Diebold Nixdorf

Value Line

Note and coin recycler

Installation, user and service manual
15.1.2019

Contents

General information

With Value Line, Diebold Nixdorf offers entry-level models for banknote and coin processing. The aim of using Value Line is to further automate the payment process.

The coin recycler is aimed at the lower market segment, for instance businesses with small shopping baskets and minor formation of waiting lines.

The coin recycler can only be operated in a POS environment in combination with the note module.

Variants:

Modell	**Variant**	**Integrated Components**		
VL 2010	Note Storage	NV200 (for TEBS)	TEBS	
VL 2020	Note Storage	NV200	Cassette	
VL 3010	Note Recycler	NV200 (for TEBS)	TEBS	Payout-Module
VL 3020	Note Recycler	NV200	Cassette	Payout-Module
VL 5020	Coin Recycler	SCS	Coin Feeder	Smart Hopper

About this manual

➔ Notes in the manual are marked by this symbol.

This symbol is used for notices of caution.

Important notes

Appliances supplied by Diebold Nixdorf comply with the relevant safety regulations for data processing and information technology installations, including electrical office equipment for use within an office environment.

- The installation may only be carried out by specially trained staff following a check of the constructional conditions on site.

Whenever work of any kind is done on the device, as well as when data cables are plugged in or unplugged, the device must be completely disconnected from the line voltage.

- The devices may only be repaired by trained technicians.
- Unauthorized opening of the housing or inexpert repairs can result not only in considerable personal danger, but will also invalidate your warranty and liability protection.
- Always consult the available documentation before doing any work with this appliance.
- If the device is brought from a cold environment into a heated operating room, condensation may occur. Before operation, the device must be completely dry. Therefore, an acclimatization period of at least two hours must be adhered to.
- Always lay the supply leads and cables in such a way that they cannot be stepped on or tripped over.
- Exchange damaged cables immediately.
- In order to completely disconnect the device from the power source, use the circuit breaker in the fuse box or building installation.
- Make sure that no objects (such as paper clips) can reach the interior of the device, since electrical shocks or short-circuits could result.
- To avoid overheating, ensure that the system receives adequate ventilation.
- Always keep the ventilation slots free of obstruction (at least **50 mm**) to ensure adequate air circulation and avoid overheating.
- Only operate devices if they are fully inserted and the doors are closed.
- During an thunderstorm, data cables should not be plugged in or unplugged.
- Protect the devices from vibration, dust, humidity and heat.

- Ensure that used up parts are disposed of in an environmentally friendly manner.
- In case of an accident (such as a damaged housing, entry of liquids or foreign objects), pull out the power plug or use the circuit breaker of the building installation to completely remove the device from power.
- The appliance and other information technology hardware should only be connected to electrical supply networks with a separate protective earth (PE) wire. This type of electrical supply network is referred to as a TN-S network. Do not use PEN conductors.
  Also follow the recommendations set forth in DIN VDE 0100 Part 540, Appendix C2 as well as EN50174-2, section 5.4.3.
- Transport the devices only in their original packaging (to protect them against shock and impact).

Warranty

Diebold Nixdorf generally guarantees a warranty for 12 months beginning with the date of delivery or acceptance. This warranty covers all defects occurring during normal use of the product.

Defects due to

- improper or insufficient maintenance,
- improper use or unauthorized modifications of the product, or
- an unsuitable location or surroundings

will not be covered by the warranty.

All parts of the product that are subject to wear and tear are not included in the warranty either. For detailed warranty arrangements, please consult your contract documents.

If no warranty claim can be made and you have not signed a service contract with Diebold Nixdorf, the Diebold Nixdorf Customer Care Center (CCC) is available to accept orders without a contract.

Scope of delivery

➔ Important when unpacking the devices: Always grasp the housing, not the door, to lift the devices out of the packaging!

Unpack the parts and check that the scope of delivery is identical to the information on the delivery note.

Should you notice any

- transport damages or
- discrepancies between the package contents and delivery note or
- functional defects,

immediately inform your contracting party or your branch office of Diebold Nixdorf. Specify the delivery note, delivery note item and serial number of the affected device.

Scope of delivery of the note module:

- 1 power cable (2.5 m)
- 1 type B USB cable (3 m) for connection to the POS system
- Door key
- In case of TEBS module: two additional keys

Scope of delivery of the coin recycler:

- Data cable (3 m)
- 24 V cable (3 m)
- 1 ground cable (0.5 m)
- 4 raised-head screws (4 x 10 mm) with cross recess,
  8 washers and 4 M4 nuts.
- Door key; coin box key

Installation

Warning: All work steps described in this section may only be carried out by qualified service staff or the warranty will be voided.

List of tools

To set up the system, the following tools will be needed in addition to standard tools:

- PZ-1 screwdriver
- Impact drill

Preparations

Following an assessment and evaluation of the constructional conditions on site, the installation must be carried out by a professional technician.

The **wiring protection** (16 A fuse) must be part of the building's electricity distribution cabinet in accordance with **DIN EN 60127** (breaking capacity of 1500 A).

All devices must first be checked for damage. Report damages immediately to the person carrying out the installation or the person responsible for the installation.

- First check the construction situation on site.
- Is the installation location suitable?
- Are all cables available? Is a grounded socket available within less than 2 m?
- Wear **safety shoes** in accordance with **ISO 20345** Code S1 while transporting and installing the devices.

The **distance** between the devices can be up to 3 m. The coin recycler must always be grounded! This can be done either by connecting it directly to the note module with the delivered ground cable (if the modules are less than 0.5 m apart) or by grounding the device separately using the nearest possibility (e.g. via the protective ground contact of a socket, water line, etc.).

Operating the coin recycler without grounding is not permitted as this could lead to malfunctions! Make sure to proceed in the correct order when grounding the device: First connect the ground cable, then add the toothed washer and secure with the nut.

Keep at least 50 mm around the ventilation slots at the back of the devices free of obstruction!

Fastening points on the outside of the housing

There are 4 holes on each side panel. Adjacent systems can be screwed together using M4 x 10 mm screws, washers and nuts.

The holes can also be used to fasten the systems to walls or furniture at the site of installation.

Fastening points inside the housing

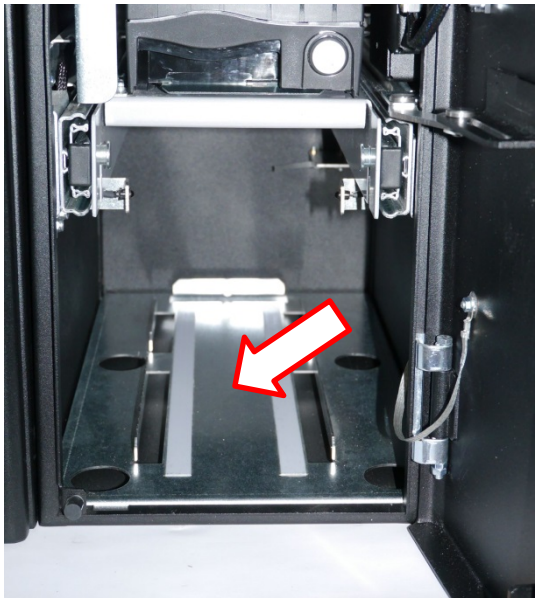
⚠ Both devices must be screwed to the floor.

Before fastening the coin recycler, remove the coin box.

Unlock the front door and press the red release lever. Slide the cover over the red lock (see arrow).

Push the lid backwards as far as it will go, pulling out the coin box by the green handle.

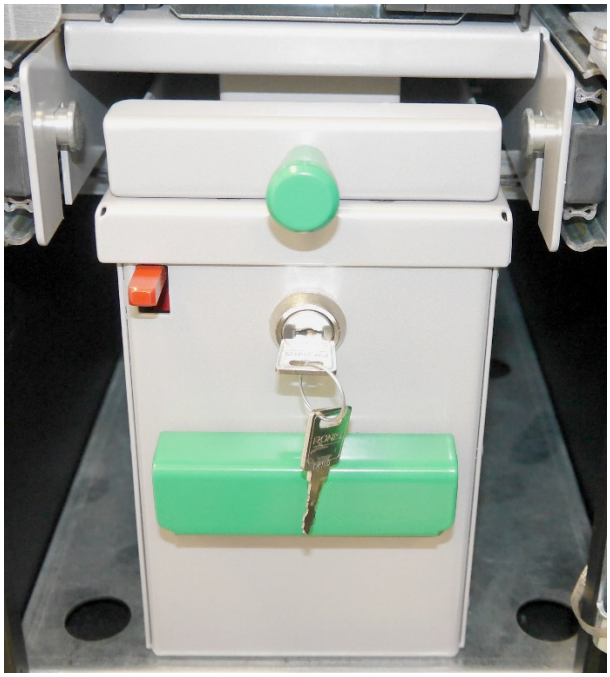
Then remove the metal sheet insert.



Select screws and washers that are suitable for the ground at the site of installation while also reliably closing up the openings in the housing (encasement as protection against fire).

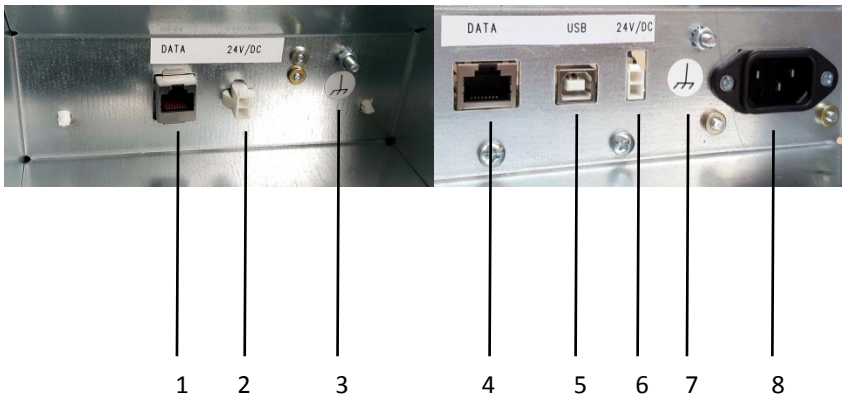
The holes in the housing base have a diameter of 8 mm.

After you have screwed the coin recycler to the floor, reinsert the coin box. When inserting, the cover of the coin box must be in the front position (see also chapter “Inserting the coin box”).



Connections

Coin re-cycler



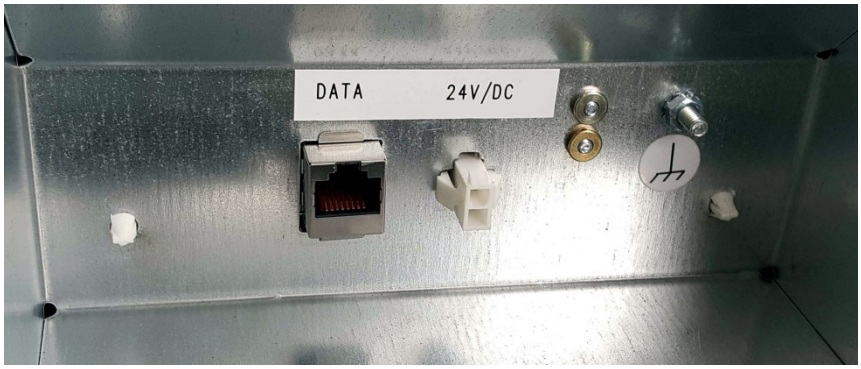
Note module

1	Data connection of coin recycler
2	Power supply of coin recycler (24 V DC in)
3	Ground connection
4	Data connection of note module
5	Type B USB connection to the POS system (note module)
6	Power supply (output for coin recycler, 24 V out)
7	Ground connection for coin recycler
8	Power input 100–240 V

Establish the data connection between (1) and (4) as well as the power supply for the coin recycler (2, 6) and screw the ground cable tight (3, 7). The USB interface (5) is used for connection to a POS system.

Once the above cable connections have been established, plug the power cable of the note module (8) into a power socket.

➔ When connecting the ground cable, make sure to proceed in the following order: First connect the ground cable, then add the toothed washer and secure with the nut.

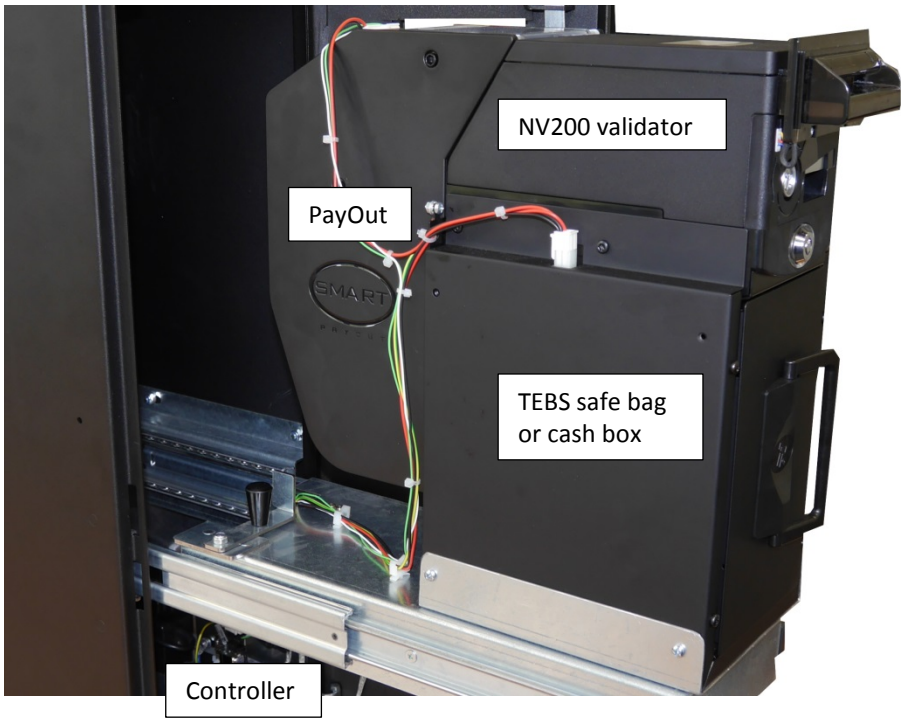


⚠ The coin recycler must always be grounded! This can be done either by connecting it directly to the note module with the delivered ground cable or by grounding the device separately using the nearest possibility (e.g. via the protective ground contact of a socket, water line, etc.).
Operating the coin recycler without grounding can lead to malfunctions!

⚠ Only operate devices if the modules are fully inserted and the doors are closed.

Note modules (NV200 cash box or TEBS)

Components



➔ All documentation about the components can be found in Diebold Nixdorf's intranet.

Filling

Minimum filling quantity

In order to guarantee a recycling function, it is necessary to comply with the critical minimum filling quantities (see also document "LEAN Driver API Specification POSValue Line", WN-POS-Value-Line-LEANDriver-API-Doc.pdf):

2 X 5 €, 2 X 10 €, 4 X 20 €, 2 X 50 €

Whether an additional 100 € and 200 € change has to be filled depends on the individual customer configuration and the software application used.

Typical filling quantity

22 X 5 €, 20 X 10 €, 20 X 10 €, 5 X 50 €.

Whether an additional 100 € and 200 € change has to be filled depends on the individual customer configuration and the software application used.

These are typical, practicable values. Deviations may occur after commissioning by your service partner.

Recommended filling quantity

Dependent on the load profile: Determination of the need for commissioning by your service partner

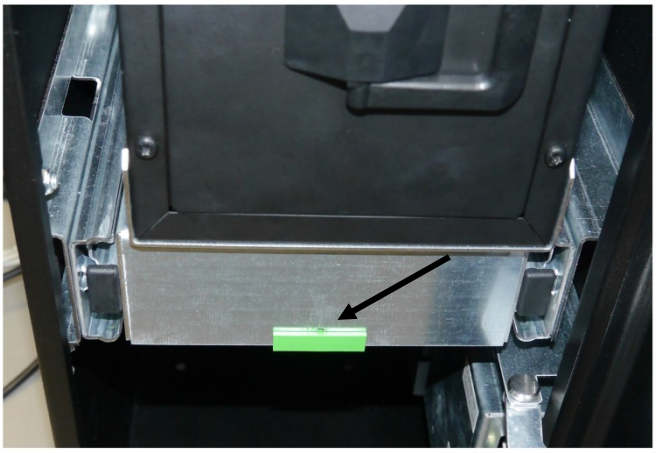
Maximum for the total number of notes

70

Opening the note module

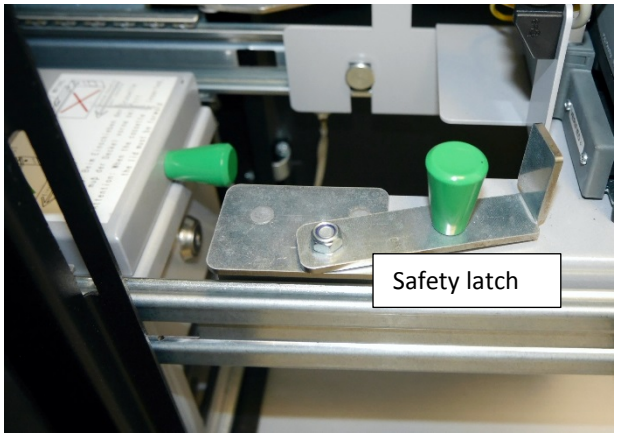
Insert the key and turn it clockwise. Open the housing door.

Grasp the green handle (see arrow) and pull the module out to the front.

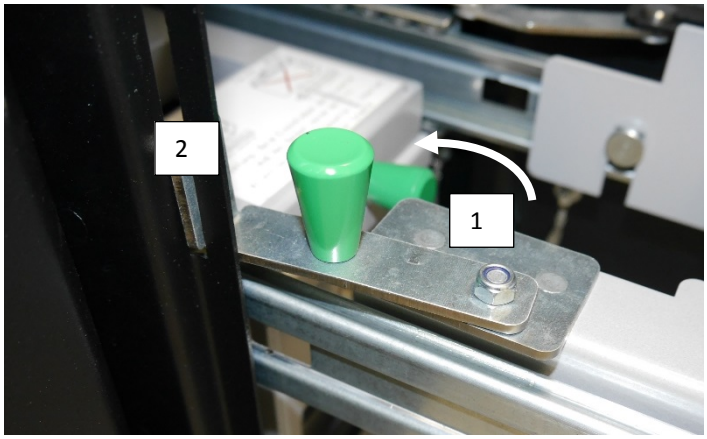


The support must be fastened when performing work on the note module (protection against injuries).

For this purpose, a safety latch is attached to the support (see below).



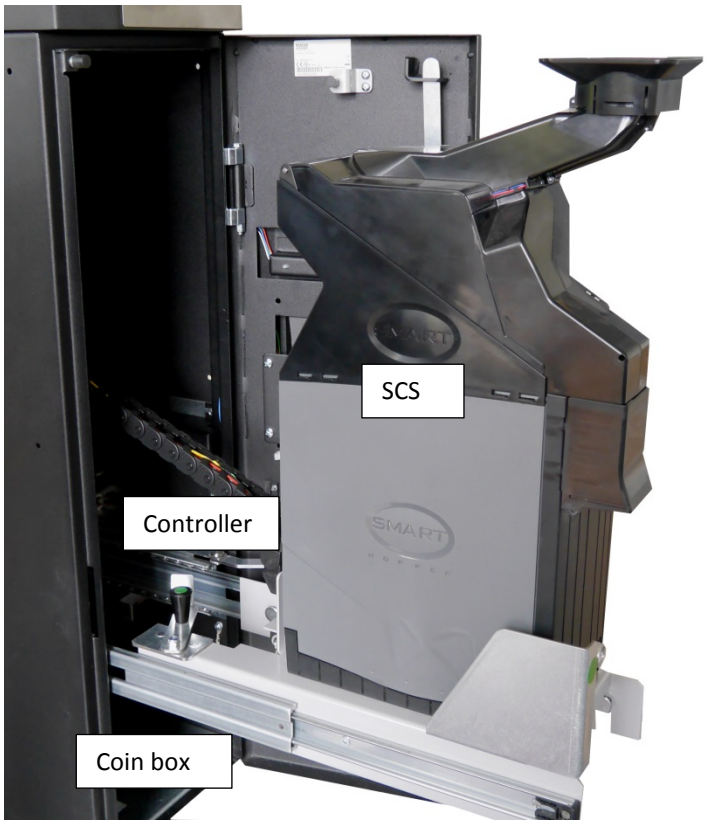
Pull out the support until the latch (1) easily hooks into the slot in the housing (2).



Before retracting the support, the safety latch must be returned exactly to its original position, since the note module could otherwise be damaged.

Coin recycler (smart coin system (SCS))

Components



➔ All documentation about the smart coin system (SCS) can be found in Diebold Nixdorf's intranet.

Optimal coin fill level

Coin volumes

Minimum filling quantity

In order to guarantee a recycling function, compliance with the critical minimum filling quantities is necessary (see also document "LEAN Driver API Specification POS Value Line ", WN-POS-Value-Line-LEANDriver-API-Doc.pdf):

20 pieces of each denomination (= 160 coins/euro)

Typical filling quantity

100 pieces of each denomination (= 800 coins/euro)

Recommended filling quantity

This depends on the load profile. Determination of the requirements after commissioning by your service partner.

Maximum filling

1450 with a balanced distribution among the various coin denominations.

With commands for coin volume control, the host computer should ensure that the maximum level is not exceeded.

Filling the coin recycler

When filling the coin recycler with the content of a coin roll (excl. paper) put the coins into the funnel. Wait until the coins are completely handled by the coin recycler before adding more.

Mix the contents of at least 2 coin rolls with different denominations in a suitable container and then fill into the coin funnel. Take care not to put any paper residues into the funnel.

When filling in mixed coins, add no more than 150 coins at a time. Wait until these have been processed before adding further coins to the system.

➔ During the filling process, some coins may be rejected in the normal way. These should be added again as soon as the current process has been completed.

Small coins

➡ Coins with a diameter of less than 18 mm require special attention.

€0.01 (1 cent)

During regular operation (dispensing or mixing), the number of €0.01 coins in the hopper may not exceed 20 coins or 15% of the total number of coins, depending on which number is greater.

If this volume is exceeded, the coin recycler will automatically try to deposit the excess coins in the coin box during a dispensing process.

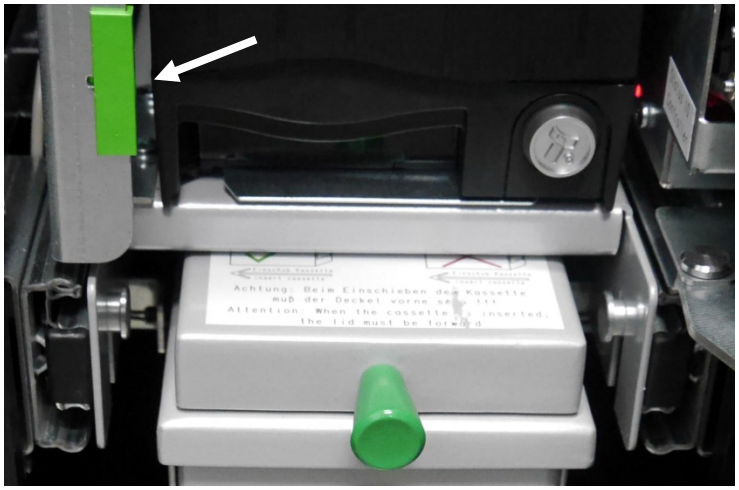
In this case, the number of coins should be reduced as quickly as possible with the help of the commands for coin volume control.

Opening the coin recycler housing

The housing of the coin module may only be opened if the LEDs for coin input and coin output are not lighting up.

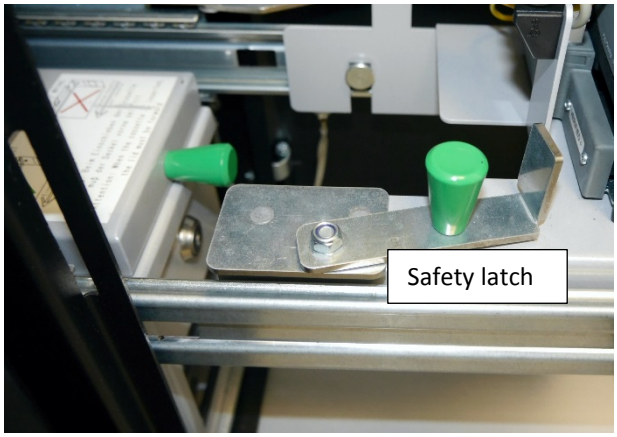
Insert the key and turn it clockwise. Open the housing door.

Grasp the module at the green handle and pull it out to the front.

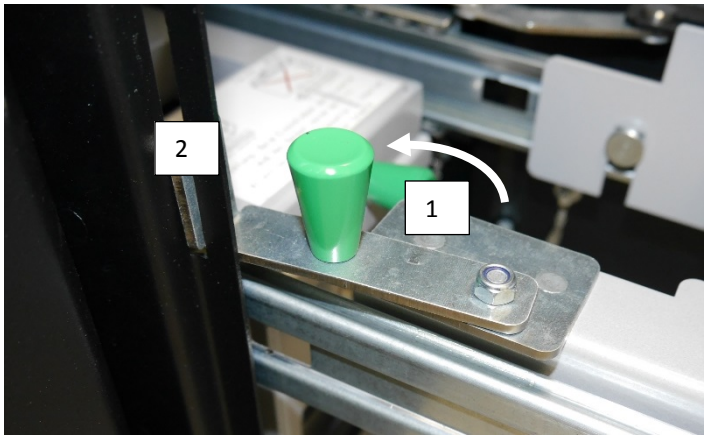


The support must be fastened when performing work on the coin recycler (protection against injuries).

For this purpose, a safety latch is attached to the support (see below).



Pull out the support until the latch (1) easily hooks into the slot in the housing (2).



Before retracting the support, the safety latch must be returned exactly to its original position, since the coin recycler could otherwise be damaged.

Removing/opening the coin box

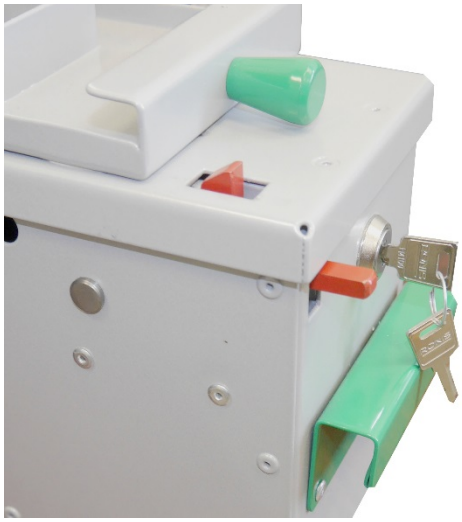
Insert the key and turn it clockwise. Open the housing (see page 17).

Unlock the front door and press the red release lever. Slide the cover over the red lock (see arrow).

Push the lid backwards as far as it will go, pulling out the coin box by the green handle.

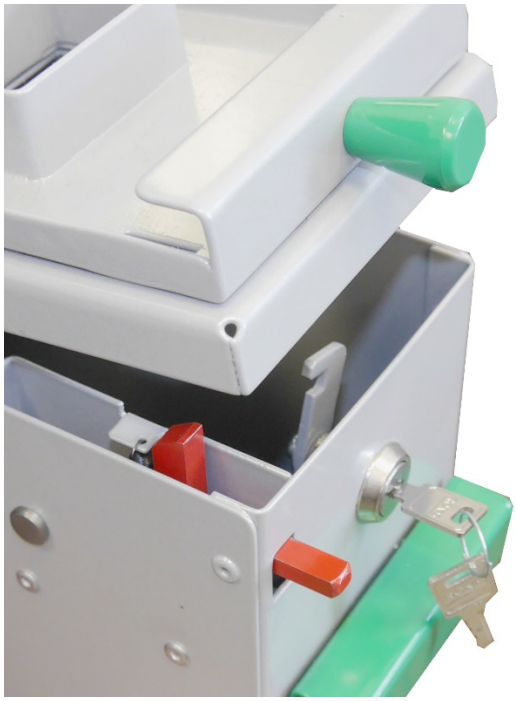
The cassette is locked after being removed and can only be opened with the coin box key.

Insert the key and turn until it is vertical.



When you lift the lid, the lid will snap forward. Do not touch the upper edge of the cassette when opening it.

Now open the cassette. While opening, the upper part of the lid slides forward.



Inserting the coin box

Close and lock the coin box with the key. Pull the key.

For insertion, the cover of the coin box must remain in the front position (see picture below).

Slide the coin box into the housing as far as it will go.

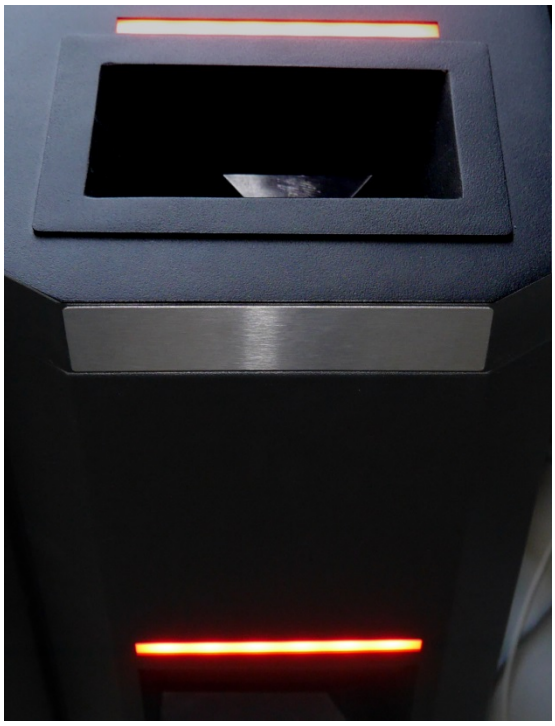
Firmware updates

Indication at the coin input tray

If the LEDs on the coin input and output trays are flashing red, a firmware update is currently in progress.

The device may not be operated during this procedure under any circumstances, since this could damage the coin recycler. Do not open the doors!

Once the firmware download is complete, the device carries out a reset (audible turning of the motors) and the LEDs on the coin input and output trays turn off.



Indication at the note module

The device may not be operated during this procedure under any circumstances, since this could damage the note module. Do not open the doors!

During a firmware update of the note module, the LED on the note module flashes blue. If a coin recycler is connected, the LEDs on the coin input and output trays light up permanently in blue.

LED flashing blue

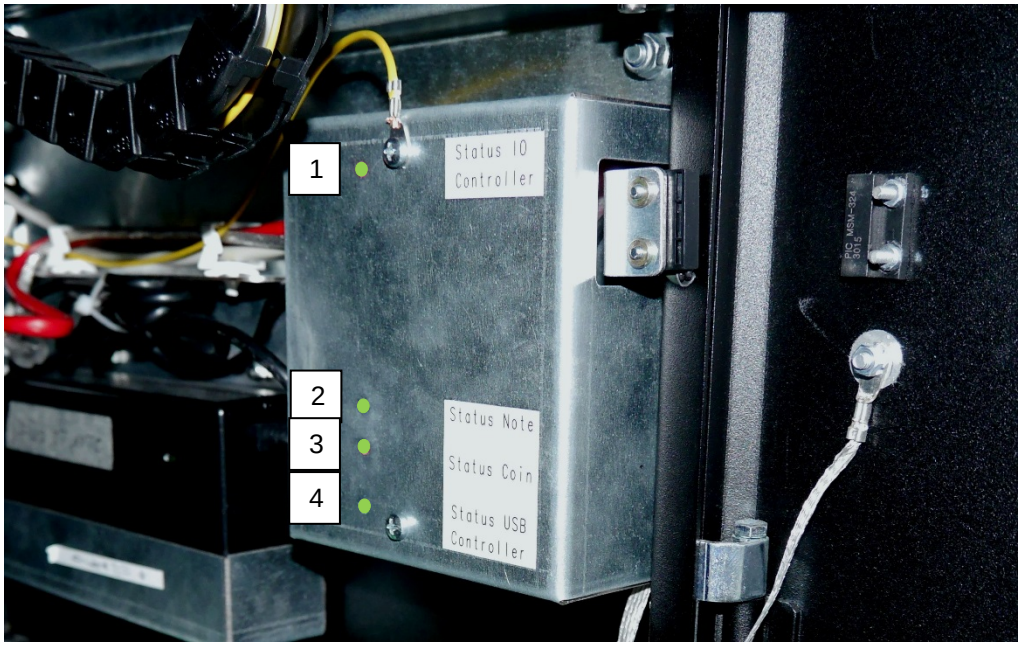
Flash codes on the controller of the coin recycler

LED (I/O interface on I/O interface module in the coin recycler)

The following tables show the LED signals of the I/O interface module:

LED color	Description
Green (flashing)	OK
Off	Without current (24 V not connected)

Flash codes on the controller of the note module



During system initialization, the I/O interface module runs through the different colors (red, yellow, green) on the LED panels for a visual LED check.

The following tables show the LED signals of the USB interface module.

LED #1: Status IO Controller

LED Color	Description
Green	OK
Red	Error (IO Controller (coin) no response) or Cashbox not inserted correctly
Red/Green flashing	IO-Controller is in initialization (BOOT Loader)
Red/Yellow flashing	IO-Controller in firmware download mode

LED #2: Note

LED Color	Description
Green	OK
Yellow	Jam (can usually be removed by the operator)
Red	Error (communication with notation device currently not possible) Possible causes: - Incorrect wiring - Firmware update of the note - Device incorrectly connected - Device is in reset mode - Device defective (replacement required)
Red flashing	USB controller in firmware download mode

LED #3: Coin

LED Color	Description
Green	OK
Yellow	Coin jam (can usually be removed by the operator)
Red	Error (communication with notation device currently not possible) Possible causes: - Incorrect wiring - Firmware update - Device incorrectly connected - Device is in reset mode - Device defective (replacement required)

LED #4: USB Controller

LED Color	Description
Green flashing	OK. Driver available
Yellow flashing	Error - Driver not available on host - Key exchange between driver and USB controller not possible (Has the note module door been opened once?)
Red	Error - Storage- oder RTC-error
Red flashing +LED #2: flashing green	Controller is in initialization (BOOT Loader) (flashes for appr. 2 seconds)
Red/Yellow flashing +LED #2: flashing green	Controller in firmware download mode
Off	No current (USB not connected)

Flash codes of the components

Coin recycler SCS (smart coin system)

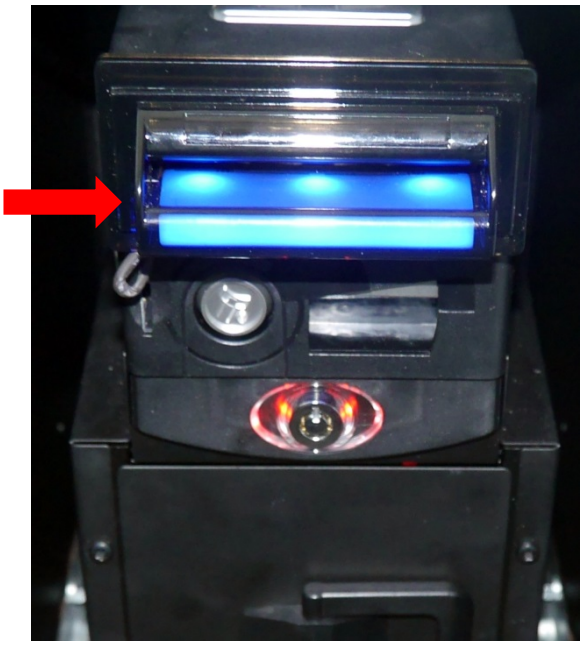
The coin recycler features an integrated error detection function. If a configuration or other error occurs, the LEDs on the coin recycler (see picture) flash in a special order.

LED color	Status	Description	Action
Green	Flashing with 1 Hz	Enabled and ready for dispensing	
Red	1 flash interval	Hopper disabled	Host system must send enable command.
Red	2 flash intervals	Calibration error	Optical sensor dirty. Operator must clean the output sensor's fluorescent tube. If the error persists, please inform your service partner.
Red	3 flash intervals	No encryption code set	Set encryption code

Red	4 flash intervals	Coin jam	Remove power, manually empty the coins from the tray and check hopper base for stuck coins. Try manually turning the disc. A persistent jam may require sending the device to your service partner.
Red	5 flash intervals	Fraud attempt detected.	Reset hopper. If flashing persists, this indicates a problem with the upper payout flap, the light guide or the output sensor.
Red	6 flash intervals	Outdated component, no longer used. (Hopper empty)	
Red	7 flash intervals	Memory checksum error	Power-disconnect Coin-recycler for appr. 5 seconds, then download hopper firmware again. If the error persists, please inform your service partner.
Red	8 flash intervals	Hopper sensor not initialized	Send to your service partner.
Red	9 flash intervals	Outdated component, no longer used. (Cover removed).	

Note module

NV200 with cash box or NV200 with TEBS (with safe bag)



The NV200-validator is combined in different modules:

1. As a deposit-only unit (Deposit: NV200 with cassette or Safebag, but without Payout)
2. Deposit and withdrawal unit (NV200 with cassette or Safebag AND Payout)

The NV200 validator features integrated error detection facilities. If a configuration or other error occurs, the NV200 front bezel will flash in a particular order; a summary of the NV200 bezel flash codes is shown below:

Flashes		**Indicated status / error**
Red	Blue	
0	0	Device in running order
1	1	Note path open
	2	Note path jam
	3	Unit not initialized
2	1	Cash box removed
	2	Cash box jam
	3	TEBS not recognized (only TEBS)

2	4	Barcode-error (only TEBS)
	5	Cash-Box unlocked (only TEBS)
	6	Currency-misadaption: Currency in TEBS does not match currency in payout (only TEBS)
	7	Firmware error
3	1	Firmware checksum error
	2	Interface checksum error
	3	EEPROM checksum error
	4	Dataset checksum error
4	1	Voltage supply too low
	2	Voltage supply too high
	3	SD-card format not readable
	4	Payout module reset
5	1	Firmware mismatch
	2	Payout module jam
	4	Recovery after payout jam in progress

NV200 head module

Overview of flash codes for the NV200 head module:

Flashes		Indicated status/error
Red	Blue	
0	0	None
1	1	Note path open
	2	Note path jam
	3	Unit not initialized
2	1	Cash cassette removed
	2	Cash cassette jam
	3	No TEBS recognized (TEBS only)
	4	Barcode failure (TEBS only)
	5	Cash cassette unlocked (TEBS only)
	6	Currency mismatch (TEBS only)
	7	Firmware error (TEBS only)
3	1	Firmware checksum error
	2	Interface checksum error
	3	EEPROM checksum error
	4	Dataset checksum error
4	1	Voltage supply too low
	2	Voltage supply too high
	3	Card format
	4	Payout reset
5	1	Firmware mismatch

Payout module LED

An LED at the back of the payout module shows error codes to assist with troubleshooting. An overview of the status indicator flash codes for the payout module is shown below:

Status indicator		Flashes	Indicated error	Comments
Red	Green			
		0	No LEDs lit up	No power
		1	Motor/barcode error	Check the belt in the window of the payout module
		2	Note sensor error	
■		3	EEPROM error	Disconnect from power for appr. 5 seconds, then switch back on. If the error continues to appear, contact your service-technician
		4	Payout jam	Contact your service-technician
		5	Error in the selector switch	Turn payout module DIP switch 8 on and off while power is on

		0	Both LEDs on (no flashing)	Turn power on and off
		1	Power reset	For information only
		2	Wakeup from low current	For information only
		3	Software reset	For information only
		4	Software command	For information only
		5	Reset as shown in original user manual	For information only
		6	Power supply problem	Check power supply
		7	Possible grounding error	Check grounding of the device
		Once per second	Device in running order	Everything OK

Controller

Warning: All work steps described in the following sections may only be carried out by qualified service staff or the warranty will be voided.

Power supply

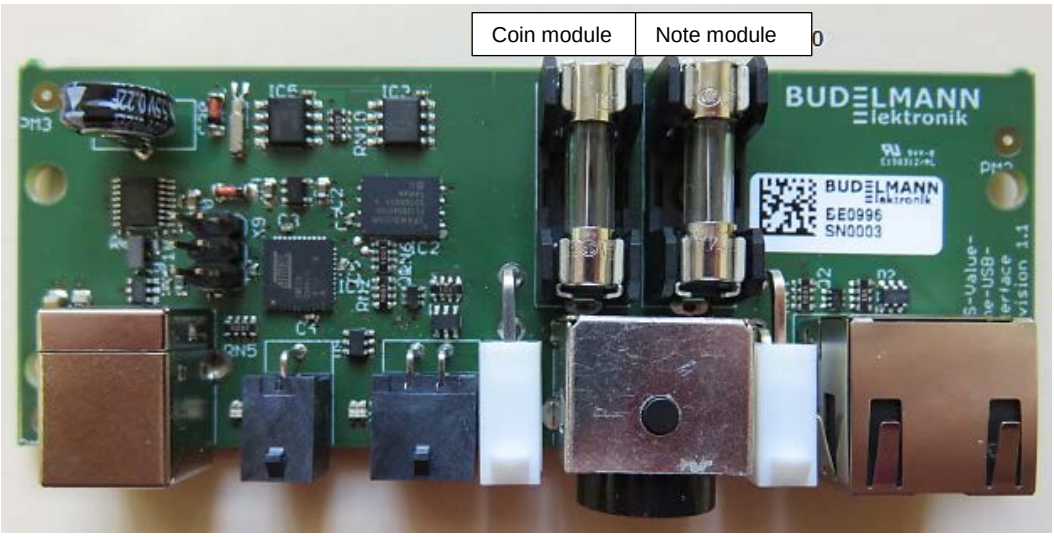
Value Line may only be operated with the included power supply unit.

Value Line fuses (coin recycler and note module)

The fuses are located on the USB controller in the note module (see picture below).

Fuses may only be changed by trained service staff. Only OEM fuses may be used:

- Littelfuse type 213.004, 5x20 mm, 4 A/250 V ac

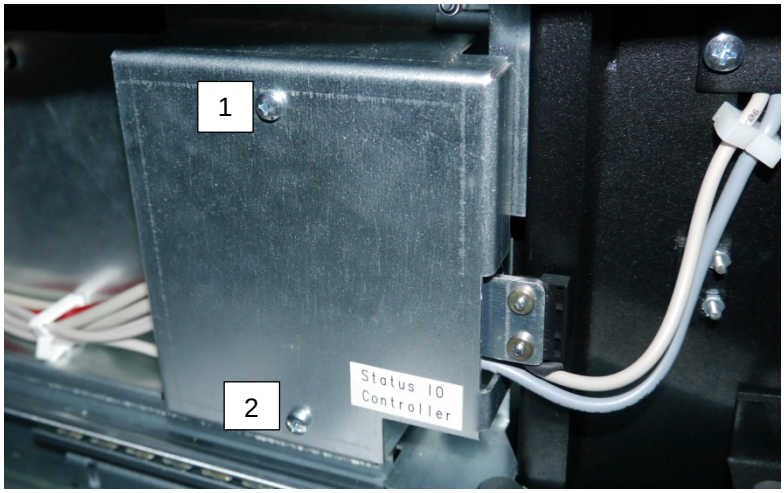


Changing the controller (coin and note module)

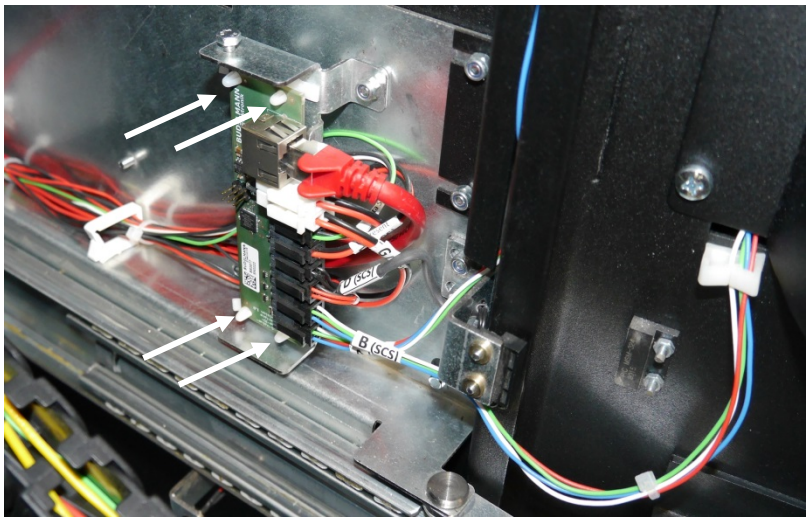
Pull out the power plug.

Open the housing and pull the carriage with the cash module out to the front (page 16 f).

Loosen both screws (1 and 2).

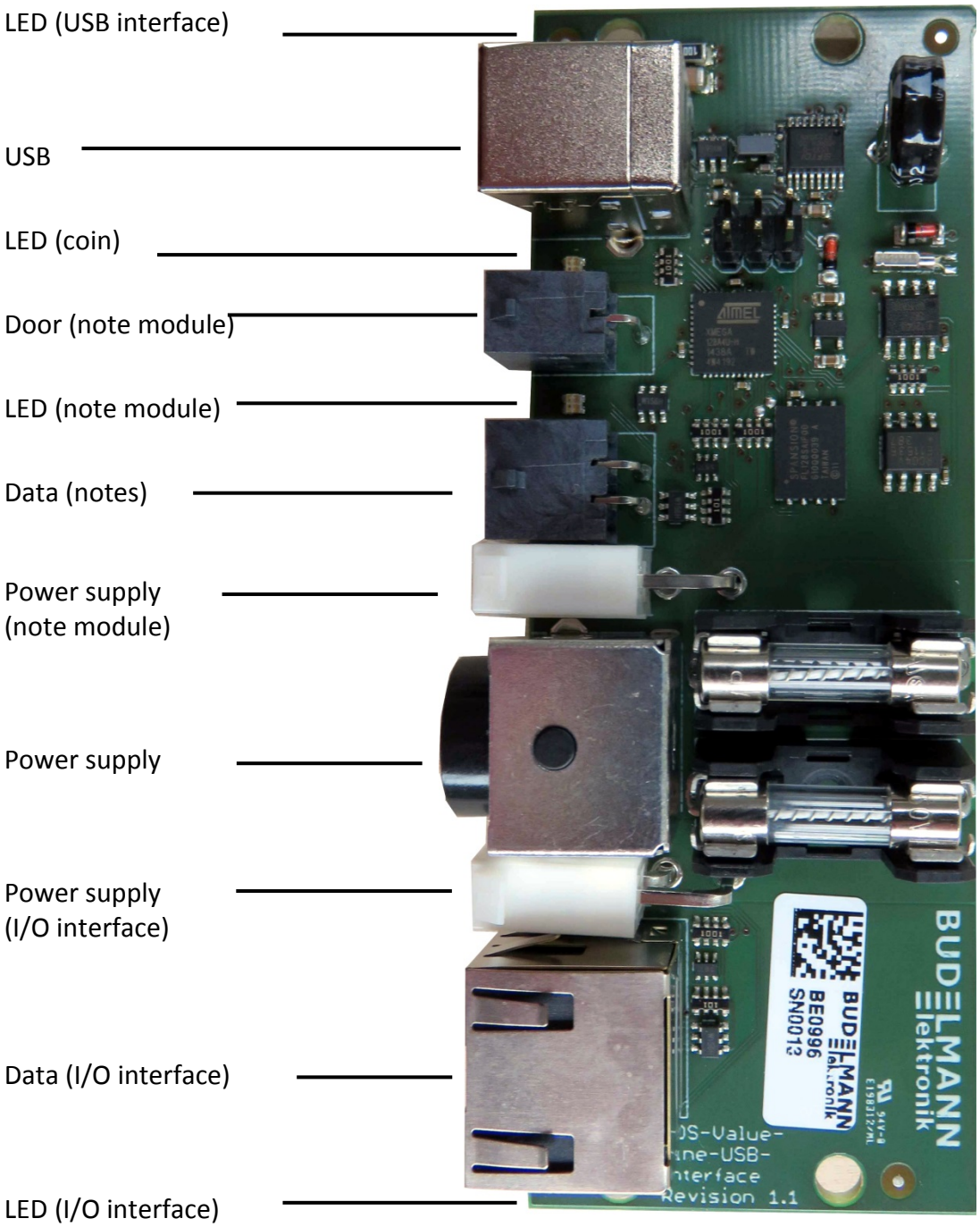


Remove the housing cover. Remove the connectors. Disengage the four tabs of the holders (see arrows) and carefully remove the controller.

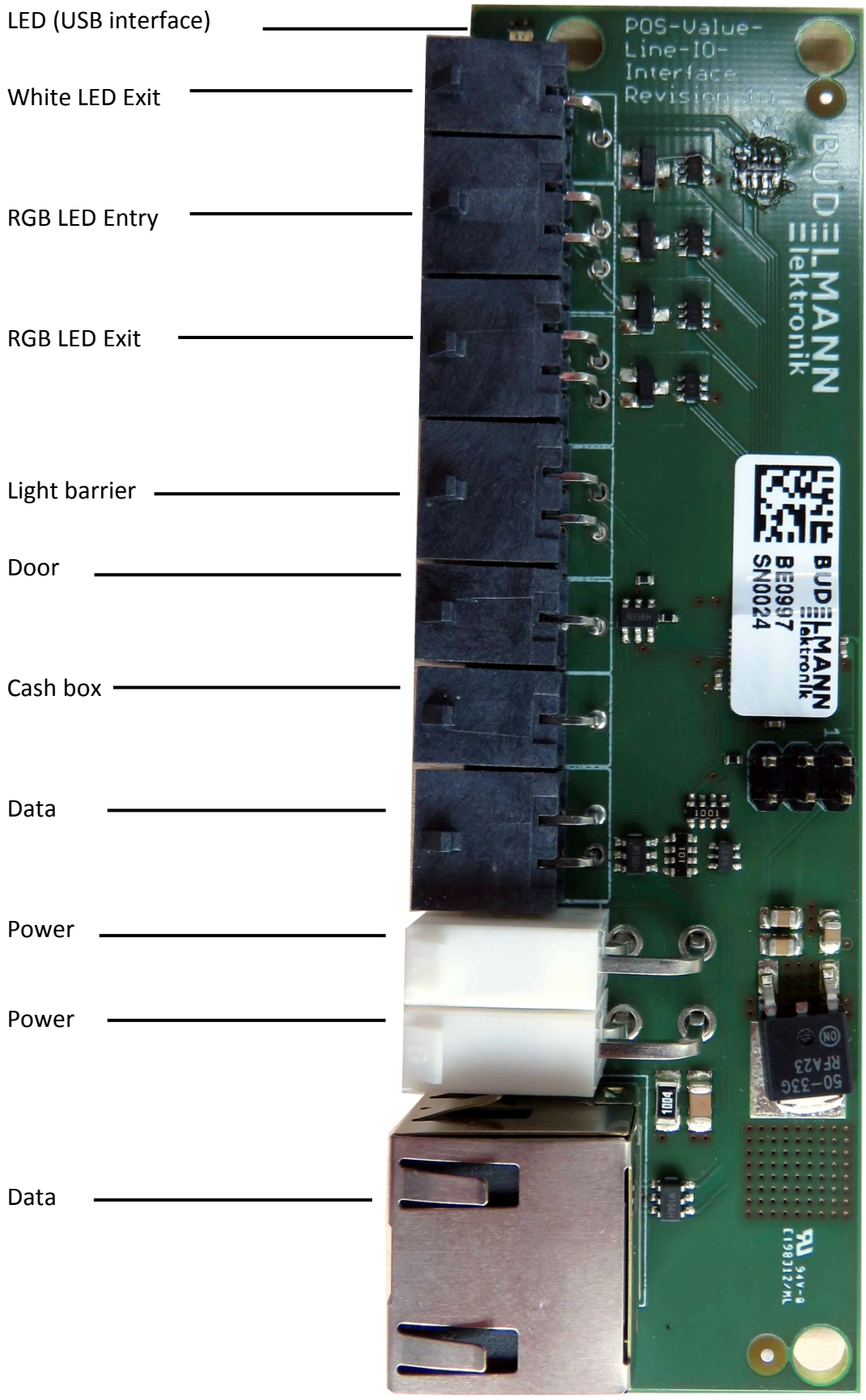


To mount the new controller, proceed in reverse order (see also pin assignment on the following pages).

Pin assignment of note module



Pin assignment of coin recycler



Coin recycler

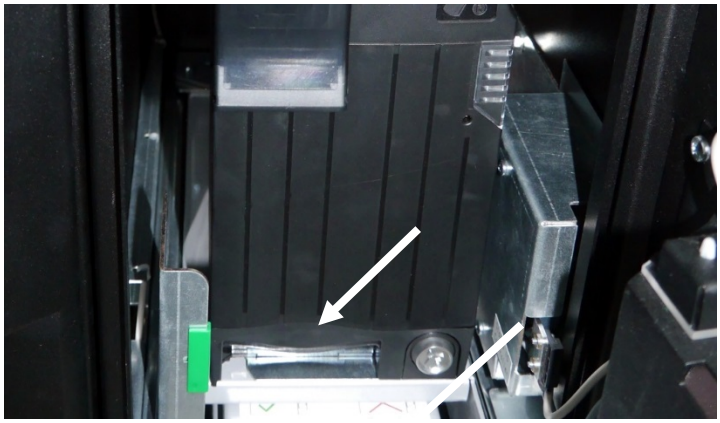
Assembly and disassembly

Switch the device off and pull out the power plug. Open the coin recycler (page 17).

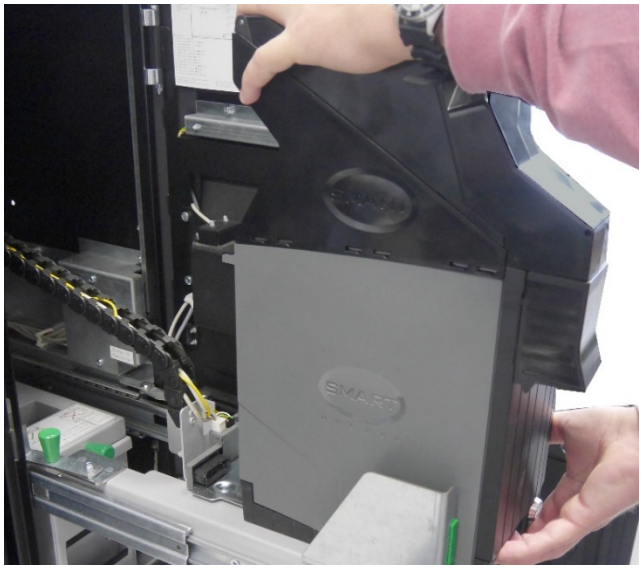
Lift the handle upward (see picture) and carefully pull the entire module out to the front.

Safety shoes in accordance with ISO 20345 Code S1 must be worn during disassembly. In addition, the coin recycler should be removed by two people.

Lift up the grip (see below)…



… and carefully pull out the module all the way to the front.

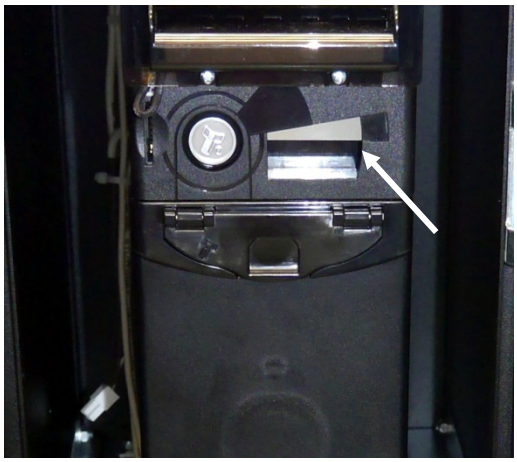


Reinsert the device in reverse order.

Note module

Assembly and disassembly of NV200 head module

Pull out the power plug. Open the housing (page 17). Raise the lever (see arrow) and pull the NV200 module out to the front.



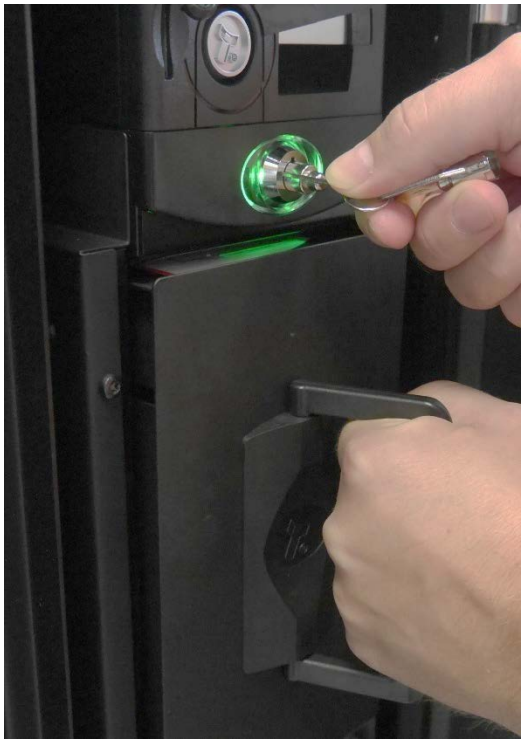
Install the module in reverse order. Please ensure the correct fitting of the module.

Removing and inserting of TEBS safebag

Open the housing (page 17). Release the lock on the TEBS module with the help of the software application. When the LED shines green, you can begin the withdrawal.

Unlock the TEBS module by turning the key to the left.

Hold the key in this position, grasp the module at the handle and pull it out to the front.



Press the locking device in the direction of the arrow to the right and remove the safebag from the holder.

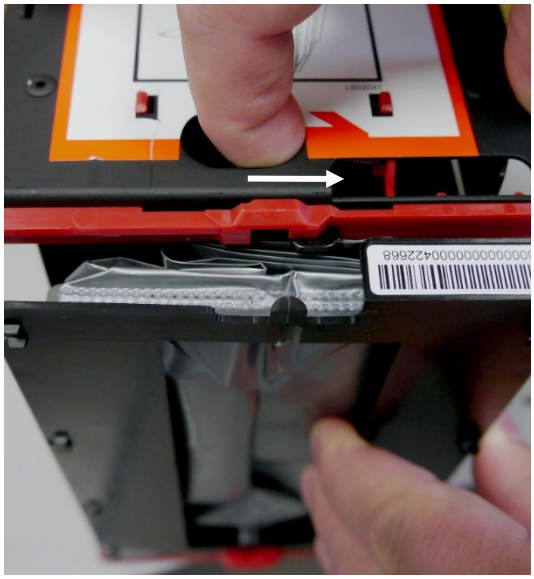
Unpack a new safebag.

The white adhesive tape must not be removed! Do not squeeze the bag during insertion!

The barcode on the safebag **must** be on top.

First, insert the safebag into the recess at the bottom of the cassette.

Open the locking mechanism on the top of the cassette by sliding the locking mechanism to the right with one finger and insert the safebag at the top. Slide back the locking mechanism.



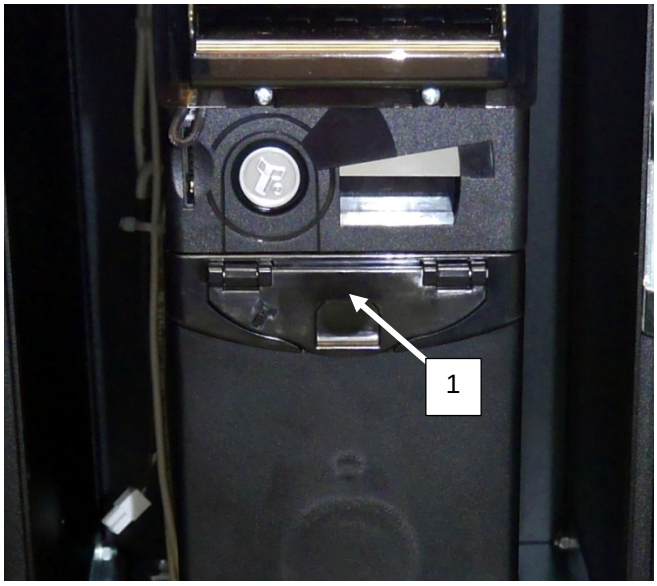
Install the module in reverse order.

Removing and inserting of NV200 cash box

Open the housing (page 17).

Make sure that no transactions are carried out when removing or inserting the cassette!

Unlock the NV200 note module, grasp the cash box at the handle (1) and pull it out to the front.

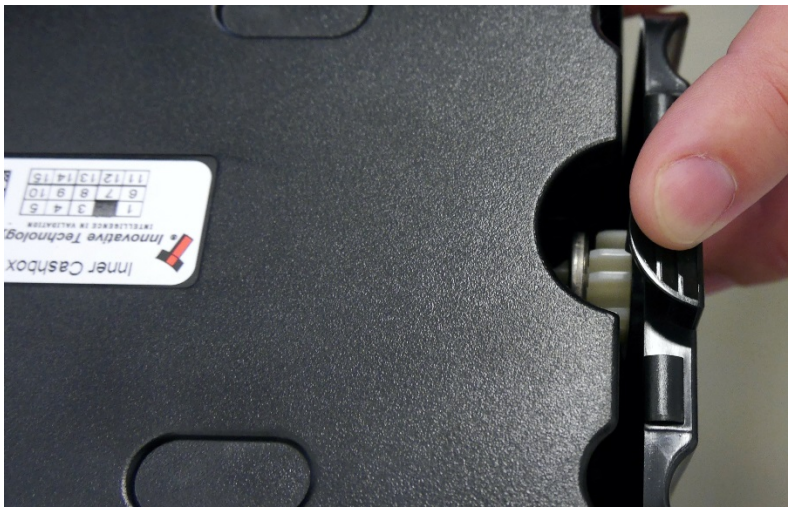


To open the cassette, first turn the locks at the back of the cassette horizontally (see arrows).

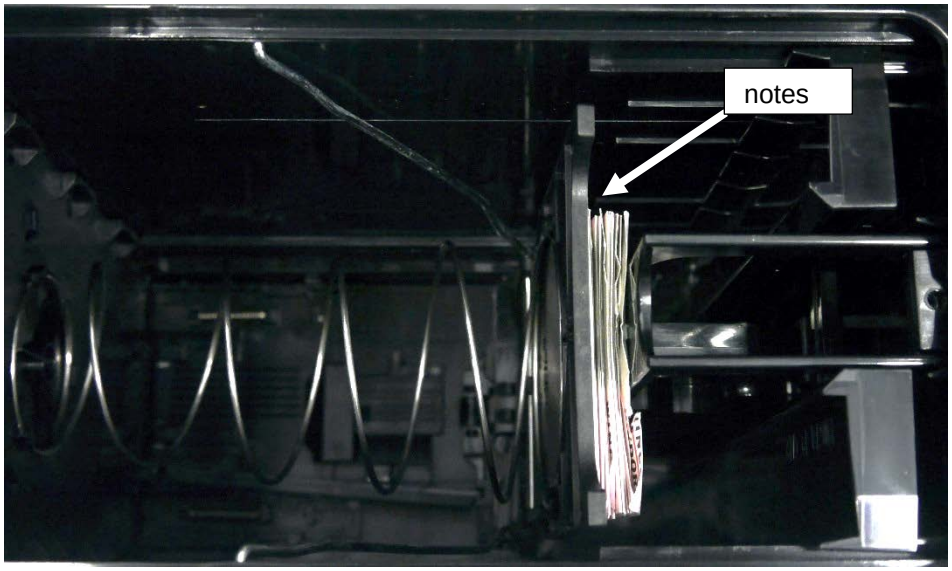
Install the module in reverse order.

When the bolts are in the horizontal position, the cassette can be opened.

Open the cassette (see illustration).



Now you can take out the notes.



Set the cassette into place. Take care not to tilt the cassette when inserting it.

Assembly and disassembly of payout module

Pull out the power plug and open the housing (page 17). Remove the NV200 head module (see page 45).

Remove the connector on the payout module (see arrow).

Lift the module out in a vertical upward direction.

Install the module in reverse order.

Note module chassis (with controller)

Pull out the power plug and open the housing (page 17).

Remove the TEBS safe bag module or the cash box.

Remove the NV200 head module (see page 45).

Remove the ground cable (1). Undo two screws (2) on both sides of the chassis and lift the chassis out.

Reassemble the device in reverse order.

Cleaning instructions

Always turn off the system before cleaning.

Do not use solvents containing acetic acid, methylclorid and active solvent as alcohol, gasoline, PCB, etc.

All pH neutral materials (pH 6 to 8) are good for cleaning. Cleaners with pH values 9 to 10 are not recommended. Cleaning with water as well.

Use a soft, fine-meshed cloth to clean the surface. Dampen the cloth slightly and then clean the device.

Wrong cleaning can result in damage of the device and is not covered by warranty

Clean the housing with a hoover or cloth.

A wrong maintenance may cause damages to the screen, which are not covered by guarantee or warranty.

Cleaning Cycles

Coin Module

Clean up the coin module once a month or if necessary.

The entrance of liquids into the device must be avoided. In case of pollution from liquids an immediate cleaning is necessary. If the liquid has reached the hopper, an exchange is recommended.

Note Module

Clean up the note module twice a month or if necessary.

➔ Find further information about cleaning in the component manuals on the Diebold Nixdorf Internet.

Permitted cleaning materials

The articles listed below can be ordered at your Diebold Nixdorf branch or your Diebold Nixdorf sales partner.

Product name	**Order number**	**Explanations**
Cleaning cloths	01750097332	For all plastic and metal surfaces, not suitable for TFT
TFT, screen clean wipes	01750097334	For TFT/LCD displays, contains no alcohol, flameproof
Air Duster 400g	01750108425	Non-flammable
Cleaning cloths with isopropanol	01750104065	100 cloths with isopropanol
Multi-Media Cleaner	01750035530	For all ITL components, e.g. Coin recycler

Please note the *manufacturer's specifications* on the packaging and on the information leaflet included with the packaging. The product may be damaged or soiled if proper materials are not used or materials are not used properly.

Removal of the note module for cleaning

The Payout module is a closed unit – except from the outer case it does not need further cleaning.

The NV200 module was designed to keep particles in the air away from the optical sensors. Nonetheless, depending on the surroundings, it may be necessary to clean the NV200 module from time to time.

Do not use cleaning supplies containing solvents, such as alcohol, gazoline, PCB, etc. Usage of such supplies may result in a permanent damage of the unit!

To clean the NV200 note path you have to remove the module from the assembly – You cannot open the note path cover while the payout-unit is mounted.

For removal of the NV200 module lift up the silver latch in the front of the NV200 (1)

Then pull the module to the front (2) and take out of the case (3).

After taking out the NV200 module proceed with opening the note path cover. Pull the latch of the upper cover towards the front (to the mouthpiece) and lift the cover as shown below. (It is recommended to also dismount the frontal mouthpiece to enable a correct cleaning of the note paths)

The note path is now visible and can be cleaned. Carefully clean the surface with a soft, lint-free cloth moistened with water and mild detergent. (Such as Diebold Nixdorf Multi-Media-Cleaner 01750035530) – Be extra careful while cleaning the lenses (sensors) and make sure they are clean and dry before closing the cover and restarting the unit.

Never lubricate the noten transport-mechanism or the noten path. This could affect the functionof the NV200.

Don’t try to open the payout module zu öffnen – trying migth result in serious injuries or irreparable damage to the unit. (Loss of warranty).

Cleaning the coin system

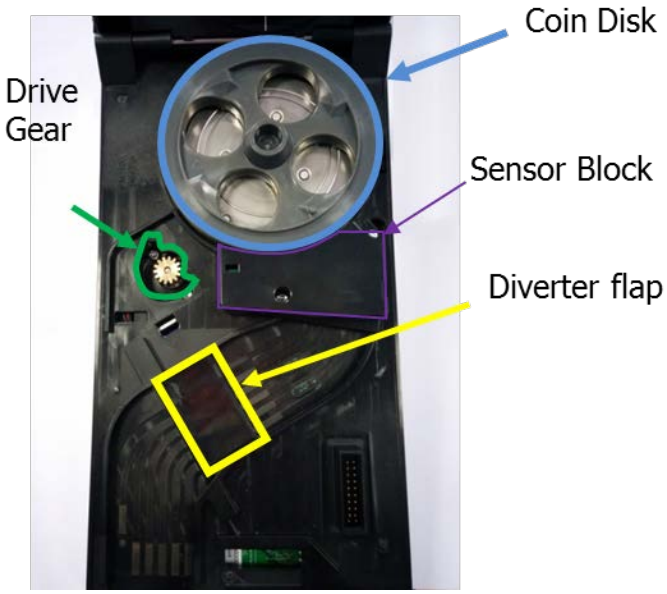
Before you begin with the cleaning process, make sure the device is unplugged from power supply.

Please don’t clean the System while a deposit is taking place.

Open the door and pull the coin module out of the case (this disconnects the voltage supply in the coin module).

Lift up the lever in the front and open the lid.

Now you can start cleaning the device.



Wipe the coin-dust in the coin-path.

Please make sure the reversing flap can move freely. The flap should be able to open.

Make sure the driving wheel is not disabled by dirt. If so, clean it with a dry brush.

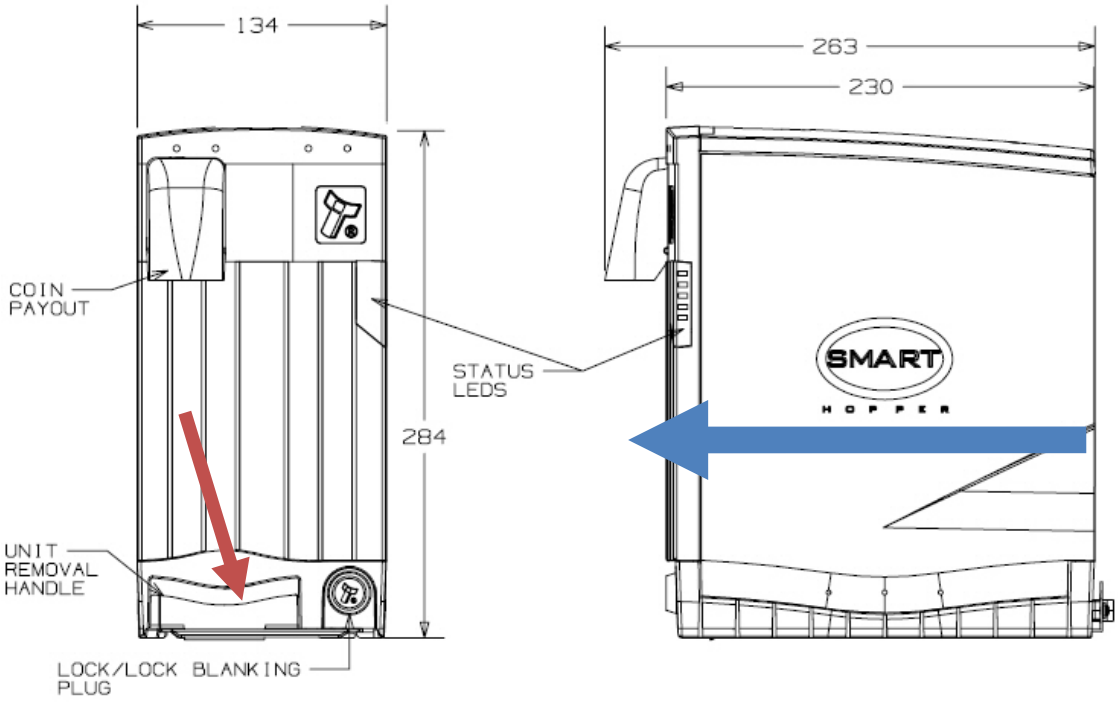
Close the lid of the feeder and put it back in place.

Check the normal operations, such as deposit and withdrawal.

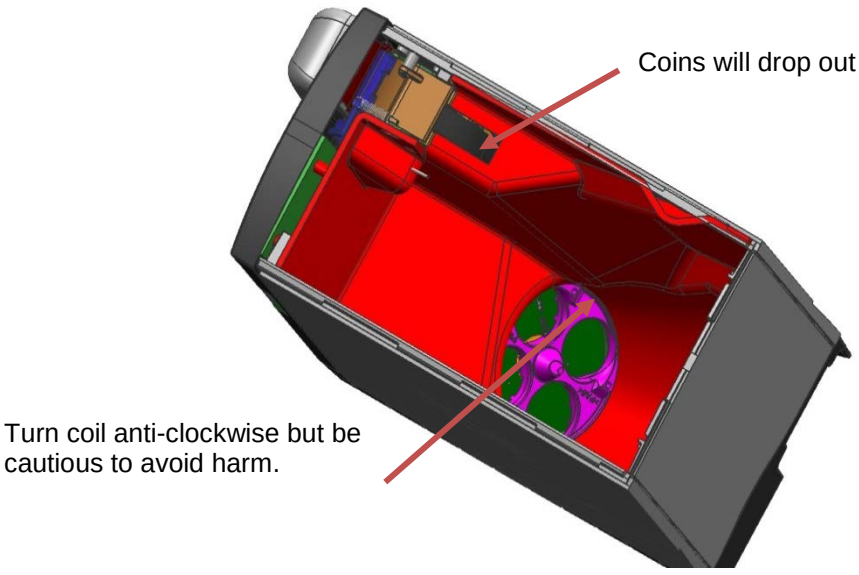
Removal of the sensor block requires the device to be sent in to a Diebold Nixdorf service repair-center for a new initialization.

Clearing a Jam from the Hopper

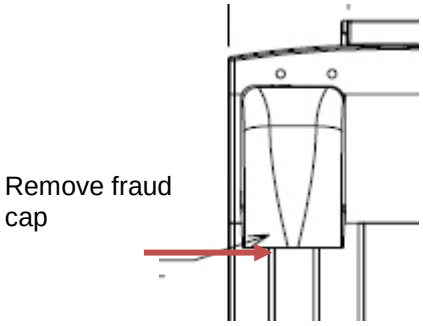
- Power off the SCS and remove 24volt 4 way power cable.
- Remove the hopper from the mounting plate



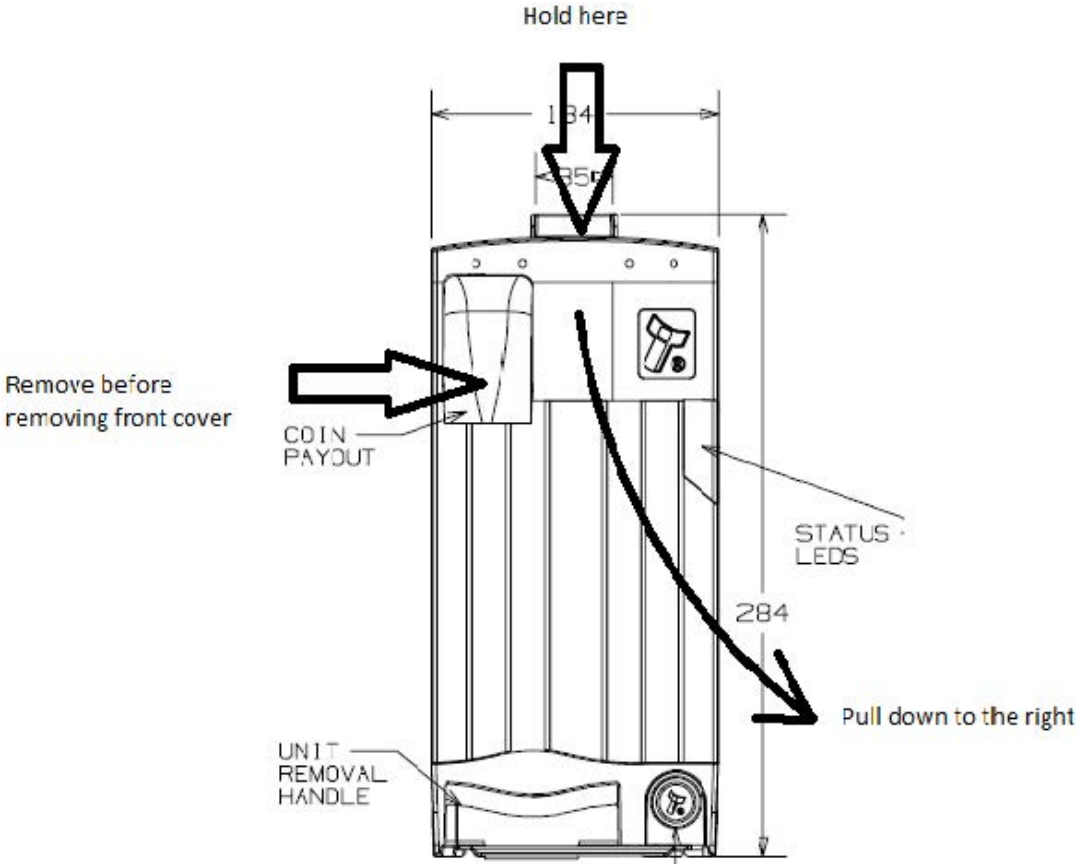
- Empty all coins from the coin bowl
- Clear the jammed coin from the disk



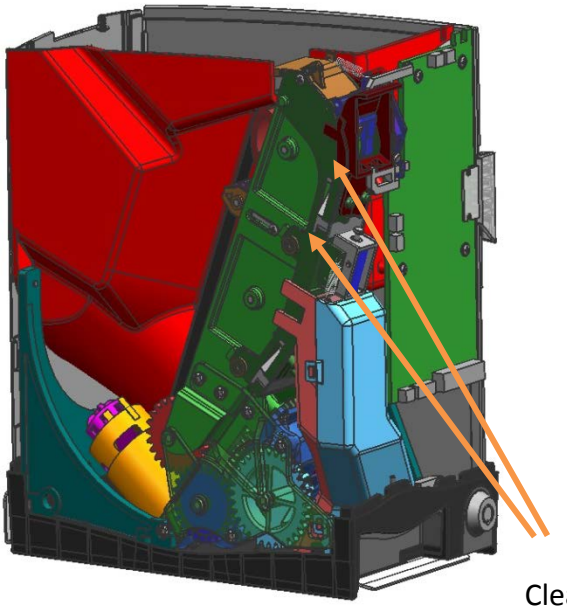
- Remove coin cover (fraud cover)



- Re-move the front panel. From the top pull down and right (twist) and the panel clips off.



- Once the cover is removed check the pistol is not sticking and that the sensor is clean, see picture below.



Clean Sensor and pistol.

- Re-fit all parts
- Re-attach the hopper to the mounting base plate and the feeder
- Re-fill the hopper and apply levels to host.
- Apply power
- Test operation

Clearing a Jam from the Feeder

Before attempting to clear the jam you must ensure the power has been removed.

1. Empty all coins from the funnel.
2. Lift the catch on the front of the feeder and lift the lid back.
3. Clear the jammed coin from the disk and ensure it is free to rotate.
4. Wipe the track of any coin dust.
5. Ensure the diverter flap is able to move, the flap should be capable of opening onto the coin path.
6. Once all of the coins have been cleared ensure the drive gear isn't impeded.
7. Close the lid of the feeder and reapply power.
8. Check for normal operation.

PLEASE NOTE:

Removing the sensor block will require returning to a service center for re-initialization.

Technical data

Note module	H x W x D in mm: 750 x 240 x 460
	Weight: 32 kg
Mains input voltage	100–240 V
Frequency of mains voltage	50–60 Hz
Coin recycler	H x W x D in mm: 790 x 240 x 460
	Weight: 40 kg

Media Specification

Note modules:

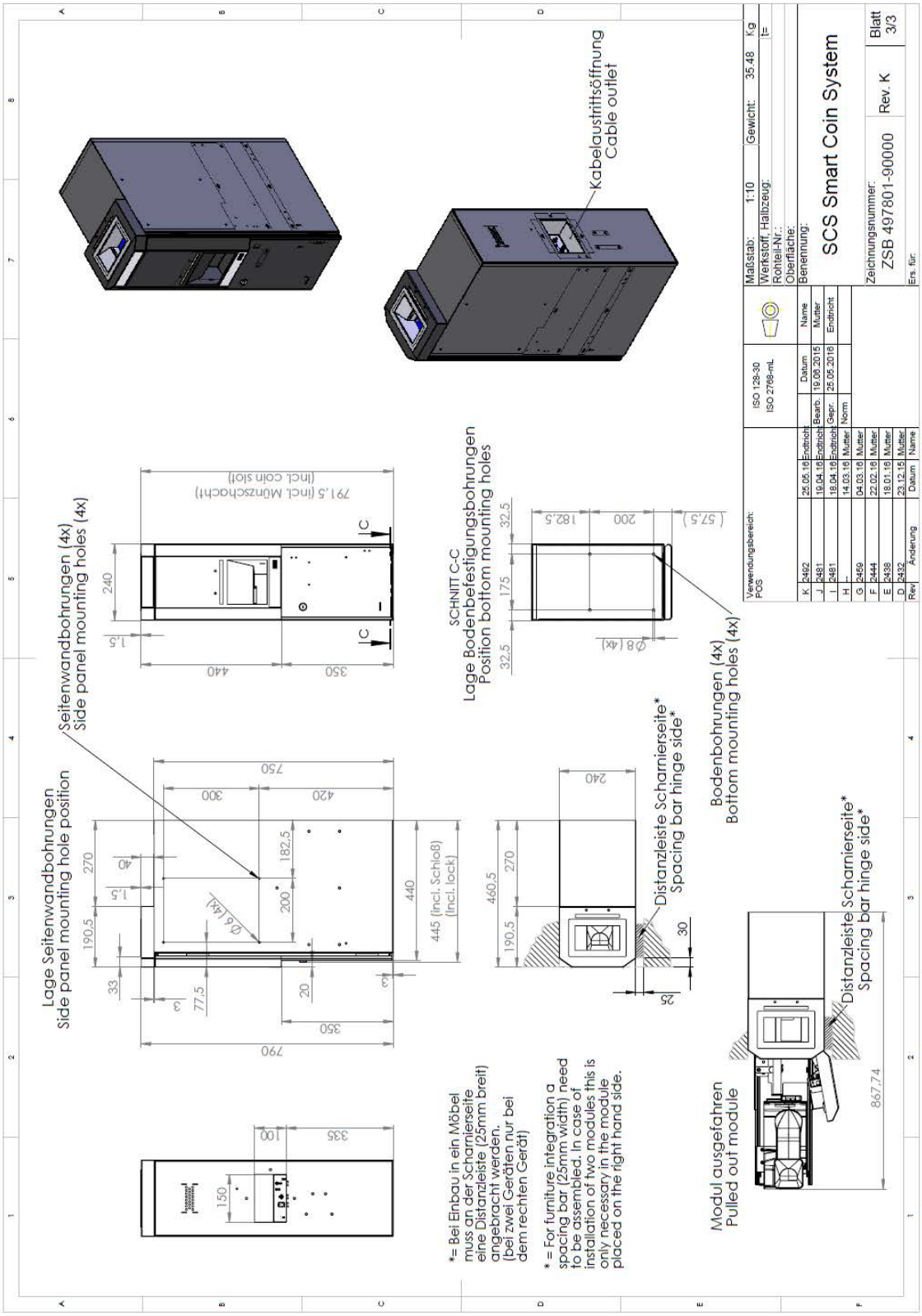
Media Specifications				
	Min	Max	**Capacity**	**No. of Notes***
Width	60 mm	85 mm	TEBS (Safebag)	<=500
Length	115 mm	175 mm	TEBS (Cassette)	typ:850 max:1000
			Smart Payout	70

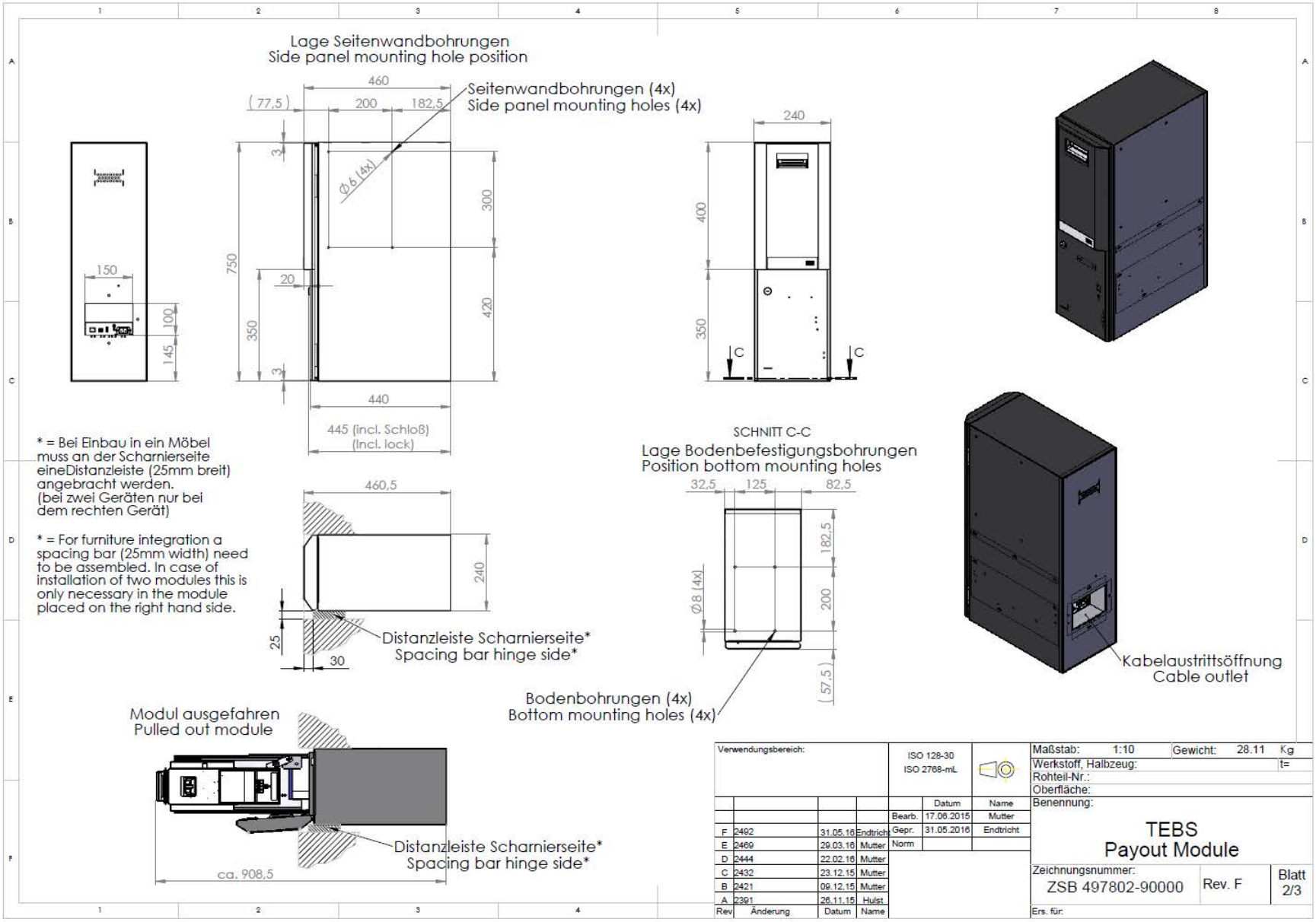
*Capacity can vary dependent on note quality and currency

Coin module (SCS)

Media Specifications				
	Min	Max	Capacity	1500 x €1
Diameter	18mm	28.5mm		1200 x £1
Thickness	1.65mm	3.2mm		

Dimensions

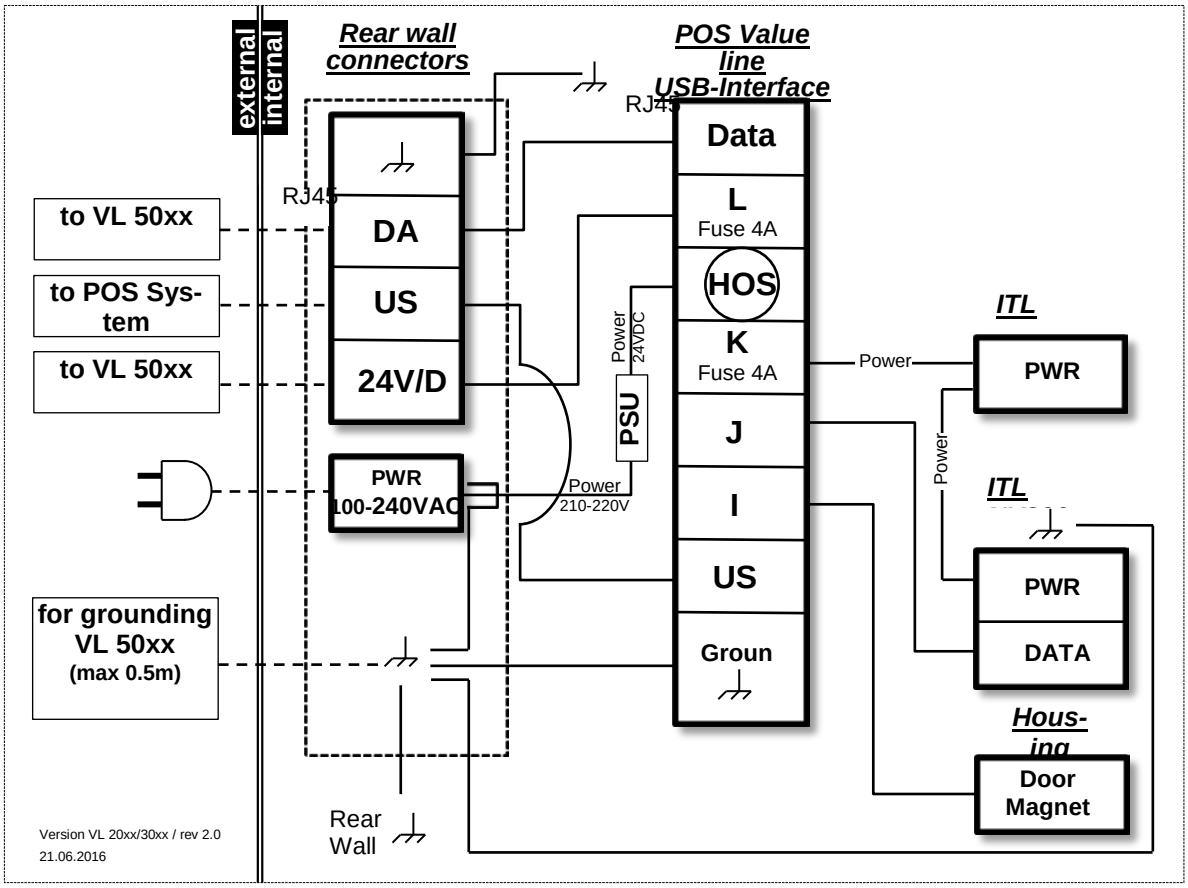

Kabelaustrittsöffnung
Cable outlet
Seitenwandbohrungen (4x)
Side panel mounting holes (4x)
Lage Seitenwandbohrungen
Side panel mounting hole position
SCHNITT C-C
Lage Bodenbefestigungsbohrungen
Position bottom mounting holes
Bodenbohrungen (4x)
Bottom mounting holes (4x)
Distanzleiste Scharnierseite*
Spacing bar hinge side*
Modul ausgefahren
Pulled out module
*= Bei Einbau in ein Möbel muss an der Scharnierseite eine Distanzleiste (25mm breit) angebracht werden. (bei zwei Geräten nur bei dem rechten Gerät)
* = For furniture integration a spacing bar (25mm width) need to be assembled. In case of installation of two modules this is only necessary in the module placed on the right hand side.
SCS Smart Coin System
ZSB 497801-90000
Rev. K
Blatt 3/3
Maßstab: 1:10
Gewicht: 35.48 Kg
Werkstoff / Halbzeug:
Oberfläche:
Benennung:
Zeichnungsnummer:
Verwendungsbereich: POS
ISO 128-30
ISO 2768-mL
Ers. für:



Verwendungsbereich:				ISO 128-30 ISO 2768-mL		
					Datum	Name
				Bearb.	17.06.2015	Mutter
F	2492	31.05.16	Endtricht	Gepr.	31.05.2016	Endtricht
E	2469	29.03.16	Mutter	Norm		
D	2444	22.02.16	Mutter			
C	2432	23.12.15	Mutter			
B	2421	09.12.15	Mutter			
A	2391	26.11.15	Hulst			
Rev	Änderung	Datum	Name			

Maßstab: 1:10	Gewicht: 28.11	Kg	
Werkstoff, Halbzeug:		t=	
Rohteil-Nr.:			
Oberfläche:			
Benennung:	TEBS Payout Module		
Zeichnungsnummer: ZSB 497802-90000	Rev. F	Blatt 2/3	
Ers. für:			

Block diagram



Certificates

CE-certificate

This device meets the requirements of the EU directives 2014/30/EU with regard to “Electromagnetic compatibility” and, if applicable, 2014/35/EU “Low Voltage Directive” and 2011/65/EU “Restriction of Hazardous Substances”.

The device therefore bears the CE label on the rear. Alternatively, the label may be found on the packaging.

In case the device is equipped with WI-FI it also meets the requirements of the “Radio equipment directive” 2014/53/EU.

cUL/UL mark

The system has received the UL symbol and cUL symbol.

Supplier's Declaration of Conformity

47 CFR § 2.1077 Compliance Information	
Responsible Party in the U. S.	Diebold Nixdorf
Address	5995 Mayfair Road N. Canton, OH 44720 / USA
Contact	Cynthia.williams@dieboldnixdorf.com

FCC Compliance Statement

This device complies with Part 15 of the FCC Rules. Operation is subject to the following two conditions:

(1) This device may not cause harmful interference.

(2) This device must accept any interference received, including interference that may cause undesired operation.

Address of the manufacturer
Diebold Nixdorf
Wohlrabedamm 31

D – 13629 Berlin

Order number: ***01750287216D***