

Scan QR code



# Safescan 2485-SC Banknote Value Counter User manual



## Print version

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[Click here](#) to open a printable version of the manual in the selected language.

## Introduction

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Thank you for purchasing a Safescan 2485-SC banknote counter. For proper use and maintenance we advise you to read this user manual carefully.

### Please note

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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 instructions

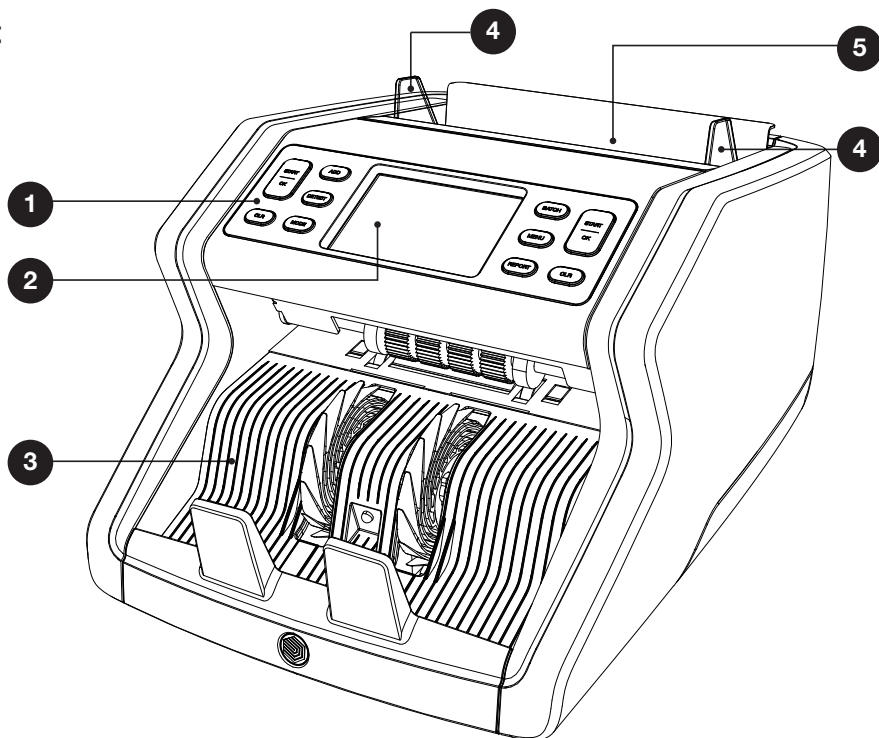
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- Place the machine on a flat and stable surface.
- Do not place the machine in dusty or dirty environments.
- Use the supplied dust cover when the machine is not in use.
- Do not place the machine in direct sunlight or near heat sources or air conditioners.
- Always connect the device to a grounded power 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.
- Please ensure that no foreign objects (coins, paper clips, staples) fall into the machine, these may block the mechanical parts and the sensors of the machine and damage or break them and will void your warranty.
- Keep jewellery, long hair, ties and other protruding parts away while operating the machine.
- Never disassemble the machine.
- To prevent shock hazard, do not touch the power cable with wet hands.
- Unplug the device if you want to move it to another position.
- Hold the plug when disconnecting the unit from the power outlet, never pull the cord.

## Product overview and box contents

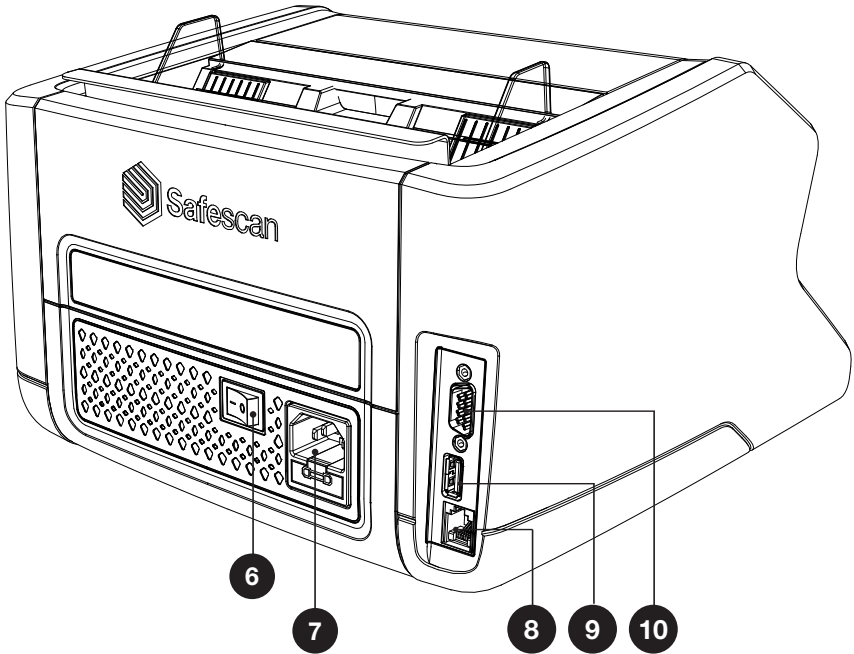
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### Front

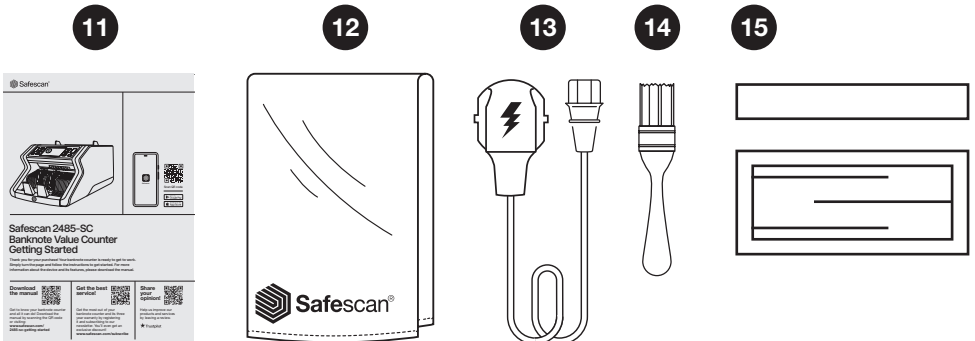


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1. Control panel
  2. LCD touch screen
  3. Stacker
  4. Banknote guides
  5. Hopper

## Back



- 6. Power switch
- 7. Power mains connector
- 8. External display connector (RJ-12)
- 9. Update port (USB-A)
- 10. Print port (RS-232)
- 11. Get started folder
- 12. Dust cover
- 13. Power cord
- 14. Cleaning brush & cloth
- 15. Celebration set\*

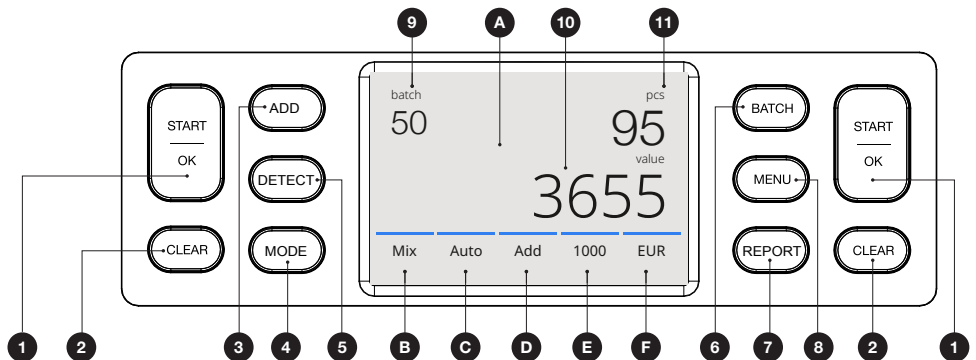


\*Store calibration items. Use only under Safescan support supervision.

## Setting up your machine

1. Remove the protective foil from the LCD screen.
2. Connect the power cable to the power outlet.
3. Power on the device with the power switch.
4. The banknote counter will start. Select a language by pressing the touch screen and confirm the language selection in the next screen.
5. The device will perform a self-test, during which its software version and product number will be displayed. After a successful self-test, the machine will prompt to scan the QR-code to get the Safescan app. After pressing [OK] the count screen opens and the device is ready to use.

## Buttons & touch display

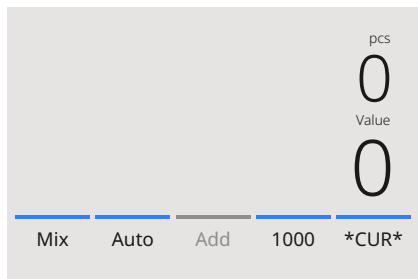


Nr.	Button	Description
1.	START/OK	Start counting / Confirm selection (in MENU)
2.	CLEAR	Clear counting results
3.	ADD	Add function On/Off (ADD count results of multiple counts to the total.)
4.	MODE	Open Count mode menu
5.	DETECT	Open detection menu. (Select currency/ detection type)
6.	BATCH	Open Batch menu (In BATCH menu: Loop: 100 - 50 - 25 - 20 - 10 - Off)
7.	REPORT	Open counting results report with send and print interface
8.	MENU	Open the user menu

<b>Nr.</b>	<b>Button</b>	<b>Description</b>
<b>A</b>		Open Quick menu
<b>B</b>		Open Count mode menu
<b>C</b>		Automatic start counting On/Off
<b>D</b>		Add function On/Off (ADD count results of multiple counts to the total.)
<b>E</b>		Open counting speed menu
<b>F</b>		Open detection type menu
<b>9.</b>		Selected batch number

<b>Nr.</b>	<b>Button</b>	<b>Description</b>
<b>10.</b>		Total value of counted banknotes
<b>11</b>		Number of counted notes

## First operation

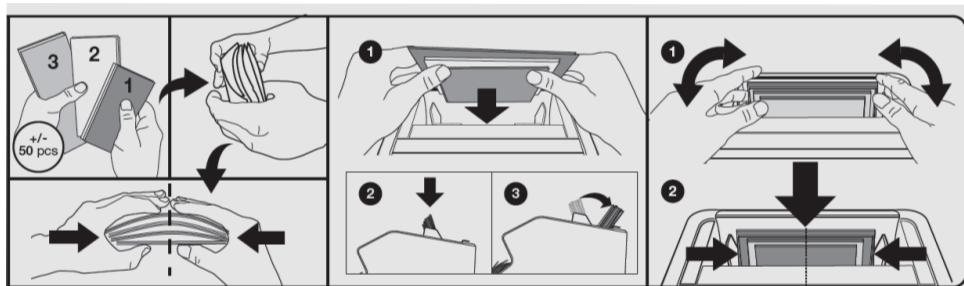


1. The device starts by default with the following settings:

- A. Detection type: \*CUR\*  
(Automatic currency recognition)
- B. Counting mode: MIX
- C. Auto start: ON
- D. Add mode is Off
- E. Counting speed: 1000

2. Prevent unnecessary counting errors.

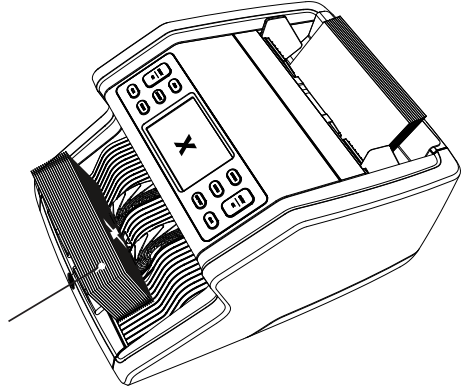
Organise your banknotes by stacking them neatly from the smallest to the largest denomination. Place the stack on the hopper with the largest banknotes facing upwards. Gently push the banknotes back to start the counting process. Ensure the stack is evenly aligned, with the back straight and the notes centred. Carefully use your hands to guide the banknotes during counting to prevent them from slanting or shifting.



3. When the banknotes are placed on the hopper the machine will automatically start counting.

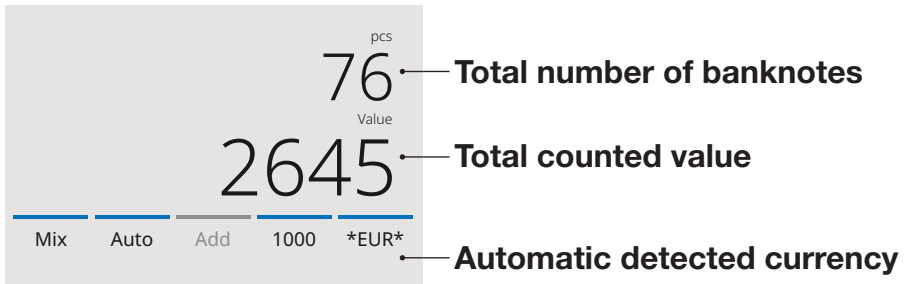
Note: Press **[AUTO]** on the screen to switch Off this function.

4. When the device detects a suspect banknote during counting, it will stop, sound an alarm and display an error message. The last counted banknote in the stacker is the suspect note. Remove this note and press **[Start/OK]** to continue counting.



Suspected note

5 After finishing the count, the results are shown on the screen.



6. Press the **[REPORT]** button to view the detailed counting results specified per denomination.

Press **[PRINT]** on the screen to print the counting results\*.

Press **[Send]** on the screen to send the counting results to the Safescan app.

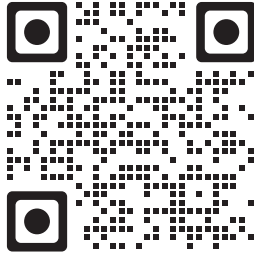
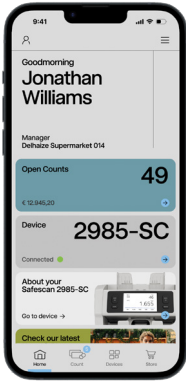
Den	Pcs	Value
5	23	115
10	16	160
20	21	420
50	17	850
<b>&lt; Total</b>	<b>76</b>	<b>2.645 &gt;</b>

\* We recommend the use of the optional Safescan TP-230 printer

## Sending count results to the Safescan app

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To send counting results to the Safescan App, the app must be installed on your smartphone. To download the app, scan the QR code or tap the **Get Safescan App** button below.



Scan QR code

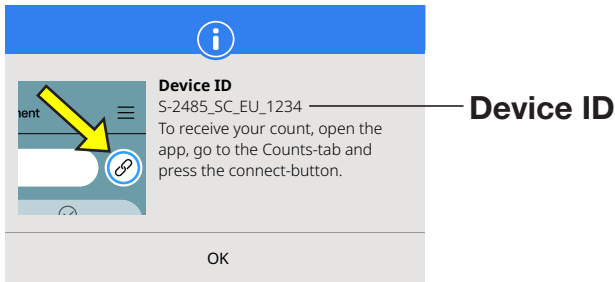


Click on app store

1. On the report screen, press **[Send]**.

Den	Pcs	Value
5	23	115
10	16	160
20	21	420
50	17	850
< Total	76	2.645 >

**A.** If no previous connection has been established, the device will display a Device ID along with instructions. This Device ID is used to identify your device in the Safescan App.

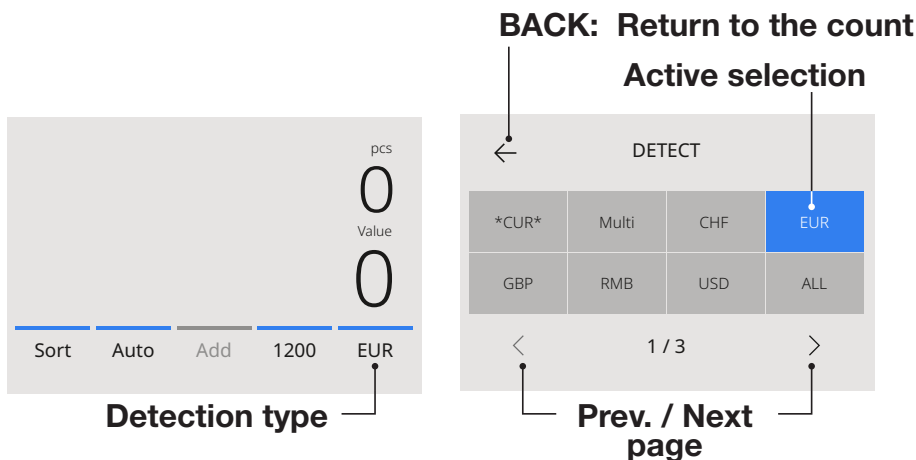


**B.** If a connection is already active during the current session, the count results will be sent directly to the Safescan App.

**Note:** The app maintains an active connection with the device for 10 minutes. Each time new count results are sent, the 10-minute timer is reset.

## Selecting a detection type

1. To select or change the current detection type press the currency indicator on the bottom right corner of the touch screen or press the **[DETECT]** button on the control panel. The detection menu opens.



2. The detect menu contains multiple selection tiles. The active detection type has a blue coloured tile. Use **[LEFT]** & **[RIGHT]** buttons to toggle between the detection menu pages. Simply press the tile corresponding to the currency or a detection manner you require on the screen for your count.

**Note:** Selecting a detection type will determine the available count modes.

## Explanation of the available detection types

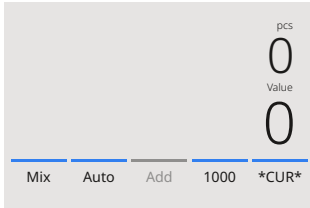
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### Detection

### Description

### Explanation of usage

#### \*CUR\*



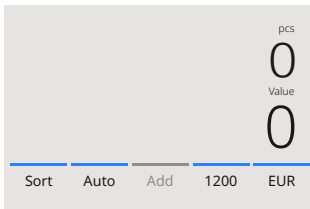
Currencies available on the device are automatically recognized.

With \*CUR\* 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.

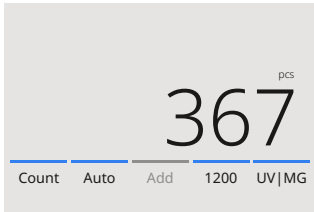
EUR, USD, GBP and other currencies that are available on the device.

Counting banknotes of a specific currency.

Select currencies in the DETECT menu. Banknote of other currencies will be considered as suspicious



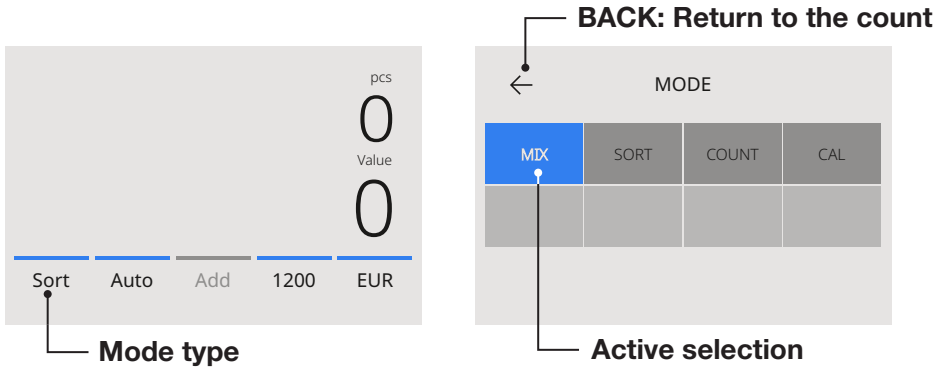
Detection	Description	Explanation of usage
ALL	Piece counting without any counterfeit detection.	Select ALL, UV, MG, UV+MG to piece count currencies which are not available on the machine.
UV	Piece counting with UV detection.	
MG	Piece counting with MG detection.	
UV   MG	Piece counting with both UV + MG detection.	



## Selecting a counting mode

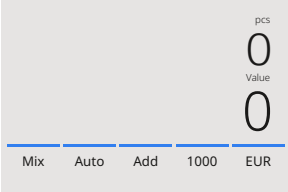
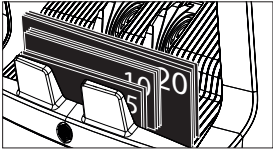
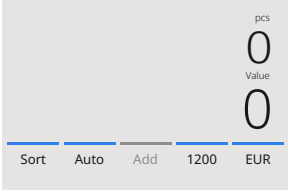
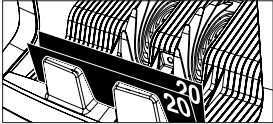
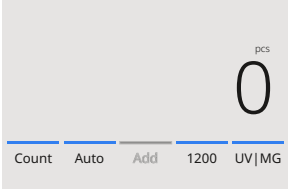
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1. Press the mode type in the bottom left corner or press the **[MODE]** button on the control panel. The mode menu opens.



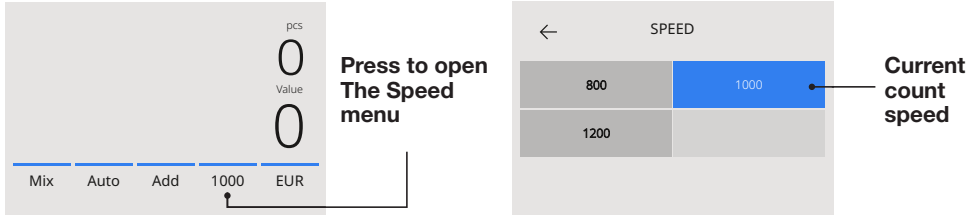
2. The mode menu contains multiple selection tiles. The active mode type has a blue coloured tile. The available mode types are determined by the active detection type. Simply press a mode type you require for your count.

# Explanation of the available count modes

Mode	Main feature	Explanation of mode
<p><b>Mix</b></p> 	<p>Counting the value and number of banknote denominations.</p> 	<p>Counting the value and number of both sorted and unsorted denominations of the selected currency. If detection "MULTI" is selected, 3 currencies can be mixed counted simultaneously.</p>
<p><b>Sort</b></p> 	<p>Counting the value and number of banknotes while sorting out any different banknote denominations.</p> 	<p>Counting the number of banknotes sorted per denomination. Denominations different than the first counted banknote denomination are rejected.</p>
<p><b>Count</b></p> 	<p>Counting the number of banknotes.</p>	<p>Counting the number of banknotes without checking banknote dimensions or value.</p>

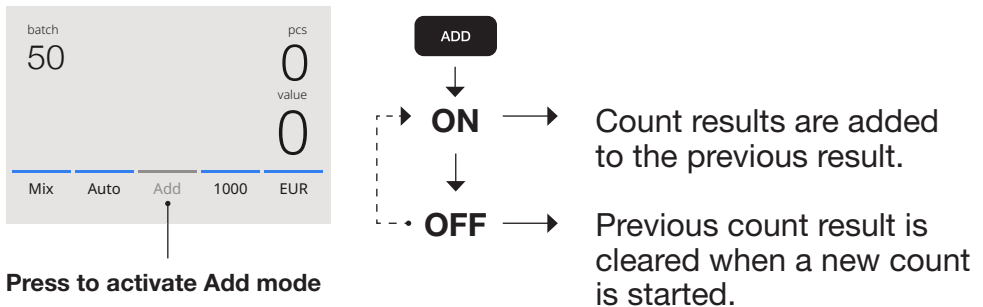
## Select counting speed

Press the count speed indication on the touch-screen to open the Speed menu. The speed menu will show the count speeds available within the selected counting mode and detection setting.



## Add function

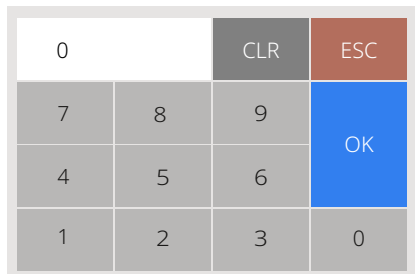
Use the add function to add the results of multiple counts to the total. Press **[ADD]** in the bottom-middle of the count screen. or press the **[ADD]** button on the control panel. The bar above ADD will light up blue when activated.



## Batch counting

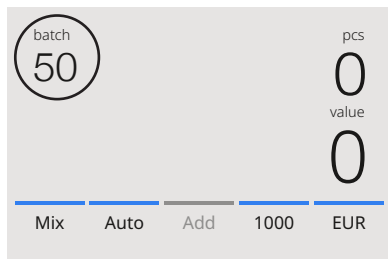
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The batch function is used to create stacks of an equal number of banknotes. Press **[BATCH]** to open the Batch entry screen. By default the batch number is set to 100.



1. Type the desired batch number on the touch screen and press **[OK]** to confirm. Or repeatedly press the **[BATCH]** button to toggle between the presetted batch numbers.
    - Press **[CLR]** to clear the entry.
    - Press **[ESC]** on the touch screen to exit the batch entry screen.
- 

2. In the count screen, the batch number is shown.

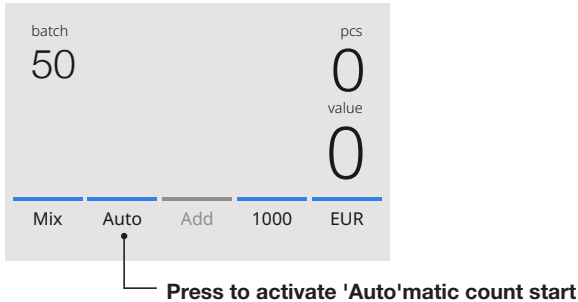


3. Place a stack of banknotes on the hopper. The device will now stop counting when the batch number has been reached.

**Note:** When the batch number is not reached, the device will give 1 sound signal.

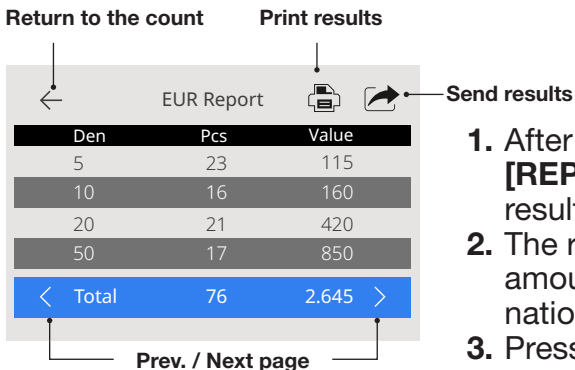
## Automatic count start

With setting 'Auto' activated, the machine will automatically start counting when banknotes are placed on the hopper.  
With 'Auto' deactivated, the **[START]** button must be pressed to start counting.



## Counting report

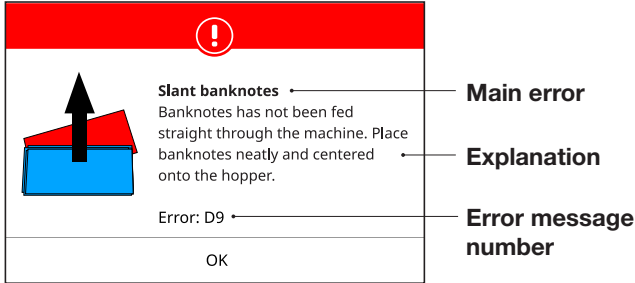
Use the report screen to show the counting results of currency counting.



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 next result page(s)
4. Press 'Print' to send the count results to a printer.
5. Press [Send] to send the count results to the Safescan app.
6. Press <- to exit the report screen and return to the count screen.

## Banknote Error messages

When the device detects a suspect banknote during counting, it will stop, sound an alarm and display an error message. The last counted banknote in the stacker is the suspect note. Remove this note and press **[Start/OK]** to continue counting. Count the banknote again to ensure the suspected banknote is correctly detected.



A variety of messages can be displayed. These messages can occur during start up or during counting. The error message screen shows the main error, the explanation and solution and the error message number.

## Banknote Error messages

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Error	Cause	Solution(s)
<b>UV, MG, IR, IMAGE INCOMPLETE, IMAGE DISTORTION, IMAGE, NOT RECOGNIZED</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 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>	<ul style="list-style-type: none"> <li>- Check the rejected stack for a different denomination.</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>

Error	Cause	Solution(s)
<b>CHAINED, DOUBLE</b>	- More than one banknote is being fed through the machine at the same time.	<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 adjustment knob in clockwise direction. See chapter maintenance and servicing.</li> </ul>
<b>HALF BANK-NOTE</b>	- An incomplete, torn or half-size banknote has been detected.	- Check the banknote quality. If no obvious visible issues are found, count the banknote again and check if the problem persists.
<b>WIDTH, LENGTH</b>	- A banknote with a non-conforming size has been detected.	- Check the banknote quality. If no obvious visible issues are found, count the banknote again and check if the problem persists.

## Machine error messages

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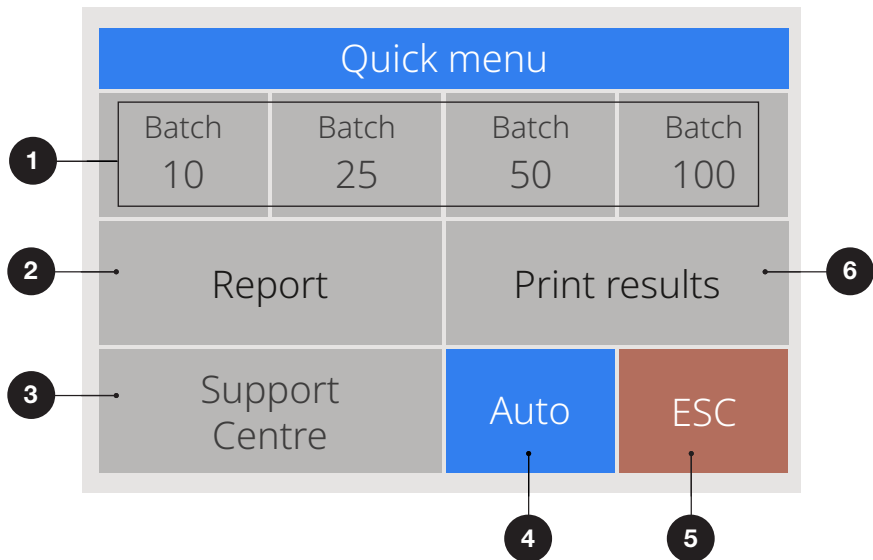
<b>Error message displayed</b>	<b>Solution displayed</b>
Sensors blocked	Open the top-panel for maintenance.
Machine service error	Contact Safescan support: <b>support.safescan.com</b>
The stacker is full	Remove all banknotes from the stacker
CIS-Sensor is open	Close the CIS-Sensor
Hopper sensor blocked	Remove banknotes and clear dust from the hopper sensor.
Stacker sensors are blocked	Remove all banknotes and clear dust from the stacker.

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## Quick menu

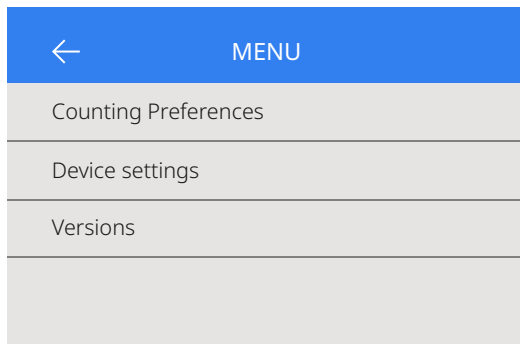
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The quick menu is a helpful tool that offers several features which are used regularly. Open the quick menu by simply pressing the middle of the touch screen once. With the quick menu opened, press a feature on the screen or press **[ESC]** to exit the quick menu.



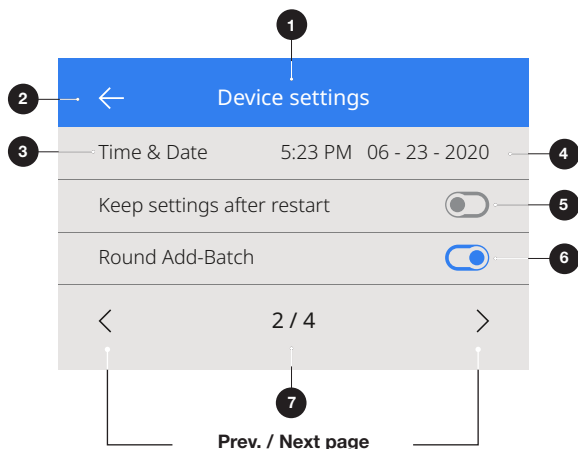
Nr.	On the screen	Description	Usage
1.	Batch 10 / 25 50 / 100	Batch presettings	Instruction 1. Press the touchscreen once to open the quick menu. 2. Press a batch setting. 3. The machine will return to the count screen with the selected batch settings activated.
<b>Note:</b> Batch presets can be adjusted in counting preferences in the menu.			
2.	Report	Open Report screen	Use the report screen to show the counting results of currency counting.
3.	Support Centre	QR-code to the device support centre page	Scan the QR-code to visit the online device support page.
4.	Auto	On/Off Automatic count start	With [AUTO] On the device will automatically start counting.
5.	ESC	Exit Quick Menu.	Instruction 1. Press [ESC]. 2. The machine will return to the count screen.
6.	Print results	Print current count results.	Note: For printing the count results you will need the optional TP-230 printer.

## Menu



1. Press the [MENU] button to open the menu.
2. The menu is divided in 3 submenu's.
  - Counting preferences
  - Device settings
  - Versions
3. Press on a submenu item to open or Press [←] to return to the count menu.

## Working with the menu



1. Current Menu/Sub-menu
2. Go one step back
3. Menu item
4. Item settings
5. Function switch OFF: Switch is grey
6. Function switch ON: Switch is bright white and blue.
7. Page number indication

## Menu items

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<b>Counting preference</b>	<b>Setting description</b>
Button sound	Enable or disable beep sounds when a button is pressed using the On/Off switch.
Alarm sound	Enable or disable alarm sounds when an error occurs using the On/Off switch.
Batch quantities	Change preset batch numbers in quick menu.
<hr/>	
<b>Device settings</b>	<b>Setting description</b>
Language	Select language of user interface.
Time format	Select 12 or 24 hour format.
Time and Date	Menu to manually enter the time and date. The current time and date is shown.
Keep setting after restart	Enabled (On): The current user settings will be used after restarting. Disabled (Off): The device will start with automatic currency detection, count mode Mix and Batch Off.

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**Device settings****Setting description**

Default factory settings

Start reset procedure. After resetting, the device is set back to default factory settings. All user settings are cleared.

Maintenance Menu

This menu is protected by a PIN code and is only accessible under the supervision of Safescan.

Get Safescan App

Scan the QR code to access the Safescan App download page.

**Device settings****Setting description**

Software version

Shows which software version is installed.

BT firmware

Shows which bluetooth firmware is installed.

BT MAC address

Shows the BT MAC address.

## Maintenance & servicing

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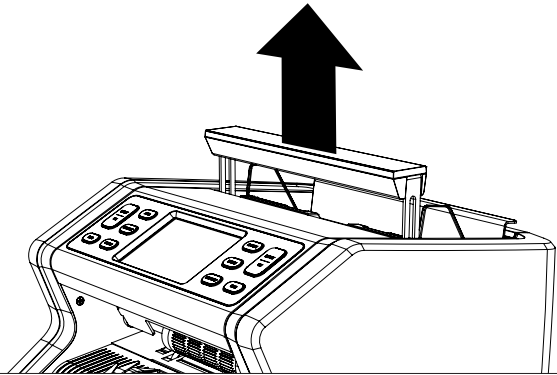
To ensure continuous reliable operation, regular cleaning of the device's internal parts and sensors is required. Dust or dirt can rub off banknotes and disturb the proper functioning of the sensors. or foreign objects that might have gotten stuck.

**Remark:** Always power OFF the machine and pull out the power cable from the device before servicing.

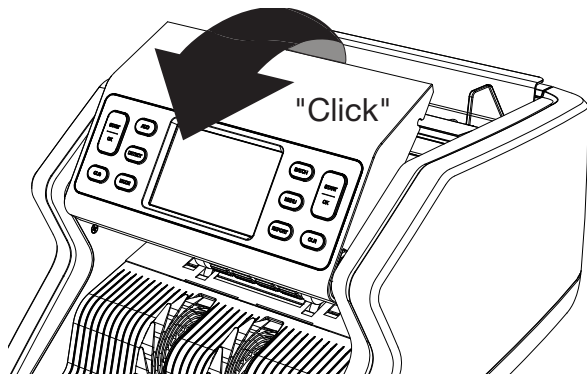
### Opening the top panel

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1. Lift the handle.

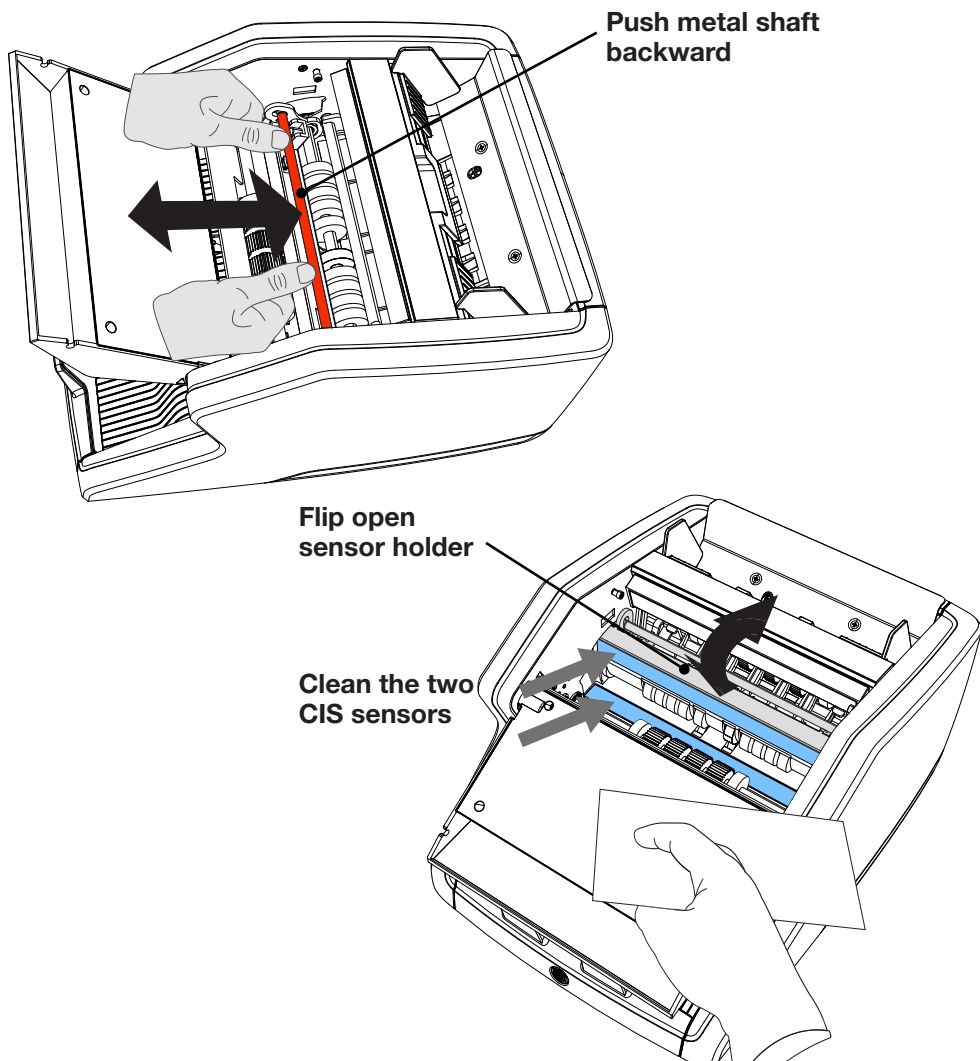


2. Turn the control panel outward.



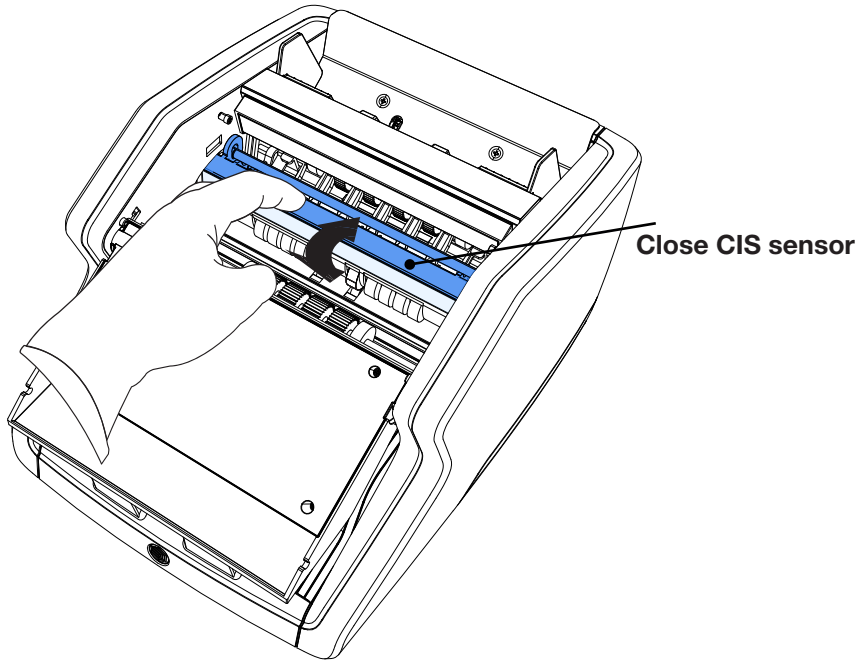
## Cleaning

Depending on the frequency of machine usage, remove all the dust from the sensors with a dry brush (included) or cloth, on a weekly or monthly basis. During cleaning the use of an airduster or vacuum cleaner is recommended. When using a vacuum cleaner make sure to put a soft brush attachment onto the hose.



## Cleaning

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## Software updates

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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 2400-Series banknote counter can keep pace with these changes.

All Safescan devices are tested on a yearly basis at the Central banks. To make sure your machine is up to date, please check our website regularly to see if there are new updates necessary for your device.

## Updating the device

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1. Check the currency software version on your machine. The software version is displayed displayed in the Menu. Press **[MENU]** and then press 'Versions' to see the current versions.
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

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<b>Supported currencies:</b>	Please visit <a href="http://www.safescan.com">www.safescan.com</a> for up to date availability.
<b>Counting modes:</b>	<b>Mix</b> (Value counting for sorted & unsorted currencies) <b>Sort</b> (Value counting with denomination sorting or sheets counting with size-sorting and detection (None, UV, MG or UV +MG) <b>Count</b> (Sheet count, with detection settings : Off, UV, MG or UV + MG)
<b>Counting speed:</b>	800, 1000 and 1200 banknotes/minute
<b>Banknote feature detection:</b>	UV, MG, MT, IR, IMAGE, 3D-size, Thickness, Paper Quality
<b>Banknote size range:</b>	50 x 110 mm ~ 90 x 180 mm
<b>Hopper capacity:</b>	150 banknotes
<b>Stacker capacity:</b>	220 banknotes
<b>Power:</b>	AC 110-250V / 50-60Hz.
<b>Power consumption:</b>	60W maximum (Check)
<b>Dimensions:</b>	(W x D x H) 259 x 254 x 255 mm
<b>Weight:</b>	6.4kg (Check)
<b>Operating Temperature:</b>	15-35 °C / 59-95 °F.

## Technical Support

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Please visit our online support center first - go to **support.safescan.com** and select 'Banknote Counters'.

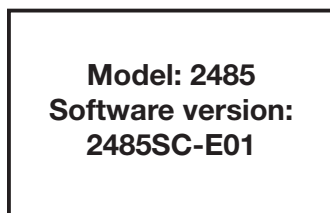
If you need any further assistance: our Customer Care Team is available by phone during office hours (GMT +1 timezone) or by e-mail to answer any question you may have regarding the usage of your Safescan device. Visit **www.safescan.com** for details.

When calling or e-mailing our Customer Care Team, always make sure you have the following information at hand: model number, serial number (see product sticker at the bottom of the device), software version number (shown at startup of the device) and date of purchase.

Serial number




Software version number



## 3 year warranty

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Warranty procedure: **www.safescan.com**

 This product is in compliance with the essential requirements and other relevant provisions of the applicable European directives. The Declaration of Conformity (DoC) is available at [www.safescan.com](http://www.safescan.com)



Take the device to a recycling centre if you want to dispose of it. Never dispose of any electronic devices with household waste.

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