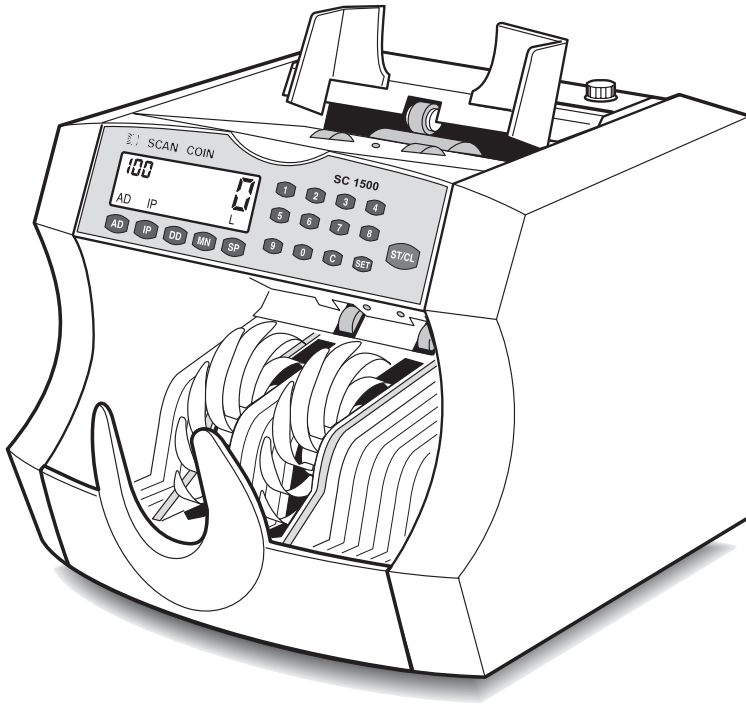


User's Guide
Bruksanvisning
Bedienungsanleitung
Manuel d'utilisation
Instrucciones para el usuario
Manuale dell'operatore



SCAN COIN 1500

Currency Counters

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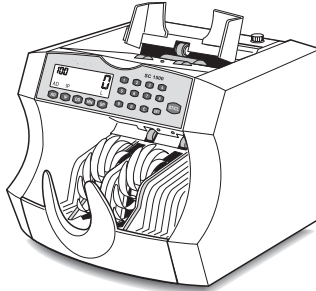
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User's Guide

SCAN COIN 1500 std/UV/3D/MG/MT/IR

Currency Counters



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General information

SCAN COIN AB reserves the right to revise and improve its products as it sees fit. This publication describes this product at the time of publication and may not reflect the product at all times in the future.

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Declaration of conformity

We, SCAN COIN AB, Malmö, Sweden, declare under our sole responsibility, that the product in this manual, to which this declaration relates, is in conformity with the following standards or other normative documents:

- EN 60 950: 1992;
- EN 50 081-1: 1992;
- EN 50 082-1: 1992,

following the provisions of Directive:

- Low Voltage Directive 73/23/EEC and amending Directive 93/68/EEC;
- EMC Directive 89/336/EEC and amending Directives 92/31/EEC and 93/68/EEC.

Responsibility

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

Safety precautions

This guide contains hazard information which must be read by all users. The hazard information is presented as a warning, as follows:



WARNING!

Risk of personal injury!

Warnings indicate a potential hazard to the health and safety of users. The warning symbols appear at their points of application in this guide.

Caution!

Cautions indicate a hazard to the machine, but not a danger to personnel. They clearly state the nature of the hazard and how to avoid it. They appear at their points of application in this guide.



WARNING!

Risk of electric shock!

Lethal voltages exist in the machine when connected to mains power. Make sure you disconnect the power cord before cleaning or servicing the machine.



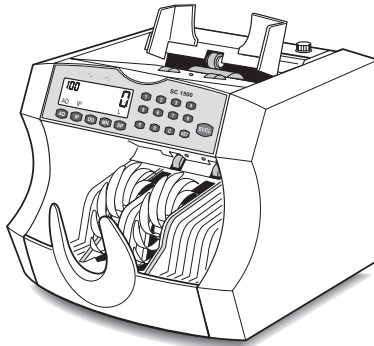
WARNING!

Risk of jamming!

This machine contains moving parts and sharp edges. Always be careful. Do not touch the components inside the machine while it is running.

Introduction

SC 1500 is a compact desktop machine for counting notes/documents, detecting suspicious counterfeits and detecting undersized notes/documents.



SC 1500 is available in several models with different functions, see [“Functions” on page 7](#). Throughout this guide, the instructions given apply to all versions unless stated otherwise.

SC 1500 is light, easy to carry and easy to operate. By pressing keys on the control panel, you can select the machine’s various modes of operation.

SC 1500 has a LCD (Liquid Chrystal Display), which displays counted totals, batch quantity, error codes and other information.

Notes to be counted are placed on the feed table on top of the machine. As the notes are fed into the machine, they are counted and then collected on the stacker table at the bottom front of the machine.

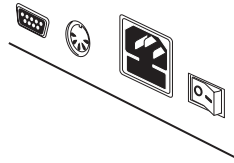
The machine can operate at three different counting speeds: low, medium and high.





There are two communication ports at the rear of the machine.

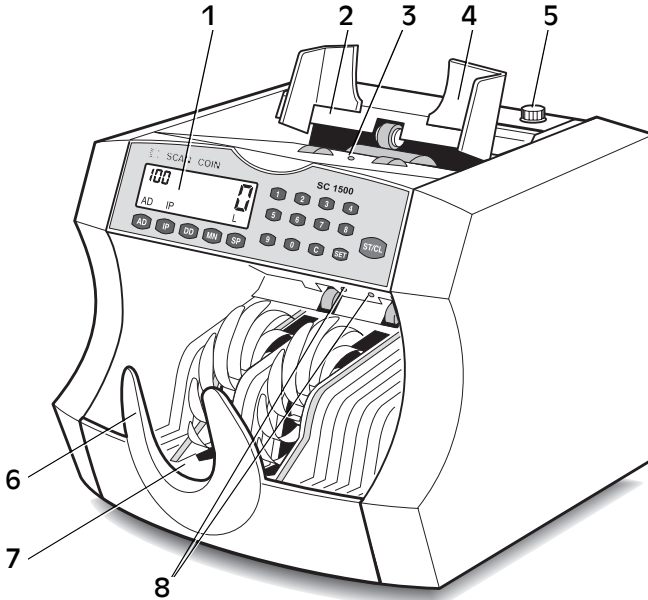
- The nine pin standard RS-232 serial interface is used for communication with computer.
- The five pin port is used for connecting the remote display RD 7 (accessory).



Accessories

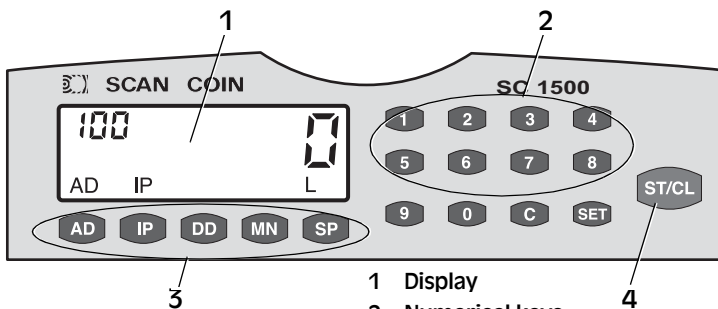
	Description
RD 7 013617-000	External display.
013975-000	Communication cable.

Machine part terminology



- | | |
|---------------------|---------------------------------|
| 1 Control panel | 5 Knob for thickness adjustment |
| 2 Feed table | 6 Stacker table |
| 3 Start sensor | 7 Stacker sensor |
| 4 Adjustable guides | 8 Left and right count sensor |

Control panel



- | | |
|-----------------------------------|-----------------------------------|
| 1 Display | 4 ST/CL -key (Start/Clear) |
| 2 Numerical keys | |
| 3 Function keys (SC 1500 std) | |
| 4 ST/CL -key (Start/Clear) | |



Positional references

Unless stated otherwise, positions and directions such as left, right, upper, lower, front, rear, clockwise and counter-clockwise are given with respect to the machine when viewed from the front.

Installation

WARNING!

Risk of electric shock!

The machine is of metal construction and must therefore always be earthed to the supply. Ensure that both the plug on the supply lead and the supply source are earthed. This is a requirement for this type of equipment and if not adhered to will contravene the national and international standards of Health and Safety in the work place.

Caution!

The machine must be protected by a fuse or a circuit breaker in the electrical circuit.

The machine must be installed by a authorized SCAN COIN representative.

Please also note the following when installing the machine:

- Operating temperature 15-35 °C
- Operating humidity 30-80% R.H.

Do not place the machine close to any radiators. Make sure there is some free space around the machine that allows the air to circulate.

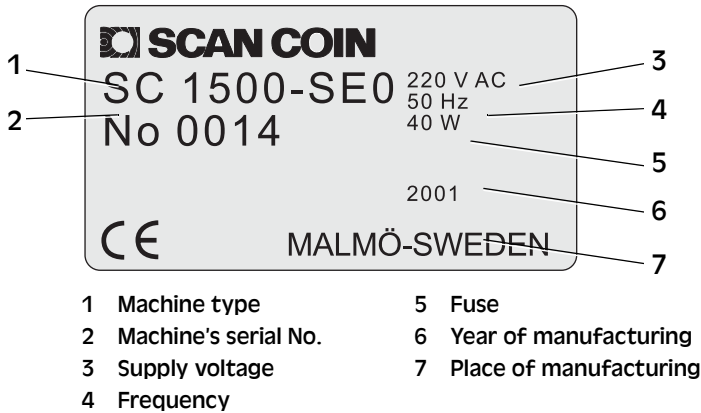
Make sure that the machine is positioned so that the socket outlet is easily accessible.

If the plug on the supply lead to the machine has a fuse, make sure it has the correct rating in amps.

Although this machine has been tested and complies with the national and international standards/regulations, it is recommend that no kind of equipment which generate a high level of electromagnetic interference (EMI) or vibration is placed close to the machine.

Machine label

The label below is an **example** of the information available on the machine.



Functions

For further instructions, see “Operation” on page 11. To use a function, press the key. The corresponding text will light up on the display, to indicate that the function is active.

Description



Adding

The machine will add each successive counting to the counted total.



Intelligent processing

This function can be used together with other functions.

The machine will automatically select the correct setting for light or dark notes/documents (density).

If extremely dark and light notes are mixed in a bundle, the **IP**-function can be disabled and a manually selected level can be used, see “Setting note density (IP)” on page 13.

Description

DD**Dimension detection (in mm)**

Detects notes/documents of differing width (short side) in any bundle.

If an under-sized or over-sized note/documents is detected, the machine stops at once with a beep tone and "dd" appears on the display.

The top most note/document on the stacker table is the different one and is not included in the counted total.

The minimum detectable difference (detecting accuracy) is 2 mm and can also be changed up to 7 mm (see "Setting dimension detection accuracy (DD-function, short side)" on page 12). The factory setting is 4 mm.

MN**Manual start** (SC 1500 std only).

This function can be used together with other functions.

When the **MN**-function is enabled, the machine does not start automatically when notes are placed on the feed table.

UV**UV detection** (UV-versions only)

Checks notes/documents by means of ultraviolet light. Can be used for almost any notes. The purpose is to identify the paper quality. It is used to detect suspicious notes/documents.

When a suspicious note/document is detected, the machine stops at once with a beep tone and "CF1" appears on the display.

Description

3D**Three-dimensional detection** (3D-versions only)

Detects notes/documents of differing width **and** length (long side) in any bundle. The function can be switched off, can be set to check the short side only (**DD**-function) or to check both short side and long side at the same time (**3D**-function). A symbol will indicate the current choice on the display:

**3D**-function **not** in use.**DD**-function in use.**3D**-function in use.

The accuracy for long side and short side detection can be set separately. The factory setting is 4 mm (short side) and 5 mm (long side). The setting will remain even if the machine is switched off.

MG**Magnetic print detection** (MG-versions only)

Checks for magnetic ink print. Can be used for example on US\$ and Euro-notes. The purpose is to detect suspicious notes/documents.

When a suspicious note/document is detected, the machine stops at once with a beep tone and “CF2” appears on the display.

MT**Magnetic metal thread detection** (MT-versions only)

Checks for magnetic metal thread. Can be used to verify the security thread in for example Euro-notes and/or notes/documents with a similar type of metal thread. The purpose is to detect suspicious notes/documents.

When a suspicious note/document is detected, the machine stops at once with a beep tone and “CF4” appears on the display.

Note!

Cannot be used on all notes. The factory setting is for Euro-notes.

Description



Infrared light detection (IR-versions only)

Allows extended security check by means of infrared light. It is used to detect suspicious notes/documents.

When a suspicious note/document is detected, the machine stops at once with a beep tone and "CF3" appears on the display.

Note!

Cannot be used on all notes. The factory setting is for Euro-notes.

Operation

WARNING!

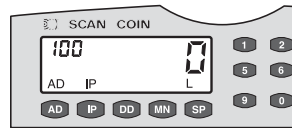
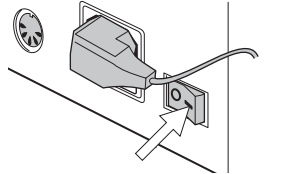
Risk of jamming! Follow the Safety precautions.



GB

Getting started

- 1) Connect the mains supply cable to the mains socket at the rear of the machine.
- 2) Set the power switch to **I (On position)**.
- 3) The machine will initiate a start and load all start-up parameters. If any error occurs, an error code is displayed.
- 4) The machine is automatically set to Batch counting mode. “0” will appear on the count display and “100” will appear on the batch display.
- 5) Any function can now be selected, see “Functions” on page 7.



Counting

The machine counts the notes currently placed on the feed table. At the start of the new counting operation, the count display is automatically reset to zero.

- 1) Press **C** to clear the batch number and disable batch counting mode (default mode).
- 2) Place the notes on the feed table. Adjust the guides so that they fit the size of the notes. The counting starts automatically.

Batch counting

The machine will count the notes/documents according to the selected batch number and then stop.


The batch size “100” is automatically selected when the machine is switched **On**. Press **C** to clear the batch number.

- 1) Set any batch number by means of the numerical keys **0-9**.
- 2) Place the notes on the feed table. The counting starts automatically and stops when the selected batch size has been reached.
- 3) Remove the counted notes. The counting continues automatically as long as there are notes on the feed table.


Adding (AD)

- 1) Press **C** to clear the batch number and disable the batch counting mode.
- 2) Press **AD**. “AD” appears on the display.
- 3) Place the notes on the feed table. The counting starts automatically. Each batch of notes will be counted and added to the total. The count display will show the total number of notes counted.

Setting dimension detection accuracy (DD-function, short side)

- 1) Press **DD** or **3D** 



or

Press **SET** several times until “dd” appears on the display. 
- 2) Press numerical key **1** (increase) or **0** (decrease) to select the desired detecting accuracy. The range is 2-7 mm.
- 3) Press **ST/CL**.

Setting dimension detection accuracy (3D-function)

To set the short side detection accuracy, follow the previous instruction ("Setting dimension detection accuracy (DD-function, short side)" on page 12).

The **3D** function must be in use.

- 1) Press **SET** "3d" appears on the display.  
- 2) Press the numerical key **1** (increase) or **0** (decrease) to select the desired detection accuracy. The range is 4-8 mm.
- 3) Press **ST/CL**.

Setting note density (IP)

When the **IP** function is off, "DE X" appears on the display, the density range can be set according to the bank notes to be counted.

Eight levels of note density are provided. The factory setting is level 4.

Note!

The **IP** function will automatically handle almost any kind of document and should only be switched off when documents in specific condition is to be counted (for example extremely light and/or extremely dark documents mixed in the same bundle).

- 1) Press **SET** several times until "dE" appears on the display.
- 2) Press numerical key **1** (increase) or **0** (decrease) to select proper density level:
 - DE 1-2: thin, light colored or new note/document;
 - DE 3-5: note/document with color between light and dark;
 - DE 6-8: thick, dark colored, old or dirty note/document.
- 3) Press **ST/CL**.

Setting UV detection sensitivity (UV-version only)

Note!

If mis-detection often occurs (a real note is taken for a counterfeit), select a lower sensitivity. If no-detection (the counterfeit is taken for real note) occurs, select a higher sensitivity.

- 1) Press **SET**.
- 2) Press **UV** several times to select the proper sensitivity level:
 - “L”: low sensitivity;
 - “M”: medium sensitivity;
 - “H”: high sensitivity.
- 3) Press **ST/CL**.

Setting counting speed (SP)

Note!

If the **SP**-key is not available, see [“Setting counting speed \(SET\)” on page 15](#).

Press **SP** to select the desired counting speed.

The display will show:

- “L”: low speed
- “M”: medium speed
- “H”: high speed.

To change the fixed values of the three counting speeds:

- 1) Press **SET**. “SP1” appears on the batch display.
- 2) Press numerical key **1** (increase) or **0** (decrease) to select the desired high speed.
- 3) Press **SET**. “SP2” appears on the batch display.
- 4) Press numerical key **1** or **0** to select the desired medium speed.
- 5) Press **SET**. “SP3” appears on the batch display.
- 6) Press numerical key **1** or **0** to select the desired low speed.
- 7) Press **ST/CL**.

Setting counting speed (SET)

If the **SP**-key is not available, the counting speed can be set by means of the **SET** key.

Press **SET** to select one of three preset counting speeds.

- “SP L”: low speed
- “SP M”: medium speed
- “SP H”: high speed.

To select another preset counting speed:

- Press **2** to select low speed.
- Press **3** to select medium speed.
- Press **4** to select high speed.

The preset speeds can be also be set. There are nine different levels available. Press numerical keys **1** or **0** to select the desired speed.

Setting automatic start On/Off (MN)

If the **MN**-key is not available, the function can be set by means of the **SET** key.

- 1) Press **SET** a number of times until “AU” appears on the batch display.
- 2) Press numerical key **1** (On) or **0** (Off) to select the desired function.

Setting MG/MT/IR sensitivity

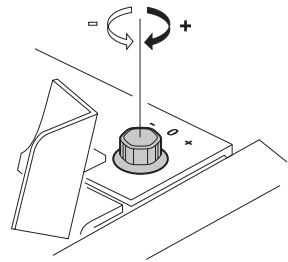
To set the sensitivity of any of the **MG**, **MT** or **IR** functions, the function must be activated. Press the function key (**MN**, **MT** or **IR**).

- 1) Press **SET**.
- 2) Press **MG/MT/IR** to select the desired level:
 - “L”: low sensitivity;
 - “M”: medium sensitivity;
 - “H”: high sensitivity.
- 3) Press **ST/CL**.

Setting position of thickness adjusting knob

The purpose of this knob is to adjust for most convenient separation of the notes/document.

- If the machine stops frequently and displays “dbL”. Turn the adjusting knob slightly counter-clockwise to decrease the gap between the feed rollers.
- If the notes run hard or too slow, turn the adjusting knob clockwise to increase the gap between the rollers.



Troubleshooting

WARNING!

Risk of electric shock! Follow the Safety precautions.



GB

Error codes

Error messages may appear on the display during normal operations. When the machine stops, read the message and then carry out the appropriate action described below. If any errors persist contact your SCAN COIN representative.

This is a complete list of the messages shown on the display, in alphabetical order.

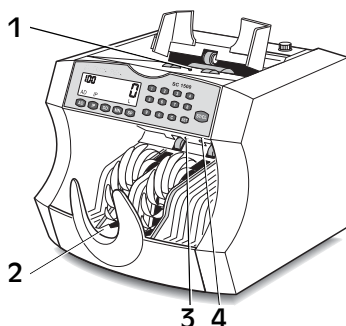
Code	Description
HAF	Half note detected. Remove the half note and press ST/CL to continue counting. No need to remove the complete bundle.
dd	Undersized or oversized note detected. Remove the note and press ST/CL to continue counting. No need to remove the complete bundle.
3d	Undersized or oversized note detected. Remove the note and press ST/CL to continue counting. No need to remove the complete bundle.
dbl	Double notes or chained notes detected. Remove notes from the stacker and recount all notes. If the “dbl” occurs frequently, adjust the position of the thickness adjusting knob.
CF1	Suspicious note/document detected (UV). Remove the suspicious note only and then press ST/CL to continue counting. The suspicious note is not included in the counted total.
CF2	Suspicious note/document detected (MG). Remove the suspicious note only and then press ST/CL to continue counting. The suspicious note is not included in the counted total.
CF3	Suspicious note/document detected (IR). Remove the suspicious note only and then press ST/CL to continue counting. The suspicious note is not included in the counted total.

Code	Description
CF4	Suspicious note/document detected (MT). Remove the suspicious note only and then press ST/CL to continue counting. The suspicious note is not included in the counted total.
JAN	Protective stop. Press ST/CL to continue counting. If the machine does not start, remove the jammed notes, check the position of thickness adjusting knob and then start again.
InS	Jammed note/document inside the machine. Remove the note and start counting.

Sensor errors

The following error messages are all associated with sensor failures. The main cause of sensor failure is a dirty sensor or that the sensor is covered by a note/document. The corrective action in these cases is to use a soft brush or cloth to clean the surface of the sensor or to remove the note and then restart the machine.

Code	Error position
E01	Left count sensor
E02	Right count sensor
E03	Left double sensor
E04	Right double sensor
E05	Stacker sensor
E06	Feed sensor
E07	Speed sensor



- 1 Feed sensor
- 2 Stacker sensor
- 3 Left count sensor
- 4 Right count sensor

Maintenance

WARNING!

Risk of electric shock! Follow the Safety precautions.

Clean the machine daily to prevent from accumulation of dirt.

Caution!

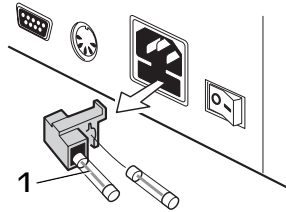
Only use cleaning materials and implements which do not scratch.

Changing fuses

Carefully pull out the bottom holder.
The fuse (1) is a spare fuse.

Exchange the fuse. See [“Technical data”](#)
[on page 20](#)

Replace the bottom holder.



Cleaning

Sensors

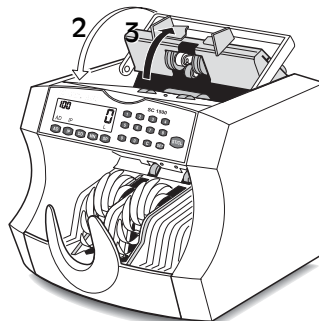
There are four sensors which need to be cleaned regularly. Use a soft brush.

Clean:

- the start sensor on the feed table,
- the stacker sensor on the stacker table,
- the left and right count sensors.

Feed system

- 1) Make sure the note holders are **not** in their outermost position.
- 2) Place the handle in its front position.
- 3) Lift the upper friction roller unit.
- 4) Inspect and if necessary clean the area with a soft brush.



Technical data

Part number:

SC 1500 std	018520-000
SC 1500 UV	018520-100
SC 1500 UV MG	018520-101
SC 1500 UV MT	018520-102
SC 1500 UV IR	018520-110
SC 1500 UV MG IR	018520-111
SC 1500 UV MT IR	018520-112
SC 1500 UV 3D	018520-300
SC 1500 UV 3D MG	018520-301
SC 1500 UV 3D MT	018520-302
SC 1500 UV 3D IR	018520-310
SC 1500 UV 3D MG IR	018520-311
SC 1500 UV 3D MT IR	018520-312

Power supply 99-245 V AC

Frequency 60/50 Hz

Current consumption 40 W

Fuse 2 A

Counting speed (selectable):

High	1300, 1400, 1500 notes/minute
Medium	900, 1000, 1100 notes/minute
Low	500, 600, 700 notes/minute

Note size:

Minimum	110x50 mm (4.33-1.97")
Maximum	185x90 mm (7.28-3.54")

Dimensions:

Width	270 mm (10.63")
Depth	230 mm (9.06")
Height	250 mm (9.84")

Weight 5.6 kg (12.3 lb)

Noise level (during operation) 79 dB (A)