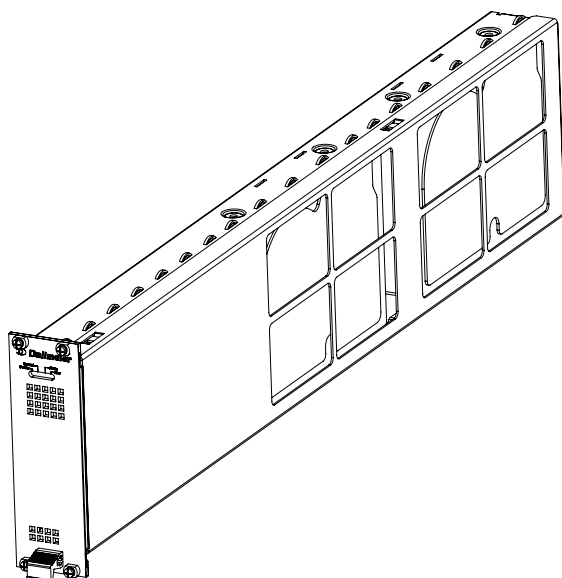


DIS-4/M SRS

Commissioning

English



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1 Validity

This document applies to the SMAVIA Appliance DIS-4/M SRS.

Figures in this document may differ from the actual product.

2 Documents

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 all documents included in the scope of delivery carefully and thoroughly before using the device.

Always follow the contained instructions, notes and warnings and observe the technical specifications.

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.

This Document

Commissioning

The document “Commissioning” (this document) contains detailed descriptions on installation, connection and commissioning of the device as well as safety instructions and general notes.

The target audience of this document is trained system integrators.

Other Applicable Documents

Specification

The document “Specification” contains detailed technical specifications, features and characteristics of the device.

The target audience of the document is trained system integrators.

Configuration

The document “Configuration” contains detailed descriptions on the configuration of the device.

The target audience of the document is trained system integrators.

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 is used to address practices not related to physical injury.

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

Instructions are indicated by arrows (➡).

Expressions in bold and italic marks generally indicate a ***control element*** on the device (switches or labels) or on its user interface (buttons, menu items).

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

4 Safety Instructions

Only use the device if it is 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 device 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 device 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.

RAID System

Devices that are configured with a RAID system for redundant recording always must be supplied with power via an uninterruptable power supply (UPS). A sudden voltage drop can damage the RAID system.

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 data in the "Specification" document.

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 device is 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 device has reached room temperature before commissioning.

Earthing & Equipotential Bonding

For the safety of persons (protection against dangerous contact voltages) and devices (protection against over-voltages) as well as for 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.

Operating Conditions

Unfavorable operating conditions may shorten the life of the device 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 unit may not be moved while in operation.

Foreign Bodies

If objects or liquids get into the device, immediately disconnect it 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 a formation of smoke coming from the device, immediately disconnect it from the power supply (pull out the power plug).

Contact the sales partner responsible for your area.

Opening

The device 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 device from the power supply. Remove all connected devices. Return the device to your respective sales partner.

5 General Notions

Transportation and Packaging

Store the original packaging for later transportation.

Dallmeier is not responsible for any damage resulting from unprofessional/improper transportation.

The device should only be shipped in the original packaging.

If the original packaging is no longer available, ensure that the used packaging sufficiently protects the device against damage, moisture, heat and cold.

Warranty

The terms and conditions valid at time the contract was signed shall apply.

Appropriate Use

The appliance DIS-4/M SRS has been designed as a compact 3 RU slide-in module for highly available storage systems of larger video installations in stadiums, shopping malls, casinos or convention centres. In conjunction with the pre-installed VideoIP software SMAVIA Recording Server, this appliance is ideally suited for the recording of up to 4 video channels in real-time.

Approvals/Certifications

The following approvals/certifications were valid for the device at the time of this document's compilation:

- CE
- FCC
- RCM
- UL
- DIN 50130-4 compliant



Visit www.dallmeier.com for possible updates.

Note (USA)

This equipment has been tested and found to comply with the limits for a Class A digital device, pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference when the equipment is operated in a commercial environment. This equipment generates, uses, and can radiate radio frequency energy and, if not installed and used in accordance with the instruction manual, may cause harmful interference to radio communications. Operation of this equipment in a residential area is likely to cause harmful interference in which case the user will be required to correct the interference at his own expense.

6 Requirements

The appliance has to be mounted in the according module carrier, which is to be operated in a 19" standard rack with active ventilation. The required rails are included in the scope of delivery.

Rack Installation

- ➔ Ensure a free space of at least 60 cm at the front of the rack in order to be able to fully open the door.
- ➔ Ensure a free space of at least 75 cm at the rear of the rack in order to enable sufficient air circulation and access for maintenance.
- ➔ Install the rack at a place with limited access (device or server room).
- ➔ Ensure that the rack is installed in a stable way and is suitable to withstand the weight of the mounted devices.

Device Installation

- ➔ Install heavy devices at the bottom of the rack.
- ➔ Note that the temperature in the top of the rack can be higher than at the bottom.
- ➔ Plan a distance between the devices in order to allow a better air circulation.
- ➔ Ensure a sufficient air circulation by a free space of 10 cm at the front and rear side of the device.

Operation in the Rack

- ➔ Keep the doors of the rack closed in order to ensure a sufficient air circulation.

Secure Earthing

- ➔ Ensure anytime a proper grounding, preferably through a direct grounding of the rack.

Power Supply of the rack

- ➔ Operate the rack with 115/240 V AC, 50/60 Hz.
- ➔ Use an uninterruptible power supply (UPS) to protect the device from voltage spikes and to keep it in operation in case of power failure.

NOTICE

Prevention of separation from the circuit

The plug of the supply line serves as separator from the supply circuit.

- ➔ Use an outlet installed close to the device.
- ➔ Make sure the outlet is easily accessible.

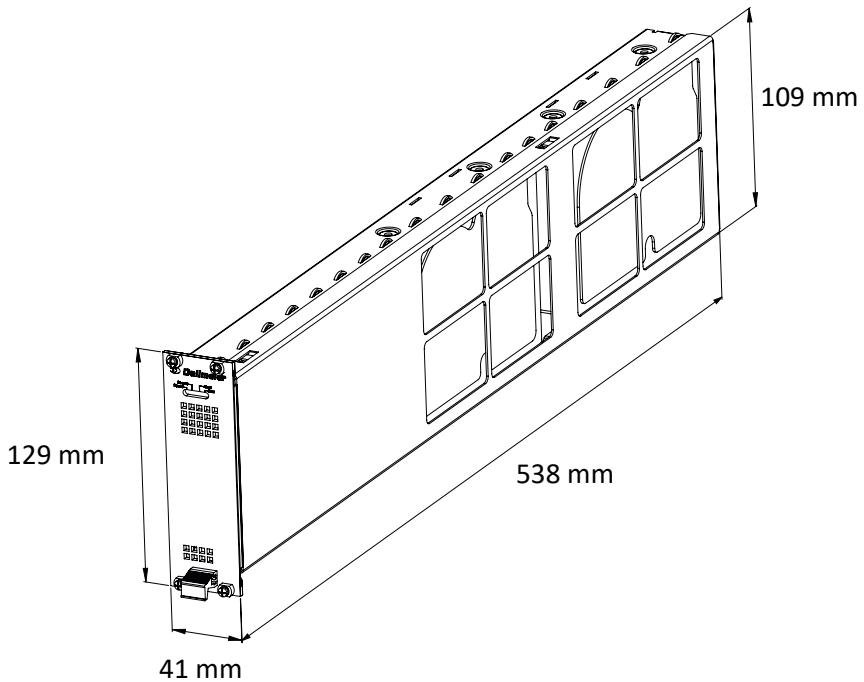
7 Rack Installation

The installation and commissioning of the device may only be carried out by qualified personnel.

The following tools are needed for the installation:

- Cross recess screwdriver (5 mm)

Dimensions




Mounting

CAUTION

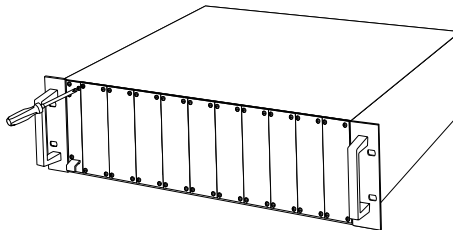
Risk of damages and injury through electric shock

➔ Ensure that all devices are disconnected from the mains supply.

A free duct should be available for every module you have ordered.

 *Start on the left-hand side of the module rack. The modules must later be installed in sequence from left to right.*

- ➔ Undo the four screws on the duct cover until they are loose in their anchor points.
- ➔ Then remove the cover.

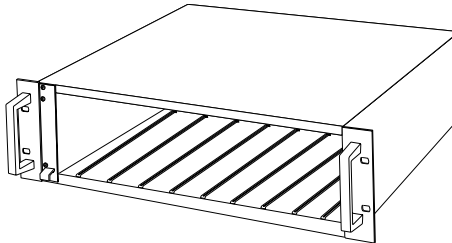


⚠ WARNING**Risk of electric shock**

The module rack can already be live.

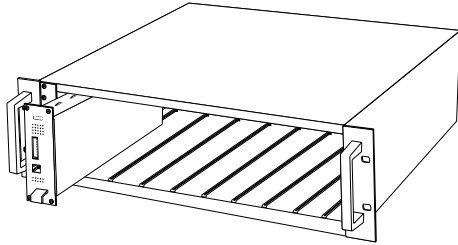
- ➔ Do not reach into the open housing of the module rack.
- ➔ Do not insert any objects.

- ➔ To install modules always use the first empty duct from the left-hand side of the module rack.

**NOTICE****Damage from electrostatic discharge**

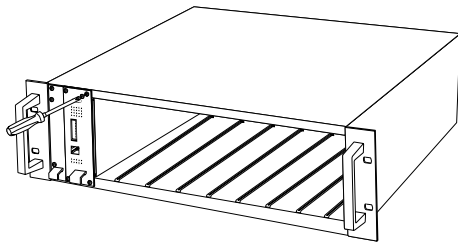
- ➔ Ensure that you are electrostatically discharged (earthed) before you touch the module.
- ➔ Wear suitable ESD shoes or an earth strap.

- ➔ Insert the module into the guide rails (top and bottom).
- ➔ Carefully slide the module into the module rack.
- ➔ Ensure that you slide it straight. Do not use any force.



i *The module is inserted correctly when it has been fully slid in and engaged.*

- ➔ The front cover of the module must be flush with the edge of the module rack housing.

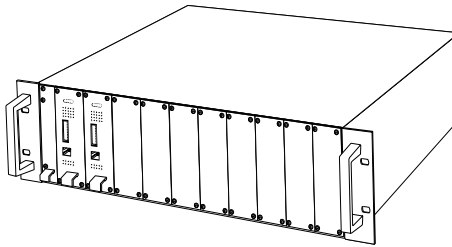


- ➔ Secure the module in the module rack using the four screws on the front cover.
- ➔ Then install the next module as described above.

Duct Covers

For continuous operation it is essential that all ducts on the module rack are closed. This is necessary to maintain air circulation and therefore to cool the modules.

- ➔ Close all the ducts that are still open after you have installed the modules, using the duct covers provided for this purpose.
- ➔ Ensure that the EMC seal on the duct cover is on the right-hand side



NOTICE

Damage through open ducts of the module carrier

Open ducts on the module rack can result in serious damage to the modules in continuous operation (particularly a hard disk drive failure).

- ➔ Ensure that all open ducts are closed with duct covers.

8 Commissioning

In order to continue the commissioning of the appliances, the module carrier has to be installed in the rack. Notice the according documentation “Commissioning DIS Module Rack”.


➔ Connect the device to the voltage supply.

The appliances inside the module carrier start automatically.
The power-LED glows.

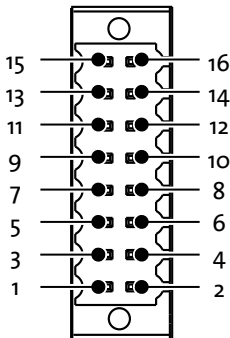
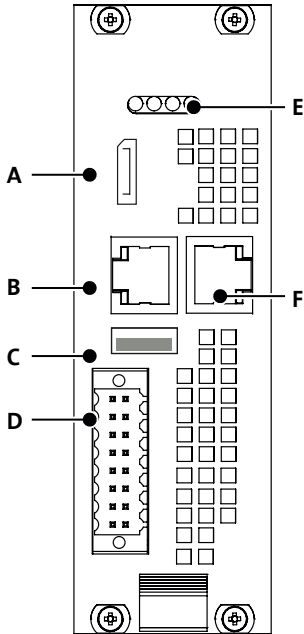
- ➔ Connect a monitor with display port and a USB mouse to the first appliance.
- ➔ Connect the monitor to the power supply.
- ➔ Switch on the monitor.
- ➔ Connect the module to the network.

The module can be configured via the network after approx. 45 seconds.

The start screen of SMAVIA Recording server is displayed.

 *If you want to use a USB keyboard for configuration in addition to the mouse, you have to use an USB splitter, because there is only one USB port available.*

9 Connections



- A Video OUT Interface**
1× DisplayPort eDP 1.3
- B Ethernet Interface 1**
RJ45, 10/100/1000Mbps (optional)
- C USB Interface**
1× USB 3.0, type A
- D Contact IN / Relay OUT**
Weidmüller socket, 16 pins,
max. 12V DC/24V AC/0,5A, 150mOhm
- E Status LED (Power)**
Blue / The device is in operation; Blue
blinking / The device is shutting down
- Status LED (Record)**
Green blinking / The device is recording.
- Status LED (Alarm)**
Orange / The device is in alarm mode.
- Status LED (Error)**
Red / The device indicates an error..
- F Ethernet Interface 2**
RJ45, 10/100/1000Mbps

Control inputs (Contact IN)

PIN	Function
2/4	+5VDC isolated (SELV)
6	Contact 1
8	Contact 2
10	Contact 3
12	Contact 4
14/16	GND isolated

Relay (Contact OUT)

PIN	Function
1/3	Relay 1
5/7	Relay 2
9/11	Relay 3
13/15	Relay 4

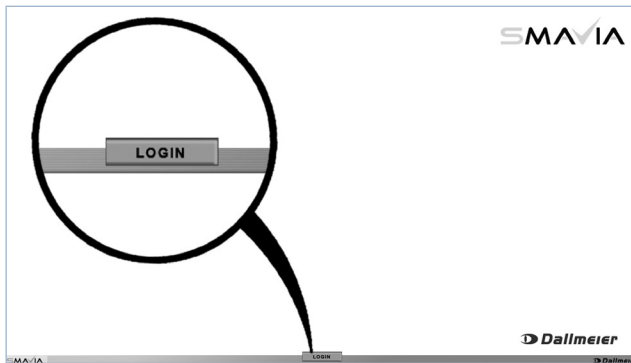
10 Login

In the initial state it is possible to login without a password. The rights of the Administrator group are valid.

i *The definition of the passwords and of the network parameters is necessary for remote access with SMAVIA Viewing Client.*

➔ Drag the mouse pointer to the lower screen edge.

The task bar with the **Login** button is displayed.



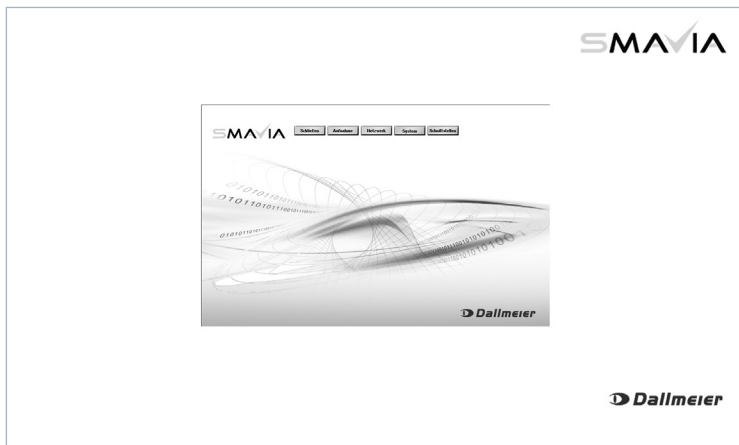
➔ Click the **Login** button.

The **Recorder Login** dialogue is displayed.



➔ Click **Later** to login without changing a password.

The configuration interface is displayed.



- ➔ Observe the appropriate "Configuration" documentation.
- ➔ Continue accordingly for the remaining modules.

11 Specifications

Components	
CPU	Multi-Core
RAM	4 GB
Flash module	8 GB (for operating system and application)
Hard disks	Up to 2× 3.5" HDD (optional)
Max. storage capacity	Currently up to 12 TB
Fan	Integrated in module rack (hardware 002150)
Power supply unit	Integrated in module rack (hardware 002150)


Interfaces	
Video OUT	1× DisplayPort, eDP 1.3, for configuration (not fit for adapter)
USB	1× USB 3.0, type A
Ethernet 1	RJ45, 10/100/1000 Mbps
Ethernet 2	RJ45, 10/100/1000 Mbps (optional, license 003803)
Ethernet protocols	IPv4, TCP, UDP, ARP, ICMP, DHCP, NTP, HTTP
Contact IN	4×, with galvanic isolation, only for switch / push button (dry contact), with 4 functions each
Relay OUT	4×, with galvanic isolation, max. 12 V DC / 24 V AC / 0,5 A, 150 mOhm, as NC or NO

Electrical Data	
Voltage supply	12 V DC ±10%
Power consumption	Max. 30 W
Thermal output	Max. 102 BTU/h
Internal fuse F1	7 A, slow blow (time lag), LITTELFUSE INC Series 454 (mainboard)
Internal fuse F1	8 A, slow blow (time lag), SCHURTER S A S MKT / LITTELFUSE INC Series 454 (connector panel)

Mechanical Data	
Dimensions (W × H × D)	Approx. 41 × 129 × 538 mm (1.6 × 5.1 × 21.2 inches)
Weight	Approx. 2.5 kg (5 lbs) with 2 HDDs

Ambient Data	
Temperature	+ 5°C up to +40°C (41°F – 104°F)
Recommended temperature	+20°C up to + 25°C (68°F – 77°F)
Humidity	5 – 70% RH, non-condensing
Atmospheric load	Dust-free

Approvals and Certifications	
Type	CE, UL, FCC, ACA, LGC Forensics, DIN EN 50130-4

 For detailed technical data and possible updates, see the current “Specification” document available at www.dallmeier.com.

12 Maintenance

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

WARNING

Danger of electric stroke

The module carrier is equipped with redundant power supply units.

- ➔ Ensure that all 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 anti static cloth.
- ➔ Do not use detergents.



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