

BILL COUNTER WITH COUNTERFEIT DETECTION



RBC-100N

Thank you for purchasing the Royal Sovereign High Speed Bill Counter, RBC-100N. This manual will provide you with safety information, instructions for optimal use, and proper care and maintenance for your product. Please read this manual carefully before operating.

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SAFETY INSTRUCTIONS

When using this machine follow these safety precautions to reduce risk of fire, electric shock, or injury.

WARNING

1. Only use the power cord that comes with the machine. Plug the power cord into a properly grounded wall outlet.
2. Do not use the machine if the power cord is damaged.
3. Do not place the machine in an area where it may be exposed to water or other liquids.
4. Do not take apart the machine. When service or repairs are needed, bring to a qualified service repair technician or contact Royal Sovereign Customer Service.
5. When unplugging the power cord from the outlet, grip the plug to pull it out.
6. Do not place objects on the power cord and do not bend it excessively.
7. Before dusting the machine with a brush, unplug the machine from the wall. Do not use liquid or aerosol cleaners on the machine. Use a soft brush to avoid any paper particles or dust from sticking to the light transmitter or the light receiving sensors.
8. Do not use the machine in areas of high temperature, high humidity, or strong sunlight. This may result in the machine not working properly.
9. When not using the machine for long periods of time, unplug the power cord from the outlet.
10. The effective power must be in scope of 110~220V. The fuse rating is 2A/250V, it can not be increased or reduced.

Read & Fully Understand This Owner's Manual Before Using This Machine.

BOX CONTENTS



Bill Counter

PRODUCT VIEW

Hopper



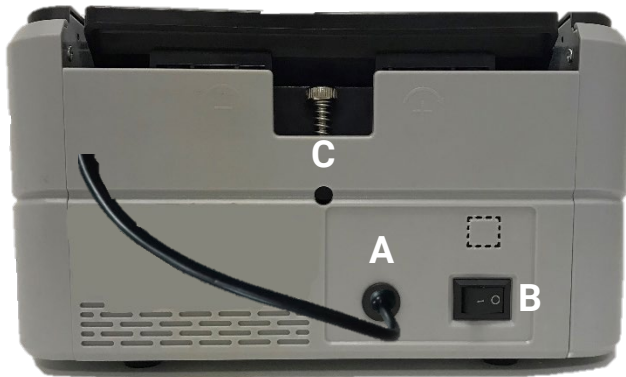
Control Panel

Bill Receiving
Vanes



QUICK START GUIDE

1. Plug the power cord, from the back of the unit, into the wall power outlet (A).
2. On the back of the machine, flip the power switch to power on (B).
3. The machine will go through an automatic self-diagnostics test to ensure accurate bill counting. The counting wheels in the bill counter will spin several times to ensure it is ready for use. When the machine has completed its test run and “0” displays on the machine, it is now ready for counting.
4. Place your currency into the hopper to automatically begin counting.



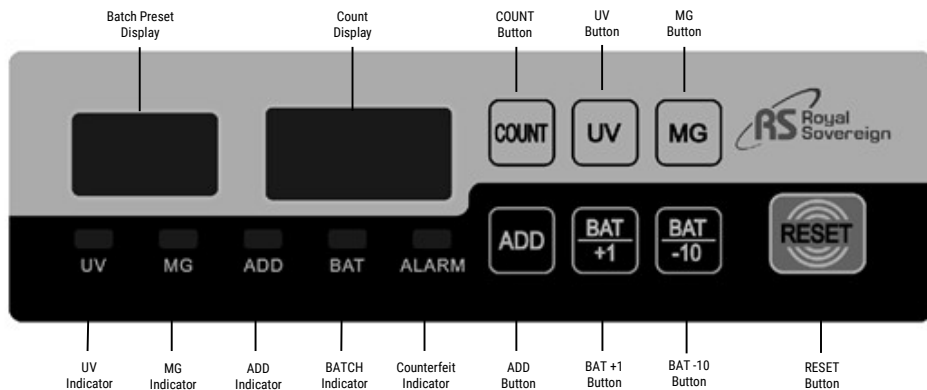
A: Power Cord

B: Power Switch

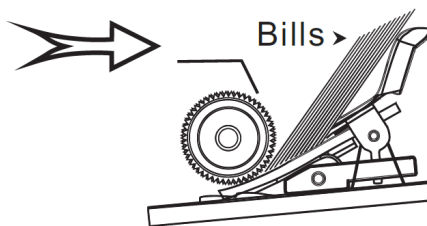
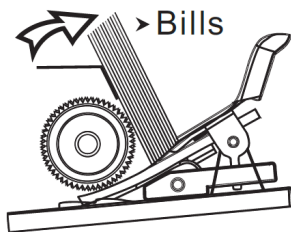
C: Thickness Adjuster

For More Detailed Instructions, Go To Page 6

CONTROL PANEL



HOW TO LOAD BILLS



PRODUCT OPERATION

1. Plug the power cable from the back of the machine into a wall power outlet, and turn the power switch on.
 - The unit will conduct an automatic self-diagnostics to ensure accurate counts.
 - After five seconds of the counting wheels spinning, the screen will display “0”.
 - If there is a problem, the preset display will show an error code. (See ERROR CODES – LOCATED ON PAGE 11.)
2. Before counting, select counting settings that are related to your counting needs:
 - **Add Mode:** The ADD mode displays the cumulative total of all bills counted. To turn the ADD mode on, press the “ADD” button.
 - **Batch Mode:** The machine is preset to common counting mode, which automatically counts all bills placed into the hopper. To count bills in batches, press the “BAT/+1” or the “BAT/-10” button. Both buttons will set the batch quantity to 100. Use the “BAT/+1” button to increase the quantity by 1. Use the “BAT/-10” button to decrease the quantity by 10. Press the “RESET” button to clear the batch mode.
 - **Count Mode:** By pressing the “COUNT” button this will put the bill counter in basic count mode. This will turn off all counterfeit detection methods.

PRODUCT OPERATION (CONTINUED)

- **Counterfeit Detection:** UV and MG detection methods are automatically on when the unit is powered up. To manually turn off any of these methods, press the corresponding buttons, “UV” and “MG”.
 - UV Counterfeit Detection: Counterfeit bills often used white or bleached paper, which will glow under ultraviolet light. When the UV detector finds a suspicious bill, the machine will stop counting to allow removal and will display the error code on the display. To resume counting, simply press “RESET”.
 - MG Counterfeit Detection: If the magnetic detector does not find the presence of magnetic ink that are standard in authentic bills, the machine will stop counting to allow removal and will display the error code on the display. To resume counting, simply press “RESET”.
3. Place bills into the hopper to begin counting.

MAINTENANCE OF THE MACHINE

WARNING: Before dusting or cleaning, turn the power switch off and disconnect the power cord from the machine. It is very important to clean all the sensors in the machine with a soft brush to avoid any paper particles or dust from sticking to the light transmitter or the light-receiver sensors. It is important to clean the inside of the machine occasionally. Unplug the machine and lift the top cover to gain access to the interior.

If necessary, the glass surfaces of the detectors may be wiped with a soft cloth dampened with alcohol.

To get the best results out of your bill counter, Royal Sovereign recommends using **Royal Sovereign Cleaning Cards (RBC-CLN)** to remove dirt, dust, oils, and other contaminants from bill counters. With the machine on, simply run the cleaning card through the machine like a bill. This cleaning card will run through and clean the sensors of dirt and other contaminants. Cleaning cards are recommended to be used after every 100 cycles.

TROUBLESHOOTING

Error Code	Reason	Solutions
Bills get damaged / Machine runs slow	Hopper Tension is too tight	To loosen the tension, please turn the bill thickness adjuster (located on the back of the machine) one notch to the right (+). Repeat bill counting and adjust if the problem continues.
Bills eject from the machine / Display shows miscount	Hopper Tension is too loose	To tighten the tension, please turn the bill thickness adjuster (located on the back of the machine) one notch to the left (-). Repeat bill counting and adjust if the problem continues.

ERROR CODE DISPLAY AND SOLUTIONS

The display may show some error codes when counting, which means there are some problems with the machine. Refer to the chart below to solve the errors.

Error Code	Reason	Solutions
E01	The left counting sensor is broken or dirty	Clean the sensor or contact Royal Sovereign to replace sensor.
E02	The right counting sensor is broken or dirty	Clean the sensor or contact Royal Sovereign to replace sensor.
E04	The hopper sensor is broken or dirty	Clean the sensor or contact Royal Sovereign to replace sensor.
E0A	Ambient light is too high.	Lower the ambient light or change the UV sensor.
	UV sensitivity light is too high.	Lower the UV sensitivity.

ERROR CODE DISPLAY AND SOLUTIONS (CONTINUED)

Error Code	Reason	Solutions
BF	Wheels running without feeding bills	Press reset and feed bills again.
EE1	Suspect note is flagged due to UV error	Remove first bill from the stacker, then continue counting.
EE2	Suspect note is flagged due to MG error (no magnet)	Remove first bill from the stacker, then continue counting.
EE4	Suspect note is flagged due to half size error (partly ripped or folded)	Remove first bill from the stacker, then continue counting.
EEF	The left (right) counting sensor is dirty or broken	Clean the sensor or contact Royal Sovereign to replace sensor.
EE5	Two bills are counted as one/inaccurate counting	Tighten the tension adjustment screw clockwise.
EE6	Suspect note is flagged due to MG error (to much magnetic presence on the bill)	Remove first bill from the stacker, then continue counting.
EE7	Bill is slanted/not inserted properly	Remove first bill from the stacker, then continue counting.
EE9	Suspect note is flagged due to bill width being larger than 75 mm	Remove first bill from the stacker, then continue counting.
EEA	Suspect note is flagged due to chain note error	Remove first bill from the stacker, then continue counting.

If you are receiving error codes above, check the machine for dust. If you continue to receive error codes, please contact Royal Sovereign's Service Center at 1-800-397-1025.

SPECIFICATIONS

Model	RBC-100N
Power	100 – 240V, 50/60Hz 1.5A
Power Consumption	< 60W
Temperature Range of Operation	32~104 °F / 0~40 °C
Hopper Capacity	150 notes
Counting Speed	1,500 bills per minute
Accepted Note Size	4.3" x 2.0" ~ 7.0" x 3.3" / 110 x 50 ~ 180 x 85 (mm)
Accepted Currency	USD
Display Range	Counting: 3 Digits / Batch Counting: 3 Digits
Dimensions	9.45" W x 8.86" D x 5.12" H (240 x 225 x 130 mm)
Net Weight	6.60 lbs. / 3.00kg

ONE YEAR LIMITED WARRANTY

Royal Sovereign International, Inc. warrants this product to be free from defects in material and workmanship for a period of one (1) year. This warranty is extended to the original purchaser only.

This warranty only covers products that are properly installed, properly maintained, and properly operated in accordance with the instructions provided. This limited warranty does not cover any failures or operating difficulties due to normal wear and tear, accident, abuse, misuse, alteration, misapplication, improper installation, or improper maintenance and service by you or any third party.

Returned product will not be accepted without a Return Authorization number. To request a Return Authorization number, please visit us at www.royalsovereign.com. All transportation costs for the return of damaged product or parts will be the responsibility of the purchaser. Return defective product, in original packaging, to the address below.

Royal Sovereign International, Inc. requires reasonable proof of your date of purchase from an authorized retailer or distributor. Therefore, you should keep your receipt, invoice, or canceled check from the original purchase. The limited warranty shall be limited to the repair or replacement of parts which prove defective under normal use and service within the warranty period.

Royal Sovereign International, Inc. (and its affiliated companies) SHALL HAVE NO LIABILITY WHATSOEVER TO PURCHASER OR ANY THIRD PARTY FOR ANY SPECIAL, INDIRECT, PUNITIVE, INCIDENTAL, OR CONSEQUENTIAL DAMAGES. Some states do not allow the exclusion or limitation of incidental or consequential damages so the above exclusion and limitations may not apply to you.

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