

# Table of contents: 1 Introduction 1.1 About the Cassida Concepta \_\_\_\_\_\_\_6 1.2 Box contents \_\_\_\_\_\_\_6 1.3 Front and rear views 7 1.4 Control panel \_\_\_\_\_\_\_ 8 1.5 Main display \_\_\_\_\_\_9 1.6 Specifications \_\_\_\_\_\_\_10 1.7 Important safety notes \_\_\_\_\_\_\_\_11 2 Getting started 2.1 Powering up \_\_\_\_\_\_\_12 2.2 Loading the hopper \_\_\_\_\_\_\_12 3 Operating Modes 4 Detection features 4.2 Double note detection \_\_\_\_\_\_\_18 4.4 Chain note detection \_\_\_\_\_\_\_20 4.5 Note size detection 20

5	User	config	uration	options
---	------	--------	---------	---------

Auto/Manual start mode configuration	21
Changing counting speed	21
Changing note size detection sensitivity	22
Changing double note detection sensitivity	22
Changing UV counterfeit detection sensitivity (optional)	23
Changing MG counterfeit detection sensitivity (optional)	23
	Auto/Manual start mode configuration Changing counting speed Changing note size detection sensitivity Changing double note detection sensitivity Changing UV counterfeit detection sensitivity (optional) _ Changing MG counterfeit detection sensitivity (optional)

# 6 Maintenance and troubleshooting

6.1	Daily maintenance	24
6.2	Feed gap adjustment	25
6.3	Error codes	25
6.4	Troubleshooting	26
6.5	Warranty	27
6.6	Contact information	27

# INTRODUCTION

# 1.1 About the Cassida Concepta

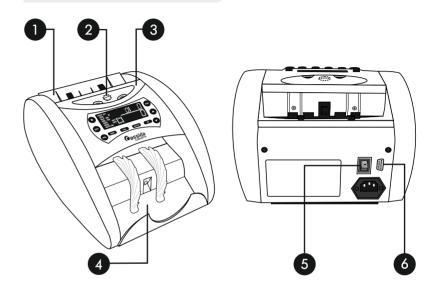
Thank you for choosing the most advanced back-loading currency counter in the industry.

The Cassida Concepta incorporates a breakthrough bill transport mechanism which allows easy loading of the bills in the hopper. A smart value counting feature allows you to automatically calculate the total value of the bills as you count them. A heavy-duty mechanism ensures long and reliable service. The Cassida Concepta is a new generation back-loader that incorporates an array of user-adjustable features that will satisfy the needs of the most demanding users. We hope you enjoy using it.

#### 1.2 Box contents

- Cassida Concepta PROFESSIONAL CURRENCY COUNTER
- AC power cord
- User manual
- Optional Remote display
- Optional Maintenance kit (cleaning card, cleaning cloth and brush)

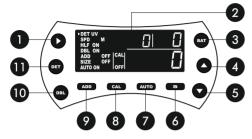
## 1.3 Front and rear views



- 1. Hopper
- 2. Feed gap adjustment
- Adjusts for different bill thicknesses. Note: Please do not DBL or CHN error messages.
- 3. Retractable handle
- 4. Stacker
- 5. Power switch
- 6. Remote display port

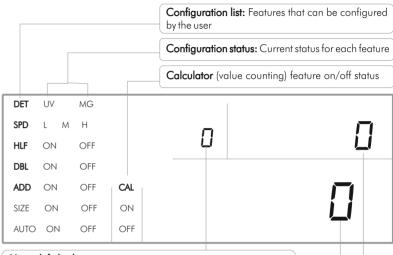
- Bills to be counted are placed here.
- change this setting unless the machine displays recurrent
- Used for carrying the machine or as a hopper support in an upright position to allow loading more bills into the hopper.
- Receives and holds counted bills.
- Turns machine on or off.
- Used to connect optional remote display.

## 1.4 Control panel



Item	Name	Function
1	<b>•</b>	Selects item from an option menu.
2	Display	Displays currency count and machine setup information.
3	BAT	Turns Batch mode on or off.
4	<b>A</b>	Move up one menu item. Also used to increase set values for other functions.
5	▼	Move down one menu item. Also used to decrease set values for other functions.
6	S	Manually start or continue counting. Also used to save configuration changes.
7	AUTO	Turns auto start feature on or off.
8	CAL	Turns calculator (value counting) feature on or off.
9	ADD	Turns Add mode on or off.
10	DBL	Turns double note detection on or off.
11	DET (optional)	Configures counterfeit detection mode.

# 1.5 Main display



# Upper left display:

Displays the programmed batch amount. Displays current bill count in Add mode with Calculator feature turned on.

# Main display:

Displays number of bills counted in simple count mode.
Displays total count in add or batch modes.

# Upper right display:

Displays the last count when in add mode.

Displays programmed calculator denomination.

Displays current batch count.

# 1.6 Specifications

Dimensions	273mm (w) x 158mm (h) x 341mm (d) 10.75" (w) x 6.22" (h) x 13.44" (d)
Weight	5.01 Kg (11 lbs)
Display	LCD
Hopper capacity	400 new bills, 200 used bills
Stacker capacity	200 new bills, 100 used bills
Size of countable note	Width: 50mm to 80mm (1.9" to 3.15") Length: 100mm to 178mm (4.41" to 7.00") Thickness: 0.06mm to 0.12mm (.0024" to .0047"
Batch range	0-999
Counting speed	Low speed – 900 bills/minute Medium speed – 1,200 bills/minute High speed – 1,600 bills/minute
Counterfeit detection	Ultraviolet (optional) Magnetic (optional)
Feed system	Friction roller
Ambient temperature	0°- 40°C (32°- 104°F)
Operating humidity	40% - 90%
Input power	100-240 VAC, 50/60 Hz
Power consumption	< 60 watts

# 1.7 Important safety notes

When using this unit, basic safety precautions should always be observed, including the following:

- Do not use this unit in areas where it may be exposed to water or any other liquids.
- Only use the power cord supplied with the machine. 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 machine can result in severe injury or fire.
- Make certain the unit is installed on a flat surface. Do not operate the machine in areas with high temperature, humidity or smoke, as these conditions may prevent proper operation.
- This unit is designed for indoor use in a ventilated environment. Keep the machine away from direct sunlight and strong magnetic fields. These could interfere with the counterfeit detection sensors.
- When not using the unit for an extended period of time, disconnect the power cord from the wall outlet.
- Unplug the unit from the wall outlet before cleaning. Use a damp cloth or specifically designed maintenance accessories such as a Cassida air duster, soft bristle brush, or Cassida CleanBill Pro cleaning cards.
- To avoid the risk of electrical shock, do not disassemble this unit. Disassembly 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 any parts yourself.

# 2. GETTING STARTED

## 2.1 Powering up

After ensuring the hopper and stacker are empty, turn the power switch ON. After a short self-check, "D" will be shown on main display.

## 2.2 Loading the hopper

It is important to load the hopper correctly in order to avoid jams and to ensure proper operating speed of the machine.

Check for any torn or badly worn bills before loading the hopper. Damp bills should not be loaded. Folded or curled bills should be straightened before loading. Ensure no foreign objects (such as rubber bands, adhesive tape or paper clips) are present in the bill stack.

Ensure the bill stack is squared. Place the stack on the hopper platform using both hands to ensure the bills do not shift. When counting large stacks of bills, you can lift the handle up to increase the number of bills you can load into the hopper.

# 3. OPERATING MODES

#### 3.1 Auto and Manual start modes

The Cassida Concepta is shipped with the Auto start mode enabled. In the Auto mode, bill counting will automatically begin when bills are placed in the hopper. The Cassida Concepta can also be configured to start manually. In this mode, counting begins when the "S" button is pressed. See section 5.1 for instructions on switching to Manual Start mode.

### 3.2 Count mode

After the machine is turned on, it defaults to the count mode. To count bills, place them in the hopper (see section 2.2, "Loading the hopper"). The machine will start counting the bills 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. The number of counted bills will be shown on the main display. The main display will clear itself of the previous count when the stacker is emptied and a new count is started.

Additional bills may be placed in the hopper without emptying the stacker. Please ensure the stacker does not accumulate more bills than it can hold (approximately 200 new bills or 100 old bills), as this will cause jamming, and may lead to a motor failure.

#### 3.3 Batch mode

To switch to batch mode, press the "BAT" button. The Upper left display will show "100", indicating a batch amount of 100 is programmed. To change the batch quantity, press the ▼ key. Each time the key is pressed, a new programmed batch quantity will be displayed (100, 50, 25, 20, 10). You can modify any programmed batch quantity by pressing the ▲ key.

The machine will start counting automatically once bills are placed in the hopper. As soon as the machine counts the desired batch quantity, it will stop. The main display will show the number of bills in the stacker. When the stacker is emptied, the machine will automatically start counting the next preset batch quantity.

If the number of counted bills in the stacker does not reach the preset batch quantity, a warning beep will sound, and the main display will flash, showing the



# Batch quantity



Actual number of bills counted

**C**assida

actual number of bills counted. To complete the batch, place additional bills in the hopper. The machine will automatically count the required number of bills to complete the batch. To turn off batching mode, press the "BAT" button so " $\mathcal{Q}$ " is shown in the upper left display.

#### 3.4 Add mode

In this mode, the machine enables you to count multiple stacks of bills while keeping track of the total number of bills counted.

To switch to add mode, press the "ADD" button. The main display will be zeroed. The display panel will show "ADD ON".

Place the bills in the hopper. The machine will start counting automatically. The machine will stop when the hopper is empty. The total number of bills counted will be displayed on the main display. The upper right display will show the number of bills counted since the stacker was last emptied.

Empty the stacker, and refill the hopper. The machine will continue counting, adding the new count to the total count, showing the ADD total on the main display.

HLF ON DBL ON ADD ON

Count since stacker was emptied

SPD M HLF ON	0 16
DBL ON ADD OFF CAL SIZE OFF AUTO ON OFF	55

ADD total

To continue adding without emptying the stacker, just refill the hopper. The machine will continue counting, adding the new stack of bills to the partially full stacker. Please ensure you do not accumulate more bills than the stacker can hold (approximately 200 new bills or 100 old bills), as this will cause jamming, or could lead to a motor failure.

To reset the total count, exit and reenter the Add mode by press the "ADD" button twice.

### Smart error/counterfeit detection in all add modes

Smart counterfeit/irregular note detection in add mode allows you to continue operation without losing the total count. When the machine stops with a UU, Table or dd error, remove the suspect bill (last bill in the stacker), and press "S" to continue counting. The counterfeit bill will not be added to the count. If a dbL, EHn ar HLF error occurs, remove all bills from the stacker for recounting. The machine will not add them to the total count.

## 3.5 Add + Batch mode

This mode allows you to batch the desired quantity of bills, and monitor the running total at the same time.

To activate this mode, first program the desired batch quantity (see section 3.3). Then press the "ADD" button. The "ADD" indicator will be lit.

The machine will start adding beginning with the next count. The total number of bills counted (ADD total) will be shown on the main display. The last batch count will be shown on the upper-right display. To change the batch quantity, use ▼ and

▲ keys.

# SPD M HLF ON DBL ON ADD OFF SIZE OFF AUTO ON CAL OFF

Batch avantity

ADD tota

CAL

Last batch

## 3.6 Calculator (Value countina) feature

This mode allows you to display the total value of bills counted. The Concepta uses a user-defined bill denomination as a multiplier, displaying the total value of bills counted. (Example: denomination \$20 x 25 bills counted = 500 displayed).

ADD OFF SIZE OFF AUTO ON

**C**assida

To activate this feature, press the "CAL" button. "CAL ON" will be shown on the display.

Use the ▲ and ▼ keys to select the desired denomination for your bill stack. Available settings are 100, 50, 20, 10, 5, 2 and 1. The denomination will be shown on the upper-right numerical display.

DET SPD M HILF OFF DBL ON ADD OFF ON AUTO OFF

Load the bill stack onto the hopper, ensuring the denomination of the stack

\$500 counted (25 bills)

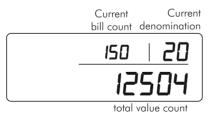
\$20 denomination

matches your calculator denomination. The Concepta will count the stack, and display the total value for the stack.

## Value counting in Add mode:

This mode allows you to count different denominations of bills while keeping track of the total value of bills counted.

- 1. Make sure you are in Manual start mode. "AUTO OFF" will be shown on the display.
- 2. Press the "CAL" button. "CAL ON" will be shown on the display.
- 3. Use the ▲ and ▼ keys to select the desired denomination. The denomination will be shown on the upper right numerical display.
- 4. To change denomination use the ▲ and ▼ keys. The new selected denomination will be shown on the upper-right numerical display. The machine will now start calculating the value using the new denomination.



#### Value counting in Batch mode:

- 1. Make sure you are in Manual start mode. "AUTO OFF" will be shown on the display.
- 2. Press the "CAL" button. "CAL ON" will be shown on the display.
- 3. Use the **\( \)** and **\( \)** keys to select the desired denomination. The denomination will be displayed on the upper-right numerical display.



Stacker value count

- 4. Press the "BAT" button and set the batch quantity using ▲ and ▼ keys. Batch quantity will be set in number of bills and not the dollar value. The selected batch quantity will be shown on the upper-left numerical display.
- 5. To change denomination in Batch mode, exit the batch mode, change the denomination and re-enter the Batch mode.

The Calculator feature is not available when operating in ADD+Batch mode.

# 4. DETECTION FEATURES

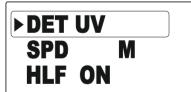
## 4.1 Counterfeit note detection

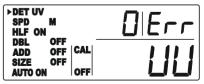
#### UV counterfeit detection (optional):

The UV detection mode checks for counterfeit bills using ultraviolet sensors. To activate this mode, click the "DET" button repeatedly until the display reads "DET UV".

The machine will beep and stop counting when a suspected counterfeit note is detected. A "Err", "UU" message will be shown on the display.

To continue counting, remove the suspicious bill, which will be the last one in the stacker, and press the "S" button.





The machine will start counting again, and will not add the counterfeit bill to the count. This feature allows you to continue operation without losing count, and is especially time saving in the add mode.

Magnetic counterfeit detection (optional):

Magnetic counterfeit detection uses special sensors to check for the presence of magnetic ink. To activate this feature, repeatedly click the "DET" button until the display reads "DET MG".

The machine will beep and stop counting when a suspected counterfeit note is detected. A "Err" "āī9" message will be shown on the display.

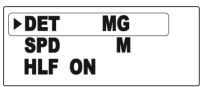
To continue counting, remove the suspicious bill, which will be the last one in

the stacker, and press the "S" button. The machine will start counting again, and will not add the counterfeit bill to the count. This feature allows you to continue operation without losing count, and is especially time saving in the add mode.

Please note that the Cassida Concepta, like all other counters with integrated detectors present on the market, cannot 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 bills, excessively dirty bills, or highly advanced counterfeiting techniques used to produce the bill. Separate equipment may be required to definitively determine whether or not a bill is counterfeit.

## 4.2 Double note detection

Bills may stick to each other due to excessive dirt, folding, or various other reasons. The Cassida Concepta uses a highly advanced double note detection mechanism, which allows



DET MG SPD M HLF ON		0 Err
DBL OFF ADD OFF SIZE OFF AUTO ON	CAL OFF	779

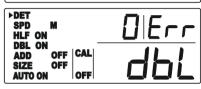
it to reliably detect double notes regardless of the condition of the bills counted.

Double note detection is activated automatically when the machine is turned on. To manually turn on double note detection, press the "DBL" button so "DBL ON" is shown in the display.

The machine will start beeping, and stop counting when a double bill is detected. A "Err dbL" message will be shown on the display.

To continue counting, remove all bills from the stacker and place them on the hopper for recounting.

# HLF ON DBL ON



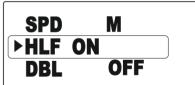
### 4.3 Half note detection

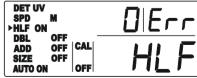
The Cassida Concepta incorporates infrared light (IR) sensors that notify users if a half note passes through the counting mechanism.

To turn on half note detection, press the 
▲ or ▼ button until the display cursor is next to the "HLF" selection. Press the ▶ button to turn on the half note detection feature.

The machine will start beeping, and stop counting when a half note is detected. A "Err HLF" message will be shown on the display.

To continue, remove all bills from the stacker and recount them.





## 4.4 Chain note detection

The Concepta 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 automatically in all modes for your convenience.

The machine will emit a warning beep and stop automatically when a chain note is detected. A "Err EHn" message will be displayed on the screen. To continue counting, remove all bills from the stacker and place them on the hopper for recounting.

#### 4.5 Note size detection

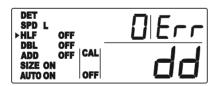
When the note size detection feature is enabled, the Concepta will stop and give a "dd" alarm if it senses a bill that is of irregular size.

To enable note size detection, use the ▲ and ▼ keys to move the display cursor to the SIZE menu selection. Use the ▶ key to turn Size detection on or off.

If an irregular-size bill is detected, a "Erradd" message will be shown on the display.

To continue counting, remove the suspect bill, which will be the last one in the stacker, and press the "S" button. The machine will start counting again, and will not add the suspect bill to the count.

ADD OFF SIZE ON AUTO ON



# 5. USER CONFIGURATION OPTIONS

## 5.1 Auto/Manual start mode configuration

In the Auto mode, bill counting will automatically begin when bills are placed in the hopper. The Cassida Concepta can also be configured to start manually. In this mode, counting begins when the "S" button is pressed.

To change the Start Mode configuration, press the "AUTO" button to switch between Auto and Manual start modes. The display panel will show "AUTO ON" or "AUTO OFF".



## 5.2 Changing counting speed

The Cassida Concepta has three user-selectable counting speeds, which may be changed at any time.

Use the ▲ and ▼ keys to move the display cursor to the Speed menu selection. Use the ▶ key to select the desired speed.

The available speed settings are:

- L 900 bills/minute
- M 1200 bills/minute
- H 1600 bills/minute



## 5.3 Changing note size detection sensitivity

When counting foreign currency, it may be necessary to change the sensitivity of the note size detection.

Press and hold the "ADD" button for approximately three seconds until the machine beeps, and displays the sensitivity setting screen (see example at right).

DET UV
SPD M
HLF ON
DBL ON
ADD OFF CAL
SIZE ON
AUTO ON OFF

Use the ▲ and ▼ keys to change the sensitivity value.

If false "dd" errors are being observed, select a larger number. If the Concepta is not detecting bills of irregular size, select a smaller number.

Press the "S" key to save the new setting.

## 5.4 Changing double note detection sensitivity

To change double note detection sensitivity, press and hold the "DBL" button for approximately three seconds until the machine beeps, and displays the sensitivity setting screen (see example at right).



Use the  $\blacktriangle$  and  $\blacktriangledown$  keys to change the sensitivity value.

If false "dbL" errors are being observed, select a larger number. If double notes are not being properly detected, select a smaller number.

Press the "S" key to save the new setting.

## 5.5 Changing UV counterfeit detection sensitivity (optional)

To change UV counterfeit detection sensitivity, press and hold the "DET" button for approximately three seconds until the machine beeps, and displays the sensitivity setting screen (see example at right).



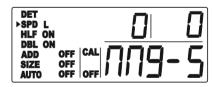
Use the ▲ and ▼ keys to change the sensitivity value.

If false "UU" errors are being observed, select a larger number. If counterfeit notes are not being properly detected, select a smaller number.

Press the "S" key to save the new setting.

## 5.6 Changing MG counterfeit detection sensitivity (optional)

To change MG counterfeit detection sensitivity, press and hold the "CAL" button for approximately three seconds until the machine beeps, and displays the sensitivity setting screen (see example at right).



Use the  $\triangle$  and  $\bigvee$  keys to change the sensitivity value.

If false "iii9" errors are being observed, select a smaller number. If counterfeit notes are not being properly detected, select a larger number.

Press the "S" key to save the new setting.

# 6. MAINTENANCE AND TROUBLESHOOTING

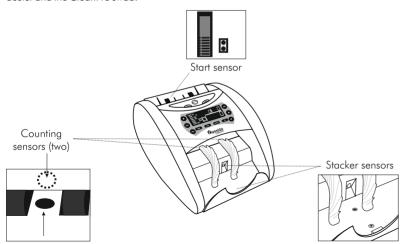
## 6.1 Daily maintenance

Cassida recommends cleaning the sensors and the bill pathway after every one hour of continuous operation. Tools you will need:

- Cassida air duster
- CleanBill Pro cleaning card
- CleanPro cleaning swab
- Soft bristle brush

Before cleaning, ensure the Cassida Concepta is turned off and unplugged.

Clean the Start sensor, the Stacker sensor and the Counting sensors with a Cassida air duster and the Clean Proswab.

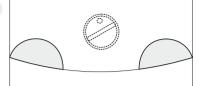


# 6.2 Feed gap adjustment

Over the course of time, as the rubber components in the bill transport wear, the feed gap will need to be adjusted.

teed gap will need to be adjusted.

If multiple bills are being pulled through the feed mechanism (which will usually cause a



"dbL" or "EHn" error), turn the feed gap adjustment screw one-quarter ( $\frac{1}{4}$ ) turn clockwise. Do not turn more than  $\frac{1}{4}$  turn.

## 6.3 Error codes

Error code	Cause	Corrective action
EHn	Improper bill feeding detected, caused by bills not being properly separated	Remove all bills from the stacker and recount them. Check for damaged or torn bills before loading hopper.  Recurrent EHn errors could indicate feed gap is too wide (see section 6.2).
dbL	Double note	Two notes stuck together. Remove all notes from the stacker and recount them.  Recurrent dbL errors could indicate feed gap is too wide (see section 6.2).
dd	Note size error	Detected bill width not normal. Remove the last bill from the stacker and press the "S" button to continue counting. The suspect bill will not be added to the count.
Encod	Encoder disk error	Possible broken drive belt. Contact your local dealer.
FEEd	Start sensor blocked	Clean start sensor (see section 6.1).
HLF	Half note detected	Remove all bills from the stacker and recount them.
L-EE	Left counting sensor blocked	Clean left counting sensor (see section 6.1).

Error code	Cause	Corrective action
(option)	Suspected MG counterfeit note	Remove the last bill from the stacker and press the "S" button to continue counting. The suspect bill will not be added to the count.
r-CE	Right counting sensor blocked	Clean right counting sensor (see section 6.1).
มม (option)	Suspected UV counterfeit note	Remove the last bill from the stacker and press the "S" button to continue counting. The suspect bill will not be added to the count.

# 6.4 Troubleshooting

Symptoms	Corrective action
Bills not feeding smoothly.	Badly worn or torn bills. Bills not loaded correctly - see section 2.2. Dirty feed rollers – run a CleanBill Pro cleaning card through the machine.
Recurrent "dbL" or "EHn" errors – multiple notes being pulled through bill transport.	Feed gap may require adjustment – see section 6.2.
Recurrent "dbL" errors – bills are feeding correctly.	Double note detection sensitivity may require adjustment - see section 5.4.
Abnormal sound.	Foreign material (adhesive tape, paper clips) may be present in the feed mechanism or on the rollers. Check and remove any foreign material.
Counting does not start automatically when notes are placed in the hopper.	Machine may be configured for Manual start mode - see section 5.1.

# 6.5 Warranty

All Cassida products are warranted for a period of one year from the date of purchase from Cassida Corporation. In most cases, the malfunction of the machine can be resolved by cleaning the unit. Please refer to section 6.1 "Daily maintenance" for guidelines.

## Coverage:

The warranty covers defects in materials and workmanship. It does not cover maintenance and cleaning (cleaning parts or sensors of dust, replacing parts such as rubber rollers, rubber mats, rubber belts, etc. that are worn out by a natural cycle of work).

## Shipping:

Warranty does not cover shipping cost to or from Cassida Corporation

## 6.6 Contact information

Technical Support contact information:

email: technicalsupport@cassidausa.com

phone: 1-888-800-0303 http://cassidausa.com

011001

none		
Caring about your money		
oout)		
ing at	Designed by Cassida USA Printed in China	
Cari	Printed in China 011001	
	©assida Para Para Para Para Para Para Para Pa	