

# Owner's Manual



## BILL COUNTER WITH COUNTERFEIT DETECTION



RBC-ES200

Thank you for purchasing the Royal Sovereign Bill Counter with Counterfeit Detection - RBC-ES200. 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 110V.

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

## BOX CONTENTS



Bill Counter



Power Cord

## PRODUCT VIEW

Hopper

Carrying Handle

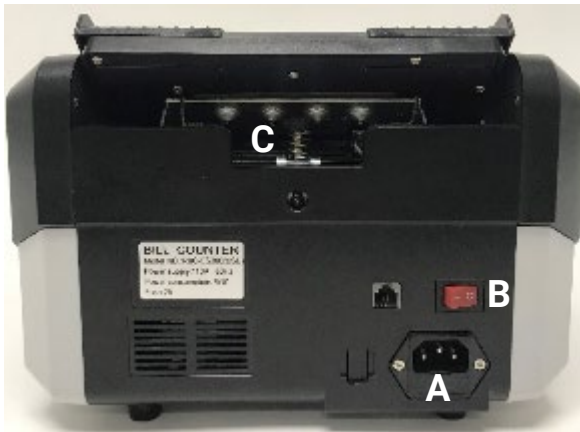
Control Panel

Bill Receiving Vanes



## QUICK START GUIDE

1. Plug the power cable into the back of the unit and 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.



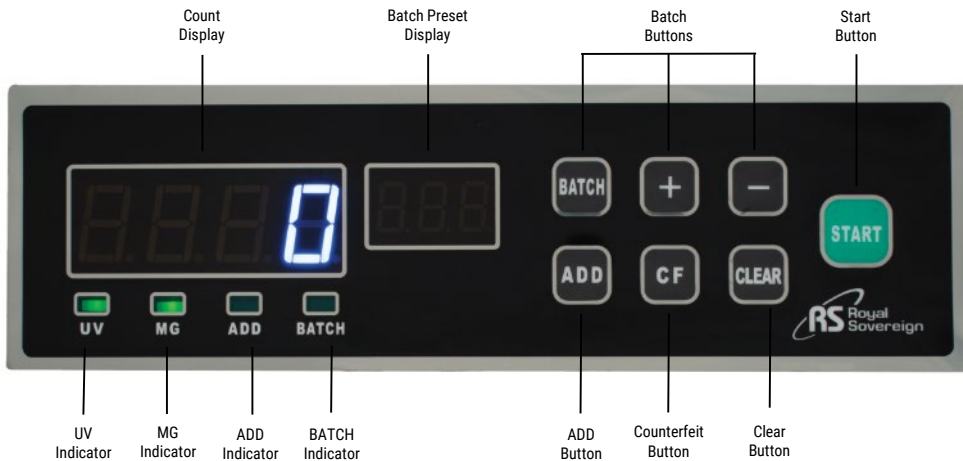
**A:** Power Socket

**B:** Power Switch

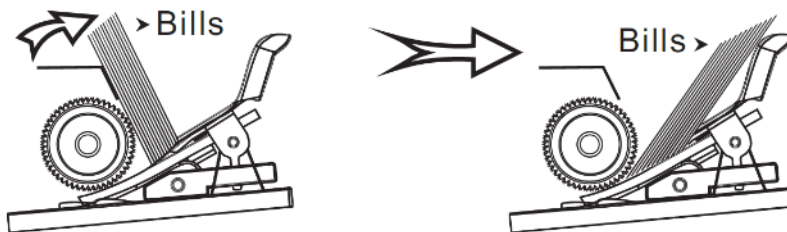
**C:** Thickness Adjuster

For More Detailed Instructions, Go To Page 6

# CONTROL PANEL



# HOW TO LOAD BILLS



## PRODUCT OPERATION

1. Attach the power cable to the back of the machine, plug into a three-prong outlet, and turn the 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 CODE DISPLAY AND SOLUTIONS – LOCATED ON PAGE 8.)
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.
  - **Auto and Manual Start Mode:** This unit is preset to automatically start counting bills once placed into the hopper. To change to the manual start mode, press and hold the "START" button. The OFF LED light will flash on the control panel. To return to automatic setting, press and hold the "START" button. The ON LED will flash on the control panel.
  - **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 "BATCH" button. The batch count amount will automatically start at 100.
    - Press the "BATCH" button again to set the amount to 50.
    - Press the "BATCH" button again to set the amount to 20.
    - Press the "BATCH" button again to set the amount to 10.
    - Press the "BATCH" button again to set the amount to 1.
    - Press the "BATCH" button again to turn the batch mode off.
    - Use the "+" and "-" buttons to increase and decrease the quantity by 1. Press the "START" button to clear the count number in Batch mode.

## PRODUCT OPERATION (CONTINUED)

- **Counterfeit Detection:** UV and MG detection methods are automatically on when the unit is powered up. To turn off any of these methods, press the “CF” button until the indicator lights turn off.
  - 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 “START”.
  - 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 “START”.
- 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) anti-clockwise. 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) clockwise. 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
A	Suspect note is flagged due to UV error	Remove first bill from the stacker, then continue counting.
B	Suspect note is flagged due to MG error (no magnet)	Remove first bill from the stacker, then continue counting.
C	Suspect note is flagged due to chain note error	Remove first bill from the stacker, then continue counting.
D	Suspect note is flagged due to bill width error	Remove first bill from the stacker, then continue counting.

## ERROR CODE DISPLAY AND SOLUTIONS (CONTINUED)

Error Code	Reason	Solutions
F	Suspect note is flagged due to half size error (partly ripped or folded)	Remove first bill from the stacker, then continue counting.
E01/E02	The left (right) counting sensor is dirty or broken	Clean the sensor or contact Royal Sovereign to replace sensor if error code persists.
E03	Code disc sensor is dirty or broken	Clean the sensor or contact Royal Sovereign to replace sensor if error code persists.
E04	Hopper sensor is dirty or broken	Clean the sensor or contact Royal Sovereign to replace sensor if error code persists.
E05	Stacker sensor is dirty or broken	Clean the sensor or contact Royal Sovereign to replace sensor if error code persists.
H	Hole in bill. Sometimes found in very old or dirty bills.	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-ES200
Power	AC 120V / 60Hz
Power Consumption	< 80W
Temperature Range of Operation	32~104 °F / 0~40 °C
Hopper Capacity	200 notes
Counting Speed	1,400 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: 4 Digits / Batch Counting: 3 Digits
Dimensions	12.44" W x 10.16" D x 7.95" H (316 x 258 x 202 mm)
Net Weight	11.00 lbs. / 5.00 kgs

## 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](http://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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