



# MANUAL

ENGLISH | NEDERLANDS | DEUTSCH | FRANÇAIS | ESPAÑOL | ITALIANO | PORTUGUÊS  
POLSKI | ČESKY | MAGYAR | SLOVENSKÝ

**SAFESCAN 155-S / 165-S**

# COUNTERFEIT MONEY DETECTOR

# INTRODUCTION

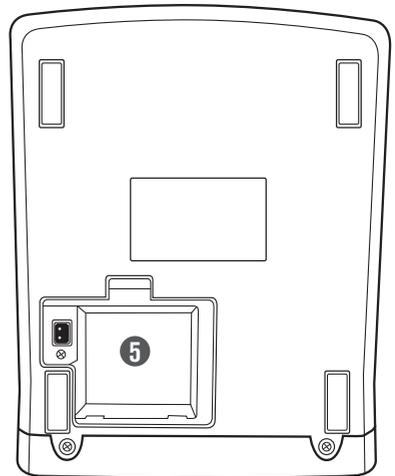
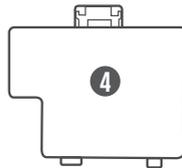
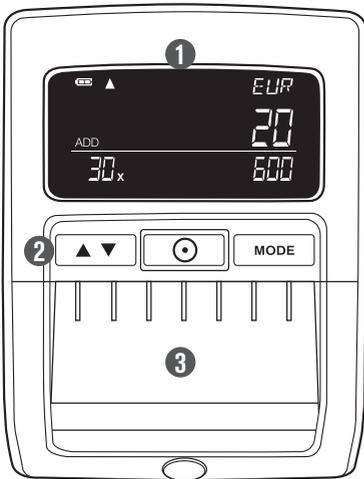
Thank you for purchasing Safescan 155-S / 165-S automatic counterfeit detector. The Safescan 155-S / 165-S will distinguish counterfeit banknotes from genuine ones by verifying them on various security features. Please read these operating instructions carefully before starting to use this device, and keep this manual for future reference.

## PACKAGE CONTENTS

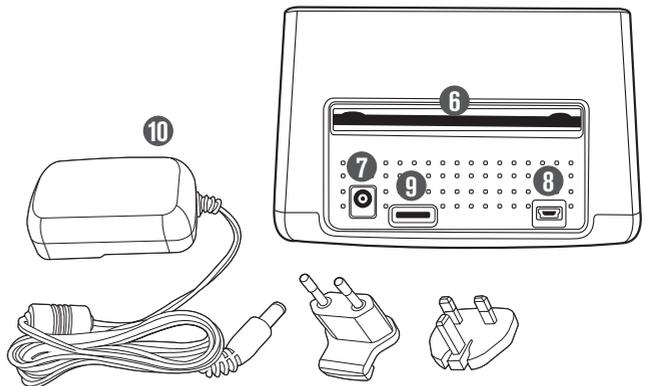
The retail box contains the following items:

- Safescan 155-S / 165-S counterfeit money detector
- Manual
- Power adapter (12V/1A, 10 Watt)
- Banknote insert direction stickers

## 1. PRODUCT

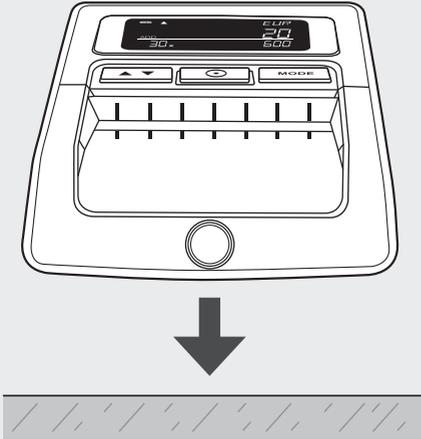


1. LCD display
2. Function buttons
3. Banknote feed entrance and exit (when selected)
4. Battery lid
5. Battery compartment
6. Banknote exit (when selected)
7. Power connector
8. USB update port
9. Micro SD card update slot
10. Power adapter

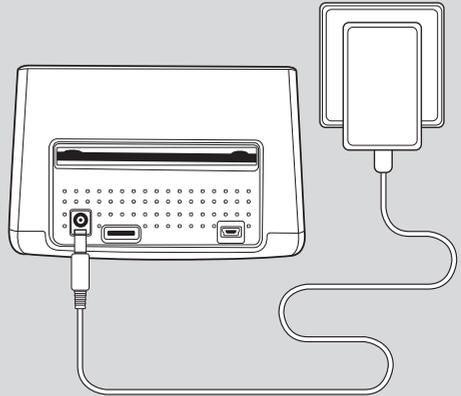


## 2. INSTALLING YOUR SAFESCAN 155-S / 165-S

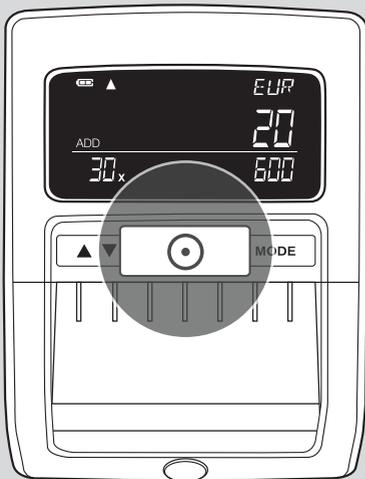
1. Place the detector on a flat and stable surface. Remove the protective foil from the LCD display.



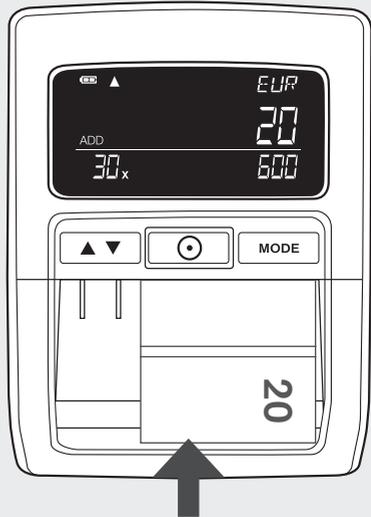
2. Connect the power adapter to the device and plug the power adapter into the mains outlet (AC 110-240V).



3. Press the  key for appr. 2 seconds to power **ON** the detector. A blue light will be visible under the power button.



4. The device is now ready to verify banknotes.

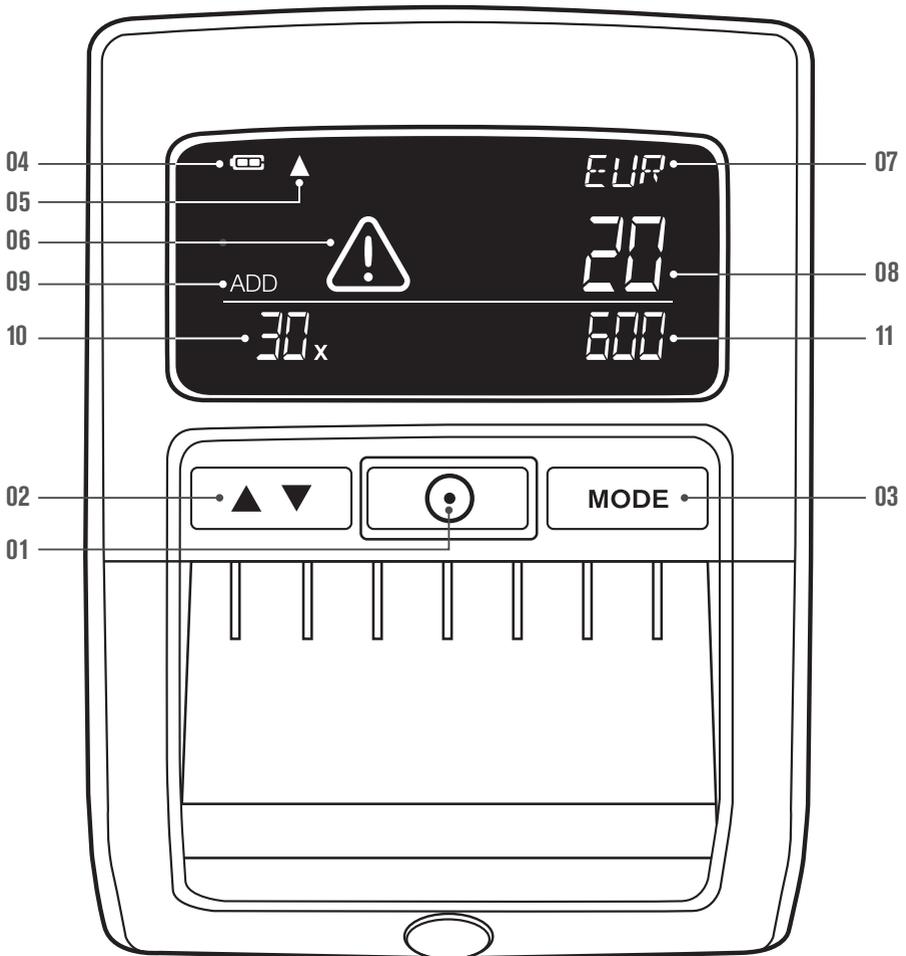


\* Please note: during startup, the device will show the installed software version on the display and will perform a self-test. If it has detected a problem during the self-test, it will show the corresponding error code on the screen.

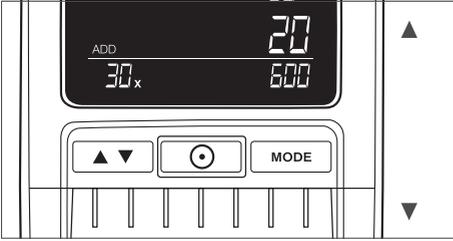
# 3. CONTROLS

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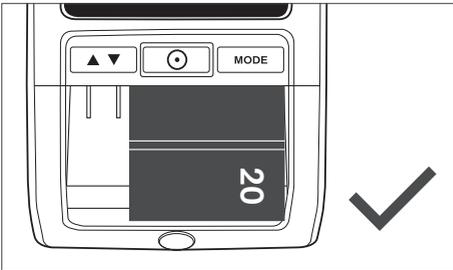
- 01. On/Off and Clear button
  - 02. Banknote exit direction selection and Report button
  - 03. Mode and Currency selection button
  - 04. Battery status indicator (when battery is inserted)
  - 05. Banknote exit direction indicator
  - 06. Error message icon
  - 07. Selected currency
  - 08. Denomination of last scanned banknote
  - 09. ADD function indicator
  - 10. Total number of scanned banknotes (in ADD mode only)
  - 11. Total value of scanned banknotes (in ADD mode only)
- 



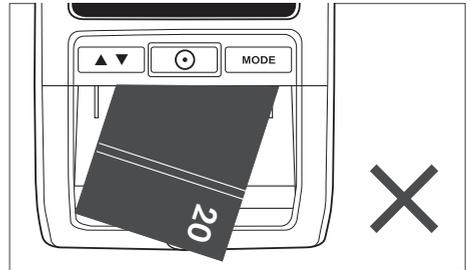
## 4. OPERATION



- 1. Select the exit direction.** Select the desired banknote exit direction (front or rear) by pressing the **▲▼** key for 2 seconds. The indicator light of the exit direction (**▲** or **▼**) will light up for 3 seconds.



- 2. Select the currency.** Press the **MODE** key for 3 seconds to change the currency. The selected currency will be shown on the display.



- 3. Insert a banknote into the detector.** Make sure the banknote is inserted straight and aligned to the right hand side. Also observe the insert directions for your selected currency. The banknote will automatically be fed past the integrated sensors and will be scanned within 0.5 seconds..



- 4. Genuine banknote:** If the banknote is genuine, the screen will show the denomination of the scanned banknote. When ADD mode has been selected, the total number and total value of all scanned banknotes will be shown.

- 5. Suspected counterfeit banknote:** If a suspected counterfeit banknote has been detected, the machine will sound a beep and show a red light under the power button. The corresponding error code will appear in the display. See page 6 for suspected counterfeit banknote error messages.



- 6. ADD mode:** The device will add the value and also show the total quantity of all scanned banknotes on the display.



- 7. Report** (in ADD mode only): To review the counting results, press the key briefly. The count results are shown per denomination. Press again to move to the next denomination. When all denominations have been shown, pressing will result in a double beep sound - the total of all scanned notes will be displayed.



- Denomination mode:** the machine will show the denomination of the last note that has been checked. Press to change between **ADD** and **Denomination mode**.



- 8. Clear counting results.** Press the button once to clear all counting results.

- 9. Stand-by and Power Off:** The device will go into stand-by mode after approx 30 seconds of non-use. When pressing a random key or when presenting a banknote to the platform, the detector will automatically switch on again.

Press the button for 2 seconds to Power Off the detector. Remove the detector from the mains outlet when it is not in use for a longer period.

#### SUSPECTED COUNTERFEIT BANKNOTE ERROR CODES:

E01	Banknote length error	E08	Metallic thread / security strip error
E02/E03	Magnetic ink properties error	E09/E10/E11/E12	Watermark error
E04/E05	Infrared properties error	E13	Spectrum analysis error (165-S)
E06	Banknote thickness error / Double note error	E14	Color sensor error
E07	Slant note (note not inserted straight)	E20	Passing error / Banknote insert error

## 5. BANKNOTE INSERT DIRECTIONS

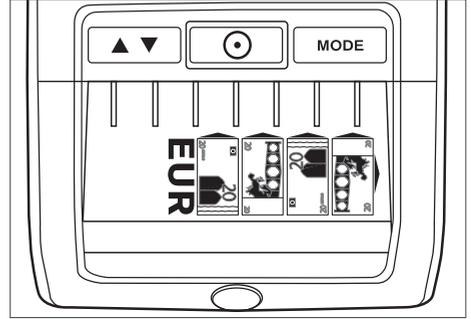
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Included with your Safescan 155-S / 165-S detector are stickers which indicate the correct insert direction of various supported currencies. When required, place these stickers on the banknote entrance platform of the detector, as shown below.

Please observe these instructions and insert the banknotes accordingly. Due to the different characteristics and integrated security features of the supported currencies, some currencies may be inserted in all 4 directions and some can be inserted in only 1 direction.

1. Example of insert direction sticker. In this case, the sticker indicates that EUR banknotes may be in all 4 directions, but have to be aligned at the right hand side of the banknote entrance platform.

**SEE APPENDIX FOR SPECIFIC BANKNOTE INSERT INSTRUCTIONS OF THE SUPPORTED CURRENCIES.**



## 6. DIRTY OR DAMAGED BANKNOTES

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The Safescan 155-S / 165-S may occasionally detect dirty, rumpled, damaged or accidentally washed genuine banknotes as counterfeits because the device cannot correctly detect all of the anti-counterfeit features of these banknotes.

When a suspected banknote error code appears, please inspect the condition of the banknote. After inspection and eventual cleaning / unfolding the banknote, test the banknote again. Inserting the banknote in a different direction (if allowed for the specific currency) may help.

## 7. WHAT TO DO WITH COUNTERFEIT BANKNOTES

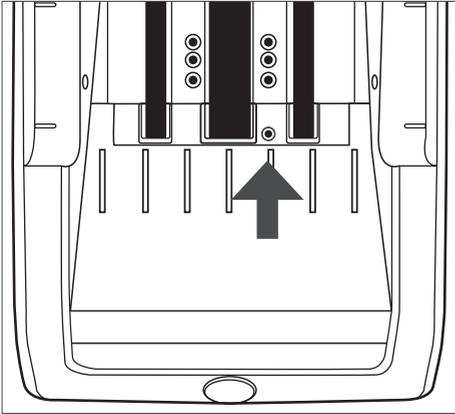
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Manufacturing, distributing, spending and even possessing a counterfeit banknote is illegal. When your Safescan 155-S / 165-S has detected a counterfeit banknote and you have assured yourself that the banknote is in fact a counterfeit, please notify the authorities immediately and hand in the counterfeit banknote. Alternatively you can take the counterfeit note to a branch office of your country's central bank or your local bank. Please note that your bank will not reimburse you for the face value of the counterfeit banknote.

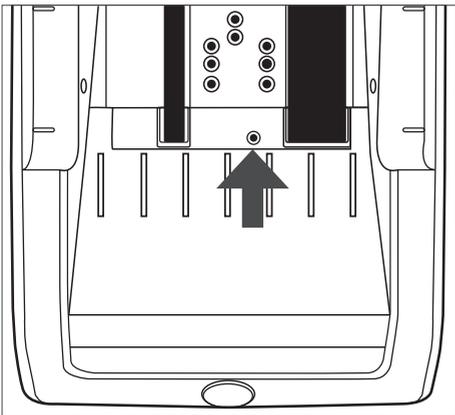
# 8. MAINTENANCE

The Safescan 155-S / 165-S is a "low maintenance" device. However, to ensure accurate verification results it is necessary that the sensors (⊙, ■) are regularly cleaned with a dry brush, pressurized air suitable for cleaning of mechanical and electronic devices or a cotton tip with pure alcohol. Make sure the device is switched off and disconnected from the mains outlet before cleaning.

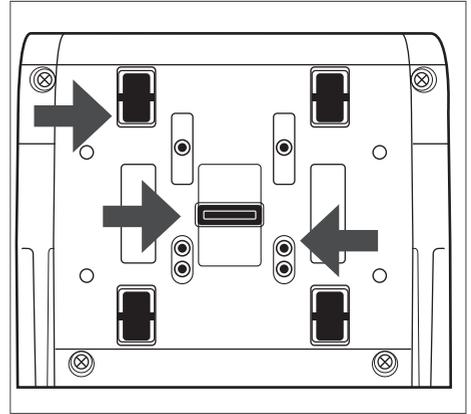
**TO EXPOSE THE SENSORS, LIFT THE TOP PART OF THE DEVICE WHERE THE DISPLAY IS LOCATED**



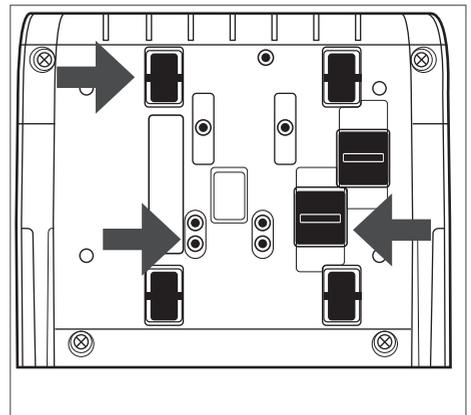
1. Safescan 155-S: Remove any dust or dirt from the bottom sensors and the driving belts as indicated above.



3. Safescan 165-S: Remove any dust or dirt from the bottom sensors and the driving belts as indicated above.



2. Safescan 155-S: Remove any dust or dirt from the top sensors, clean the magnetic head with a cotton tip and cleaning alcohol and clean the rotation wheels.

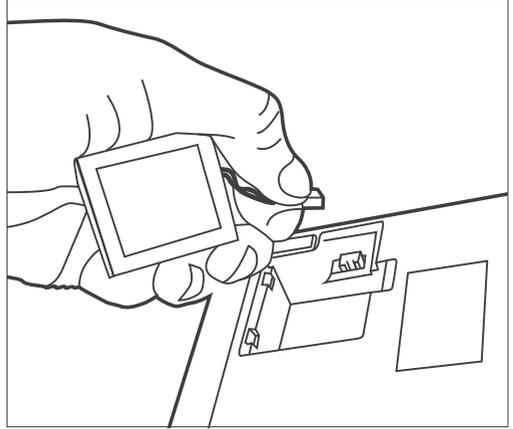


4. Safescan 165-S: Remove any dust or dirt from the top sensors, clean the 2 magnetic heads with a cotton tip and cleaning alcohol and clean the rotation wheels.

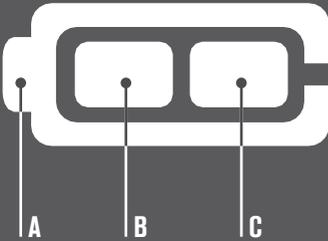
## 9. RECHARGEABLE BATTERY (OPTIONAL ACCESSORY)

The Safescan 155-S / 165-S can also be used with the Safescan LB-105 rechargeable battery (available as option). Ideal for up to 30 hours of use in places where there is no mains outlet available.

- 1. Inserting the rechargeable battery:** Open the battery cover. Place the connector of the battery in the battery socket. Place the battery in the compartment and close the battery cover.
- 2. Power on the device.** The battery status indicator will now be visible on the display, indicating a battery has been inserted.



### BATTERY STATUS INDICATOR (VISIBLE AFTER START-UP OF THE DETECTOR)



- 1. Charging mode (power adapter is connected):**  
When the battery is not fully charged: segment A is on, segments B + C are blinking (first B for 0.5 sec. and then C for 0.5 sec.) This sequence appears 5x in 5 seconds. After 5 seconds the battery icon will disappear.
- 2. Charging mode (power adapter is connected):**  
When the battery is fully charged: Segments A + B + C are blinking together, for 5x in 5 seconds. After 5 times blinking the battery icon will disappear.
- 3. Battery operation mode (no power adapter connected):**  
When the battery power is at less than 20%, segments A + B are blinking together, 1x per second.
- 4. Battery operation mode (no power adapter connected):**  
When the battery power is at 50%, segments A + B are on. After 5 seconds the battery icon will disappear.
- 5. Battery operation mode (no power adapter connected):**  
When the battery is fully charged, segments A + B + C are on. After 5 seconds the battery icon will disappear.

When in battery operation mode: after 30 minutes in standby mode, the device will automatically switch off. When a battery is inserted but the detector is also connected to the mains outlet it will remain in standby mode.

# 10. CURRENCY UPDATES

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Whenever new banknotes of a supported currency are issued or security features of supported banknotes have been upgraded, it is required to update the software of your Safescan counterfeit detector to the latest currency definitions, to ensure that the new banknotes are also properly recognized. Updating your Safescan 155-S / 165-S detector can be done via the USB port (computer and mini-USB to USB-A cable required) or via a Micro SD card (no computer required). For more information please see [www.safescan.com](http://www.safescan.com).

# 11. TROUBLESHOOTING

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PROBLEM	CAUSE	SOLUTION
The device reports all scanned banknotes as counterfeit	The sensors are dirty	Clean the sensors
	The wrong currency has been selected	Select the correct currency
	The banknotes are not inserted correctly	Insert the banknotes according to the currency-specific insert direction(s) and always aligned to the right hand side of the entrance platform
The device displays an incorrect denomination (example: €50 is detected as €20 note)	The device is placed near other electronic devices which transmit a radio-signal or produce a certain electromagnetic radiation. This may disturb the sensors of the detector.	Remove the device from its current location and place it somewhere else.
The device does not recognize a newly introduced banknote	The current software version does not contain the security characteristics of this new banknote	Update the currency software
The battery power indicator is blinking on the screen	Battery is being charged or has less than 20% power left	Connect the adapter to the mains outlet and the device
	Battery is not charged	
Battery is inserted but device does not work	Battery is not inserted correctly.	Make sure the connector is inserted into the designated socket in the correct way.

## SUPPORT

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### ANY QUESTIONS? NEED TECHNICAL ASSISTANCE?

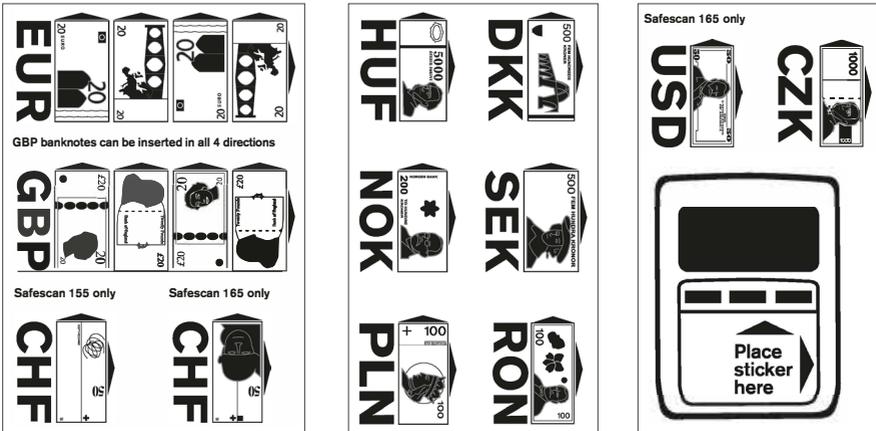
Our support team is available by phone during office hours (GMT +1 timezone) or by e-mail to answer any question you may have regarding the use of your Safescan device. For more details go to [www.safescan.com](http://www.safescan.com)

When calling or e-mailing our support center, always make sure you have the following information at hand: model number, partnumber, serial number (see product sticker at the bottom of the device), software version number, date of purchase.

# SPECIFICATIONS

<b>Counterfeit detection features:</b>	Safescan 155-S: magnetic ink, metallic thread, infrared properties, watermark, color, banknote length, paper thickness Safescan 165-S: magnetic ink, metallic thread, infrared properties, watermark, color, spectrum analysis (USD only), banknote length, paper thickness
<b>Currency versions:</b>	Safescan 155-S: default: EUR, GBP, CHF, PLN, HUF also available: EUR, GBP, SEK, NOK, DKK EUR, PLN, HUF, CZK, RON Safescan 165-S: USD, EUR, GBP, CHF, PLN, HUF, SEK, NOK, DKK <i>currency version information correct at time of going to press</i>
<b>Testing speed</b>	< 0.5s per banknote
<b>Power</b>	DC 12V/1.0A (100V ~ 240V / 50 ~60Hz)
<b>Power consumption</b>	<10W
<b>Operating temperature</b>	0°~40° C
<b>Storage temperature</b>	-25°~55° C
<b>Dimensions</b>	15.9 x 12.8 x 8.3 cm
<b>Weight</b>	0.62 kg
<b>Rechargeable battery (option)</b>	Safescan LB-105 Rechargeable lithium battery 10.8V/600mAh

# APPENDIX - BANKNOTE INSERT DIRECTIONS



# WARRANTY

Warranty procedure: contact Safescan for assistance: [www.safescan.com](http://www.safescan.com)

**CE** 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 throw any electronic device away with the household waste.

Aluminiumstraat 65  
2718 RB Zoetermeer  
The Netherlands  
+31 79 363 11 70  
info@safescan.com  
[www.safescan.com](http://www.safescan.com)