapping notes being counted, the transparency range can be selected from three levels according to the thickness and print darkness of the note to be counted. If the print pattern or color is light, set the range to "LVL1". If the notes to be counted are dark or dirty, set the range to "LVL3".

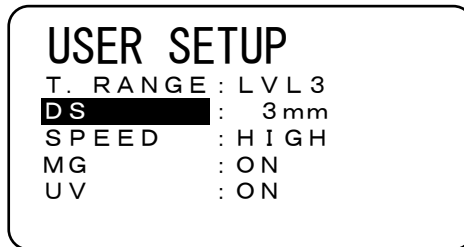
NOTE : The standard values are preset (registered). However, setting (registration) alteration may be required in accordance with the condition of the notes.



NOTE : If transparency range is set to OFF, number of note counted may not be correctly displayed. It is recommended to set transparency range LVL1, LVL2 or LVL3.

## ■ SIZE DETECTION FUNCTION SETUP

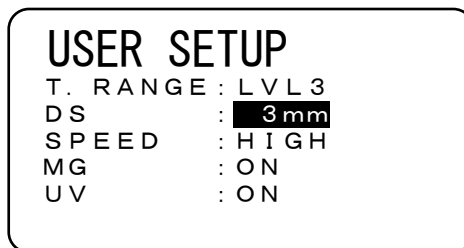
Detection of note dimensions is available. Set to allowable value or OFF.

1. Select [DS] by pressing  or  key, then the  key.




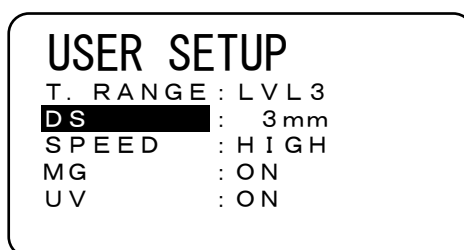
2. If size detection is not activated, set OFF by pressing  and  key. When size detection is enabled, set the allowable value (3 mm, 4 mm, 5 mm, ...).

The available setup range is between 3 and 9 mm. The setting unit is 1 mm/key press.



Size detection	Display	Status
Length (shorter side)	OFF	Size Detection is OFF.
	3mm	Notes with 3 and more mm difference will be detected.
	4mm	Notes with 4 and more mm difference will be detected.
	5mm	Notes with 5 and more mm difference will be detected.
	6mm	Notes with 6 and more mm difference will be detected.
	7mm	Notes with 7 and more mm difference will be detected.
	8mm	Notes with 8 and more mm difference will be detected.
	9mm	Notes with 9 and more mm difference will be detected.

3. When size detection is completed, press the  key to return to USER SETUP MENU.

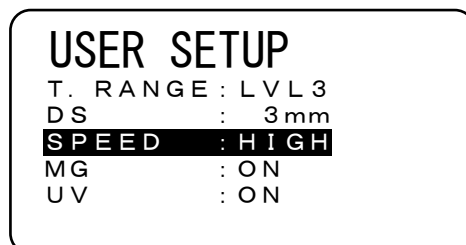





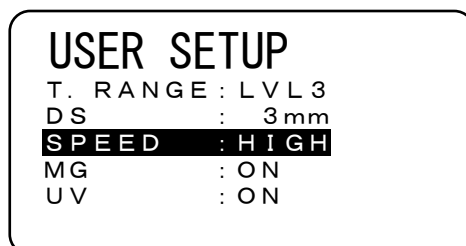
## COUNTING SPEED SELECTION

HIGH (1500 notes/min), MIDDLE (1200 notes/min) or LOW (1000 notes/min) counting speeds are available.

1. Select [SPEED] by pressing  or  key, then the  key.



2. The counting speed changes from [HIGH]→[MIDDLE]→[LOW] in order by pressing the  key several times. Select the counting speed to be run.



No.	Counting speed	Display
1	1500notes/minute	HIGH
2	1200notes/minute	MIDDLE
3	1000notes/minute	LOW

## ■ ON/OFF OF MG DETECTION FUNCTION (N-131A/133A ONLY)

Set to ON or OFF the magnetic (MG) detection.

Change MG detection to be ON/OFF by pressing the  key.

### USER SETUP

T. RANGE : LVL3  
DS : 3mm  
SPEED : HIGH  
**MG : ON**  
UV : ON

### USER SETUP

T. RANGE : LVL3  
DS : 3mm  
SPEED : HIGH  
**MG : OFF**  
UV : ON

## ■ ON/OFF OF UV DETECTION FUNCTION (N-132A/133A ONLY)

Set to ON or OFF the ultraviolet (UV) detection.

Change UV detection to be ON/OFF by pressing the  key.

### USER SETUP

T. RANGE : LVL3  
DS : 3mm  
SPEED : HIGH  
MG : ON  
**UV : ON**

### USER SETUP

T. RANGE : LVL3  
DS : 3mm  
SPEED : HIGH  
MG : ON  
**UV : OFF**

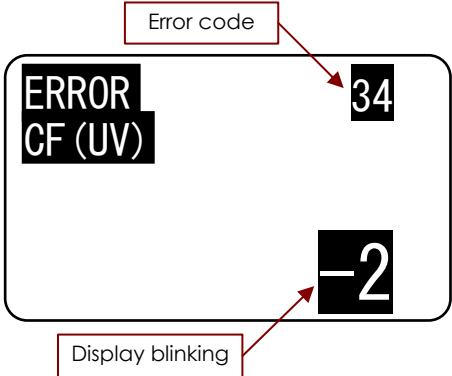

# HOW TO CLEAR ERROR AND REMOVE JAMMED NOTES

## ■ ERROR CODE AND COUNTERMEASURES

### a) COUNTING ERROR MESSAGE

CODE	MESSAGE	CAUSE OF ERROR	COUNTERMEASURES
01	SKEW	Skew note fed	<ul style="list-style-type: none"> <li>• Check the two or three notes near the stacker vane, remove the error note and return the remaining normal notes to the hopper.</li> <li>• Clear the error condition by pressing the <b>C</b> key and restart counting by pressing the <b>▶·  </b> key.</li> </ul> <p>NOTE: While Error reset is set to AUTO, when the notes are removed from the stacker, counting will automatically resume.</p>
02	DOUBLE	Overlapped notes fed	
03	OVER-BATCH	Over Batch	<ul style="list-style-type: none"> <li>• Remove the notes from the stacker, clear the error condition by pressing the <b>C</b> key, and count again by pressing the <b>▶·  </b> key.</li> </ul> <p>NOTE: While Error reset is set to AUTO, when the notes are removed from the stacker, counting will automatically resume.</p>
04	UNDER-BATCH	Under Batch	
05	CHAIN	Chain notes fed	<ul style="list-style-type: none"> <li>• Check the two or three notes near the stacker vane, remove the error note and return the remaining normal notes to the hopper.</li> <li>• Clear the error condition by pressing the <b>C</b> key and restart counting by pressing the <b>▶·  </b> key.</li> </ul> <p>NOTE: While Error reset is set to AUTO, when the notes are removed from the stacker, counting will automatically resume.</p>
06	SHORT	Short note fed	
07	HALF	Half note fed	
08	JAM	Jamming	<ul style="list-style-type: none"> <li>• Remove the notes and return the notes in the stacker to the hopper.</li> <li>• Clear the error condition by pressing the <b>C</b> key and restart counting by pressing the <b>▶·  </b> key.</li> </ul> <p>NOTE: While Error reset is set to AUTO, when the notes are removed from the stacker, counting will automatically resume.</p>
09		Unused	
0A			
0B			
0C			
0D	COUNTER FULL	The number of notes counted (amount) exceeds the displayable range	<ul style="list-style-type: none"> <li>• Clear the error condition by pressing the <b>C</b> key and restart counting by pressing the <b>▶·  </b> key.</li> </ul> <p>NOTE: While Error reset is set to AUTO, when the notes are removed from the stacker, counting will automatically resume.</p>



## b) DENOMINATION ERROR MESSAGE

CODE	MESSAGE	CAUSE OF ERROR	COUNTERMEASURES
30		Unused	<ul style="list-style-type: none"> <li>Check the error note in the stacker. The displayed blinking number shows how far the note to be checked. Is from the stacker vane.</li> </ul> <p>Ex) In below case, check the second note.</p> 
31	MG	MG pattern error	
32		Unused	
33		Unused	
34	UV	UV error	
35		Unused	
36		Unused	
37		Unused	
38		Unused	
39		Unused	
3A	LENGTH SIZE	Length error (DS detection) *When different length from the first counted note's length is detected	<ul style="list-style-type: none"> <li>Return the rest of the notes to the hopper after removing error notes.</li> <li>Count again by pressing the  key.</li> </ul>
3B			
3C			
3D			

## c) MACHINE TROUBLE ERROR MESSAGE

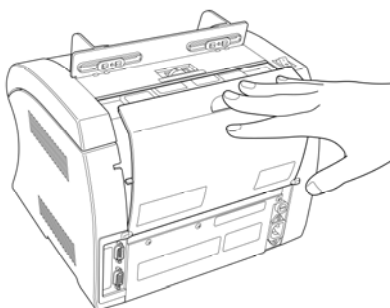
CODE	MESSAGE	CAUSE OF ERROR	COUNTERMEASURES
E1	H-MOTOR	Hopper motor trouble	<ul style="list-style-type: none"> <li>Restart the machine.</li> <li>If the errors recurs, contact your dealer.</li> </ul>
E2	S-MOTOR	Stacker motor trouble	
E3	R-COUNT	Counting sensor (right) trouble	<ul style="list-style-type: none"> <li>Clean the sensor.</li> <li>If the errors recurs, contact your dealer.</li> </ul>
E4	L-COUNT	Counting sensor (left) trouble	
E5	RS232C	RS-232C communication trouble	<ul style="list-style-type: none"> <li>Check the communication setting.</li> <li>If the errors recurs, contact your dealer.</li> </ul>
E6	LCD-I/F	LCD trouble	<ul style="list-style-type: none"> <li>Restart the machine.</li> <li>If the errors recurs, contact your dealer.</li> </ul>
E7	R-DOUBLE	Double detection sensor (right) trouble	<ul style="list-style-type: none"> <li>Clean the sensor.</li> <li>If the errors recurs, contact your dealer.</li> </ul>
E8	L-DOUBLE	Double detection sensor (left) trouble	
E9	COUNT SNS	Counting sensor trouble	<ul style="list-style-type: none"> <li>Open the rear top cover and check that no note is clogging the machine.</li> </ul>
EA	MEMORY	Memory error	<ul style="list-style-type: none"> <li>Restart the machine.</li> <li>If the errors recurs, contact your dealer.</li> </ul>
EB			
EC			
ED			
EE			
EF			

d) ALARM MESSAGE

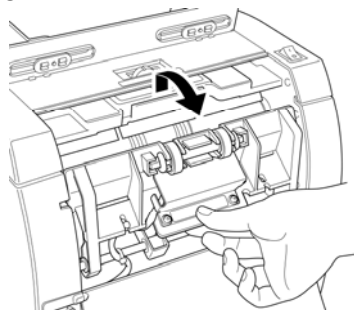
CODE	MESSAGE	CAUSE OF ERROR	COUNTERMEASURES
C1	STACKER FULL	Stacker is full of capacity	<ul style="list-style-type: none"> <li>• Remove the notes from the stacker.</li> <li>• Clear the error condition by pressing the  key and restart counting by pressing the  key.</li> </ul> <p>NOTE: If the notes are removed from the stacker, counting will automatically resume.</p>
C2	COVER OPEN	Cover is open	<ul style="list-style-type: none"> <li>• Check that the rear cover is closed and the close the rear top cover.</li> </ul>
C3	A/DC	AD conversion error	<ul style="list-style-type: none"> <li>• Restart the machine.</li> <li>• If the errors recurs, contact your dealer.</li> </ul>

## HOW TO REMOVE JAMMED NOTES

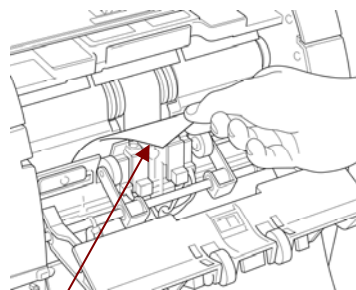
1. Open the rear top cover.



2. Pull the rear guide rearward while lifting it a little. Then open the rear guide.



3. Remove jammed notes.



Note



**CAUTION**

Pay attention not to clamp one's hand or fingers when the upper cover or the rear guide is closed.

# TROUBLESHOOTING

If any trouble has occurred during operation, find trouble cause and execute proper countermeasure referring to the following troubleshooting list.

In case no resolution can be made, contact your dealer for service.

No.	SYMPTOM	TROUBLE CAUSE	COUNTERMEASURES
1	<ul style="list-style-type: none"> <li>The machine will not activate even if the power switch is turned on.</li> </ul>	<ul style="list-style-type: none"> <li>The power cord is not properly connected.</li> <li>The power fuse is blown.</li> <li>If the fuse blows again even after replacement, contact your dealer.</li> </ul>	<ul style="list-style-type: none"> <li>Check the power cord connection.</li> <li>Fuse replacement</li> <li>Contact your dealer.</li> </ul>
2	<ul style="list-style-type: none"> <li>Notes do not feed smoothly.</li> <li>Connected, doubled, skewed notes or jams frequently occur.</li> </ul>	<ul style="list-style-type: none"> <li>The notes are poorly aligned on the hopper.</li> <li>The gap adjustment dial setting is too narrow.</li> <li>The gap adjustment dial setting is too wide.</li> <li>The surface of the feed drum or any roller is contaminated.</li> </ul>	<ul style="list-style-type: none"> <li>Check the condition of the notes.</li> <li>Widen the gap.</li> <li>Narrow the gap.</li> <li>Clean the surface of the feed drum and rollers.</li> </ul>
3	<ul style="list-style-type: none"> <li>Notes cannot be aligned at the stacker unit.</li> </ul>	<ul style="list-style-type: none"> <li>Same as No.2.</li> <li>The stacker vane is bent or broken.</li> </ul>	<ul style="list-style-type: none"> <li>Same as No.2.</li> <li>Replace the stacker vane with a new one.</li> </ul>
4	<ul style="list-style-type: none"> <li>Double error frequently occurs.</li> </ul>	<ul style="list-style-type: none"> <li>Same as No.2.</li> <li>The note to be counted is dark.</li> <li>The count sensor is contaminated.</li> </ul>	<ul style="list-style-type: none"> <li>Same as No.2.</li> <li>Confirmation and adjustment of the transparent range setting.</li> <li>Cleaning of the count sensor.</li> </ul>
5	<ul style="list-style-type: none"> <li>Abnormal noise is generated during counting.</li> </ul>	<ul style="list-style-type: none"> <li>Alien matter exists in the machine.</li> </ul>	<ul style="list-style-type: none"> <li>Check the inside of the machine. Remove any contamination.</li> </ul>
6	<ul style="list-style-type: none"> <li>Counting will not start even after notes are set on the hopper.</li> </ul>	<ul style="list-style-type: none"> <li>Notes remain in the stacker.</li> <li>The error condition is not cleared.</li> <li>The hopper sensor is contaminated.</li> </ul>	<ul style="list-style-type: none"> <li>Remove notes from the stacker.</li> <li>Check the error condition and clear it.</li> <li>Clean the hopper sensor.</li> </ul>

# DAILY CLEANING AND MAINTENANCE

When paper fibers or dust accumulate on the surface of the sensors or rollers, it may cause errors. Please regularly clean the sensor and rollers. When cleaning the machine, avoid using thinner or benzene as they can cause parts deformation or discoloration.



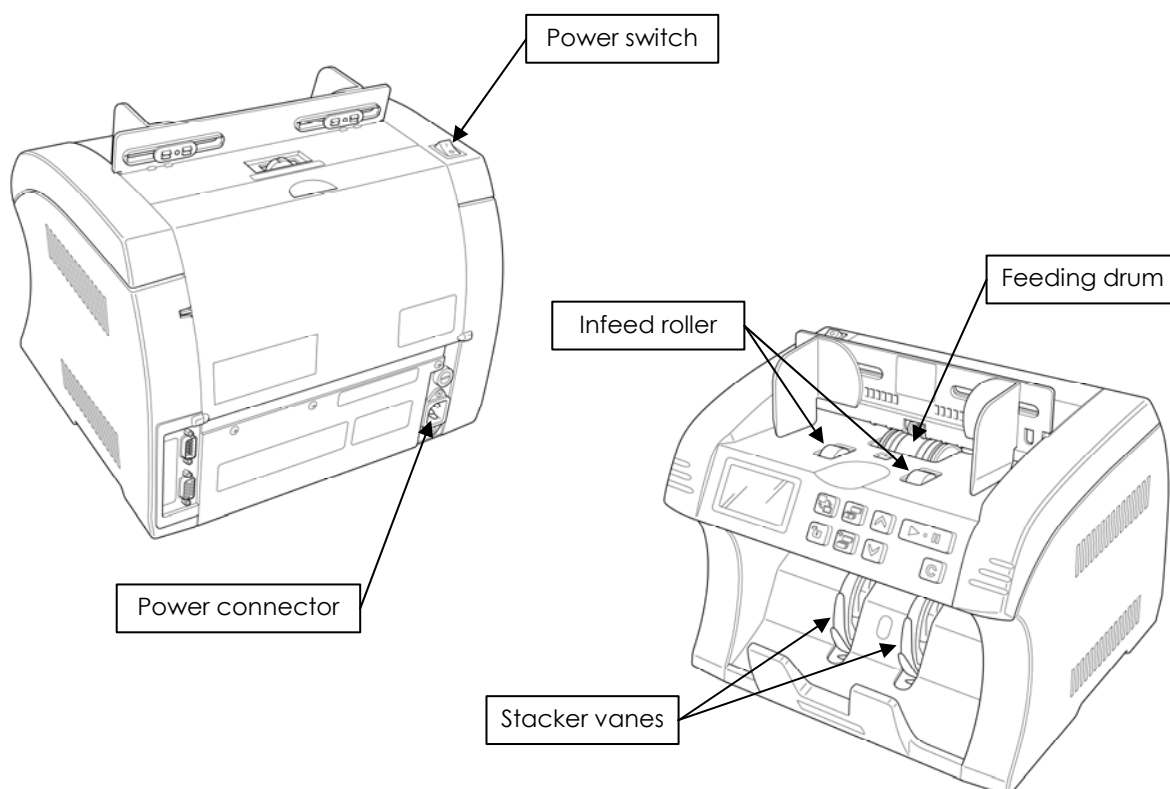
## CAUTION

- ⦿ When opening/closing the rear top cover, pay attention that the operator's hand or finger is not caught in the rear top cover or the rear guide.
- ⦿ Never unscrew any screw from the machine or disassemble the machine.
- ⦿ Before beginning the inspection, cleaning or fuse replacement, be sure to turn OFF the power switch and disconnect the power plug from the outlet.

## INSPECTION

Turn OFF the POWER switch and disconnect the power plug from the outlet.

1. Check that no stacker vane in the stacker unit is bent or broken.
2. Check that no alien matter adheres to the feed drum or any roller.





## CLEANING

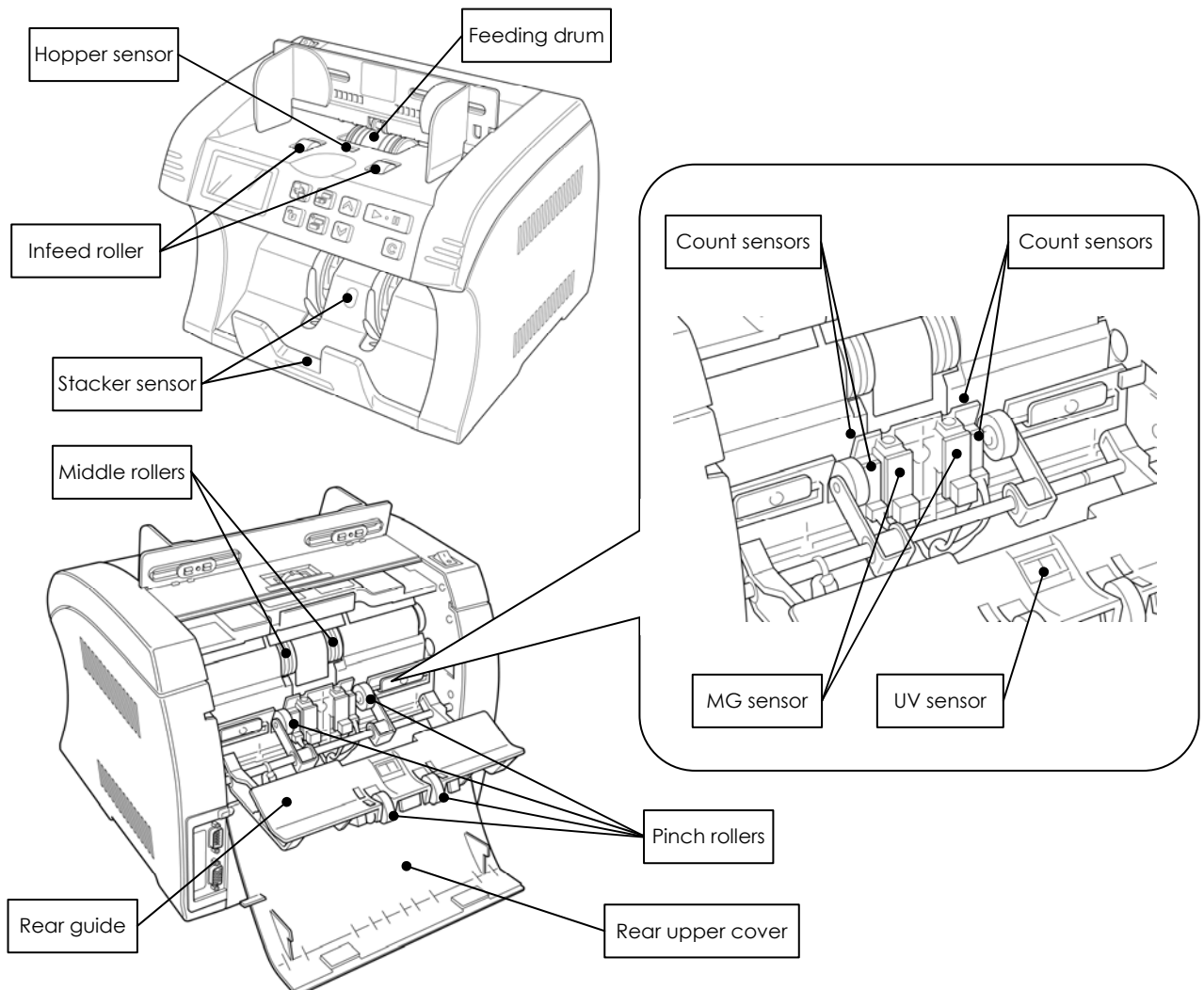
Turn OFF the **POWER** switch and disconnect the power plug from the outlet.

### a) Feed drum and rollers

1. Feed drum and feeding rollers are positioned at the top of the machine.
2. To clean the middle and pinch rollers, open the rear top cover and pull the rear guide frontward while raising it. The guide will be opened to facilitate cleaning the inside of the machine.
3. Remove paper fibers and dust from the feed drum and rollers using the accessory brush.

### b) Sensor cleaning

1. The hopper sensor is positioned at the top of the machine and the stacker sensor is positioned at the front of the machine.
2. To clean the UV, MG sensors and count sensors, open the rear top cover and pull the rear guide frontward while raising it. The guide will be opened to facilitate cleaning the inside of the machine.  
(The count sensors are positioned at opposite sides.)
3. Clean and remove dust and note fiber carefully from all sensors' surfaces using the attached brush or dry soft cloth daily.



## SPECIFICATIONS

No.	ITEM	SPECIFICATIONS
1	Counting targets	Paper notes with the following dimensions and weight • Dimensions : Height 55mm – 97mm, Width 110mm – 192mm For Aus specifications, width size is to be no longer than 162 mm • Thickness : 0.06mm – 0.12mm
2	Counting speed	• Low : 1000 notes/min Middle : 1200 notes/min High : 1500 notes/min (Standard note : A 1000 Yen note (height 76mm))
3	Batch number setting	Selection from 5 settings (100, 50, 25, 20, 10) Or optional between 1 and 999
4	Detection	DOUBLE, HALF, SKEW, CHAIN, JAM, DIMENSIONS, SUSPICIOUS NOTE
5	Display	Batch setting indication : 3 digits Counted number of notes (total number of counted notes) display : 5(7) digits
6	Counting mode	Normal (Add and Batch function available in each mode)
7	Hopper capacity	300 notes (Circulating notes)
8	Stacker capacity	210 notes (Circulating notes)
9	External dimensions (mm)	Width : 280mm, Depth : 260mm, Height : 220mm Height including hopper guide : 265mm
10	Weight	7.2kg
11	Power supply /Current consumption	AC100 – 240V 50/60Hz 1.0A

## ACCESSORIES

No.	NAME	Q'TY	REMARKS
1	Cleaning brush	1	
2	Fuse	1	Replace with the specified fuse.
3	Power cord	1	Use the specified power cord.
4	Instruction manual	1	



# **BILLCON CORPORATION**

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