



SERVICE

SEMSY® RECORDING SERVER

IPS 10 000

SOFTWARE VERSIONS 10.7.X

Copyright © 2021 Dallmeier electronic GmbH & Co.KG

The reproduction, distribution and utilization of this document as well as the communication of its contents to others without express authorization is prohibited. Offenders will be held liable for the payment of damages.

All rights reserved in the event of the grant of a patent, utility model or design.

The manufacturer accepts no liability for damage to property or pecuniary damages arising due to minor defects of the product or documentation, e.g. print or spelling errors, and for those not caused by intention or gross negligence of the manufacturer.

Figures (e.g. screenshots) in this document may differ from the actual product. Specifications subject to change without notice. Errors and misprints excepted.

All trademarks identified by ® are registered trademarks of Dallmeier.

Third-party trademarks are named for information purposes only.

Dallmeier respects the intellectual property of third parties and always attempts to ensure the complete identification of third-party trademarks and indication of the respective holder of rights. In case that protected rights are not indicated separately, this circumstance is no reason to assume that the respective trademark is unprotected.

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 (eay@cryptsoft.com).

CONTENTS

CHAPTER 1:	INTRODUCTION	7
1.1	Validity	7
1.2	Disclaimer	7
1.3	Documents	7
1.3.1	This Document	7
1.3.2	Other Applicable Documents	8
1.4	Typographical Conventions	8
CHAPTER 2:	SAFETY INSTRUCTIONS	9
CHAPTER 3:	GENERAL NOTES	11
1.1	Appropriate Use	11
1.2	Warranty	11
1.3	Mainboard Battery	11
1.4	Approvals/Certifications	11
CHAPTER 4:	LOGIN	12
1.1	Local Login	12
1.2	Remote Login	13
CHAPTER 5:	LICENSES	15
CHAPTER 6:	UPDATE	16
1.1	Maintenance License	16
1.2	Implementation	17
CHAPTER 7:	SYSTEM PARAMETERS	18
1.1	Default Parameters	18
1.2	Export Parameters	19
1.3	Import Parameters	20
CHAPTER 8:	HDDS	21
1.1	Identify	21
1.1.1	Information Dialog	21
1.1.2	Display	22
1.2	Procedure	22
1.3	Exchange	23

CHAPTER 9:	POWER SUPPLY MODULES	26
1.1	Identify	26
1.1.1	Information Dialog	26
1.1.2	Display	27
1.1.3	Status LED	27
1.2	Deactivation	28
1.3	Exchange	28
CHAPTER 10:	MAINTENANCE	31

INTRODUCTION

1.1 VALIDITY

This document is valid for the **IPS 10 000** appliance running the preloaded VideoIP Server software **SeMSy® Recording Server 10.7.X**.

1.2 DISCLAIMER

Note that

- certain functions and features are only available if supported by the used hardware.
- the functional range of your device depends on the ordered equipment or device variant and may differ from the contents of this document.
- certain functions and features may require purchasing a license.

1.3 DOCUMENTS

The product documentation for the respective software includes various documents, as well as additional information, if any, which is provided exclusively via the website www.dallmeier.com.

Read all product documentation for the program carefully and completely before using the software. Always observe the instructions, notes and warnings contained as well as the technical specifications in the respective product data sheet of the device used.

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

Regularly check the website www.dallmeier.com for possible updates to the product documentation.

1.3.1 This Document

This “Service” document contains detailed information on how to maintain the appliance. The target audience of this document is trained video security system integrators.

1.3.2 Other Applicable Documents

Specification

The specification document contains detailed technical data, features and characteristics of the device. The target audience of the document is operators without advanced knowledge.

Commissioning

Instructions for setting up the appliance.

The target audience of the document is trained video security system integrators.

1.4 TYPOGRAPHICAL CONVENTIONS

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

NOTICE

NOTICE indicates measures to prevent device and/or property damage due to improper configuration of the device or faulty operations.

Instructions are indicated by arrows (▶).

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

Expressions highlighted in bold and dark gray usually refer to the name of an application, product or function or indicate a user interface control element (button, check box, drop-down list, menu item, etc.).



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

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.

GENERAL NOTES

1.1 APPROPRIATE USE

The IPS 10 000 appliance in the MK2 revision combines the recording software SeMSy® Recording Server (V10) with a reliable and highperformance server hardware. Perfectly matched components ensure high storage speed and allow the recording of up to 120 high-resolution video streams at a frame rate of 30 fps. The integrated RAID 6 storage system already provides a high storage capacity and can be expanded by an external RAID 6 JBOD system.

1.2 WARRANTY

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

1.3 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

1.4 APPROVALS/CERTIFICATIONS

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

- CE
- FCC
- ACA
- UL

LOGIN

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

 Note the document “Commissioning”. It contains detailed instructions on mounting, connection assignment and commissioning of the device.

2.1 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.



Fig. 2-1

- ▶ Click **Login**.

The virtual keyboard is displayed.

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

The configuration interface is displayed.

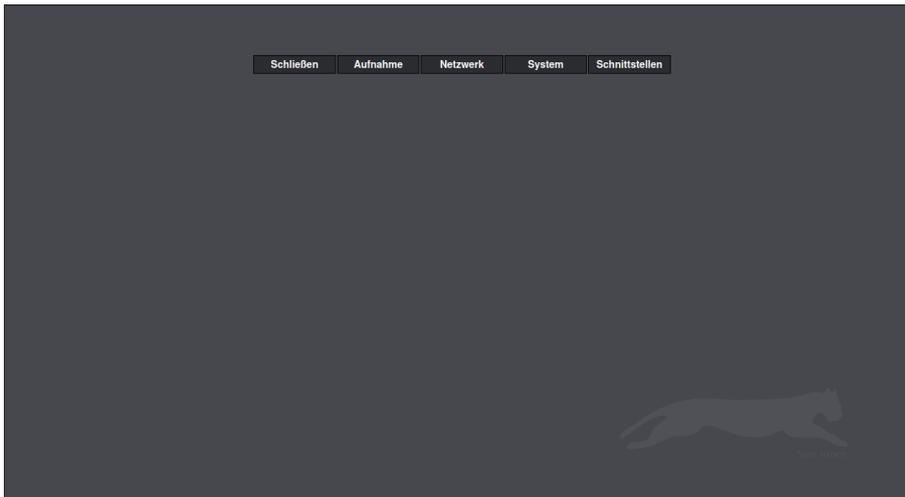


Fig. 2-2

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

2.2 REMOTE LOGIN

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

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

The connection is established.

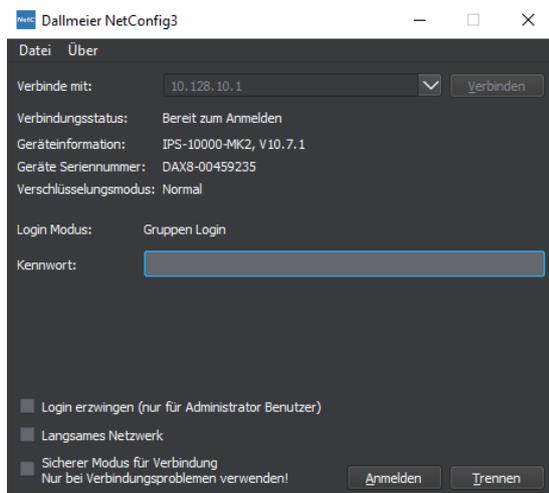


Fig. 2-3

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.

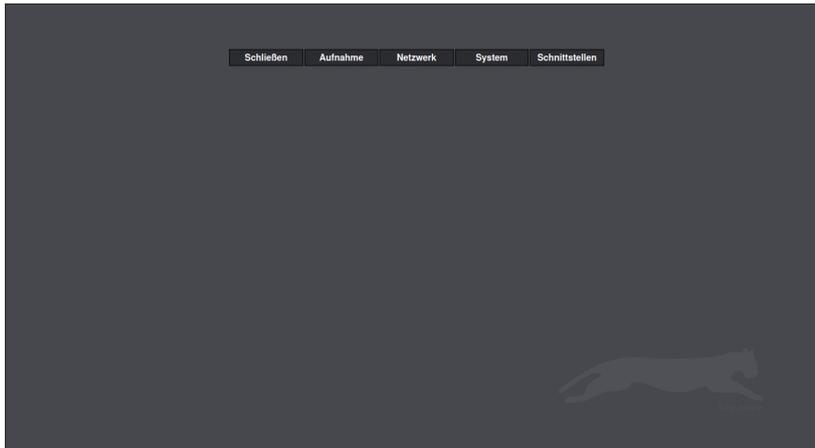


Fig. 2-4

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

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**.

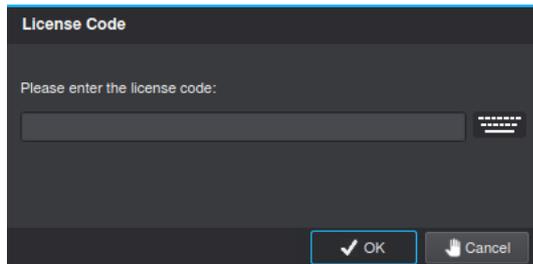


Fig. 3-1

- ▶ 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**.

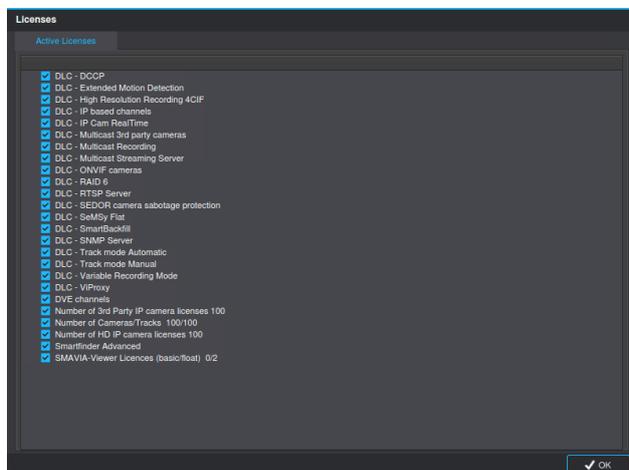


Fig. 3-2

- ▶ 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.

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.

4.1 MAINTENANCE LICENSE

The appliance is factory equipped with a 12-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 (1st license) and year three (2nd 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**.

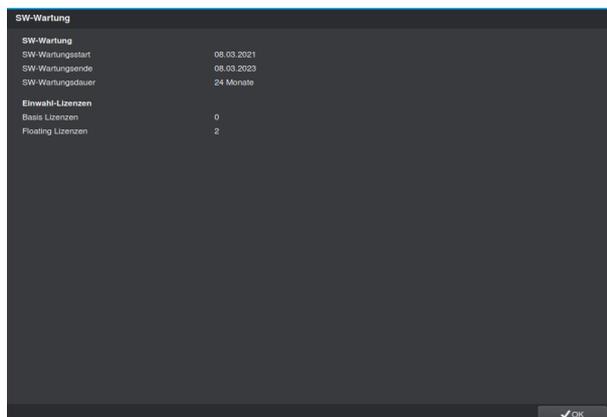


Fig. 4-1

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

4.2 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**.

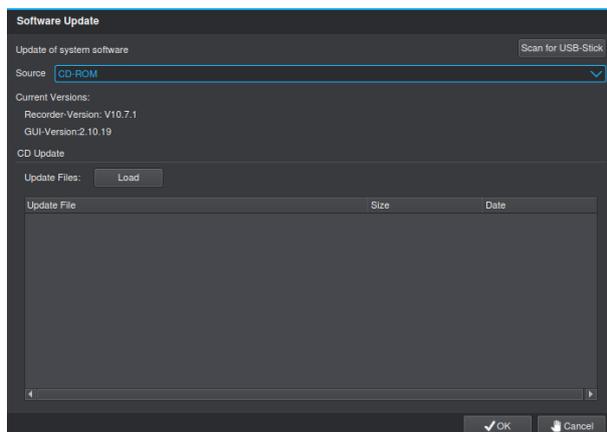


Fig. 4-2

- ▶ 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.

i *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).*

SYSTEM PARAMETERS

5.1 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**.

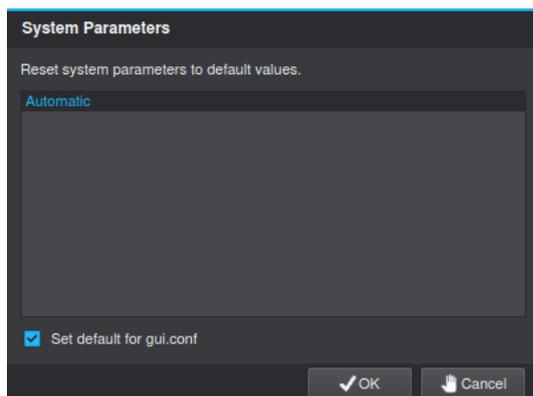


Fig. 5-1

- ▶ Click **OK**.

The default system parameters will be restored.

5.2 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**.

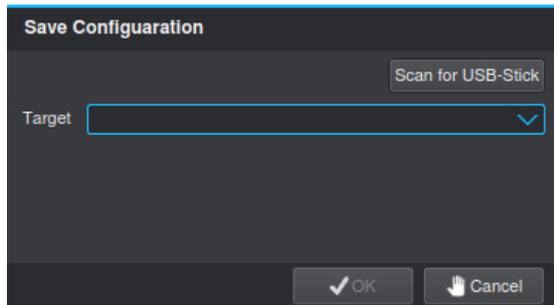


Fig. 5-2

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

The system parameters will be exported.

5.3 IMPORT PARAMETERS

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

NOTICE

Dataloss

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**.

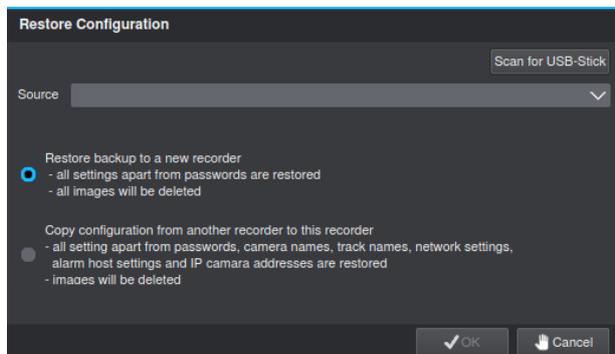


Fig. 5-3

- ▶ 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.

HDDS

The appliance is operated with several hard disks and a RAID system.

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

6.1 IDENTIFY

All hard disks are easily accessible on the front side of the device. First, the defective hard disk drive must be identified. There are two options available for this purpose: via the information dialog or via the display on the front side of the appliance.

6.1.1 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.

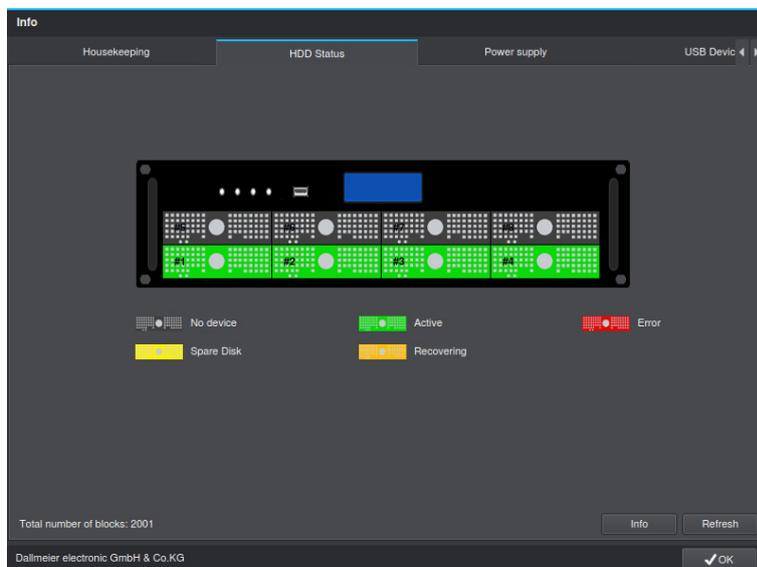


Fig. 6-1

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.

6.1.2 Display

The disk status messages are displayed also on the display at the front of the appliance:

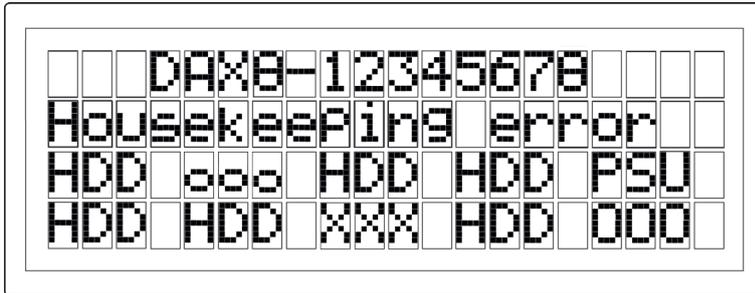


Fig. 6-2

- HDD is active and OK
- HDD is defective
- HDD is not active and OK (RAID spare HDD)
- HDD is in recovery process (RAID)
- HDD is not mounted

- ▶ Check the status of the hard disk drives.
- ▶ Identify the defective hard disk drive.

6.2 PROCEDURE

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 (**XXX**).

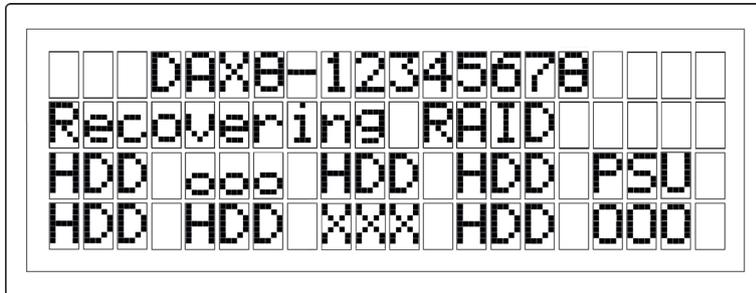


Fig. 6-3

- ▶ Replace the defective hard disk drive (see below).

The new hard disk drive is used as the spare hard disk drive (**SSS**). The recovery of the previous spare hard disk drive (**000**) and the recording continues.

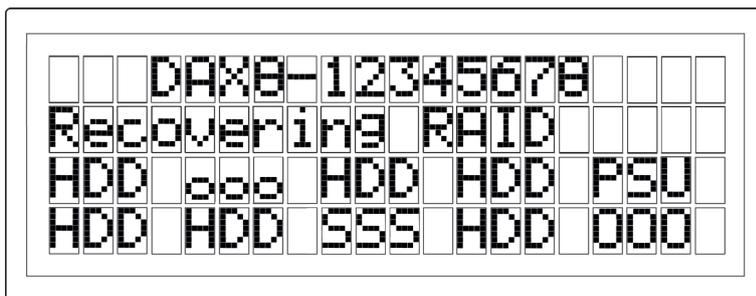


Fig. 6-4

- ▶ Note the information on the display.
- ▶ Note that recovering of a 4000 GB hard disk drive can last up to 100 hours.

6.3 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.

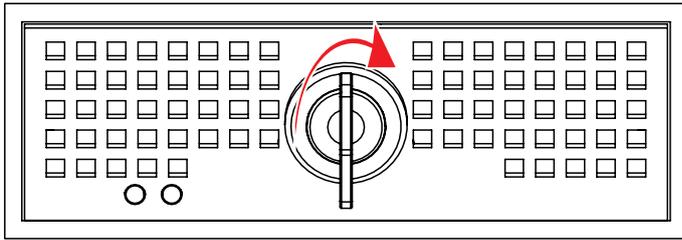


Fig. 6-5

- ▶ Unlock the HDD drawer unit with the key.

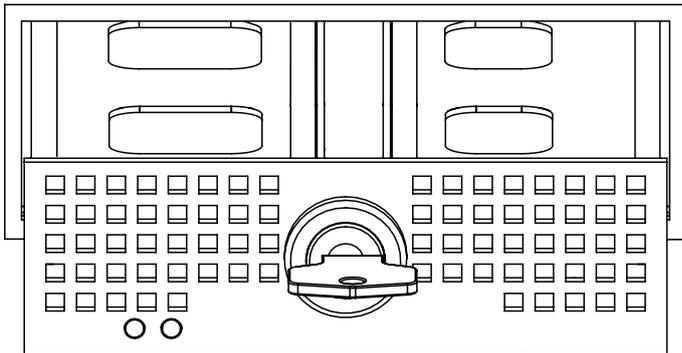


Fig. 6-6

- ▶ Pull the HDD drawer unit carefully out of the housing.
Remove the cover plate mounted in the HDD drawer unit.

CAUTION

Risk of injury from sharp edges

- ▶ Use care when installing the HDD drawer unit

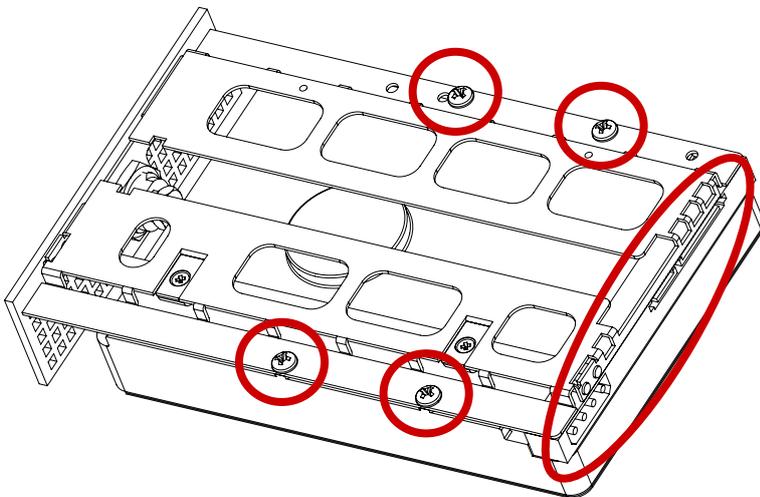


Fig. 6-7

- ▶ Remove the 4 screws.

- ▶ Remove the defective hard disk drive.
- ▶ Place the new hard disk drive in the HDD drawer unit.
- ▶ Make sure that the connections of the hard disk drive are positioned on the back of the HDD drawer unit.
- ▶ Mount the hard disk drive with the 4 screws.

NOTICE

Possibility of data loss!

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

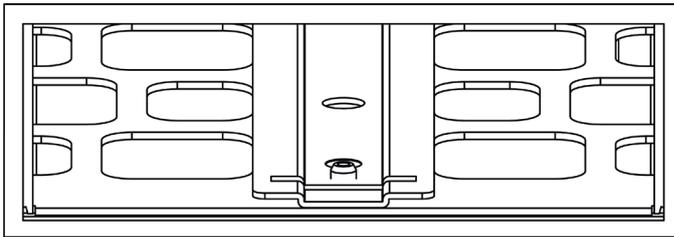


Fig. 6-8

- ▶ Insert the HDD drawer unit into the guide rail.

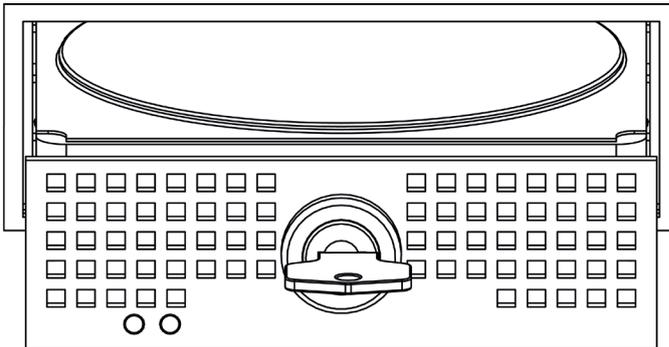


Fig. 6-9

- ▶ Slide the HDD drawer unit carefully and completely into the housing.
- ▶ Make sure not to cant.
- ▶ Do not use any force.

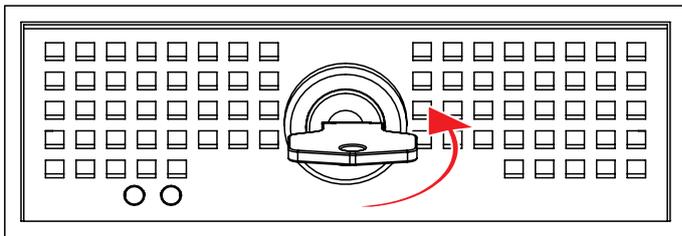


Fig. 6-10

- ▶ Make sure the HDD drawer unit and the housing are flush.
- ▶ Lock the HDD drawer unit with the key.

The new hard disk drive is initialized as described above.

POWER SUPPLY MODULES

The SMAVIA appliance IPS10 000 can be equipped and operated with three redundant power supply modules (hot plug, hot swap). If a power supply module fails, the two left take the complete power supply. The operation will continue without interruption.

- ▶ Proceed as described in the following to exchange a defective power supply module.

 Note that the following descriptions are based on devices with redundant power supply modules. They equally apply to devices with only two power supply modules.

7.1 IDENTIFY

In the case of service the faulty power supply module must be identified first. This includes three available options: via the information dialog, via the display on the front side of the appliance or via the status LED on the front side of the power supply module.

7.1.1 Information Dialog

In the Information dialog extensive information on the current status of the power supply module are displayed.

- ▶ Open the Info dialog via **System > Info**.
- ▶ Select the **Power Supply** tab.

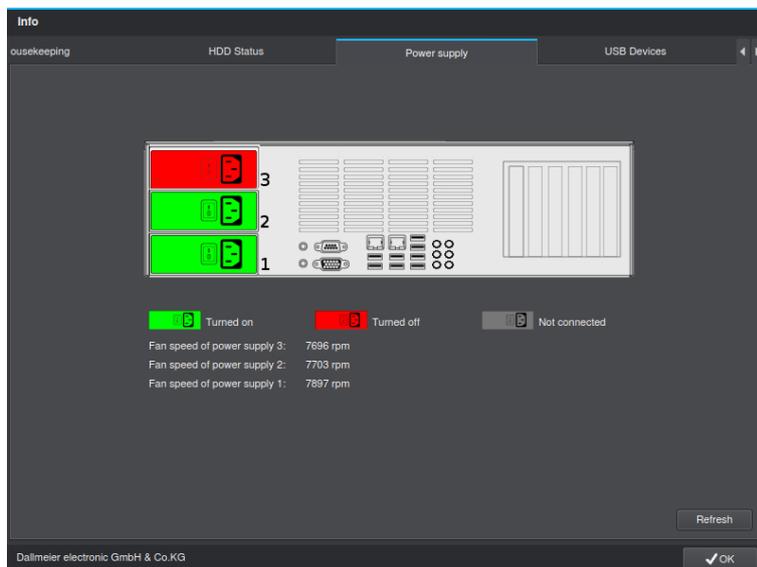


Fig. 7-1

grey	Power supply unit is not mounted
green	Power supply is active and okay
red	Power supply is defective/switched off

- ▶ Check the status of the power supply modules.
- ▶ Identify the defective power supply module.

7.1.2 Display

The failure of a power supply module is displayed by the message Housekeeping error on the front page of the device:

 Note that the “Housekeeping error” message also can indicate to other errors.

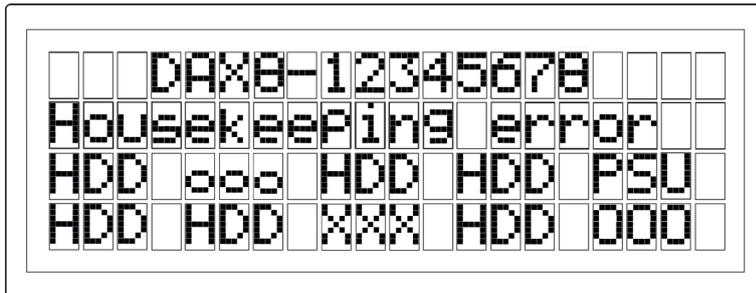


Fig. 7-2

-  Power supply unit is active and OK
-  Power supply unit is defective / switched off
-  The fan of the power supply unit is defective
-  Power supply unit is not mounted

- ▶ Check the status of the power supply modules in the display.
- ▶ Identify the failed power supply module on the information dialog as described above.

7.1.3 Status LED

The status of the power supply modules is also indicated by the green LED on the front of the module.

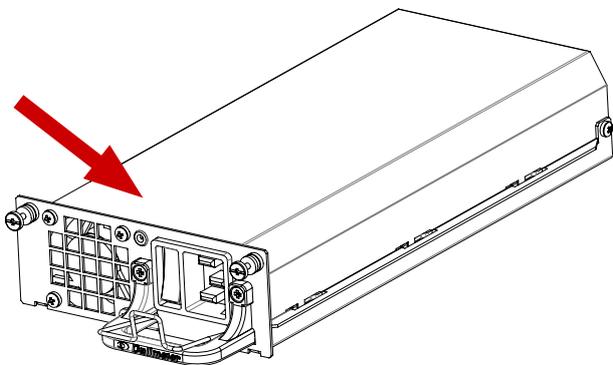


Fig. 7-3

- Green LED lights up = Power supply module switched on and OK
- Green LED not lit = Power supply module switched off or defective

7.2 DEACTIVATION

The failure of a power supply module will be displayed cyclically by a system message (local and alarm host) until the exchange. This feature can be disabled to avoid unnecessary repeated messages.

- ▶ Open the **Service Settings** dialog via **System > Service > Settings**.

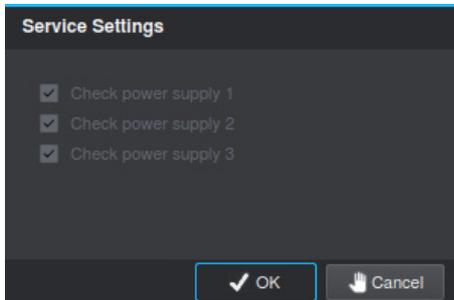


Fig. 7-4

- ▶ Deactivate the defective power supply module if required.
- ▶ Confirm with **OK**.

The display of the corresponding system message is suppressed. After replacing the power supply module this function is activated automatically, a resetting is not required.

7.3 EXCHANGE

If the device is powered by two redundant power supply modules, one can be exchanged during operation.

- ▶ Turn off the defective power supply module with the appropriate power switch.
- ▶ Remove the power cable.

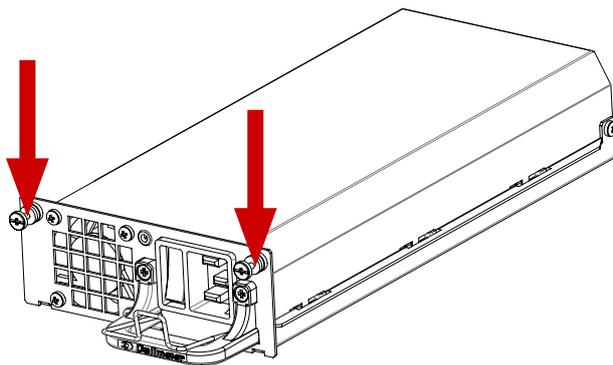


Fig. 7-5

- ▶ Loosen the screws at the top of the power supply module.

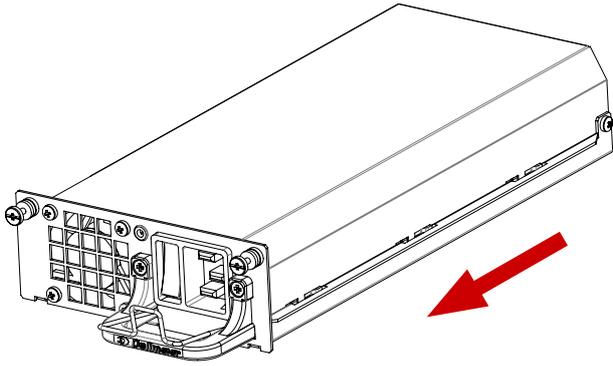


Fig. 7-6

CAUTION

Risk of injury by sharp edges

Be careful when removing and installing the power supply module.

- ▶ Pull the power supply module out of the housing.
- ▶ Take care not to cant.
- ▶ Do not use any force.

WARNING

Serious danger by electric shock

- ▶ Do not grip to the open shaft of the power supply module.
- ▶ Insert no tools in the open shaft of the power supply module.

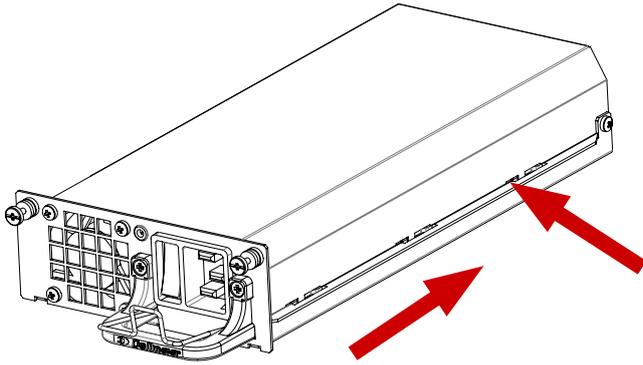


Fig. 7-7

- ▶ Place the new power supply module with the guide rails in the housing.
- ▶ Slide the power supply module carefully and completely into the housing.
- ▶ Take care not to cant.
- ▶ Do not use any force.
- ▶ Attach the power supply module with the two screws at the top.
- ▶ Connect the power cable.
- ▶ Turn on the new power supply module with the appropriate power switch.

The power supply module is put into operation automatically. The device is powered from the redundant power supply modules with equal parts of tension.

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

Damage to the surface of the device

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



HEAD & ACCOUNTS OFFICE

Dallmeier electronic GmbH & Co.KG
Bahnhofstr. 16
93047 Regensburg
Germany

tel +49 941 8700 0
fax +49 941 8700 180
mail info@dallmeier.com

www.dallmeier.com