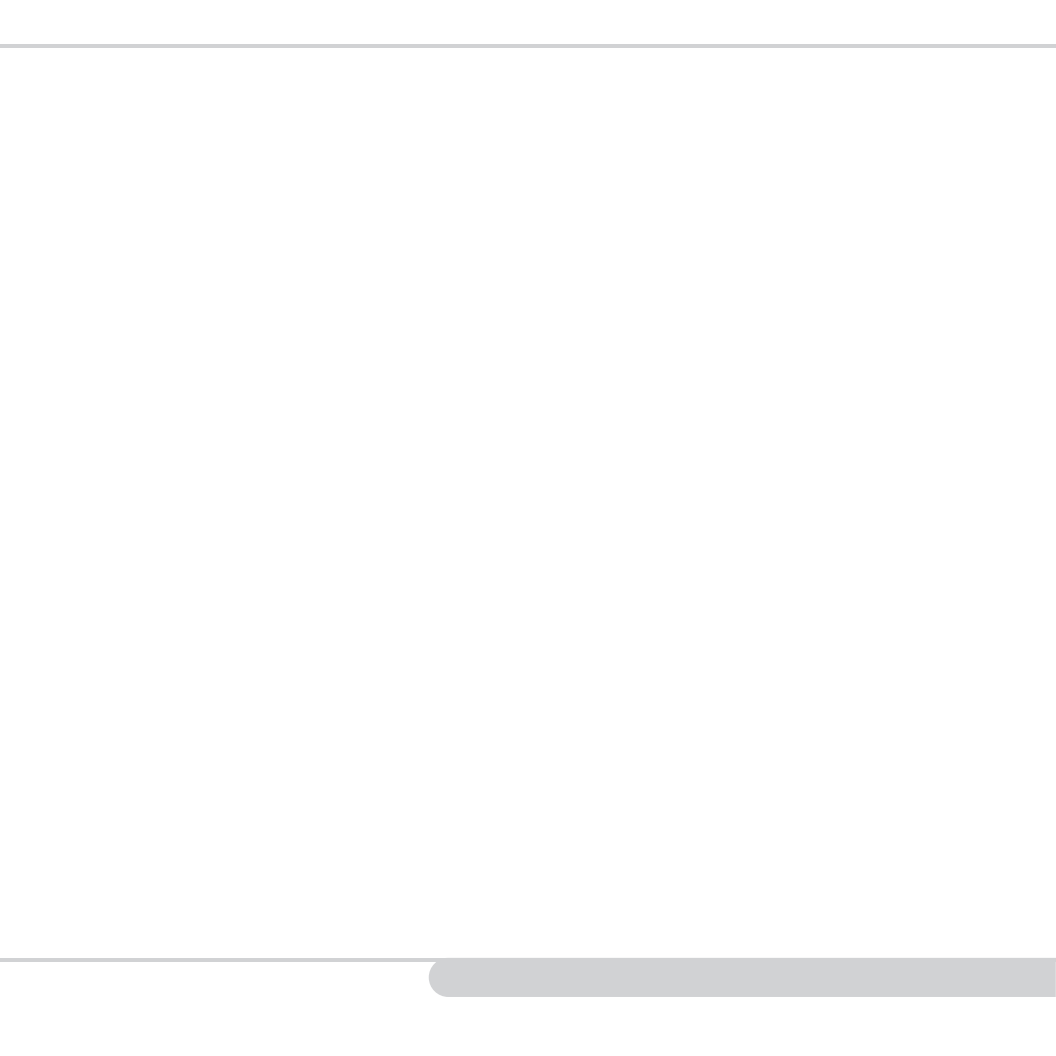


Cassida[®]
5520
moving money forward



USER MANUAL

CASSIDA 5520 DIGITAL CURRENCY COUNTER



This manual contains important information on safety measures and operational features, please read it carefully before operating your currency counter and keep it for future reference.

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1. INTRODUCTION

1.1 About the Cassida 5520

Thank you for choosing the Cassida 5520 series currency counter. We hope you enjoy using it.

Cassida's 5520 series currency counters are sophisticated yet simple to operate money processing machines. They will save you time and reduce errors in counting by swiftly and precisely counting stacks of bills at a speed of 1200 notes per minute. The Cassida 5520 series will also enable you to add up totals and batch necessary amounts into separate stacks. All these features come together with a built-in counterfeit detection system which uses ultraviolet "UV" (and magnetic "MG" 5520 UV/MG model) ink detection and alerts you immediately for any suspicious bill.

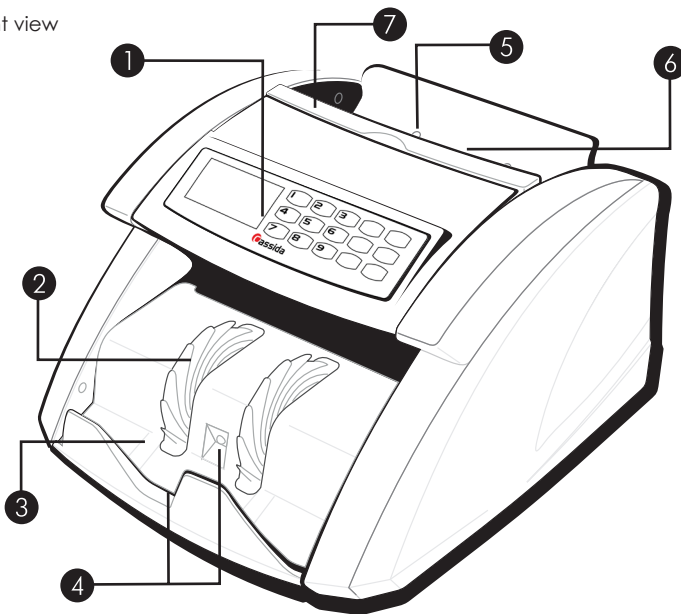
The Cassida 5520 series currency counter is an invaluable aid in banks, retail stores, groceries, car washes, gas stations, bars, nightclubs, restaurants, movie theaters and any other cash intensive environment.

1.2 Box contents

- Cassida 5520 Digital Currency Counter
- Power cord
- Spare parts kit:
 - spare fuse
 - rubber belt
- Maintenance kit (optional)
 - cleaning brush
- User manual

1.3 Front and rear views

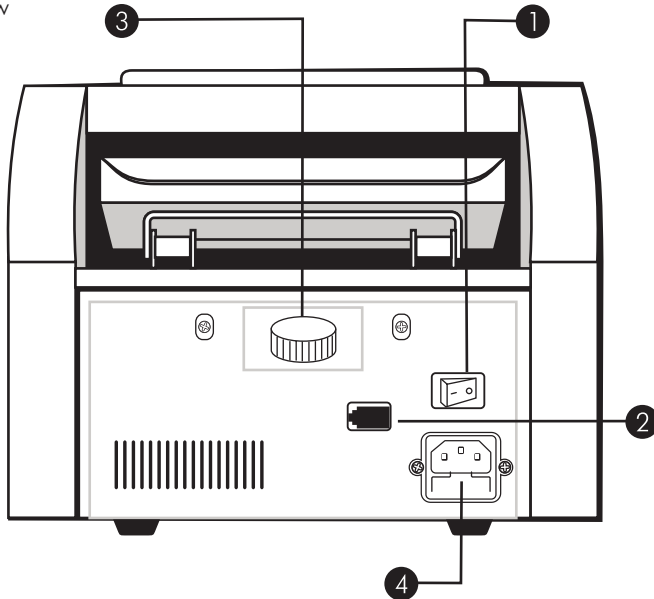
Front view



1. Control panel
2. Stacking rollers
3. Stacker
4. Stacker sensors
5. Hopper sensor
6. Hopper
7. Retractable handle

- transports counted bills into the stacker
- holds counted bills
- signals presence of bills in the stacker
- signals presence of bills in the hopper
- holds bills that need to be counted
- used to carry the counter

Rear view



- | | |
|---------------------------------|--|
| 1. Power switch | - turns the power on and off |
| 2. Serial Port (db9) | - optional remote display connection port |
| 3. Feeding gap adjustment screw | - adjusts for different bill thicknesses (narrow for brand new bills - wide for worn out bills) Note: Please do not adjust unless the machine displays recurrent DBL or Chn error messages. |
| 4. Power outlet & fuse | - to connect the power cord |

1.4 Control panel

Cassida 5520 UV



Cassida 5520 UV/MG



"ADD/BAT"

to switch between adding, batching and simple counting modes

Keypad

Used to enter custom batch quantity

"UV" or "UV/MG"

Activate counterfeit detection.

"START"

Starts operation (Hold to switch to manual mode)

"VAL"

Activates the ValuCount mode

1.5 Specifications

Power supply:	110 VAC 60Hz
Power consumption:	<70 Watts
Counting speed:	Approx 1200 bills/minute
Applicable bill thickness:	0.075-0.15 mm
Hopper capacity:	300 new bills or 150 old bills
Stacker capacity:	300 new bills or 150 old bills
Batch Range:	1-100 banknotes
Feeding System:	Roller Friction System
Counting Display:	LCD
Counterfeit detection:	UV (UV and MG for 5520 UV/MG)
Ambient Temperature:	0°C-40°C (32°F-104°F)
Operating humidity:	40%-90%
Size:	292 X 246 X 178 mm (11.5" X 9.7" X 7.1")
Weight:	4.9 kg (11 Lbs)
Fuse:	2A slow, 250V

1.6 Important safety notes

When using this product, basic safety precautions should always be followed, including the following:

Do not use this product in areas where it may be exposed to water or any other liquids.

Unplug this product from the wall outlet before cleaning. Use a damp cloth or specifically designed maintenance accessories such as the Cassida Air Duster or Cassida CleanBill Pro Cleaning Cards.

To avoid the risk of electrical shock, do not disassemble this unit. Disassembling will expose you to dangerous voltages and other safety risks. Incorrect reassembly can cause electrical shock when the appliance is subsequently used.

Take the unit to a qualified technician when service or repair is required. Do not try to replace the parts yourself. Supplied spare parts are intended for use by qualified personnel only.

- Only use the power cord supplied with the unit. Plug the power cord into a properly grounded wall outlet. Do not remove the ground pin from the power cord. Failure to properly ground the unit can result in severe injury or fire.
- Make sure the device is installed on a flat surface. Do not operate the unit in areas with high temperature, humidity or smoke as these conditions may prevent it proper operation.
- This product is designed for indoor use in a ventilated environment. Keep the unit away from direct sunlight and strong magnetic fields which may interfere with the counterfeit detection sensor.
- When not using the unit for an extended period of time, disconnect the power cord from the wall outlet.

2. GETTING STARTED

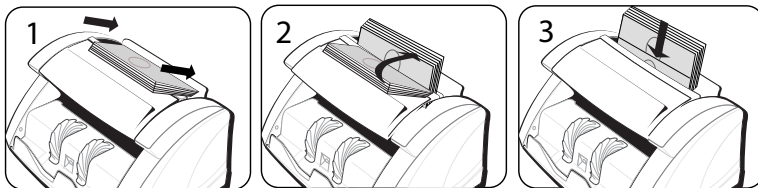
2.1 Powering up

Please make sure the hopper is empty and turn the power switch on. The unit will conduct a self-check by spinning the counting wheels several times. The screen will display "0" when the unit is ready.

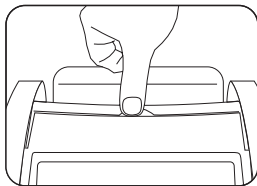
2.2 Loading the hopper

Loading the hopper correctly is important in order to avoid jams and speed up the operation of the counter.

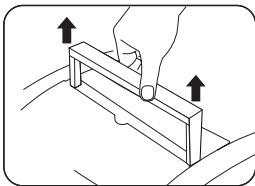
Proper hopper loading is shown in the following diagrams:



2.3 Carrying the unit



1. Grasp handle



2. Pull handle up

3. OPERATING MODES

3.1 Count mode

After the machine is turned on, it defaults to counting mode.

To switch to counting mode from another mode press the ADD and BAT buttons until both “add” and “batch” indicators are off.

To count bills, place them in the hopper (follow the procedure described in 2.2 Loading the hopper).

The machine will start counting automatically and will move the bills from the hopper to the stacker as it counts them. The machine will stop counting when the hopper is completely emptied and will emit a confirmation beep. The counted number of the bills will be displayed. Remove the counted number from the stacker and place more bills into the hopper. The screen will clear itself of the previous count before the machine starts counting the new stack. To count additional bills, add more bills to the hopper. Be sure not to accumulate more than the stacker can hold as this will cause jamming and may lead to a motor failure.

3.2 Batch mode

To switch to batching mode press the BAT button until the BATCH indicator is on. If you would like to change the batch amount, use the numeric keypad to enter the desired amount.

The unit will start counting automatically once bills are placed in the hopper. As soon as the unit counts the desired batch number it will stop and emit a confirmation beep. The screen will show the number of bills in the counted batch. When the stacker is emptied, the unit will automatically begin counting to the preset batch number again.

If the number of counted bills in the stacker does not reach the preset batch number, the screen will alert you by blinking the actual number counted.

If you want to complete the batch, just place more bills in the hopper and the unit will automatically count the required number of bills to finish the batch.

3.3 Add Mode

In this mode the unit enables you to count multiple stacks of bills while keeping track of total amount of bills counted. To switch to adding mode, press the ADD button until the ADD indicator is on.

Place the bills in the hopper. The unit will start counting automatically. The unit will emit a confirmation beep once the count is completed. The number of bills counted will be displayed on the LCD screen.

Empty the stacker and refill the hopper. The unit will continue counting and adding the new count to the total.

To keep adding without emptying the stacker refill the hopper and the unit will keep counting and adding the new stack of bills to the partially full stacker. Be sure not to accumulate more bills than the stacker can hold (300 new bills or 150 old bills), as this will cause jamming and may lead to a motor failure.

3.4 Add + Batch mode

This mode batches the desired quantity of bills and monitors the running total at the same time. To activate this mode, press the ADD and BAT buttons until the ADD and BATCH indicator are both on. Use the keypad to enter the desired batch amount. The unit will add beginning with the next count. The total number of bills counted will appear on the LCD screen. If the batch is incomplete, the LCD screen blinks to notify the user.

3.5 ValuCount mode

This mode allows you to display the total value of bills counted. The 5520 uses a user-defined bill denomination as a multiplier and displays the total value of bills counted. For example, a denomination of \$20 x 25 bills counted = \$500 displayed.

To activate this mode press the VAL button. You may press the VAL button multiple times to select the desired denomination value.

After selecting the desired denomination, load the bills to be counted into the hopper. Ensure that the denomination of the bills matches the selected denomination. The 5520 counts the stack and displays the total value and shows the number of bills counted on the screen. To exit this mode hold the VAL button down.

3.6 ValuCount and add mode

This mode counts different denominations of bills and tracks the total value of bills counted.

To activate this mode, press the ADD button. The ADD indicator will illuminate. Press the VAL button until the desired denomination is displayed on screen. The denomination may be changed at any time by pressing the VAL button. The machine will now start calculating the value using the new denomination.

4. DETECTION FEATURES

4.1 UV Counterfeit detection

The Cassida 5520 is able to check for counterfeit bills using ultraviolet (UV) light. This function is available in all modes. Press the UV or UV/MG button until the UV indicator appears on the LCD screen.

The unit will beep two times when a suspect bill is detected and a UV message will flash on the screen. The unit will continue to alert the user until action is taken. To continue counting, remove the suspect bill (which will be the last one in the stacker) and press the START button. The unit will start counting again and will not add the counterfeit bill to the count.

Please note that 5520, like all other counters with integrated detectors present on the market, can not guarantee a counted bill to be genuine or counterfeit. There are several reasons a genuine bill may be recognized as counterfeit or vice versa. Possible reasons include: direct sunlight exposure, worn out bill, excessively dirty bill or highly advanced counterfeiting techniques used to produce the bill. Separate equipment may be required to determine definitively whether or not a note is counterfeit.

4.2 MG Counterfeit detection (Cassida UV/MG model only)

The Cassida 5520 UV/MG is able to check for counterfeit bills using magnetic (MG) ink marks present in all US dollar denominations. This function is available in all modes. Press the UV/MG button to toggle between UV/MG, OFF and UV and MG mode. The MG indicator will be on the LCD screen while the MG detector is enabled.

The unit will start beeping and stop counting when a counterfeit note is detected and a MG message will be displayed. The unit will continue to alert the user until action is taken. To continue counting, remove the suspect bill (which will be the last one in the stacker) and press the START button. The unit will start counting again and will not add the counterfeit bill to the count.

Please note that Cassida 5520 UV/MG counter, like all other counters with integrated detectors present on the market, can not guarantee a counted bill to be genuine or counterfeit. There are several reasons a genuine bill may be recognized as counterfeit or vice versa. Possible reasons include: direct sunlight exposure, worn out bill, excessively dirty bill or highly advanced counterfeiting techniques used to produce the bill. Separate equipment may be required to determine definitively whether or not a note is counterfeit.

4.3 Double note detection

Bills may stick to each other due to excessive dirt, folding or various other reasons. The Cassida 5520 uses infrared light (IR) based technology to determine when two bills are stuck together. This feature is activated automatically in all modes. The unit will start beeping and stop counting when a double bill is detected and a "DBL" message will be displayed. The unit will continue to alert the user until action is taken. To clear the error, all bills must be removed from the stacker. The screen will automatically reset. All bills in the stacker must then be placed back in the hopper and recounted.

Double note detection in adding mode:

When in adding mode the unit enables you to continue counting by automatically correcting the total number of counted bills on screen. Move all bills from the stacker to the hopper for recounting.

4.4 Half note detection

The Cassida 5520 incorporates infrared (IR) light sensors that notify users if a half note passes through the counting mechanism. This feature is activated automatically in all modes for your convenience.

The machine will beep and stop counting when a half note is detected and a "HLF" message will be displayed on the screen. Move all bills from the stacker to the hopper for recounting.

Half note detection in add mode: When in add mode, the 5520 enables you to continue counting by automatically correcting the total number of counted bills on screen. Move all bills from the stacker to the hopper for recounting.

4.5 Chain note detection

The Cassida 5520 utilizes a self-checking system that alerts you in rare cases when several notes pass through the counting mechanism at once. This feature is activated in all modes.

The unit will stop automatically when a chain note is detected, and start beeping. A "Chn" message will be displayed. To clear the error, remove all notes from the stacker and move them back to the hopper for recounting.

When in adding mode the unit enables you to continue counting by automatically correcting the total number of counted bills on screen. Move all bills from the stacker to the hopper for recounting.

5. MAINTENANCE AND TROUBLESHOOTING

5.1 Maintenance

ATTENTION: You should always turn the unit off and disconnect the power cord before cleaning.

Most operational problems can be avoided with regular care and preventative maintenance. Taking regular care of your currency counter will significantly increase its lifetime and help you avoid costly repairs.

To avoid problems:

- Make sure there are no metal clips or rubber bands in bills to be counted.
- Be sure to follow the proper procedure for loading the hopper, refer to part 2.2 Loading the hopper

To get the best results out of your counter the following maintenance is recommended on a daily basis:

Use a Cassida air duster and a soft bristle brush to remove any dust or debris from the interior of the unit.

When not using your counter for an extended period of time, cover it with a drop cloth or plastic sheeting to prevent dust from settling inside.

5.2 Troubleshooting

Error message display:

Error code	Cause	Solution
UU	Suspect bill detected	Remove the last bill from the stacker and press the START button to continue counting. The suspect bill will not be added to the count. Refer to section 4.1 for more details.
mg	Suspect bill detected	Remove the last bill from the stacker and press the START button to continue counting. The suspect bill will not be added to the count. Refer to section 4.2 for more details.
dbl	The last counted bill is a double note	Remove the double note from the stacker and recount all other notes in the stacker. Refer to section 4.3 for more details.
HLF	A half bill was detected	Remove the half bill from the stacker and recount all other notes in the stacker. Refer to section 4.4 for more details.
Chn	Two or more notes have passed through the unit at the same time	Remove all bills from the stacker and recount them. Refer to section 4.5 for more details.
CE 1- CEB	Sensors may have collected dust.	Clean the sensors with a soft bristle brush and compressed air. Refer to section 5.1.

Other possible errors:

Problem description	Cause/Action
Does not function after unit turned on.	Ensure the power cord is connected properly.
Machine fails to detect counterfeit notes.	The UV sensor may have collected dust. Refer to the Maintenance section 5.1.
The count result is less than the real number of bills.	<ol style="list-style-type: none"> 1. Bills were incorrectly inserted into the hopper. 2. The feeding gap is too wide. This may happen when brand new notes are counted, because their thickness differs greatly from used notes to which machines's gap is adjusted by default. Narrow the gap a little bit by turning the feeding gap adjustment screw (refer to part 1.3, rear and front view) clockwise and try counting again. Repeat the procedure until suitable gap width is reached.
Bills jammed	Turn off the machine. Remove any jammed bills by turning rollers or wheels manually if necessary. Look for any foreign objects inside the unit (paper clips, rubber bands, etc.) Remove foreign objects, if any. Turn the unit on and restart counting.

5.2 Warranty

All Cassida products are backed by a one-year warranty on parts and labor. Registration is required. To activate your warranty in the US or Canada, please register online by visiting www.cassidausa.com/register. In other countries, go to www.cassidaglobal.com/register.

In most cases, the malfunction of the machine can be resolved by cleaning the unit. Please refer to section 5.1 Maintenance.

Shipping: The warranty does not cover the cost of shipping to the Cassida Technical Service Center.

5.3 Contact Information

If you need to contact the Cassida Technical Service Center, please have the following information available:

- **Product model** – Located on the rear panel of the unit.
 - **Serial number** – Located on the rear panel of the unit.
 - **Nature of the problem** – What happens, and when did it happen? Did the machine display an error message?
 - **Steps taken** to resolve the problem, and the results
-