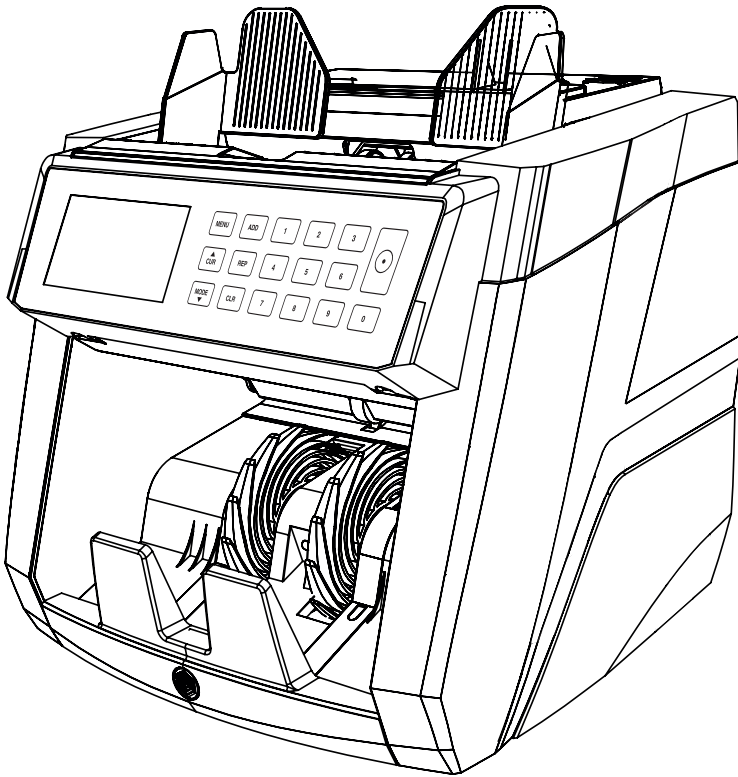




**Safescan<sup>®</sup>**



# USER MANUAL

ENGLISH

## **2885-S BANKNOTE COUNTER**



# INTRODUCTION

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Thank you for purchasing the Safescan 2885-S banknote counter. For proper use and maintenance, we advise to read this user manual carefully.

## PLEASE TAKE NOTICE

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Should the equipment be altered in any way or used in a manner for which it was not intended at the time of delivery, the supplier of the equipment accepts no responsibility for injury or damage to personnel or equipment. If the conditions for use of the equipment are changed, the supplier must be contacted or the declaration of conformity will be invalidated.

## SAFETY PRECAUTIONS

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- Place the machine on a flat and stable surface.
- Do not place the machine in dusty or dirty environments.
- Do not place the machine in direct sunlight or near heat sources or air conditioners.
- Always disconnect the power cord before performing maintenance on the machine.
- Always connect the machine to an earthed socket outlet.
- Use only the supplied power cord.
- Operation temperature 15-35 °C / 59-95 °F.
- Operation humidity 30-80% R.H.
- Do not use the machine outdoors.
- Do not expose the machine to liquids.
- This machine contains rotating parts. Never touch the moving parts when the machine is switched ON.
- Keep jewellery, long hair, ties and other protruding parts away while operating the machine.
- Never disassemble the machine.

## PACKAGE CONTENTS

---

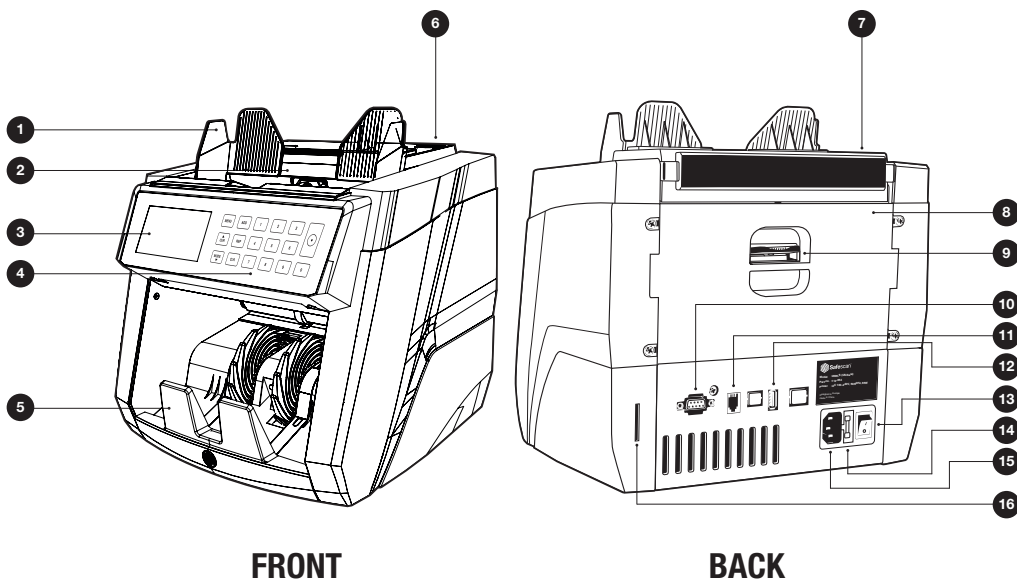
1. Safescan 2885-S banknote counter
2. Power cord
3. Safescan Money Counting Software cable
4. Cleaning and service kit
5. Warranty card
6. Quick installation guide
7. Fuse

## SETTING UP YOUR MACHINE

1. Remove the protective foil from the display.
2. Connect the power cable to the machine and the power outlet.
3. Power On the machine with the power switch.
4. The machine will start with a self-test, checking the condition of the machine.  
After a successful self-test the machine will open the count screen.



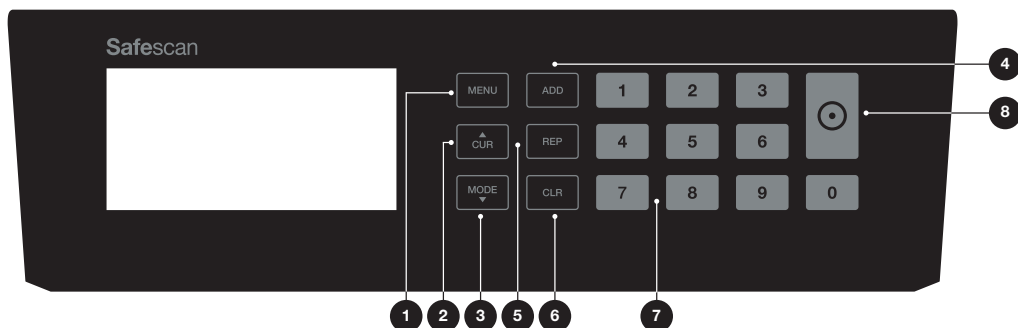
## MACHINE PARTS



1. Banknote guides
2. Hopper
3. LCD screen
4. Control panel
5. Stacker
6. Feeding gap adjusting screw
7. Handle
8. Back panel

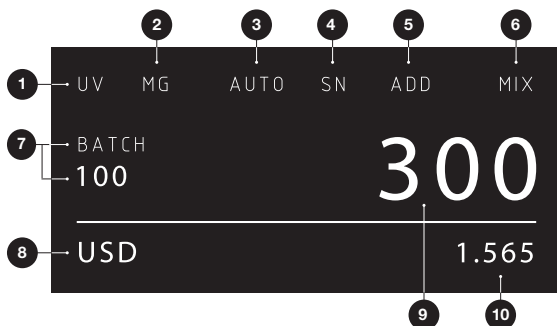
9. Release handle of back panel
10. External display connector (RS-232)
11. Update port (USB-A)
12. Print port connector (RJ-10)
13. Power switch
14. Fuse compartment
15. Power mains connector
16. Update slot (SD-card)

## CONTROL PANEL



Nr	Button	Count mode	Menu mode
1.		Open user menu	Return to the count menu
2.		Select currency	Select previous setting
3.		Select counting mode	Select next setting
4.		ADD count results of multiple counts to the total	-
5.		Press once: View counting report Long press: Print count results	-
6.		Clear counting results	Go back to previous screen
7.		Enter batch number	Numeric entry
8.		Start counting	Confirm selection -

## DISPLAY OVERVIEW



1. UV detection On
2. MG detection On
3. Automatic count start On
4. Serial number scanning On
5. Add mode On
6. Selected counting mode
7. Selected batch number
8. Selected currency
9. Number of counted banknotes
10. Total value of counted banknotes

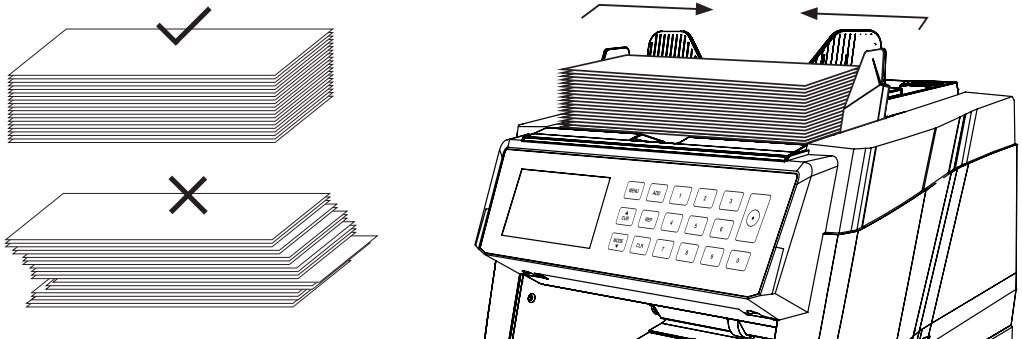
# FIRST OPERATION

1. The Safescan 2885-S starts by default with the most convenient settings to start a count:
  - A. Currency: ( - - - ) Currencies that are available on the machine are automatically recognized.
  - B. Count mode: **Mix** Counting the value and quantity of both sorted and unsorted denominations.



Set the banknote guides so that the sides of the banknotes are enclosed. Organize your banknotes to a neat stack, make sure the back of the stack is straight. Place the banknotes between the guides. The machine will automatically start counting\*.

**\*Note:** In case of a suspected counterfeit banknote the 2885-S will give a warning and stop counting. The banknote on top, in the stacker, is the suspected one.



2. After finishing the count the result is shown on the screen (Total number of notes and total amount).
3. Press **[REPORT]** to view the detailed count result.

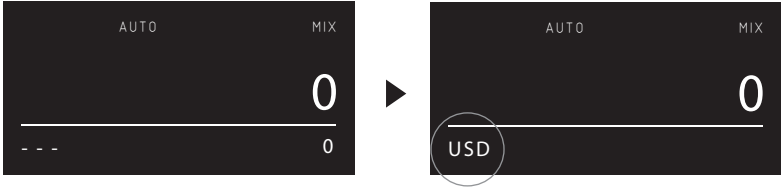
DEN	PCS	VALUE
1	100	100
5	25	125
10	75	750
20	50	1000

▶

DEN	PCS	VALUE
50	100	5000
100	35	3500
USD		385
		10.475

# SELECTING CURRENCIES

1. Press **[CUR]** to switch to the next available currency.
2. The selected currency is shown in the left bottom corner of the screen.



## EXPLANATION OF THE AVAILABLE CURRENCY SETTINGS

Currency as shown on the screen	Description	Explanation of usage
<p>--- (Automatic currency selection)</p> 	<p>10 Currencies available on the machine are automatically recognized.</p>	<p>With --- selected there is no need to manually select the currency before counting. Simply place currencies on the machine. The first detected currency will automatically be selected as the active currency of the count.</p>
<p>EUR, USD, GBP and other currencies that are available and loaded in the machine.</p> 	<p>Counting banknotes of a specific currency.</p>	<p>Select currencies manually with the <b>[CUR]</b> button.</p>
<p>ALL</p> 	<p>Piece counting without any counterfeit detection.</p>	<p>Select ALL (UV/MG - UV+MG) to piece count banknote currencies not available on the machine. Also known as free sheet counting.</p>
<p>ALL UV</p> 	<p>Piece counting with UV detection.</p>	<p>Select ALL (UV/MG - UV+MG) to piece count banknote currencies not available on the machine. Also known as free sheet counting.</p>

**Currency as shown on the screen****Description****Explanation of usage**

ALL MG

Piece counting with MG detection.

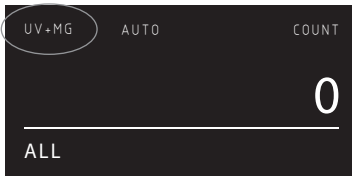
Select ALL (UV/MG - UV+MG) to piece count banknote currencies not available on the machine. Also known as free sheet counting.



ALL UV + MG

Piece counting with both UV + MG detection.

Select ALL (UV/MG - UV+MG) to piece count banknote currencies not available on the machine. Also known as free sheet counting.

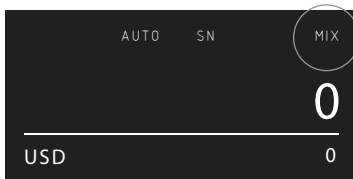


UV = Detection of Ultraviolet properties  
MG = Detection of Magnetic properties

**Note:** The machine will stop and show an error message when suspected banknotes and currencies different from the set currency selection have been detected.

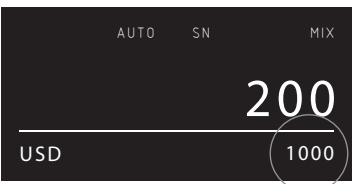
## SELECTING COUNT MODES

1. Press **[MODE]** to toggle through the available count modes.
2. The selected count mode is shown in the top right corner of the screen.

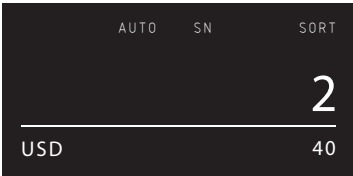
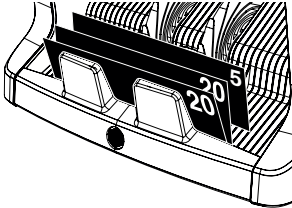


## EXPLANATION OF THE AVAILABLE COUNT MODES

Mode	Main feature	Explanation of mode
Mix	Counting the value of banknotes.	Counting the value and quantity of both sorted and unsorted denominations.

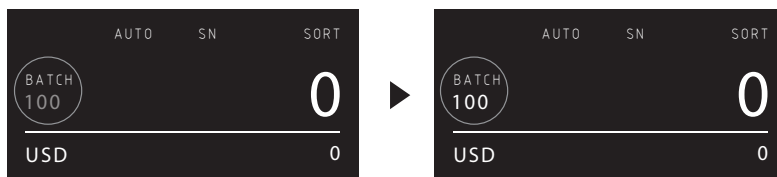




Mode	Main feature	Explanation of mode
Sort	Sort banknotes per denomination.	Counting the value and quantity of banknotes sorted per denomination. When denominations that are different than the first counted banknote are detected, the machine will stop and show an error message.
 		
Count	Counting the quantity of banknotes or sheets.	Counting the quantity of banknotes without checking size and/or denomination specifics.

## BATCH COUNTING

The batch function is used to create stacks of an equal number of banknotes.

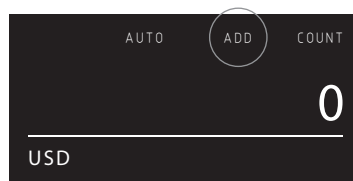


1. Type the desired batch number on the numeric keypad and press **[OK]** to confirm, or wait for 5 seconds until the batch number stops blinking. Press any number to clear the entry.
2. In the count screen, the batch number is shown.

## USING THE ADD FUNCTION

The ADD function is used to add the counting results of multiple counts to the total.

1. Press **[ADD]** to activate the ADD function.  
In the screen, the ADD indication appears.
2. Press **[ADD]** again to deactivate the function.



**NOTE:** ADD function is not available when serial number scanning is activated.

## SERIAL NUMBER SCANNING

The serial number scan function records the unique serial numbers of the counted banknotes. Serial number scanning is available for the following currencies: EUR, USD, GBP, HKD and CNY.

Activation of serial number scanning can be done in the user menu.

Viewing the serial number information:

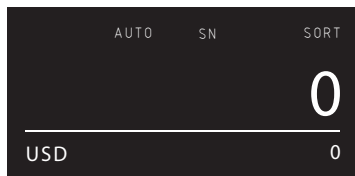
- The serial number information is viewed on a receipt print after printing the count results. Printing can be done on the optional Safescan TP-230 printer.
- The Safescan 2885-S also offers the possibility to export the serial number information to the Safescan Money Counting Software.

**Please note:** The 2885-S only records serial numbers from one side. The side of the banknote with the serial numbers should face up.

In case of a mixed orientation stack of notes, count the bundle twice:

First facing up, Second facing down.

All serial numbers of this stack are now recorded and kept in memory until printed or exported.



## COUNTING REPORT

1. After finishing a count, press **[REPORT]** to view the counting results.
2. The report screen shows the amount and value per denomination and the total value.
3. Press **[▲ ▼]** to scroll through the results.
4. Long press the **[REPORT]** button to print or export the count results.

DEN	PCS	VALUE
1	100	100
5	25	125
10	75	750
20	50	1000

## DETECTING SUSPECTED NOTES

The machine will stop, sound or alarm and show as error message. The last banknote in the stack is the suspect note.



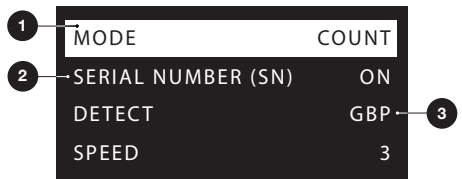
# REJECTION MESSAGES

The machine will give you a clear audible and visual notification when a suspected banknote has been detected. The following messages can be shown:

Error	Cause	Solution(s)
<b>UV, MG, IR, IMAGE INCOMPLETE, IMAGE DISTORTION, IMAGE, NOT RECOGNIZED, IMAGE INCORRECT</b>	<ul style="list-style-type: none"> <li>Banknote is suspected.</li> <li>The sensors may be dirty or blocked by dust.</li> <li>The image or integrated UV &amp; IR features of banknotes may become weaker when a banknote is old, heavily used or when it has accidentally been washed.</li> </ul>	<ul style="list-style-type: none"> <li>Count the banknote again to make sure if a suspected banknote is detected.</li> <li>Follow the cleaning procedure.</li> <li>Check if the banknotes are dirty, damaged or worn out.</li> <li>Make sure that the device is not in the vicinity of any magnetic fields or devices transmitting any signal since this may disrupt the integrated sensors.</li> </ul>
<b>DIFFERENT DENOMINATION</b>	<ul style="list-style-type: none"> <li>A banknote of a different denomination than the first counted banknote has been detected.</li> </ul>	
<b>SLANT</b>	<ul style="list-style-type: none"> <li>The banknotes are not being fed straight through the machine.</li> </ul>	<ul style="list-style-type: none"> <li>Ensure the banknotes are placed neatly and are inserted centred on the hopper. Use the hopper guides to center the banknotes and when counting a large stack of banknotes, guide the notes also with your hands during counting. Please refer to first operation.</li> </ul>
<b>CHAINED, DOUBLE</b>	<ul style="list-style-type: none"> <li>More than one banknote is being fed through the machine at the same time.</li> </ul>	<ul style="list-style-type: none"> <li>Ensure that there are no banknotes stuck, folded or glued together.</li> <li>Check the banknote quality. If no obvious visible issues are found, count the banknote again and check if the problem persists.</li> <li>The hopper may be set too loose. Adjust the hopper screw in clockwise direction. See chapter maintenance and servicing.</li> </ul>
<b>HALF BANKNOTE</b>	<ul style="list-style-type: none"> <li>An incomplete, torn or half-size banknote has been detected.</li> </ul>	<ul style="list-style-type: none"> <li>Check the banknote quality. If no obvious visible issues are found, count the banknote again and check if the problem persists.</li> </ul>
<b>WIDTH, LENGTH</b>	<ul style="list-style-type: none"> <li>A banknote with a non-conforming size has been detected.</li> </ul>	<ul style="list-style-type: none"> <li>Check the banknote quality. If no obvious visible issues are found, count the banknote again and check if the problem persists.</li> </ul>
<b>SERIAL NUMBER BLACK LIST</b>	<ul style="list-style-type: none"> <li>Serial number is known as suspected banknote.</li> </ul>	<ul style="list-style-type: none"> <li>Contact the appropriate authorities.</li> </ul>
<b>SERIAL NUMBER SCAN ERROR</b>	<ul style="list-style-type: none"> <li>Could not scan the serial number.</li> </ul>	<ul style="list-style-type: none"> <li>Check if the serial number is not covered. Remove any covering and scan the banknote again.</li> </ul>

# USER MENU

1. Selection bar
2. Menu item
3. Item setting

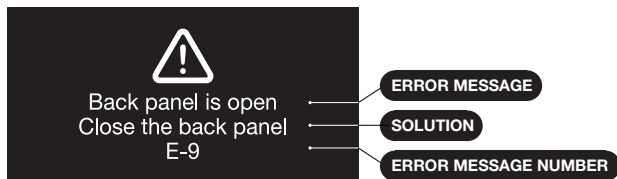


## USER MENU ITEMS

Menu item	Setting description
<b>Mode</b>	Counting mode: Mix, Sort or Count
<b>Speed</b>	Speed 1, 2 & 3. (800, 1000 & 1200 pcs/minute) Whether a count speed is available depends on the selected count mode and serial number settings. > Speed 2 & 3 are not available with serial number scanning active. > Speed 3 is only available in count mode.
<b>Detect</b>	Selected currency
<b>Serial number scanning</b>	Enable (On) or disable (Off) serial number scanning of banknotes for selected currencies.
<b>Menu password</b>	Enabled (On): A password is required for access to the user menu. The password is 1937. When requested, type this password on the numeric keypad and press OK.
<b>Currency status</b>	Activate and deactivate currencies. Deactivated currencies will not appear during usage.
<b>Round Add-Batch</b>	With both this function and ADD mode activated (On), the device will only add the count result of completed batches to the total. When the batch number isn't reached, the machine will 'correct' the total to the first multiple of the set batch amount.
<b>Version</b>	Shows which firmware and currency software version is installed.
<b>Date format</b>	Select which date format is used.
<b>Date</b>	Menu to manually enter the date.
<b>Time format</b>	Select which time format is used.
<b>Time</b>	Menu to manually enter the time.
<b>Counting start</b>	Enabled (On): The current user settings will be used after restarting. Disabled (Off): The machine will start with automatic currency detection, count mode Mix and Batch Off.

## ERROR MESSAGES

A variety of messages can be displayed on the Safescan 2885-S. These messages can occur during counting or during start up. The error message screen shows the main problem, the solution and the error message number.



## ERROR MESSAGES LIST

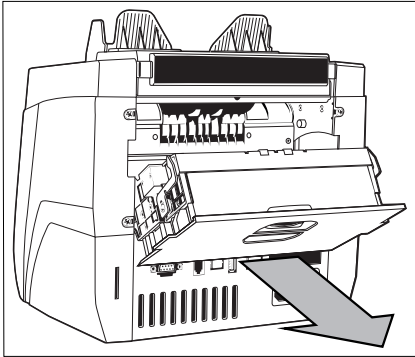
Error message displayed	Solution displayed
Mainloop broken	Restart the machine (E-1)
Jam	Remove all banknotes (E-4)
Jam Back Panel	Remove all banknotes (E-5)
Jam in Stacker	Remove all banknotes (E-7)
The Stacker is full	Remove all banknotes (E-8)
Back panel is open	Close the back panel (E-9)
Hopper sensor blocked	Clean the device (E-10)
Stacker sensor blocked	Clean the machine (E-11)

## MAINTENANCE & SERVICING

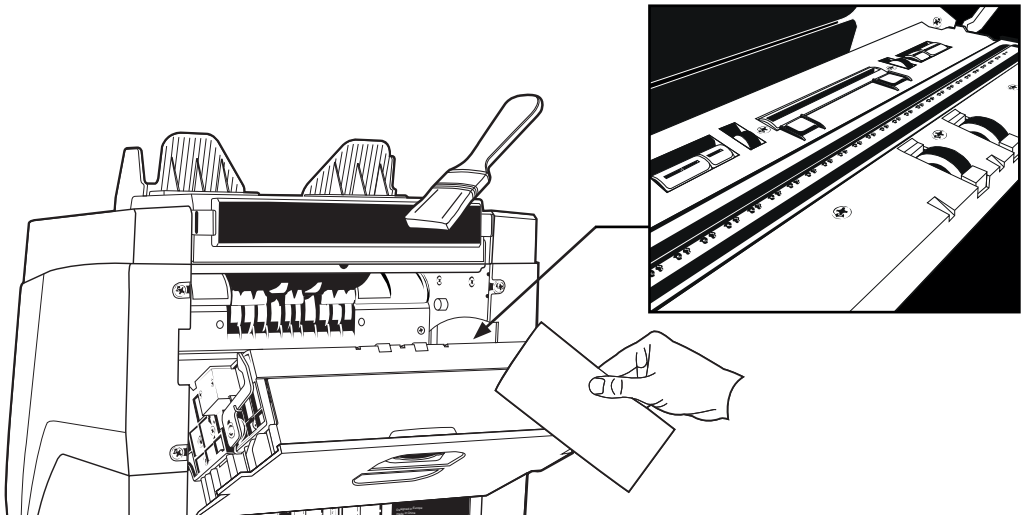
### OPENING THE BACK PANEL

To ensure continuous reliable operation, regular cleaning of the device's internal parts and sensors is required. Dust or dirt can rub off banknotes and disturb the proper functioning of the sensors. Also in case of jam errors, it might be necessary to open the back panel to remove jammed banknotes.

**Remark:** Always power OFF the machine and pull out the power cable from the machine before opening the back panel.



### CLEANING THE SENSORS



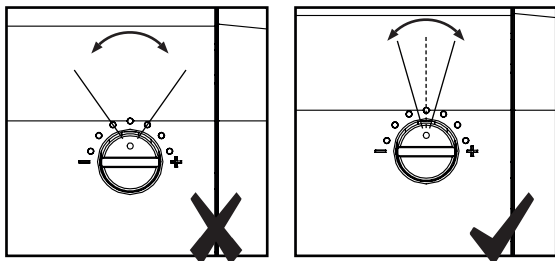
Use the enclosed cleaning aids (brush and cleaning sheets) for servicing the 2885-S.

1. Open the back panel and clean as instructed. Clean the inside of the machine using the cleaning sheet and brush. When done, close the panel.

## ADJUSTING THE FEEDING GAP

When counting errors such as double notes, chained or slant notes occur frequently, or when banknotes are not being fed smoothly through the machine, it may be necessary to adjust the hopper adjusting knob. In the factory, the position of the hopper wheel is set optimal. However, due to the nature of some banknotes, an adjustment may be required to ensure optimal feeding.

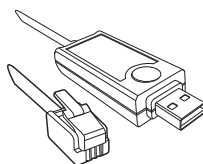
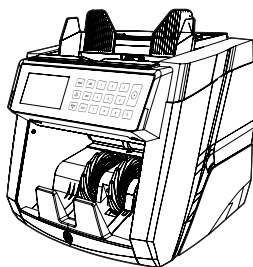
- When the banknotes are not being counted smoothly: increase the note thickness distance by turning the adjusting knob clockwise (+).
- When counting errors such as 'double notes' or 'chained notes/double notes' occur often, decrease the note thickness distance by turning the adjusting knob anti-clockwise (-).



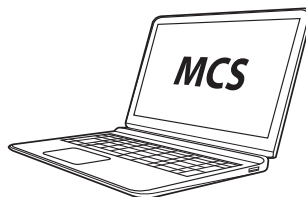
**ATTENTION!** Make only minor changes at once. Make changes per dot or half a dot.

## USE IN COMBINATION WITH SAFESCAN MONEY COUNTING SOFTWARE

The Safescan 2885-S can be used in combination with the Safescan Money Counting Software. Visit: [www.safescan.com/downloads](http://www.safescan.com/downloads). This enables you to export your counting results and serial number information to the PC for further processing.



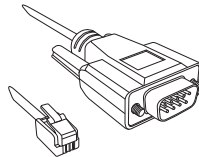
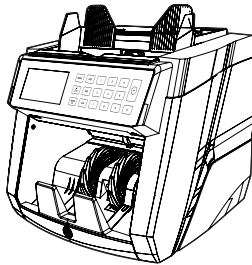
Included  
Safescan MCS  
software cable



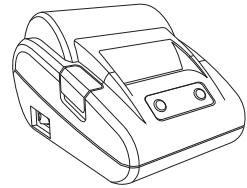
PC (Windows operating  
system) with Safescan MCS  
installed

## USE IN COMBINATION WITH SAFESCAN TP-230 PRINTER

The Safescan 2885-S can also be used in combination with the optional Safescan TP-230 thermal printer. This enables you to make an instant printout of your counting results.



Safescan  
printer cable



Safescan  
TP-230 printer

## SOFTWARE UPDATES

Central banks are constantly updating their banknotes to incorporate the newest security features and make it even harder for counterfeiters to succeed. Safescan's dedicated currency management team will make sure your 2885-S series banknote counter can keep pace with these changes.

Making sure your Safescan 2885-S is up to date:

1. Check the currency software version on your machine. The software version is displayed in the machine's User Menu.
2. Go to **[www.safescan.com/downloads](http://www.safescan.com/downloads)**.
3. Fill in the category, product and part number. The latest software updates version will be shown.
4. Compare the version numbers and details to see if a software update is necessary.
5. If a software update is required: Download the software package and follow the included update procedure instructions.

## TECHNICAL SPECIFICATIONS

<b>Product type:</b>	Automatic banknote counter
<b>Counting speed:</b>	800 - 1000 - 1500 notes per minute
<b>Detection method:</b>	Ultraviolet, Magnetic Ink, Metallic Thread, Infrared, Image, Size and Thickness
<b>Hopper / stacker capacity:</b>	300 / 200 banknotes
<b>Currency updates:</b>	Via USB port or SD card
<b>Counting modes:</b>	MIX: counting value and quantity of both sorted and unsorted banknotes SORT: counting value and quantity of sorted banknotes COUNT: counting quantity of banknotes
<b>Counting functions:</b>	Add, Batch
<b>Serial number scanning:</b>	Available for selected currencies, 1 facing
<b>Display:</b>	240 x 120 pixels black inverted LCD
<b>Power supply:</b>	AC100V~240V, 50/60Hz
<b>Power consumption:</b>	<60W
<b>Dimensions:</b>	27.1 x 25.4 x 28.4 cm / 10.7 x 10 x 11.2 inch
<b>Net weight:</b>	7.5 kg / 16.5 lbs
<b>Gross weight:</b>	8.5 kg / 18.7 lbs





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**[www.safescan.com](http://www.safescan.com)**  
[info@safescan.com](mailto:info@safescan.com)