



BellCount S515

WE PROVIDE GENUINE SECURITY

USER'S MANUAL



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1 Introduction

Thank you for purchasing the BellCount S515 banknote counter.

Before using the machine, please carefully read this manual to fully understand how the machine is safely operated and how to avoid damaging the machine. Keep the manual in a safe place for future use.

1.1 Abbreviations and Acronyms Used

3D	Three dimensional
AC	Alternating Current
AD	Analogue Digital
ccTalk	Serial communication protocol developed by Coin Controls Ltd. (now Money Controls Ltd.)
CIS	Contact Image Sensor
HW	Hardware
ID	Identification
IR	Infrared
MG	Magnetism
PC	Personal Computer
RS232	Standard for serial communication transmission of data
SD	Secure Digital
S/N	Serial Number
SW	Software
TFT	Thin-film Transistor
USB	Universal Serial Bus
UV	Ultraviolet

1.2 Contact Information

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8940 Randers SV
Denmark

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E-mail: bellcon@bellcon.dk

Home page: www.bellcon.com

2 Safety Instructions and Guidelines

- ▶ Before using the machine, read the safety instructions and guidelines carefully. Store these instructions within reach so that you can consult them later.
- ▶ If the machine is passed on to third parties, these instructions must also be passed on.
- ▶ Only connect the machine to a properly grounded power outlet of 100 – 240 VAC, 50/60 Hz.
- ▶ The mains socket to which the machine is connected must be easily accessible at all times, so that the plug can be pulled out immediately in case of emergencies.
- ▶ In order to completely switch off the machine, pull the plug out of the mains socket.
- ▶ In case of emergencies, remove the plug from the socket immediately. Even when the machine is switched off, it is still connected to the mains. If you do not use the machine for longer periods of time, pull the plug out of the socket. Always pull on the plug and not the cable.
- ▶ Do not open the casing under any circumstances. Always contact your dealer's technical support when malfunctions appear. Under no circumstances try to repair the machine yourself. Contact your dealer.
- ▶ Do not use this machine in wet or humid surroundings. Avoid foreign substances and fluids entering the casing of the machine. Do not use the machine in damp surroundings. Protect the machine from humidity and dampness. Make sure that no water gets into the machine for example by dripping or splashing, as it can be damaging to the machine. Do not place any objects filled with water, such as vases or plant pots, on the machine or directly next to it.
- ▶ Avoid operating the machine in environments with strong magnetic and/or electromagnetic fields like loudspeakers, activated cellular phones, electrical appliances etc.
- ▶ Do not place the machine close to a radiator, a heater flap, an oven or other devices which emit heat.
- ▶ Do not let children operate the machine.
- ▶ If the power cable of this machine is damaged it must be replaced by a new one in order to avoid hazards. Contact your authorized dealer.
- ▶ Do not use any accessories which were not supplied on purchase or with the delivery. The warranty is no longer valid if this is not observed.
- ▶ The machine must not be connected with the mains and not switched on if the casing of the machine is open. It must be noted that the machine can still be active even if it is not connected to the mains. Moving parts inside the machine may cause injuries.
- ▶ This machine is exclusively intended for indoor use.
- ▶ The machine has moving parts in the hopper and stacker. Be very careful about loose hanging clothes (scarf, neck tie, etc.) and long hair, which can be caught by the machine's banknote transporting mechanism.

3 Unpacking – What's in the Box?

Please check if the machine appears to be in good condition and all of the accessories are available. Inside the package there shall be the following.



BellCount S515 Counting Machine



User's Manual



USB data cable (optional)



Power cable



Cleaning brush



Dust Cover



Fuse



External Display (optional)



SD Card (optional)



Printer Cable (optional)

4 BellCount S515 at a Glance

4.1 Front View



4.2 Rear View

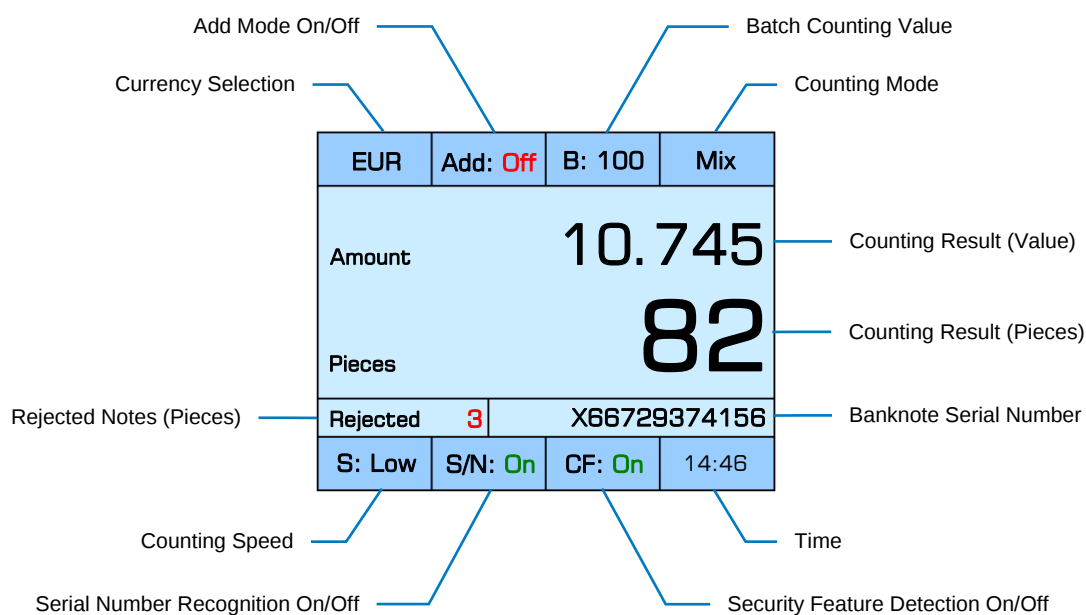


4.3 Operation Panel



1. Currency selection.
2. Batch function on/off and batch value selection.
3. Clear counting result. Return to previous menu.
4. Start counting. Enter/confirm selection.
5. Light indicator. Red light indicates security feature detection error, blue light indicates other errors and states.
6. Increase batch value by 1 (short press) or 10 (press and hold).
7. Print/send counting result.
8. Display.
9. Counting mode selection.
10. Add mode on/off (accumulative counting). Menu navigation (up).
11. View detailed counting result information. Menu navigation (down).
12. Activate Settings Menu.

4.4 Main Menu



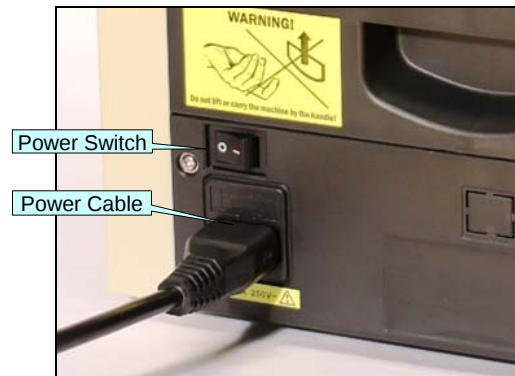
5 Basic Operation Instructions

5.1 Power On/Off

Plug in the Power Cable and connect to the mains.

Switch on the machine by pressing the Power Switch at the machine's rear side. After a power-on self-test, S515 will enter the Main Menu.

Before you switch off the machine again, make sure you have finished your counting job, printing the results etc.



5.2 Selecting Currency

Currency selection by **[CURRENCY]** key:

1. Press **[CURRENCY]** to toggle between the installed currencies:



2. If "AUTO" is selected, S515 will automatically select the correct currency when notes are put in the hopper.
3. If "MULTI" is selected, S515 can count up to four various currencies simultaneously (only Mix mode counting is possible).
4. If "BASIC" is selected, S515 can count various types of non-currency specific notes, vouchers, tickets, etc. The note value will not be counted. The counting is performed with no or limited security feature detection (depending on BASIC Mode Setup). Please note; when BASIC is selected, the counting mode selection is not available.

AUTO selected

AUTO	Add: Off	B: ---	Mix
Amount			0
Pieces			0
Rejected	0		
S: Med	S/N: Off	CF: On	14:46

MULTI selected

MULTI	Add: Off	B: ---	Mix
Cur.	Pieces	Amount	
EUR	0	0	
USD	0	0	
GBP	0	0	
CHF	0	0	
Rejected	0		
S: Med	S/N: Off	CF: On	14:46

BASIC selected

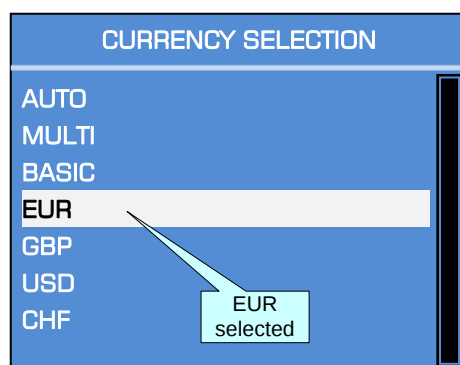
Counting Mode selection disabled

BASIC	Add: Off	B: ---	---
Pieces			0
Rejected	0		
S: Med	S/N: Off	CF: Off	14:46

Currency selection by menu:

1. Press and hold [CURRENCY] to enter the Currency Selection Menu.
2. Press [▲] and/or [▼] to highlight the desired currency.
3. Press [START/ENTER] to confirm the selection. S515 will now return to the Main Menu.

Note: You can always leave the Currency Selection Menu by pressing [CLEAR].



EUR	Add: Off	B: ---	Mix
Amount			0
Pieces			0
Rejected	0		
S: Med	S/N: Off	CF: On	14:46

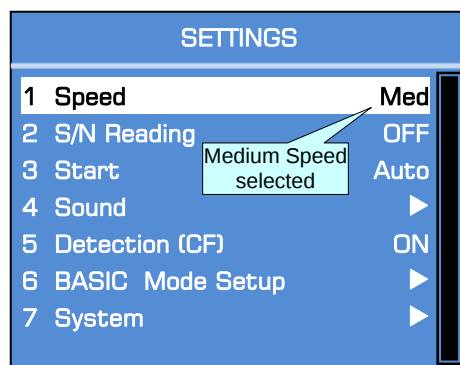
5.3 Counting Speed

1. Press [SETTINGS] to enter the Settings Menu.
2. Press [▲] and/or [▼] to highlight the Speed option.
3. Toggle [MODE] to select low, medium or high counting speed:



4. Press [START/ENTER] to confirm the selection and press [CLEAR] to return to the Main Menu. The speed setting will appear in the Main Menu.

Please note: The speed options available depend on the counting mode setting.

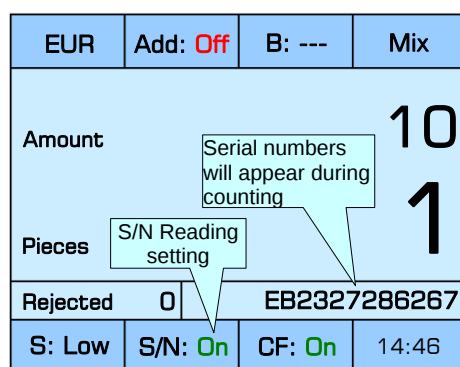
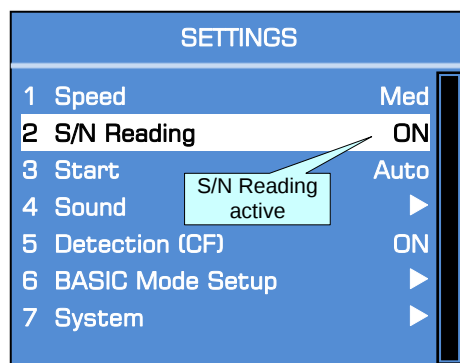


EUR	Add: Off	B: ---	Mix
Amount			0
Pieces			0
Rejected	0		
S: Med	S/N: Off	CF: On	14:46

5.4 Serial Number Reading

In some currencies, S515 can read and list the banknote serial numbers:

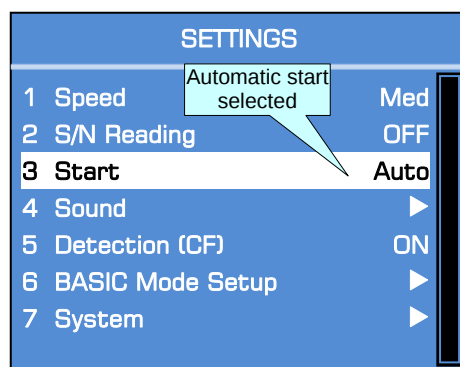
1. Press **[SETTINGS]** to enter the Settings Menu.
2. Press **[▲]** and/or **[▼]** to highlight the S/N Reading option.
3. Toggle **[MODE]** to select between OFF and ON.
4. Press **[START/ENTER]** to confirm the selection and press **[CLEAR]** to return to the Main Menu. Your selection will appear in the Main Menu.



5.5 Manual or Automatic Start

You can choose if you want S515 to automatically start when you place notes in the hopper, or if you want to manually start by pressing **[START/ENTER]**.

1. Press **[SETTINGS]** to enter the Settings Menu.
2. Press **[▲]** and/or **[▼]** to highlight the Start option.
3. Toggle **[MODE]** to select between Auto and Manual mode.
4. Press **[START/ENTER]** to confirm the selection and press **[CLEAR]** to return to the Main Menu.



5.6 How to place Notes in the Hopper

To ensure uninterrupted counting and to prevent note jam or even damage to the machine, please follow the guidelines below when placing banknotes in the Hopper:

- ▶ Align the corners and edges of the banknotes to avoid counting interruptions:
- ▶ Avoid counting wet, extraordinary dirty or damaged notes.
- ▶ Remove foreign objects from the banknotes like; paper clips, rubber bands, etc.
- ▶ Straighten folds or curls of the banknotes before counting.



- ▶ Place the banknotes in the middle of the Hopper and adjust the Hopper Guides to fit the note size.



5.7 Printing Counting Results

If you have connected an (optional) printer to S515, counting results can be printed.

After finishing a counting job, press the **[PRINT]** key to print the counting result on an external printer. If Serial Number reading was active during counting, the printing will also include a full list of the serial numbers.

6 How to Count Banknotes

6.1 Mix Mode – Counting Mixed Denomination Banknotes

In Mix Mode, S515 counts mixed denomination notes of the selected currency. Suspicious banknotes will be ejected to the reject pocket and will not be counted.

Mix Mode selection by [MODE] key:

1. In the Main Menu, toggle [MODE] until "Mix" appears in the display.



2. Put the banknotes in the Hopper. The counting will start automatically or you need to press [START/ENTER] (depending on your preferred setting).
3. If a suspicious banknote is detected, it will be ejected to the Reject Pocket.
4. When the counting is done, the total amount and the number of notes counted will appear in the display. If any, the number of rejected notes will also show.

EUR	Add: Off	B: ---	Mix
Amount	Mix Mode selected		0
Pieces			0
Rejected	0		
S: Med	S/N: Off	CF: On	14:46

EUR	Add: Off	B: ---	Mix
Amount	Total amount counted		1.900
Pieces	Total pieces counted		102
Rejected	1		
S: Med	S/N: Off	CF: On	14:46

If you want to see further counting result details, you can check the Counting Report after finishing the counting job. See section "6.8 Counting Report and Rejection List".

Mix Mode selection by menu:

1. Press and hold [MODE] to enter the Mode Selection Menu.
2. Press [▲] and/or [▼] to highlight Mix counting mode.
3. Press [START/ENTER] to confirm the selection. S515 will now return to the Main Menu.

Note: You can always leave the Mode Selection Menu by pressing [CLEAR].

MODE SELECTION			
Mix	Mix selected		
Sort			
Face			
Orient			
Issue			

6.2 Sort Mode – Counting Single Denomination Banknotes

In Sort Mode, S515 will count the banknotes with the denomination of the first inserted (genuine) note of the selected currency. Suspicious banknotes and deviating denominations will be ejected to the reject pocket and will not be counted.

Sort Mode selection by **[MODE]** key:

1. In the Main Menu, toggle **[MODE]** until "Sort" appears in the display.



2. Put the banknotes in the Hopper. The counting will start automatically or you need to press **[START/ENTER]** (depending on your preferred setting). S515 will now detect the first banknote counted.
3. If a deviating or suspicious banknote is detected, it will be ejected to the Reject Pocket.
4. When the counting is done, the total amount and the number of notes counted will appear in the display. If any, the number of rejected notes will also show.

EUR	Add: Off	B: ---	Sort
Amount	Sort Mode selected		0
Pieces			0
Rejected	0		
S: Med	S/N: Off	CF: On	14:46

EUR	Add: Off	B: ---	Sort
Amount	Total amount counted		360
Pieces	Total pieces counted		36
Rejected	1		
S: Med	S/N: Off	CF: On	14:46

If you want to see further counting result details, you can check the Counting Report after finishing the counting job. See section "6.8 Counting Report and Rejection List".

Sort Mode selection by menu:

1. Press and hold **[MODE]** to enter the Mode Selection Menu.
2. Press **[▲]** and/or **[▼]** to highlight Sort counting mode.
3. Press **[START/ENTER]** to confirm the selection. S515 will now return to the Main Menu.

Note: You can always leave the Mode Selection Menu by pressing **[CLEAR]**.

MODE SELECTION	
Mix	
Sort	Sort selected
Face	
Orient	
Issue	

6.3 Face Up/Down Sorting Mode

In Face Mode, S515 will count the banknotes with the face orientation of the first inserted (genuine) note of the selected currency. Suspicious banknotes, notes with deviating face orientation, and/or different denomination will be ejected to the reject pocket and will not be counted.

Face Up (obverse):



Face Down (reverse):



Face Mode selection by **[MODE]** key:

1. In the Main Menu, toggle **[MODE]** until "Face" appears in the display.



2. Put the banknotes in the Hopper. The counting will start automatically or you need to press **[START/ENTER]** (depending on your preferred setting). S515 will now detect the face and denomination of the first banknote counted.
3. If a deviating face orientation, different denomination, or a suspicious banknote is detected, it will be ejected to the Reject Pocket.
4. When the counting is done, the total amount and the number of notes counted will appear in the display. If any, the number of rejected notes will also show.

EUR	Add: Off	B: ---	Face
Amount			0
Pieces			0
Rejected	0		
S: Med	S/N: Off	CF: On	14:46

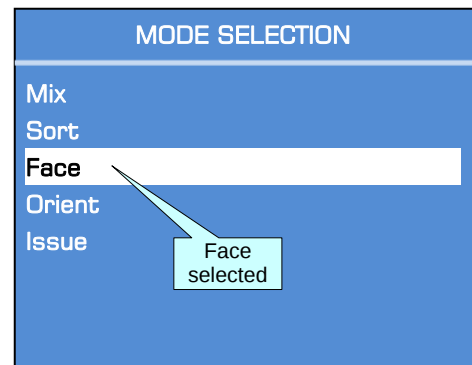
EUR	Add: Off	B: ---	Face
Amount	Total amount counted		300
Pieces	Total pieces counted		30
Rejected	6	Rejected notes	
S: Med	S/N: Off	CF: On	14:46

If you want to see further counting result details, you can check the Counting Report after finishing the counting job. See section "6.8 Counting Report and Rejection List".

Face Mode selection by menu:

1. Press and hold [MODE] to enter the Mode Selection Menu.
2. Press [▲] and/or [▼] to highlight Face counting mode.
3. Press [START/ENTER] to confirm the selection. S515 will now return to the Main Menu.

Note: You can always leave the Mode Selection Menu by pressing [CLEAR].



6.4 Orientation Sorting Mode

In Orient Mode, S515 will count the banknotes with the orientation and denomination of the first inserted (genuine) note of the selected currency. Suspicious banknotes, notes with deviating orientation, and/or different denomination will be ejected to the reject pocket and will not be counted.

Orientation Upright:



Orientation Upside Down:



Orient Mode selection by [MODE] key:

1. In the Main Menu, toggle [MODE] until "Orient" appears in the display.



2. Put the banknotes in the Hopper. The counting will start automatically or you need to press [START/ENTER] (depending on your preferred setting). S515 will now detect the orientation and denomination of the first banknote counted.
3. If a deviating orientation, different denomination, or a suspicious banknote is detected, it will be ejected to the Reject Pocket.
4. When the counting is done, the total amount and the number of notes counted will appear in the display. If any, the number of rejected notes will also show.

EUR	Add: Off	B: ---	Orient
Amount			00
Pieces			0
Rejected	0		
S: Med	S/N: Off	CF: On	14:46

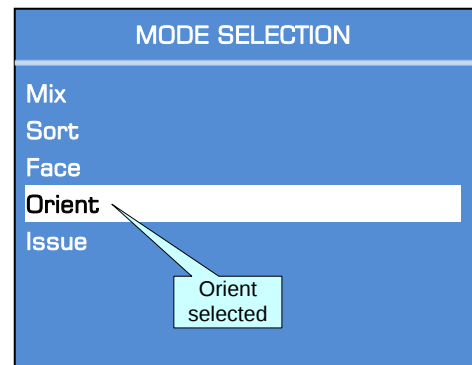
EUR	Add: Off	B: ---	Orient
Amount	Total amount counted		320
Pieces	Total pieces counted		32
Rejected	4	Rejected notes	
S: Med	S/N: Off	CF: On	14:46

If you want to see further counting result details, you can check the Counting Report after finishing the counting job. See section "6.8 Counting Report and Rejection List".

Orient Mode selection by menu:

1. Press and hold [MODE] to enter the Mode Selection Menu.
2. Press [▲] and/or [▼] to highlight Orient counting mode.
3. Press [START/ENTER] to confirm the selection. S515 will now return to the Main Menu.

Note: You can always leave the Mode Selection Menu by pressing [CLEAR].



6.5 Issue Sorting Mode

In Issue Mode, S515 will count the banknotes with the issue and denomination of the first inserted (genuine) note of the selected currency. Suspicious banknotes, notes with deviating issue, and/or different denomination will be ejected to the reject pocket and will not be counted.

Issue Mode selection by [MODE] key:

1. In the Main Menu, toggle [MODE] until "Issue" appears in the display.



2. Put the banknotes in the Hopper. The counting will start automatically or you need to press [START/ENTER] (depending on your preferred setting). S515 will now detect the first banknote counted.
3. If a deviating or suspicious banknote is detected, it will be ejected to the Reject Pocket.
4. When the counting is done, the total amount and the number of notes counted will appear in the display. If any, the number of rejected notes will also show.

EUR	Add: Off	B: ---	Issue
Amount			0
Pieces			0
Rejected	0		
S: Med	S/N: Off	CF: On	14:46

EUR	Add: Off	B: ---	Issue
Amount			420
Pieces			42
Rejected	12		
S: Med	S/N: Off	CF: On	14:46

If you want to see further counting result details, you can check the Counting Report after finishing the counting job. See section "6.8 Counting Report and Rejection List".

Issue Mode selection by menu:

1. Press and hold [MODE] to enter the Mode Selection Menu.
2. Press [▲] and/or [▼] to highlight Issue counting mode.
3. Press [START/ENTER] to confirm the selection. S515 will now return to the Main Menu.

Note: You can always leave the Mode Selection Menu by pressing [CLEAR].

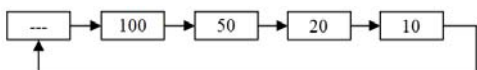
MODE SELECTION			
Mix			
Sort			
Face			
Orient			
Issue			

6.6 Batch Counting

In the Batch Counting Mode, S515 will count a selected number of notes and then stop. Select the batch quantity like this:

Batch value selection by [BATCH] key:

1. In the Main Menu, toggle [BATCH] until the desired batch preset number appears in the display.



2. To set any other value (0 - 999), press [+1/+10] to increase the value by 1 (short press) or by 10 (long press).
3. Put the banknotes in the Hopper. The counting will start automatically or you need to press [START/ENTER] (depending on your preferred setting). S515 will now count the selected number of notes and then stop.
4. If a deviating or suspicious banknote is detected, it will be ejected to the Reject Pocket.
5. When removing the notes from the Stacker, a new batch counting will start if remaining notes are in the Hopper.

Use [CLEAR] or toggle with the [BATCH] key to the value "---" to switch off batch counting.

If there are not sufficient notes in the Hopper to reach the batch value, the pop-up message "Batch Not Completed!" will appear. You can remove the message by pressing any key (except [CLEAR]). If Add Mode is activated, the message will neither disappear if you press [START/ENTER] while there are no notes in the Hopper.

Batch value input by numeric keyboard:

1. Press and hold [BATCH] to enter the Batch Value Input Menu.
2. Input the desired batch value (0 - 999) by using the numeric finger touch keyboard. Use the [CE] key to delete faulty inputs.
3. Press [OK] or [START/ENTER] to confirm the value. S515 will now return to the Main Menu.

Note: You can always leave the Batch Value Input Menu by pressing [CLEAR].

EUR	Add: Off	B: 100	Sort
Amount		Batch preset value	0
Pieces			0
Rejected	0		
S: Med	S/N: Off	CF: On	14:46

EUR	Add: Off	B: 100	Sort
Amount	Total amount counted	1.000	
Pieces	Total pieces counted	100	
Rejected	0		
S: Med	S/N: Off	CF: On	14:46

BATCH VALUE INPUT			
Value input	120		
1	2	3	CE
4	5	6	0
7	8	9	OK

6.7 Accumulative Counting

In Add Mode (accumulative counting), S515 will summarize the results of multiple counting operations.

1. In the Main Menu, press **[ADD]** to switch on Add Mode.
2. Put the first stack of banknotes in the Hopper. The counting will start automatically or you need to press **[START/ENTER]** (depending on your preferred setting).
3. Remove the Stacker notes and put the next stack of banknotes in the Hopper.
4. When the counting is done, the summarized values of all consecutive counting jobs will appear in the display. If any, the number of rejected notes will also show.

Reset the counting results by pressing **[CLEAR]**.

Switch off Add Mode by pressing **[ADD]** again.

EUR	Add: On	B: ---	Mix
Amount	Add Mode Activated		0
Pieces			0
Rejected	0		
S: Med	S/N: Off	CF: On	14:46

First counting job:

EUR	Add: On	B: ---	Mix
Amount			5.200
Pieces			52
Rejected	0		
S: Med	S/N: Off	CF: On	14:46

Second counting job:

EUR	Add: On	B: ---	Mix
Amount			10.400
Pieces			104
Rejected	0		
S: Med	S/N: Off	CF: On	14:46

If you want to see further counting result details, you can check the Counting Report after finishing the counting job. See section "6.8 Counting Report and Rejection List".

6.8 Counting Report and Rejection List

EUR	Add: Off	B: ---	Mix
Amount	1.915		
Pieces	104		
Rejected	3	Rejected notes	
S: Med	S/N: Off	CF: On	14:46

Press **[INFO]**:

EUR - COUNTING REPORT		
Denom.	Pieces	Amount
5	3	15
10	63	630
20	26	520
50	11	550
100	0	0
200	1	200
		More...

Press **[INFO]**:

EUR - COUNTING REPORT		
Denom.	Pieces	Amount
500	0	0
EUR	104	1.915

Press **[INFO]**:

REJECTION LIST	
1	Image #1
2-3	IR Error

1. After finishing a counting job, press **[INFO]** to open the Counting Report. The display will now show a list of the number of notes counted and the corresponding denominations and values. Furthermore the total value is also listed.
2. If the full list is not visible, "More..." will appear and you can press **[INFO]** again to see the remaining results.
3. The counting result will automatically reset when you start a new counting job.
4. Press **[INFO]** again to view the Rejection List (if any rejected notes). The list will present the reject reasons of the rejected notes.
5. Press **[INFO]** again or **[CLEAR]** to return to the Main Menu.

6.9 Note Reject and Error Messages

Possible error messages during power-on self-test:

Error Message:	Cause:	Solution:
Feeding Fault	A feeding error has occurred.	Remove any banknotes from the Hopper and/or clean Hopper (sensor) for dust.
Receiving Fault	There are banknotes in the Stacker, or a dust related problem has occurred.	Remove any banknotes from the Stacker and/or clean Stacker (sensor) for dust.
Rejector Fault		Remove any banknotes from the Reject Pocket and/or clean Reject Pocket (sensor) for dust.
UV Fault	Error related to the UV sensor.	Check that the Top Cover is firmly locked. Remove any strong light sources above the machine. Clean the Note Path.
Left#1 Counting Fault Left#2 Counting Fault Right#1 Counting Fault Right#1 Counting Fault	Error related to the banknote position sensors.	Remove any banknotes from the machine and/or clean the Note Path.
Left CIS Fault Right CIS Fault	Error related to the CIS scanner.	Remove any banknotes from the machine and/or clean the Note Path.
Rotate#1 Speed Fault Rotate#2 Speed Fault	Error related to the internal speed measurement.	Contact authorized technical support.
CIS#1 Fault CIS#2 Fault CIS#3 Fault	Error related to the CIS scanner.	Remove any banknotes from the machine and/or clean the Note Path.
AD Fault	General internal error occurred.	Turn off the machine and restart it.
Brake Fault	Internal braking error.	Contact authorized technical support.
Diverter #1 Fault Diverter #2 Fault Diverter #3 Fault Diverter #4 Fault	Internal mechanical error.	Contact authorized technical support.
Left BackIR Fault Right BackIR Fault	Error related to IR sensors.	Open the Rear Service Drawer, remove any banknotes and/or clean for dust.
Please Clean Left Counting Sensor	Error related to the banknote position sensors.	Remove any banknotes from the machine and/or clean the Note Path.
Please Clean Right Counting Sensor	Error related to the banknote position sensors.	Remove any banknotes from the machine and/or clean the Note Path.
MG#1 Fault MG#2 Fault MG#3 Fault	Magnetism sensor error.	Contact authorized technical support.
MG#4 Fault MG#5 Fault	Magnetism sensor error.	Contact authorized technical support.
MG#6 Fault MG#7 Fault MG#8 Fault	Magnetism sensor error.	Contact authorized technical support.
MID-MG Fault MID-MT Fault	Magnetism sensor error.	Contact authorized technical support.

Possible error messages during operation:

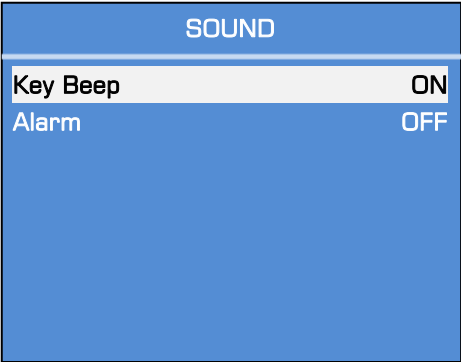
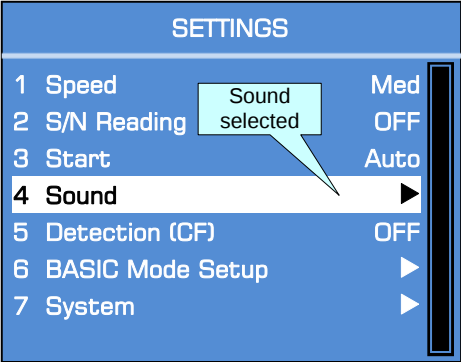
Error Message:	Cause:	Solution:
UV-Error	UV detection error.	Remove any banknotes from the machine and/or clean the Note Path.
MG-Error MG1-Error MG2-Error MG3-Error	Magnetism detection error.	Remove any banknotes from the machine and/or clean the Note Path.
IR-Error	IR detection error.	Contact authorized technical support.
Composed-Error	Multi detection error.	Remove the banknotes from the machine.
Slant Slant#1	Banknotes not placed properly in the Hopper. Banknotes tilt during counting.	Ensure that the banknotes are properly placed in the Hopper. Adjust the Hopper Guides to fit the note size.
Double Chained#1 Chained#2 Chained#3	Banknotes are double fed or overlapping.	Recount the banknotes. If the problem continues, adjust the Feeding Gap Adjustment Screw counter-clockwise in small steps.
Count	Counting error.	Remove the banknotes from the Stacker and Reject Pocket and recount.
Half	A damaged (half) banknote has been detected.	Remove the damaged banknote from the machine.
Width Length	Calibration is needed.	Contact authorized technical support.
Image#1 Image#2 Image#3	Calibration is needed.	Contact authorized technical support.
Old Ver SN-Error Face Diff Orient Diff Ver Diff Deno Diff	A general detection error occurred.	Recount the banknotes.
TIME 2	General internal timing error.	Recount the banknotes.
Stacker Full	The Stacker pocket is full.	Remove the banknotes from the Stacker.
Cover Open!	The Top Cover is open.	Close the Top Cover.
Back Drawer Open!	The Rear Service Drawer is open.	Close the Rear Service Drawer.
Jam	The Note Path is blocked by jammed banknotes etc.	Open the Rear Service Drawer and clear the Note Path.
Main Loop Broken		Turn off the machine and restart it.

7 How to set up BellCount S515

S515 can be set up to specific user needs. The settings are controlled from the Settings Menu.

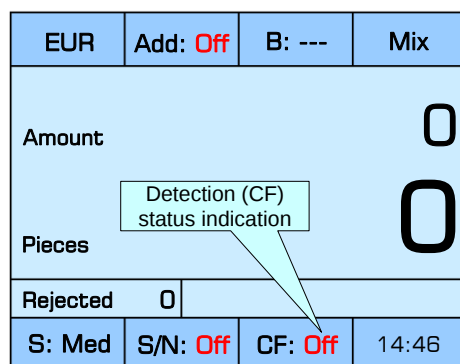
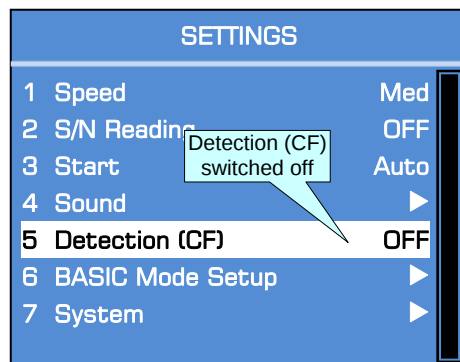
7.1 Sound

1. Press [SETTINGS] to enter the Settings Menu.
2. Press [▲] and/or [▼] to highlight the Detection (CF) option.
3. Press [START/ENTER] to enter the Sound Menu.
4. Press [▲] and/or [▼] to highlight Key Beep or Alarm.
5. Toggle [MODE] to select between ON and OFF.
6. Press [START/ENTER] to confirm the selection and press [CLEAR] to return to the Main Menu.



7.2 Detection (CF)

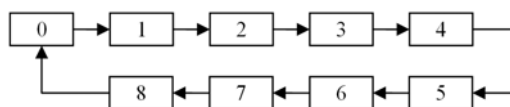
1. Press [SETTINGS] to enter the Settings Menu.
2. Press [▲] and/or [▼] to highlight the Detection (CF) option.
3. Toggle [MODE] to select between ON and OFF.
4. Press [START/ENTER] to confirm the selection and press [CLEAR] to return to the Main Menu.



7.3 BASIC Mode Setup

For the non-currency specific BASIC Mode, it is possible to set detection sensitivity values for the specific detection parameters. In this way it is possible to set up BASIC Mode for specific tasks.

1. Press [SETTINGS] to enter the Settings Menu.
2. Press [▲] and/or [▼] to highlight the BASIC Mode Setup option.
3. Press [START/ENTER] to enter the BASIC Mode Setup Menu.
4. Press [▲] and/or [▼] to highlight the parameter you want to adjust.
5. Toggle [MODE] to adjust the parameter value you need:



Parameter:	Value Range:	Purpose:
Size (Short Edge)	0 - 8	Check the short edge size of the note.
Size (Long Edge)	0 - 8	Check the long edge size of the note.
UV	0 - 8	Check UV level of the note.
MG	0 - 8	Check magnetism level of the note.
Double Feeding	0 - 8	Check for double note feeding.
Chained	0 - 1	Check for overlapping (chained) notes.

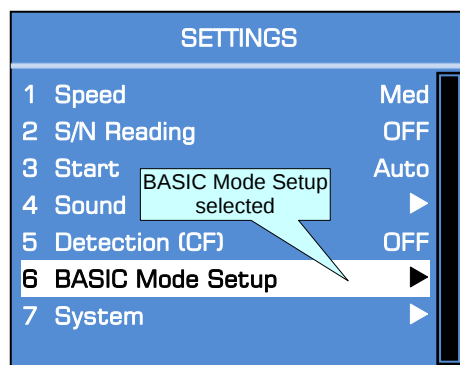
Value "0" means parameter is switched off.

Value "1" is the lowest sensitivity level.

Value "8" is the highest sensitivity level.

6. Press [START/ENTER] to confirm the selection and press [CLEAR] to return to the Main Menu.

Please note: When all parameters are set to "0", the Main Menu CF indicator will show "OFF". When one or more parameters are set to a value, the Main Menu CF indicator will show "ON".

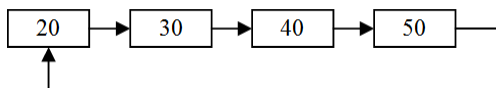


BASIC MODE SETUP	
Size (Short Edge)	4
Size (Long Edge)	4
UV	0
MG	3
Double Feeding	6
Chained	1

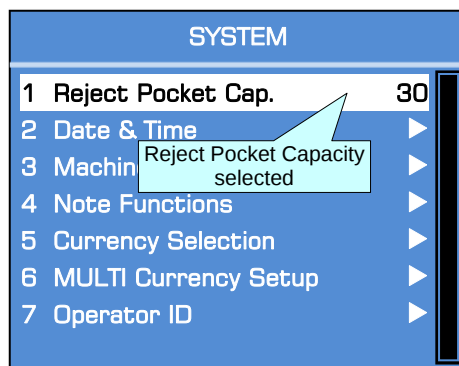
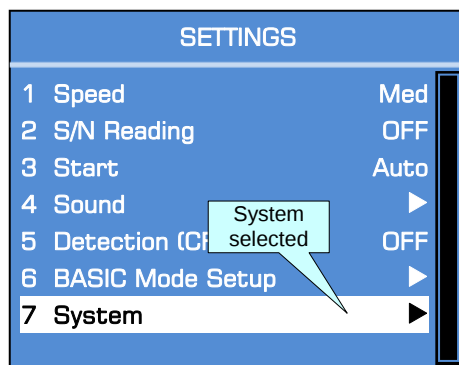
7.4 Reject Pocket Capacity

It is possible to adjust the note capacity of the Reject Pocket. Limit the value if note jam often occurs in the Reject Pocket due to low quality notes etc.

1. Press **[SETTINGS]** to enter the Settings Menu.
2. Press **[▲]** and/or **[▼]** to highlight the System option.
3. Press **[START/ENTER]** to enter the System Menu.
4. Press **[▲]** and/or **[▼]** to highlight the Reject Pocket Capacity option.
5. Toggle **[MODE]** to select the desired number of notes:



6. Press **[START/ENTER]** to confirm the selection and press **[CLEAR]** to return to the Settings Menu.

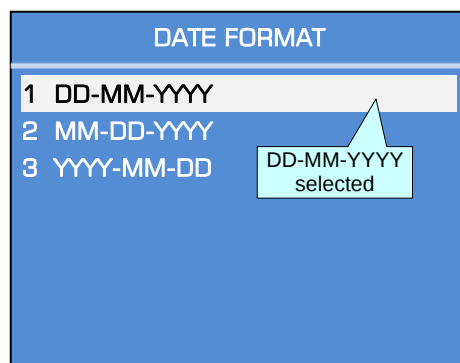
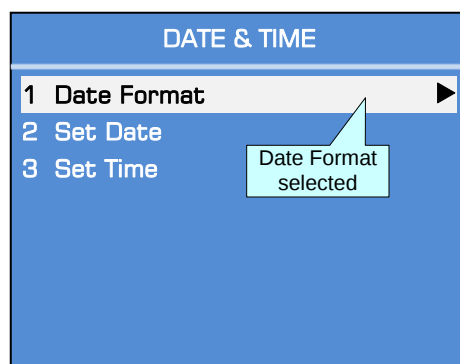
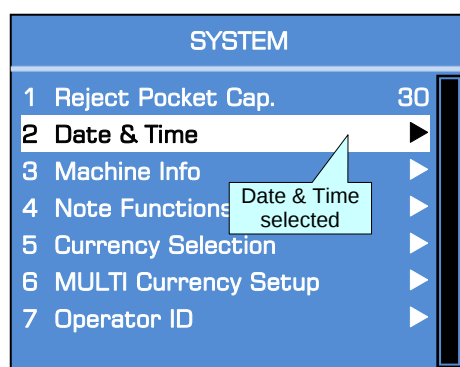
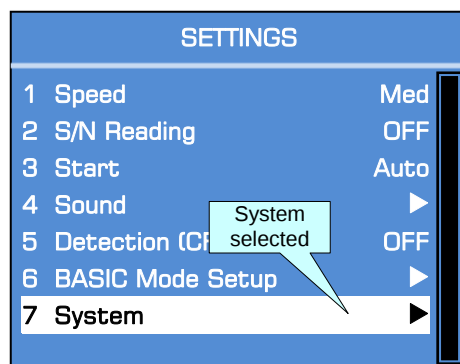


7.5 Date & Time

Set Date Format:

1. Press [SETTINGS] to enter the Settings Menu.
2. Press [▲] and/or [▼] to highlight the System option.
3. Press [START/ENTER] to enter the System Menu.
4. Press [▲] and/or [▼] to highlight the Date & Time option.
5. Press [START/ENTER] to enter the Date & Time Menu.
6. Press [▲] and/or [▼] to highlight the Date Format option.
7. Press [START/ENTER] to enter the Date Format Menu.
8. Press [▲] and/or [▼] to highlight your preferred date format.
9. Press [START/ENTER] to confirm the selection and press [CLEAR] to return to the Date & Time Menu.

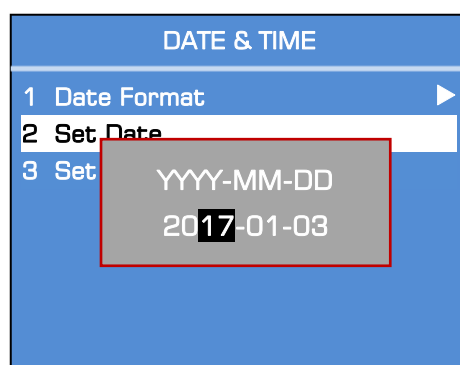
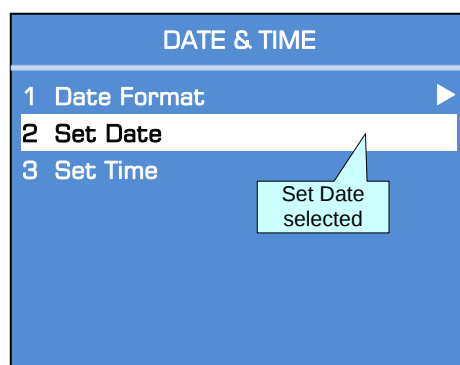
Note: You can always leave the Date Format Menu without saving by pressing [CLEAR].



Set Date:

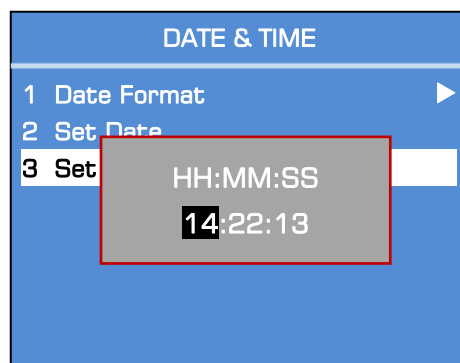
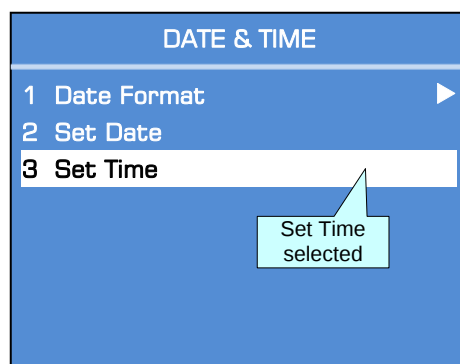
1. Press [▲] and/or [▼] to highlight the Set Date option.
2. Press [START/ENTER] to activate the Set Date Pop-up Menu.
3. Toggle [MODE] to move the cursor between year, month and date. Adjust the value(s) by [▲] and [▼].
4. When done, press [START/ENTER] to confirm the selection.

Note: You can always leave the Set Date Pop-up Menu without saving by pressing [CLEAR].

Set Time:

1. Press [▲] and/or [▼] to highlight the Set Time option.
2. Press [START/ENTER] to activate the Set Time Pop-up Menu.
3. Toggle [MODE] to move the cursor between hours, minutes and seconds. Adjust the value(s) by [▲] and [▼].
4. When done, press [START/ENTER] to confirm the selection.

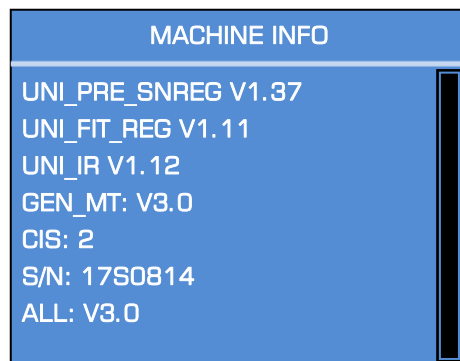
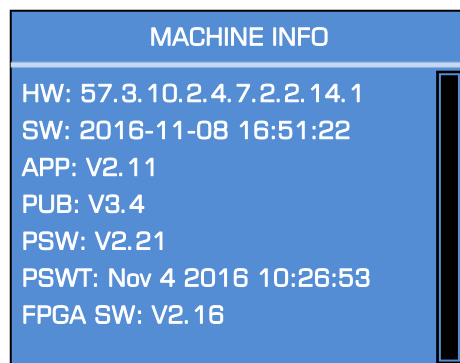
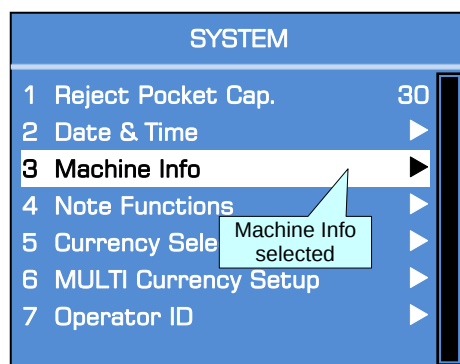
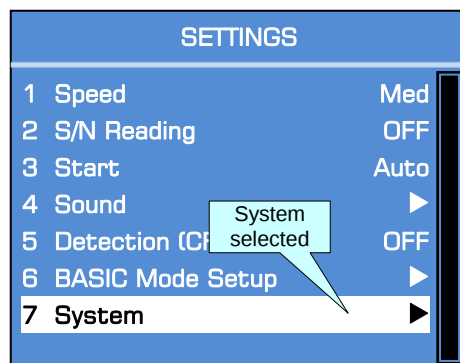
Note: You can always leave the Set Time Pop-up Menu without saving by pressing [CLEAR].



7.6 Machine Info

In the Machine Info Menu, various information regarding the machine's hardware and software is available

1. Press [SETTINGS] to enter the Settings Menu.
2. Press [▲] and/or [▼] to highlight the System option.
3. Press [START/ENTER] to enter the System Menu.
4. Press [▲] and/or [▼] to highlight the Machine Info option.
5. Press [START/ENTER] to enter the Machine Info Menu.
Toggle [▲] and/or [▼] to view more pages.
6. Press [CLEAR] to return to the System Menu.





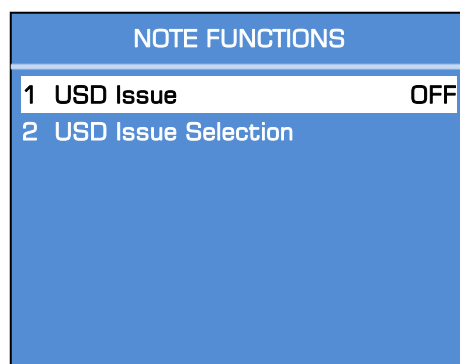
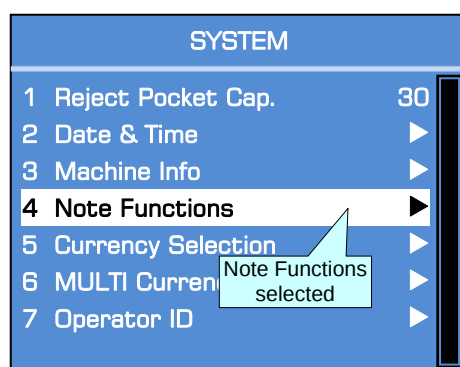
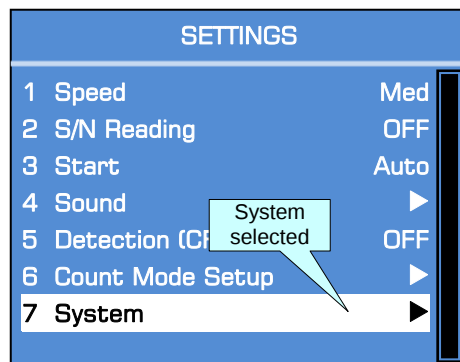
MACHINE INFO	
EUR: V3.7_S1.1	
USD: V3.3_S1.1	
GBP: V3.5_S1.2	
CHF: V3.3_S1.3	
AED: V3.1	
NOK: V3.1	
SEK: V3.2	

MACHINE INFO	
PLN: V3.4_S2.0	
RON: V3.1	
BGN: V3.3	

7.7 Note Functions

For some currencies, special settings are available.

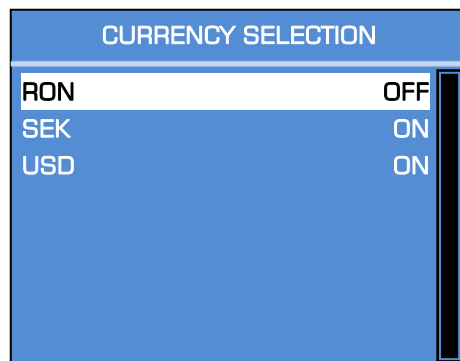
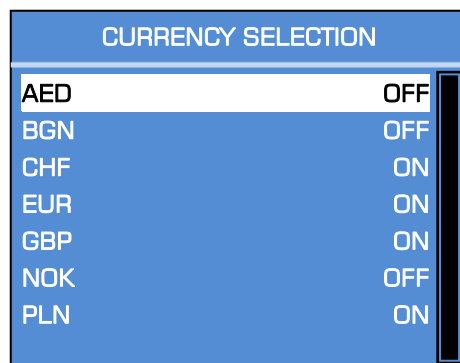
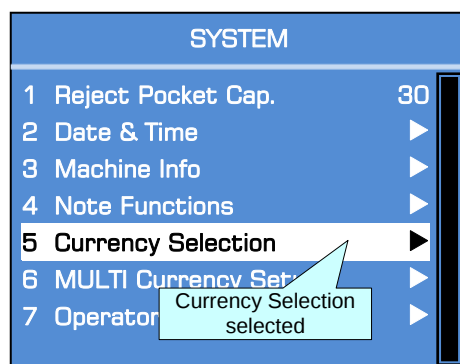
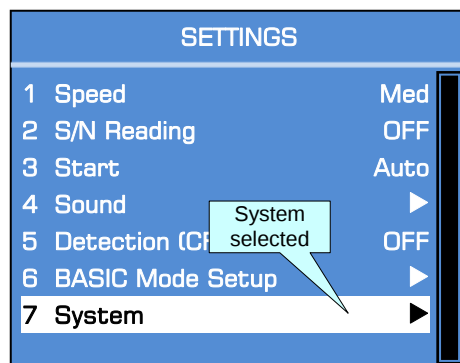
1. Press **[SETTINGS]** to enter the Settings Menu.
2. Press **[▲]** and/or **[▼]** to highlight the System option.
3. Press **[START/ENTER]** to enter the System Menu.
4. Press **[▲]** and/or **[▼]** to highlight the Note Functions option.
5. Press **[START/ENTER]** to enter the Note Functions Menu.
6. Various currency specific banknote settings are available in the Note Functions Menu (depending on installed software).
7. Press **[CLEAR]** to return to the System Menu.



7.8 Currency Selection

Several currencies are available in S515. To simplify the daily operation, you can limit the number of the visible currencies of the Main Menu:

1. Press [SETTINGS] to enter the Settings Menu.
2. Press [▲] and/or [▼] to highlight the System option.
3. Press [START/ENTER] to enter the System Menu.
4. Press [▲] and/or [▼] to highlight the Currency Selection option.
5. Press [START/ENTER] to enter the Currency Selection Menu.
6. Press [▲] and/or [▼] to highlight the currency you want to change.
7. Toggle [MODE] to select ON or OFF.
8. Press [START/ENTER] to confirm the selection and press [CLEAR] to return to the System Menu.

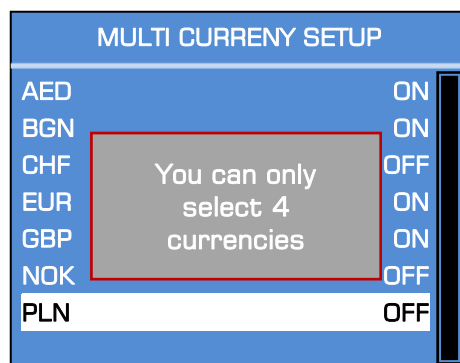
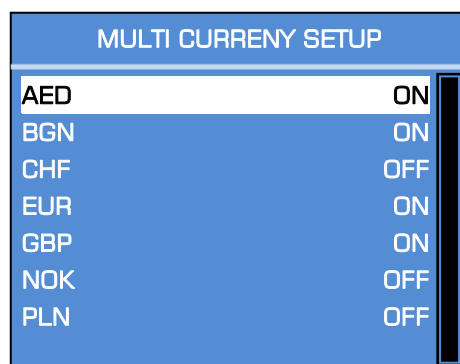
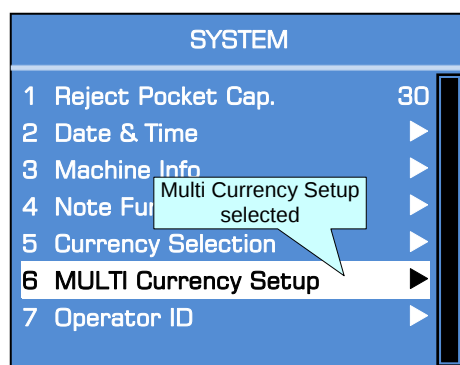
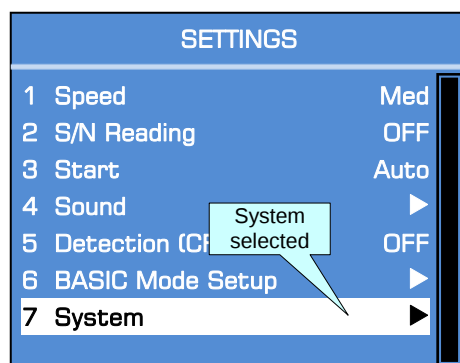


7.9 MULTI Currency Mode Setup

S515 can handle up to 4 different currencies in the Multi Currency Mode. You can configure the currency combination you want:

1. Press [SETTINGS] to enter the Settings Menu.
2. Press [▲] and/or [▼] to highlight the System option.
3. Press [START/ENTER] to enter the System Menu.
4. Press [▲] and/or [▼] to highlight the MULTI Currency Setup option.
5. Press [START/ENTER] to enter the MULTI Currency Setup option.
6. Press [▲] and/or [▼] to highlight the currency you want to configure.
7. Toggle [MODE] to select ON/OFF.
8. Press [CLEAR] to return to the System Menu.

Note: If you try to select more than 4 currencies, a pop-up message will appear.

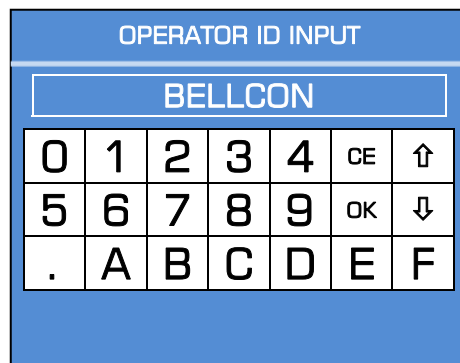
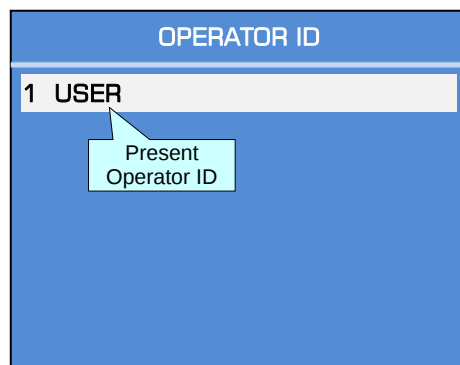
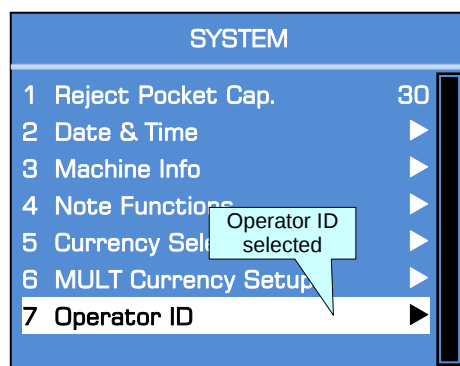
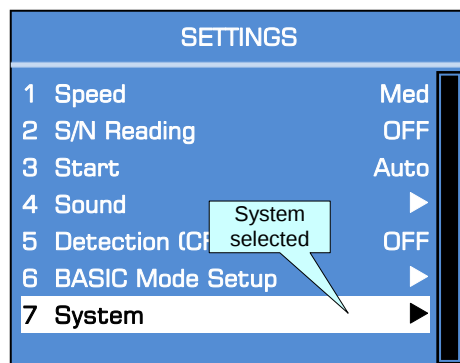


7.10 Operator ID

You can set up the Operator ID (name). The Operator ID will be included when printing counting results.

1. Press [SETTINGS] to enter the Settings Menu.
2. Press [▲] and/or [▼] to highlight the System option.
3. Press [START/ENTER] to enter the System Menu.
4. Press [▲] and/or [▼] to highlight the Operator ID option.
5. Press [START/ENTER] to enter the Operator ID Menu.
6. Press [START/ENTER] to enter the Operator ID Input Menu.
7. Input the desired name by using the numeric finger touch keyboard. Use the [CE] key to delete faulty inputs. Use [↶] and [↷] to access the rest of the keyboard.
8. Press [OK] to confirm your input. S515 will now return to the Operator ID Menu.

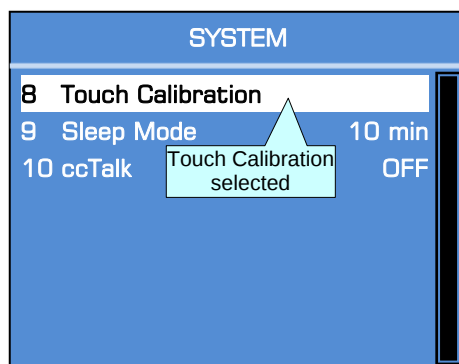
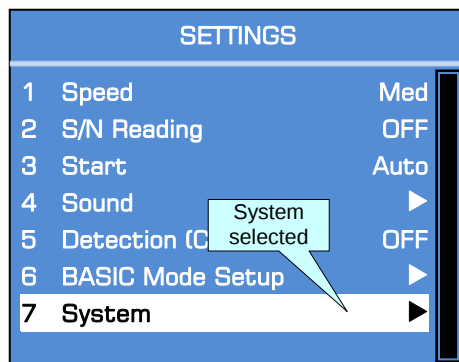
Note: You can always leave the Operator ID Input Menu by pressing [CLEAR].



7.11 Touch Calibration

If necessary, it is possible to calibrate the function of the finger touch keyboard:

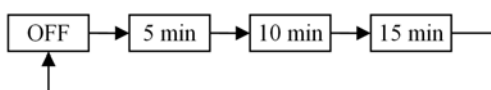
1. Press [SETTINGS] to enter the Settings Menu.
2. Press [▲] and/or [▼] to highlight the System option.
3. Press [START/ENTER] to enter the System Menu.
4. Press [▲] and/or [▼] to highlight the Touch Calibration option.
5. Press [START/ENTER] to start the calibration process. Follow the on-screen instructions.



7.12 Sleep Mode

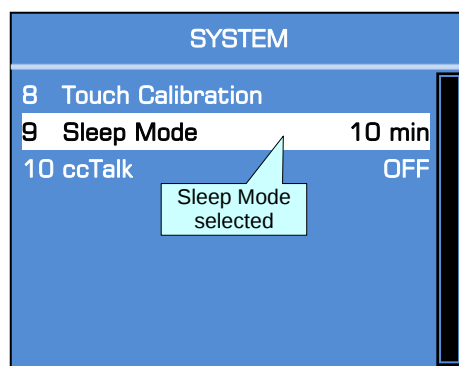
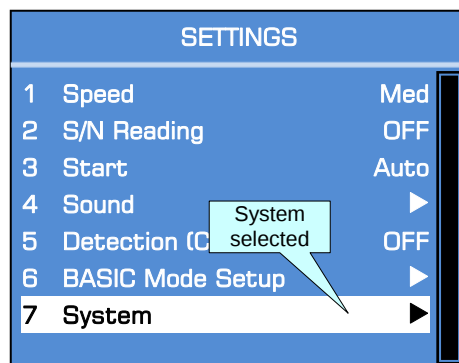
When the machine has been idle for some time it can automatically enter Sleep Mode. You can adjust the time before Sleep Mode is entered:

1. Press [SETTINGS] to enter the Settings Menu.
2. Press [▲] and/or [▼] to highlight the System option.
3. Press [START/ENTER] to enter the System Menu.
4. Press [▲] and/or [▼] to highlight the Sleep Mode option.
5. Toggle [MODE] to select the time to enter Sleep Mode:



6. Press [START/ENTER] to confirm the selection and press [CLEAR] to return to the Main Menu.

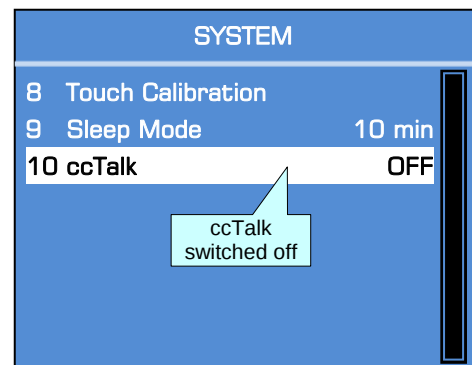
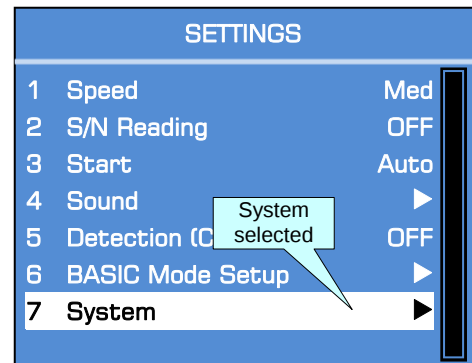
Note: When the machine is in Sleep Mode, the blue light indicators will flash every 10 seconds.



7.13 ccTalk

The ccTalk protocol serial data communication can be switched on and off:

1. Press [SETTINGS] to enter the Settings Menu.
2. Press [▲] and/or [▼] to highlight the System option.
3. Press [START/ENTER] to enter the System Menu.
4. Press [▲] and/or [▼] to highlight the ccTalk option.
5. Toggle [MODE] to select ccTalk ON or OFF.
6. You will be asked to restart the machine for the change to take effect.



8 Maintenance Instructions

8.1 How to adjust the Note Feeding Gap

The adjustment of the Note Feeding Gap has already been set to the best position at the factory. If the note reject rate is high, it can be necessary to adjust the gap to optimize the banknote feeding.

When the notes cannot be counted smoothly, increase the gap distance.

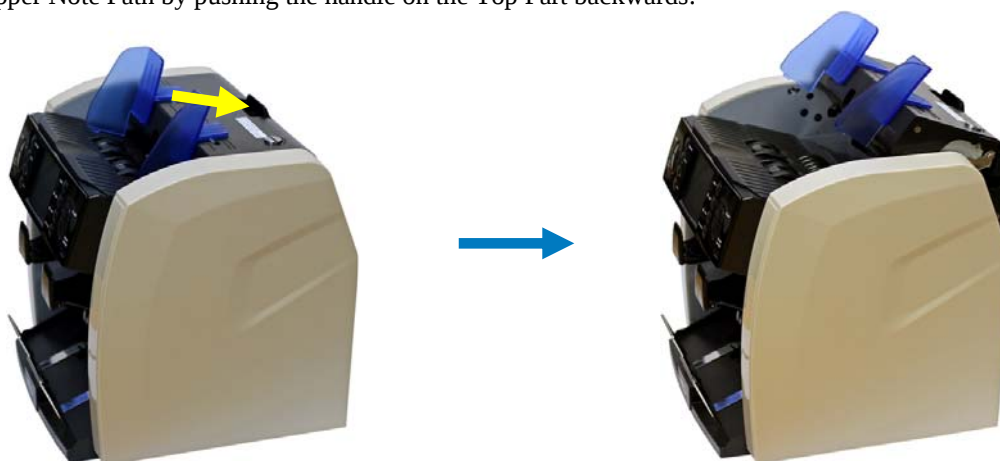
When the machine stops and displays error codes like "Double Notes" or "Chained Notes", decrease the gap.

Use a coin to turn the adjustment screw clockwise to increase the gap. Turn the screw counter-clockwise to decrease the gap. The adjustment screw is very sensitive, only make small adjustments.



8.2 How to Open the Note Path

Open the Upper Note Path by pushing the handle on the Top Part backwards:



Open the Lower Note Path by pulling the handle of the Rear Service Drawer. You can pull out the whole unit:



8.3 How to Clean the Machine

8.3.1 Outer surfaces

Occasionally clean the outer surfaces of S515:

1. Disconnect S515's power cable.
2. Prepare a mixture of a gentle kitchen-use detergent (without abrasive powder or strong chemicals such as acid or alkaline). Use five parts of water to one part of detergent.
3. Absorb the diluted detergent into a sponge. Squeeze excess liquid from the sponge.
4. Wipe the surfaces with the sponge; use a circular motion and avoid any excess liquid dripping into the machine.
5. Wipe the surfaces to remove the detergent.
6. Rinse the sponge with clean running water. Wipe the surfaces with the clean sponge.
7. Wipe the surface again with a dry, soft, lint-free cloth.
8. Wait for the surface to dry completely and remove any fibres.

8.3.2 Upper and Lower Note Path

Clean the Upper and Lower Note Path and the Rear Service Drawer on a regular basis:

1. Disconnect S515's power cable.
2. Open the Upper and Lower Note Path.
3. Gently wipe or dust the surfaces and sensors with a soft brush or a dry, soft, lint-free cloth.
4. If stains remain, moisten a soft, lint-free cloth with water or a fifty-fifty mixture of isopropyl alcohol and clean water.
5. Wring out as much of the liquid as you can from the cloth.
6. Wipe the surfaces and sensors again; do not let any liquid drip into the machine.

NOTE: Avoid spraying cleaner directly on the surfaces and sensors, and make sure the Note Path is fully dry before closing.

9 Technical Specifications

Note Size Range:	(50 × 100 mm) – (85 × 182 mm)
Note Thickness Range:	0,075 – 0,15 mm
Hopper Capacity:	500 notes (Maximum)
Stacker Capacity:	200 notes (Maximum)
Reject Pocket Capacity:	20, 30, 40 or 50 notes (Selectable)
Display:	3,2" Graphic Color Touch TFT Screen with Backlight
Max. installed Currencies:	Up to 20 (Depending on currency combination)
Power Supply:	100 – 240 VAC, 50/60 Hz
Power Consumption:	50 W (Maximum)
Temperature Range (operating):	5 – 40 °C
Temperature Range (storage):	0 – 40 °C
Humidity:	40 – 90%
Dimensions:	264 (Width) × 300 (Height) × 258 (Depth) mm
Weight:	9,2 kg (Approximately)
Piece Counting Speed:	800/900/1.100 notes/minute, selectable (Detection off)
Value Counting Speed:	800/900 notes/minute, selectable 800 notes/minute (Serial number reading activated)
Note Transport System:	Roller friction system with automatic feeder
Interfaces:	Remote Display (RS-232) External Printer (RS-232) USB (PC connection) SD Card slot
Optional Accessories:	Remote Display External Printer
Detection:	Dual full-width IR and visible light transmissive and reflective optical inspection with image processing. Magnetism sensor (thread, value code, and print). Thickness and width/height sensors (3D). UV reflection sensor.

Specifications are subject to change without further notice.

