



VideoNetBox III



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This product includes software developed by the OpenSSL Project for use in the OpenSSL Toolkit (<http://www.openssl.org>) and cryptographic software written by Eric Young (ey@cryptsoft.com).

Table of Contents

1	Introduction	4
1.1	Validity	4
1.2	Documents	4
1.3	Typographical Conventions	5
2	Safety Instructions	6
3	General Notes	8
3.1	Appropriate Use	8
3.2	Warranty	8
3.3	Mainboard Battery	8
3.4	Approvals/Certifications	8
4	Login	9
4.1	Local Login	9
4.2	Remote Login	11
5	Licenses	13
6	Update	14
6.1	Maintenance License	14
6.2	Implementation	15
7	Systemparameter	16
7.1	Default Parameters	16
7.2	Export Parameters	16
7.3	Import Parameters	17
8	HDDs	19
8.1	Identify	19
8.1.1	Information Dialog	19
8.2	Exchange	21
9	Maintainance	24

1 Introduction

1.1 Validity

This document is valid for the SMAVIA Recording Server appliance **VideoNetBox III** in conjunction with the preloaded VideoIP server software **SMAVIA Recording Server 9.X.3**.

The images in this document might differ from the actual product.

1.2 Documents

Data Sheet

Technical specifications and data
(for trained system integrators)

Commissioning

Instructions for installation, connection and commissioning
(for trained system integrators)

Service (this document)

Instructions for maintenance and cleaning
(for trained system integrators)

Operation

For instructions on using all features of the software
(for users with no technical knowledge)

Configuration

Instructions for configuring the software
(for trained system integrators)

1.3 Typographical Conventions

This document may contain various warning words and symbols that indicate potential sources of danger.

DANGER

DANGER indicates a hazardous situation which, if not avoided, will result in death or serious injury.

WARNING

WARNING indicates a hazardous situation which, if not avoided, could result in death or serious injury.

CAUTION

CAUTION indicates a hazardous situation which, if not avoided, could result in minor or moderate injury.

NOTICE

NOTICE indicates practices for preventing property damage, incorrect configurations or faulty operations.

For reasons of clarity and readability, various text formatting elements and types of emphasis are used in this documentation:

Instructions are indicated by arrows (➤).

- Always carry out instructions one after the other in the sequence described.

Expressions in ***bold/italics*** generally indicate a control element on the device (switches or labels) or on its user interface (buttons, menu entries).

Paragraphs in italics provide information on basic principles, special features and efficient procedure as well as general recommendations.

2 Safety Instructions

Only use the units described in this document if they are technically in proper working condition and for the intended purpose while keeping safety and potential dangers in mind.

Qualified Personnel

The installation, mounting, connection, commissioning and configuration of the units may only be carried out by qualified personnel.

This also applies to the maintenance, testing and repair, whereat the regulations of the DIN VDE 0701 series of standards (repair, modification and inspection of electrical appliances) must be followed.

Regulations

The use of video and audio surveillance systems is, in general, strictly regulated.

Inform yourself about the currently valid laws and regulations regarding data, worker and environmental protection before using the units and ensure compliance with them.

System Components

Only use internal components that have been tested and approved by Dallmeier.

Inappropriate internal components may cause malfunctions, damages and data loss and may result in the loss of warranty.

Modifications

Do not make any modifications to the hardware or software that have not been tested and approved by Dallmeier.

Inappropriate modifications may cause malfunctions, damages and data loss and may result in the loss of warranty.

Documentation

The product documentation contains several documents which are included in the scope of delivery in a printed form and/or on a digital medium.

Read the documents included in the delivery carefully and thoroughly.

Always follow the contained instructions, notes and warnings and observe the technical specifications in the product data sheet.

Keep all documents in legible condition and in a suitable location for future reference.

Regularly check the website www.dallmeier.com for the latest updates on product documentation.

Condensation Water

If the units are brought from a cold to a warm environment, resulting condensation water may cause malfunctions and damages.

In this case, wait (up to 8 hours) until the units have reached room temperature before commissioning.

Earthing & Equipotential Bonding

For the safety of persons (protection against dangerous contact voltages) and devices (protection against overvoltages) and the immunity of information and communication technology equipment to electromagnetic interferences (EMI), all protective measures, which are specified by the currently valid DIN, VDE and ISO standards and which provide for a standard-compliant earthing and a correct equipotential bonding of electrical and electronic devices, are mandatory and must be fulfilled by all means.

Lightning Storms

To avoid damage to the units by electrical surge during lightning storms, unplug the units from the mains power supply (pull out the power plug).

This is also recommended, when the units have been unused for a long period of time.

Operating Conditions

Unfavourable operating conditions can shorten the life of the units and may cause malfunctions, damages and data loss and may result in the loss of warranty.

Observe the specifications given in the technical data, the operating condition requirements and the maintenance instructions.

Shocks

Shocks can cause malfunctions and damages.

The units may not be moved while in operation.

Foreign Bodies

If objects or liquids get into the units, immediately disconnect them from the power supply (pull out the power plug).

Contact the sales partner responsible for your area.

Burnt Smell

If you notice burnt smell or formation of smoke from the units, immediately disconnect them from the power supply (pull out the power plug).

Contact the sales partner responsible for your area.

Opening

The housings of the units may only be opened by qualified personnel for commissioning, inspection, maintenance and repair.

Disposal

Do not dispose waste electrical and electronic equipment into the household trash.



Disconnect the units from the power supply.

Remove all connected devices.

Return the units to your respective sales partner.

3 General Notes

3.1 Appropriate Use

The **VideoNetBox III** appliance combines the proven recording software **SMAVIA Recording Server** with a compact, fanless and energy efficient server hardware.

Perfectly tuned components ensure excellent passive cooling and allow for the recording of up to 16 high-definition video streams at a frame rate of 30fps.

This appliance is therefore ideally suited for video security systems in shops, petrol stations or private houses, which require the highest recording quality and minimum space without any noisedevelopment.

3.2 Warranty

The terms and conditions valid at the signing of the contract shall apply.

3.3 Mainboard Battery

Important basic functions (eg time and hardware settings) can be obtained from a battery on the main board of the appliance. If the battery is emptied after a certain time (3-6 years), it may cause interference during the boot process: The appliance will not start after a complete shutdown.

The battery on the mainboard must be replaced only by authorized personnel.

➤ Contact for an exchange the Dallmeier service.

CAUTION

Injury due to explosion hazard!

- Replace the battery on the main board always by a battery of the same type.
- Dispose of used batteries according to the present instructions.

3.4 Approvals/Certifications

At the time of the generation of this document, the device was certified als follows:

- CE
- FCC
- RCM
- LGC Forensics
- Tested according to DIN 50130-4, DIN EN 50121-3-1, DIN EN 50498;

Notice possible updates on www.dallmeier.com.

4 Login

After connecting and operating the appliance, the device can be configured locally (monitor) or on the ethernet (workstation with **NetConfig3**).

Note the documentation "Commissioning". It contains detailed instructions on mounting, connection assignment and commissioning of the device.

4.1 Local Login

In order to access the configuration interface of the appliance, proceed as follows:

- Move the mouse pointer to the bottom of the screen.

The **Login** button is displayed.

Abb. 4-1



- Click **Login**.

The virtual keyboard is displayed.

- Enter the password.
- Confirm with **OK**.

The configuration interface is displayed.

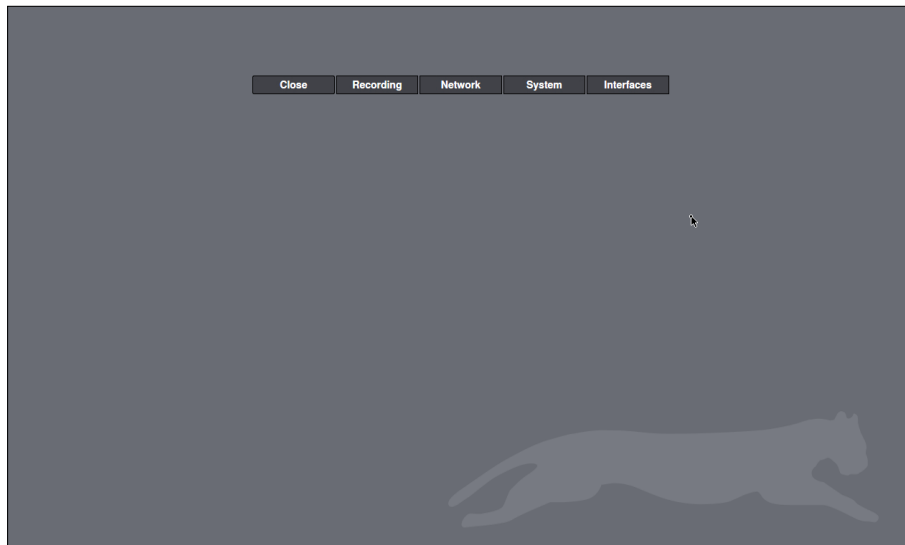


Abb. 4-2

- Make the required settings (see below).
- Click **Close** in order to exit the configuration interface.

4.2 Remote Login

A remote login to an appliance in a network is possible via the **PService3** software application.

- Note the documentation “Operation” of the **PService3** application.
- Start **PService3**.
- Scan the network.
- Select the required appliance.
- Open the context menu with a right-click.
- Click **NetConfig3**.

The connection is established.

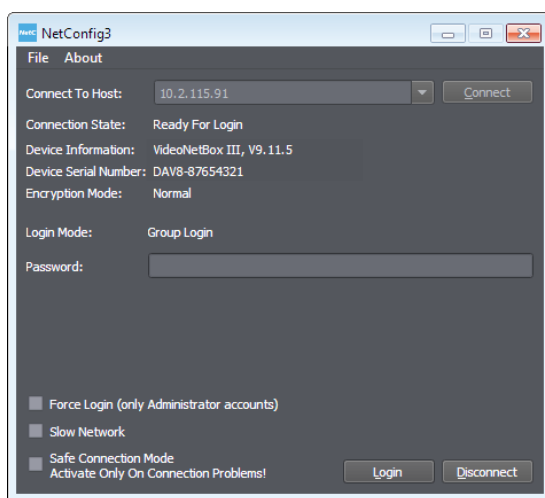


Abb. 4-3

Login Mode User Login

- Enter **User Name** and **Password**.
- Click **Login**.

Login Mode Group Login

- Enter the **Password**.
- Click **Login**.

The configuration interface is displayed.

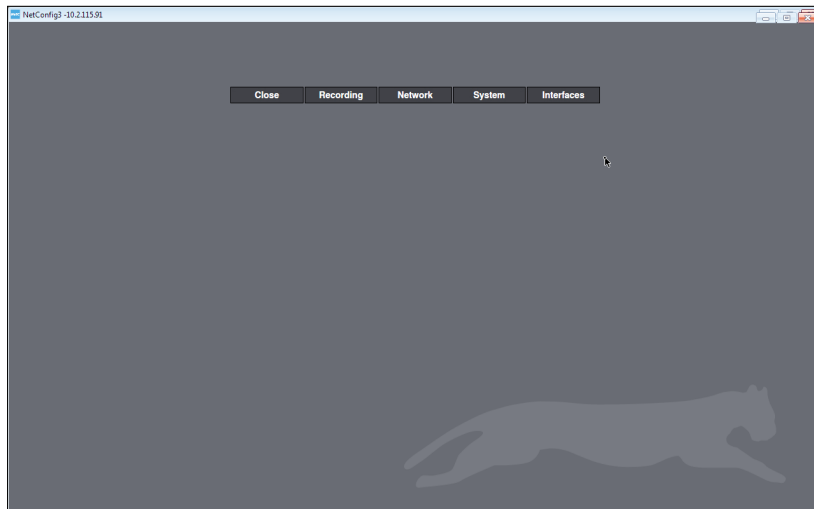


Abb. 4-4

- Make the required settings (see below).
- Click **Close** in order to exit the configuration interface.

5 Licenses

Certain features and functions of the software are optional. They are only available if they are ordered when purchasing the system or subsequently acquired.

Features and functions can also be usually licensed and enabled later. For this purpose may be possibly required the purchase of a hardware extension in conjunction with a license code.

➤ Open the **License Code** dialog via **System > Service > Extensions**.

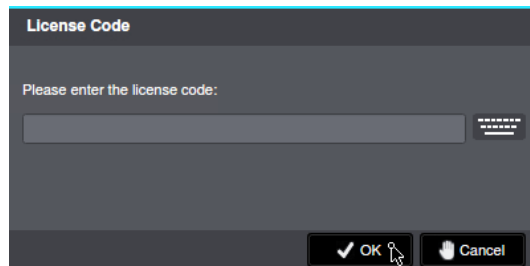


Abb. 5-1

➤ Enter the license code.

➤ Click **OK** in order to save the entry.

After the activation of features and functions, a restart of the appliance is recommended.

➤ Open the **Licenses** dialog via **System > Info > Licenses**.

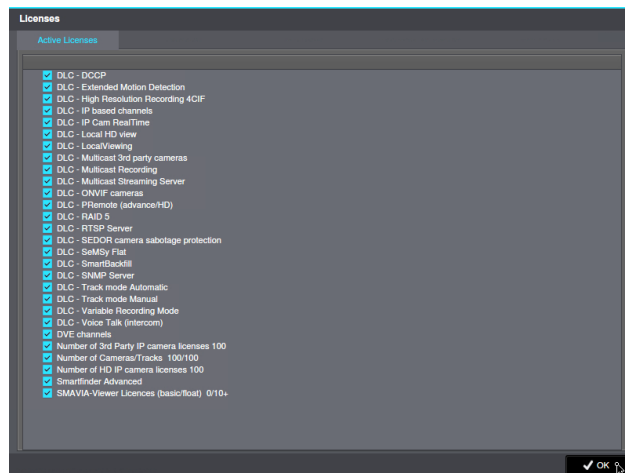


Abb. 5-2

➤ Make sure that the feature or function is selected as active.

➤ Check the functionality of the feature or function.

➤ Note that more settings are required under certain circumstances.

6 Update

The preloaded software SMAVIA Recording Server can be updated to take advantage of new, expanded and enhanced features. For the implementation of the update, the appliance must be fitted with a valid maintenance license.

6.1 Maintenance License

The appliance is factory equipped with a 24-month maintenance license. It can be extended from the factory or later by entering a license code.

The duration of the maintenance license starts from an operating time of 480 hours.

Complete Licensing

Critical to the authorization to perform an update is a complete licensing of the appliance.

An appliance is to be updated in the third year of operation with a newly released update. In this case, maintenance licenses for the year one (free license) and for the year two ((free license) and year three (1. license) are required.

Date of the Update

Critical to the authorization to carry out an update is the date of the update. It must be completely within the licensed period.

An appliance with maintenance licenses for the first two years can also be updated in the third year when the update was released before the expiration of the license for the second year.

Term of License

The duration of the maintenance license is displayed in the software's info dialog and can be accessed via the network (PService3).

➤ Open the **SW-Maintenance** dialog via **System > Info > Service**.

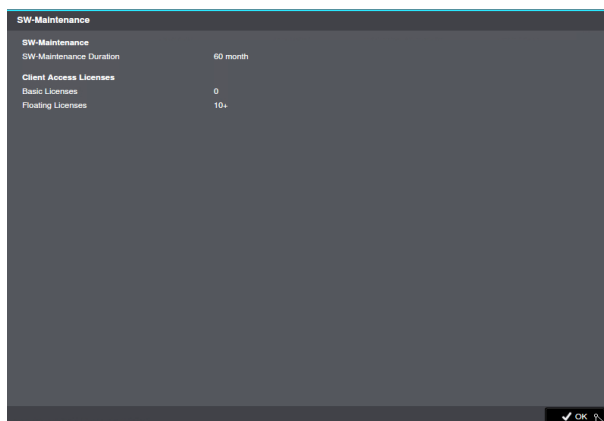


Abb. 6-1

- Check the term of the maintenance license.
- Confirm with **OK**.

6.2 Implementation

The update can be performed over the network with the software PService3 or directly to the appliance using an USB stick.

NOTICE

Risk of serious system failure!

- > Make sure that the appliance is not switched off during the performance of the update or restart.

Note that a reboot of the appliance can be triggered by an unstable power supply or via the contact IN interface.

➤ Open the **Software Update** dialog via **System > Service > Software Update**.

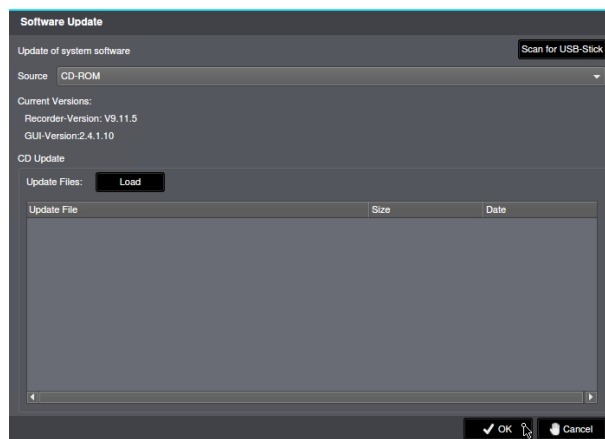


Abb. 6-2

- Select the storage medium as **Source**.
- Download the available updates with **Load**.
- Select the relevant **Update File**.
- Confirm with **OK**.

The implementation of the update starts automatically. It must be made no further adjustments. The update is completed after a final restart of the appliance.

While the update is performed, no settings or adjustments should be made. The storage medium should be removed only after the full completion of the update (restart).

7 Systemparameter

7.1 Default Parameters

The original configuration of the SMAVIA Recording Server can be restored by resetting to the default system parameters.

NOTICE

Data loss!

If the device is reset to the default system parameters, all recordings and recording settings will be lost.

- Open the **System Parameters** dialog via **System > System Parameters > Default**.

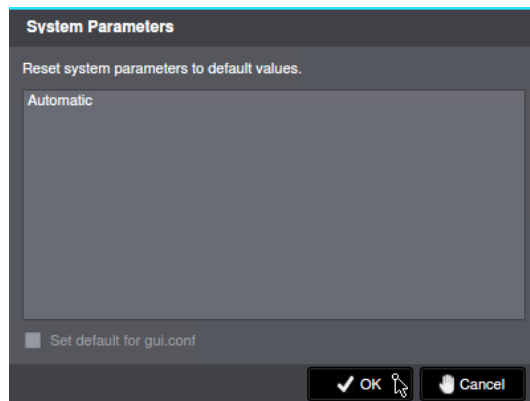


Abb. 7-1

- Click **OK**.

The default system parameters will be restored.

7.2 Export Parameters

The system parameters can be exported. After export they can be archived and modified to specific requirements.

In addition to the system parameters, various log and protocol files are stored.

- Open the **Save Configuration** dialog via **System > System Parameters > Save Configuration**.

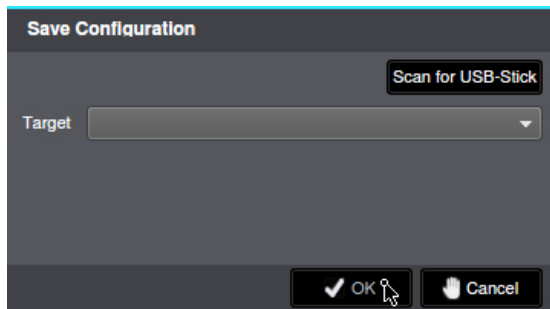


Abb. 7-2

- Click **Search....**
- Select the appropriate storage directory as **Target**.
- Click **OK**.

The system parameters will be exported.

7.3 Import Parameters

Secured or modified system parameters can be imported to restore the configuration of the SMAVIA Recording Server.

NOTICE

Data loss!

System failure!

Inappropriate or incorrectly modified system parameters can lead to the loss of recordings and a permanent system fault.

- Open the **Restore Configuration** dialog via **System > System Parameters > Restore Configuration**.

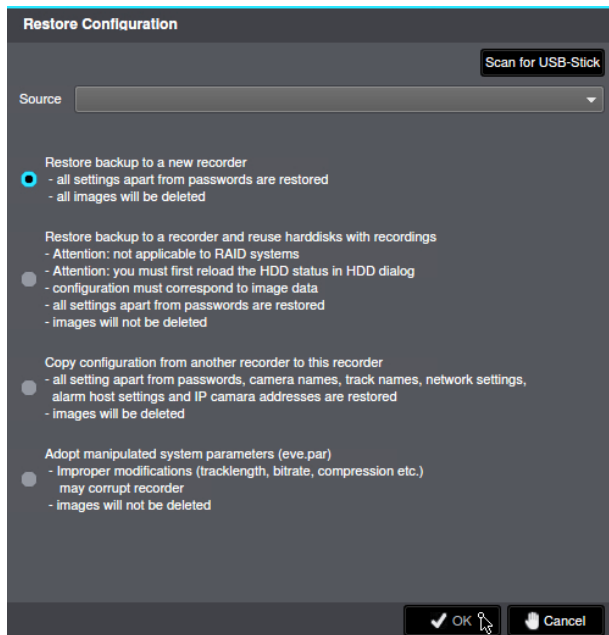


Abb. 7-3

- Note the detailed explanations in the dialog.
- Click **Search USB stick** if required.
- Select the required storage medium as a **Source**.
- Select the relevant import option.
- Finally, click **OK** in order to start the import.

The saved system parameters will be restored.

8 HDDs

The VideoNetBox III has two lockable bays for 2.5" hard disk drives on the front side. These are used exclusively for recording. The hardened Linux operating system and the SMAVIA Recording Server application are installed on a separate flash module. Equipped with two of the optionally offered 2 TB server hard disk drives, a storage capacity of 4 TB is available.

➤ Proceed as described below, to replace a defective hard disk drive.

8.1 Identify

All hard disks are easily accessible on the front side of the device. First, the defective hard disk drive must be identified using the Information dialog.

8.1.1 Information Dialog

In the information dialog comprehensive information about the current status of the hard disk drives (HDDs) are displayed.

➤ Open the Info dialog via **System > Info**.

➤ Select the **HDD Status** tab.



Abb. 8-1

black	HDD is not mounted
green	HDD is active and OK
red	HDD is defective
yellow	HDD is not active and OK (RAID spare HDD)
orange	HDD is in recovery process (RAID)

➤ Check the status of the hard disk drives.

➤ Identify the defective hard disk drive.

The integrated RAID technology allows continuous recording when a hard disk drive fails. The defective hard disk drive can be replaced during operation (hot-swap). Proceed as described below, to ensure the highest possible data security:

Note that

- *new HDDs must be tested and released for mounting by Dallmeier (HDD white list on www.dallmeier.com).*
- *new HDDs may not be formatted or partitioned.*
- *HDDs from other devices may not be used.*
- *the number of sectors is decisive for the capacity of a HDD, not the usually specified gross capacity (GB).*

The capacity of a new HDD must be the same as the capacity of the replaced HDD (or larger).

NOTICE

Possibility of data loss!

- Always replace a defective HDD with a HDD from the same production series with identical firmware.

Recommended Procedure For The Case Of Service

In case of disk failure, the spare hard disk drive is recovered and the recording is continued on the remaining hard disk drives.

- Identify the defective hard disk drive (siehe oben).
- Replace the defective hard disk drive (see below).

The new hard disk drive is used as the spare hard disk drive. The recovery of the previous spare hard disk drive and the recording continues.

- Note that recovering of a 4000 GB hard disk drive can last up to 100 hours.

8.2 Exchange

In order to exchange a defective hard disk drive, proceed as follows:

NOTICE

Data loss!

In order to prevent data loss and damage to property observe the procedure described above.

- Identify the defective hard disk drive as described above.
- Unlock the HDD drawer unit with the key.
- Carefully pull the HDD tray out of the bay.

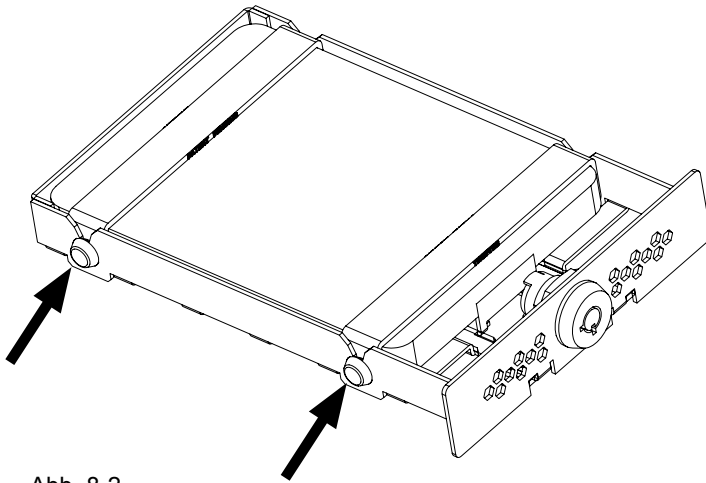


Abb. 8-2

- Remove the HDD from the HDD tray using the two holdings.

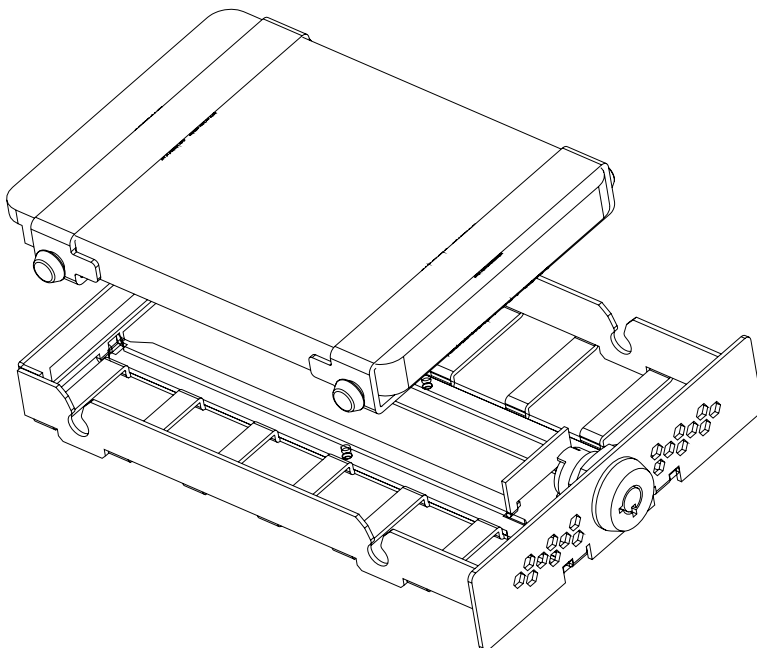


Abb. 8-3

- Remove the defective HDD from the holdings.

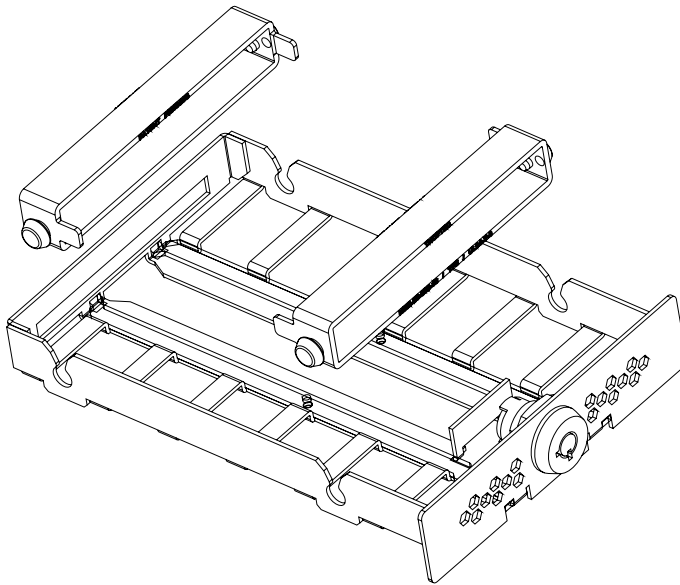


Abb. 8-4

NOTICE

Possibility of data loss!

- Always replace a defective HDD with a HDD from the same production series with identical firmware.

- Slide the holdings over the HDD in such a way that the connections of the HDD are positioned at the rear side of the HDD tray.

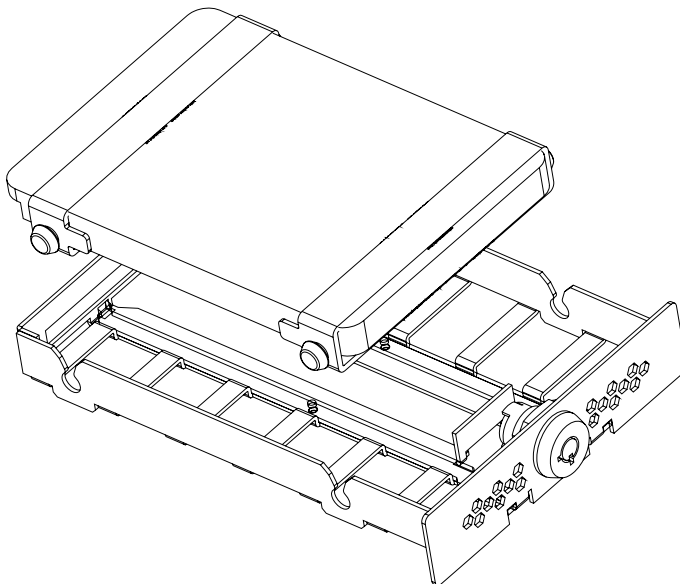


Abb. 8-5

- Insert the hard disk into the tray
- Insert the tray into the bay of the appliance.
- Ensure that the HDD tray and housing are flush.

- Do not use any force.
- Lock the HDD drawer unit with the key.

The new hard disk drive is initialized as described above.

9 Maintenance

The device may only be opened by qualified personnel for commissioning, inspection, maintenance and repair.

WARNING

Danger of electric stroke

The device is equipped with up to three redundant power supply units.

- > Ensure that both supply lines are disconnected from the supply circuit.

CAUTION

Danger of explosion if battery is incorrectly replaced

- > Replace and discard the battery of the main board in accordance with the instructions of the manufacturer.

Cleaning

If it is necessary to clean the device, observe the following notes:

NOTICE

- > Clean the housing (outside) with a soft, dry and antistatic cloth.
- > Do not use detergents.
- > Do not use microfiber cleaning cloths.