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Bank-Grade Bill Counter

User Manual

CR1800



Preface

Thank you for choosing the CR1800 Bank-Grade Bill counter. This machine represents the latest development in Carnation technology. In order to make the best use of this bill counter and its counting capabilities, please read the manual carefully, and familiarize yourself with the operating procedures.

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Safety

To avoid damage to the machine and/or personal injury, read the following carefully before the first use.

1. Place the unit on a solid flat surface. Don't place the unit on a shaky or vibrating surface.
2. Before moving the unit, please disconnect the power cord. Damage to power cord may result in fire and/or electric shock.
3. Keep the unit away from volatile gases or flammable materials. Keep the unit away from high humidity and strong sunlight, as it may cause machine's failure.
4. In case of water spill, stop operating the unit immediately. Switch it off, and disconnect the power cord, then contact the service center for help.
5. Plug the power cord into a grounded outlet only. If the unit is not in use for a long period of time, please keep it switched off and unplugged to avoid possible damage.
6. Please be careful to avoid any foreign objects, such as coins or staples, falling into the unit, as it may cause damage to the machine.
7. It is strictly prohibited for anyone except authorized technician to open/service the machine. This will render any remaining warranty void and may cause malfunction or injury.

Unpacking

1. Bill counter	1pc
2. User manual	1pc
3. Power cable	1pc
4. External display (Optional)	1pc
5. Cleaning brush	1pc
6. Resistance piece	1set

Specifications

Counting Speed: 1000 Notes/Minute

Feeder Capacity: 200 Notes Holder Capacity: 200 Notes

Power Supply: 110V/60Hz

Power Consumption: Working \leq 90W Sleeping < 3W

Operating Temperature: 32°F-104°F(0°C-40°C)

Humidity: 60%~90%

Noise: <60dB

Weight: 15.9lb(7.2kg)

Dimensions: 10x12.2x7 in(256x310x177mm)

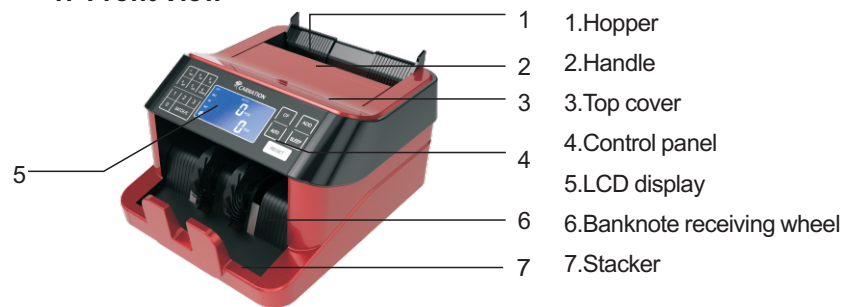
Banknote Size: Min: 1.96x4.33 in(50x110mm)

Max: 3.34x7.08 in(85x180mm)

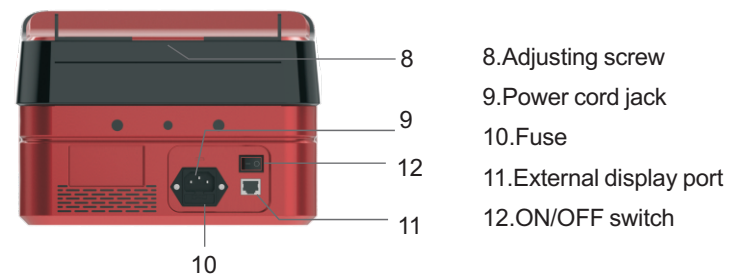
Banknote Thickness: 0.0029~0.0059 in(0.075~0.15mm)

Exterior

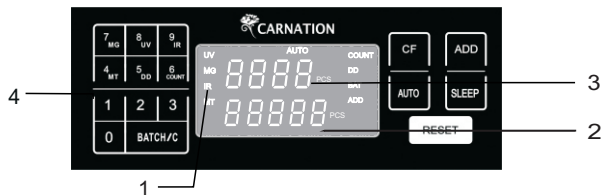
1. Front View



2. Rear View



3. LCD display and Panel



1: Detection Function Indicator: Detecting functions ON/OFF

2: Batch/Add display: Display batch value/accumulated value

3: Main Counting display: Display counted banknotes

4: Detection Function/BATCH Panel

CF: Function selection key-Press **CF**, then press **UV, MG, IR, MT, DD** to turn these functions ON/OFF.

RESET: Start counting/Clear the number of counted banknotes

COUNT: Count banknotes without detecting functions

AUTO: Auto/Manual start selection

SLEEP: Standby mode ON/OFF

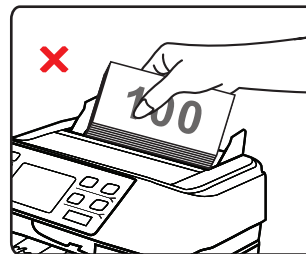
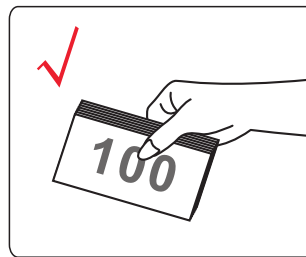
ADD: Add function ON/OFF

BAT/C: Batch function ON/OFF, or cancel batch number

0,1,2,3,4,5,6,7,8,9: Keypad for entering BATCH values

Correct way to place banknotes in feeder

For best results, fan your banknotes in a progressive stair-like manner with the front banknote in the lower position and the last banknote in the higher position. Place the banknotes in the feeder.



Counterfeit detection functions

CR1800 has five counterfeit detection functions - Ultra-Violet, Infra-Red, Magnetic, MT and Dimensions. User can select a combination of counterfeit detection functions according to counting requirements. Press CF key, then press UV, MG, IR, MT or DD key to turn these functions ON/OFF.

When the machine encounters a counterfeit banknote, it will stop and beep. The suspicious banknote is the top banknote in the banknote stacker-it is not included in the count. Counting may be resumed by pressing RESET button. COUNT function allows counting without counterfeit detection (For very worn/ dirty bills or non-currency items).

■Photo 1



■Photo 2



■Photo 3



■Photo 4



■Photo 5



■Photo 6



ADD Function

Adds consecutive batches of banknotes. Activate by pressing "ADD" button. When enabled, the latest batch count will remain on the display even if banknotes are removed from the banknote stacker.

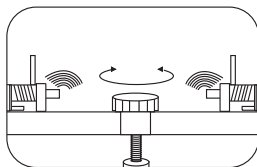
The next batch will be added to the current count. When the number of banknotes reaches 9999+1, the count is reset to 0. When ADD function is disabled, the count will reset to 0 when the new batch is run.

BATCH Function

Batch function is used to count out a set number of banknotes at a time. Activate by pressing "BATCH/C" button ("BAT" symbol on the LCD display). Use the number buttons to set the batch value in the range of 1-100.

Feeder Adjustment

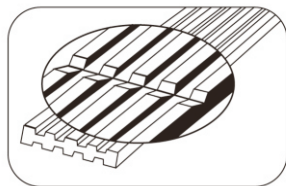
The adjusting screw of the feeder aperture on the back cover has already been set at the factory. You may need to adjust the feeder aperture if the counter jams frequently, or the bills are flying out during counting. Please consult technical support before attempting any adjustment.



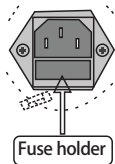
The adjusting screw is very sensitive, move only one notch at a time!

Parts Replacement

1. The resistance piece needs to be replaced when worn. Pull out the banknote feeder, press the banknote sliding board down, and replace the worn resistance piece.



2. In case the counter doesn't turn on, check the fuse. The fuse is located under the power cable socket.



Troubleshooting

The machine will automatically perform a system self-test after it is turned on. Most error codes are caused by blocked or dusty sensors. Check for banknote jams and use a brush to clean the sensors, then restart the machine.

Code	Problem	Solution
E01/02	Left/right counting sensor	Clean dust off sensor/ Replace sensor
E03	Code disc sensor	Clean dust off sensor/fasten sensor/ replace sensor
E04	Feeder sensor	Clean the obstruction/ Test MG function
E05	Receiving sensor	Clean dust off sensor/ Replace sensor
E07	The machine is operated in a strong magnetic field.	Keep it away from the strong magnetic field.
	MG sensor	Replace sensor.
E10	The machine is operated under direct sunlight.	Keep it away from direct sunlight.
	UV sensitivity	Lower UV sensitivity
E11	Button	Open top cover, and fasten the connector of button/ replace the button.
BF	Wheels are running without banknotes.	Press "RESET" and re-count.
EE1	Counterfeit or suspicious banknote. Banknote without UV feature.	Remove and press "RESET" to continue counting. If the machine stops frequently, adjust the sensitivity level.
EE2	Counterfeit or suspicious banknote. Banknote without MG feature.	Remove and press "RESET" to continue counting. If the machine stops frequently, adjust the sensitivity level.
EE3	Counterfeit or suspicious banknote. Banknote without IR feature.	Remove and press "RESET" to continue counting. If the machine stops frequently, adjust the sensitivity level.

EE4	Half-piece or torn banknote.	Remove and press "RESET" to continue counting.
	Left/right counting sensor	Clean dust off sensor/ Replace sensor
EE5	Banknotes do not feed into the machine smoothly, or banknotes are not counted accurately.	Adjust the feeder according to instructions on page 9.
EE6	Counterfeit or suspicious banknote. Banknote without or with low MG feature.	Remove and press "RESET" to continue counting. If the machine stops frequently, adjust the sensitivity level.
EE7	Banknotes are not fed correctly into the feeder.	Arrange banknotes according to instructions on page 5.
EE8	Feeding board is not in the horizontal position or banknote length not within the range (110-180mm)	Adjust the position of the feeding board.
EE9	Feeding board is not in the horizontal position or banknote width not within the range (50-85mm)	Adjust the position of the feeding board.
EEA	Some banknotes are glued together.	Remove and press "RESET" to continue counting.
EEB	Some banknotes are broken	Remove and press "RESET" to continue counting.

Maintenance

- 1.If operated at temperature below 68°F(20°C), please allow three minutes for warm-up.
- 2.The machine must be operated in a well-ventilated area. Keep it away from direct sunlight and strong magnetic fields.
- 3.Do not apply oil to machine's rubber parts, as it may cause malfunction.
- 4.Clean all sensors and magnetic head at least once a week with a soft brush .