

TECHNICAL INFORMATION

CAMERA FIRMWARE
V.8.4.2.7
CHANGELOG

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INTRODUCTION

1.1 ABOUT THIS DOCUMENT

This document contains information on new features and changes that are introduced with the current firmware version.

In addition, the document contains detailed descriptions and instructions for carrying out a successful firmware update.

Finally, the document shows a structured list with the main new features and changes of the current firmware version and all previous firmware releases (changelog).



This document only provides general information on new features and changes that are introduced with the current firmware version.

Detailed descriptions on how to configure your Dallmeier device can be found in the respective product documentation at www.dallmeier.com.

1.2 TARGET AUDIENCE OF THIS DOCUMENT

This document is particularly intended for the following persons:

- Highly qualified integrators (installers) of Dallmeier video security systems
- Experienced network administrators
- IT security experts

1.3 VALIDITY

This document applies to the following devices:

Box Cameras	IR Cameras	Module/Fisheye Cameras
<ul style="list-style-type: none">• DF5300HD-DN• DF5200HD-DN	<ul style="list-style-type: none">• DF5400HD-DN/IR• DF5210HD-DN/IR• DF5200HD-DN/IR• DF5200HD-IR-ANPR	<ul style="list-style-type: none">• SDF5410HD-DN• MDF5400HD-DN• MDF5200HD-DN
Dome Cameras	Panomera®	
<ul style="list-style-type: none">• DDF5400HDV-DN• DDF5300HDV-DN• DDF5200HDV-DN	<ul style="list-style-type: none">• Nightline Series• Topline Series• Ultraline Series	

Table 1-1

The descriptions in this document are based on the firmware version **8.4.2.7**.

1.4 COMPATIBILITY

The firmware version **8.4.2.7** is compatible with the following hardware and software:

- SMAVIA appliances of generation 5 as of firmware version 8.x.12 SP A
- SMAVIA appliances of generation 6 as of firmware version 9.x.6
- SMAVIA Viewing Client as of software version 2.8.13
- SMAVIA Viewer as of software version 2.8.13
- Dallmeier Live Video ActiveX^{*)} control as of version 1.3.1.10
- SeMSy[®] III Video Management System as of version 1.7.3

1.5 GENERAL NOTES

Note that

- the firmware update to version **8.4.2.7** is free of charge.
- new features and changes that are introduced with the current firmware version are only generally described in this document.
- the Dallmeier support hotline is always available for further questions concerning the current firmware update.
- a paid license may be required for activating a new feature that is introduced with the current firmware version.
- new features and changes described in this document may not be relevant to all of the above-mentioned devices, and their availability always depends on the device specifications (see the current product specification of your device at www.dallmeier.com).

1.6 LIMITATIONS

The following limitations have to be considered for the current firmware version:

Video Content Analysis (VCA) on Cameras of the 5300 and 5400 Series

- Only Stream 1 and Stream 2 may be activated in the encoder settings (i.e. the CVBS or HDMI output can therefore no longer be used).
- The respective bit rates set for Stream 1 and Stream 2 must not exceed 16 Mbps.
- The maximum selectable (internal) analysis input resolution in the VCA expert settings is 320 × 240 pixels.

Fisheye Cameras

- The panoramic views “360 degrees” and “2× 180 degrees” are only available if “Ceiling” is selected as the mounting position.
- Dewarping is not supported when recording to a memory card (“EdgeStorage”).
- The video preview output is only available if VCA is disabled and the selected resolution is 1984 × 1984 pixels (Stream 3 must be available for video output).
- The SDF5410HD-DN is only supported by PService with software version 3.4.13.0 or higher.

UPDATING THE FIRMWARE

The firmware update to version **8.4.2.7** can be downloaded free of charge from the corresponding product page at www.dallmeier.com.

The firmware update is performed over the network using the **PService3** software which is also available for download free of charge at www.dallmeier.com.

Updating your IP device is only possible via TCP/IP. Therefore, your IP device has to be available in your local area network (LAN) so that the update file can be successfully transferred (contact your network administrator for further information and assistance if necessary).

Performing the Update

1. Download the firmware update (zipped folder with update file and license text) from the corresponding product page at www.dallmeier.com.
2. Unzip the zipped (compressed) folder after downloading to any local directory on your hard disk (using WinZip*) or a similar program).
3. Run **PService**.
4. Follow the instructions for performing firmware updates in the **PService3** documentation.
5. To update your IP device, select the unpacked update file with the file extension ***.sh**.

NOTICE

Invalid update file

Only files with the ***.sh** file extension can be opened.

6. If necessary, enter the login credentials for gaining access to your IP device.
7. Click **OK** and confirm the start of the firmware update process in the subsequent info dialog.

The update process is then started.

NOTICE

Hardware and software malfunctions due to an incomplete or failed firmware update

- ▶ Do not disconnect your IP device from the power supply during the update process (up to 5 minutes).

Your IP device will automatically reboot after the update process is successfully completed.

NEW FEATURES AND CHANGES

Below you will find all new features and changes that are introduced with the current firmware version.

New Image Resolution of 6 MP (2448 × 2448 Pixels) for Module/Fisheye Cameras MDF5400HD-DN and SDF5410HD-DN

With the current firmware version, the available image resolutions for the module/fisheye cameras MDF5400HD-DN and SDF5410HD-DN have been extended by the 6 MP (2448 × 2448 pixels) resolution setting.

Firmware Update via WebConfig User Interface

As of the current firmware version, the camera firmware can now be updated not only using the PService3 software but also via the WebConfig user interface of the camera itself (“Service” dialog > “System state” tab).

Jamming Filter

With the current firmware version, a new jamming filter has been introduced (“Image” dialog > “Image optimization” tab). This new filter helps to largely eliminate blocking artifacts in the video data stream that may occur as a result of certain camera settings interacting with specific scene conditions (richness of detail, lighting conditions, amount and speed of moving objects).

However, note that the jamming filter should only be enabled in a few exceptional situations, as otherwise the increased computational effort may result in noticeable delays during video image transmission.

Video Content Analysis (VCA): Automatic Transmission of Defined Detection Areas and Virtual Lines to SMAVIA Appliances and SMAVIA Viewing Client

As of the current firmware version, the detection areas (Intrusion Detection) and virtual lines (Line Crossing Detection) defined for camera-internal intelligent video analysis are automatically transferred to SMAVIA appliances and SMAVIA Viewing Client for later display during the evaluation of events.

Note that the defined sensitive areas (rectangles, polygons) and virtual lines are only displayed on the screen at the time the corresponding event actually occurs (e.g. when an object crosses the drawn virtual line).

Video Content Analysis (VCA) on Panomera® Systems

With the current firmware version, the intelligent video analysis on Panomera® systems has been further improved and a problem in calculating analysis results within module transitions has been resolved.

General Minor Bug Fixes, Stability Improvements and Security Updates With Severity Rating “Low”

The current firmware version includes several general minor bug fixes, stability improvements (internal and network-related issues) and security updates with severity rating “low”.

CHANGELOG

Below you will find a structured list with the main new features and changes of the current firmware version and all previous firmware releases (changelog).

V.8.4.2.7

- 6 MP (2448 × 2448 pixels) resolution for module/fisheye cameras MDF5400HD-DN and SDF5410HD-DN
- Support for firmware update via WebConfig user interface added
- Jamming filter added (“Image optimization“ tab)
- Video Content Analysis (VCA): automatic transmission of defined detection areas and virtual lines to SMAVIA appliances and SMAVIA Viewing Client added
- Video Content Analysis (VCA) on Panomera® systems: problem in calculating analysis results within module transitions resolved
- General minor bug fixes, stability improvements and security updates with severity rating “low”

V.8.4.1.9

- WebConfig user interface adapted to the new Dallmeier corporate design
- New overview page for displaying security-related system states implemented
- New preset “Low-light ICR on (Day/Night) added
- Panomera® OnePush autofocus improved
- Support for QoS (Quality of Service) using DiffServ (Differentiated Services) implemented
- ONVIF access via registered HTTP port
- Video Content Analysis (VCA) on Panomera® systems improved
- Automatic option for bandwidth limitation added
- Russian GUI translation updated
- General minor bug fixes, stability improvements and security updates with severity rating “low”

V.8.3.4.17

- Time zone information updated (based on tz database 2017b > 2017c)
- Problem with correctly applying the time zone selected in the “Network” dialog (“Time server” tab) resolved
- Panomera® PanSyncHandler: problem with continuous automatic module synchronization resolved (no manual restart of Panomera® Master module required)
- Problem with correct assignment of valid signal gain ranges for the respective camera type when importing a configuration file resolved
- Problem with unwanted error messages when attempting to overwrite locked attributes (encoder settings) with identical parameters during the import of a configuration file resolved
- Problem with removing both registered DNS servers resolved
- Problem with available voltage for motor-driven lenses and Day/Night filter shifter resolved

V.8.3.4.10

- Verification of network parameters during input added
- Security for changing passwords improved: old password must be entered before a new password can be set
- Update mechanism accelerated

V.8.3.3.14

- VCA default settings changed (resolution 160 × 120 pixels, frame rate 12 fps)
- Problem with import of DHCP settings resolved

V.8.3.3.10

- Video Content Analysis (VCA) on single-sensor cameras of the 5300 & 5400 series added
- ONVIF (Profile S) conformance test passed
- Problem with one-push white balance (bluish image) resolved

V.8.3.2.22

- Problem with Day/Night filter shifter in models of the Ultraline series resolved
- General minor bug fixes and stability improvements

V.8.3.2.19

- Video Content Analysis (VCA) feature added
- Resolution 3312 × 2488 pixels added (only to Panomera® models of the Ultraline series)
- Russian translation optimized
- Appearance and behavior of graphical user interface (GUI) in Google Chrome*) and Opera*) web browsers optimized
- Problem with drawing multiple privacy zone masks resolved
- SSH port security enhancements

V.8.3.2.12

- Initial release for IR camera DF5400HD-DN/IR
- Support for analog audio output (talkback capability) added
- HTTPS added
- Reboot problem after Day/Night switching resolved
- Reboot permission via PService3 changed
- Problem with video recording quality of 5 MP@25/30 fps via recorder configuration resolved

V.8.3.0.11

- Initial release for Ultraline series
- “EdgeStorage for Emergency Recording with Smart Backfill” function optimized
- DHCP support added
- MTU settings added
- 5200 (Nightline) series:
 - frame rate 50/60 fps@1080p added
 - frame rate 100/120 fps@720p added
- 5300 (Topline) series:
 - frame rate 50/60 fps@1080p added
- “Analytic” preset added
- “Panomera® Stadium” preset added
- “Text overlay” settings extended
- ONVIF Profile S interoperability extended
- DDF5300HDV-DN:
 - specific video resolutions for casino applications added
- Encoder performance optimized
- Panomera® module synchronization optimized

V.8.2.1.35

- “EdgeStorage”: support for microSDXC*) cards up to 64 GB added
- Resolution 1920 × 1200 pixels (16:10) added
- Setting for bandwidth limit (per stream) added
- Internal buffering improved
- WebConfig user interface improved

V.8.2.1.21

- Audio support for MDF5200HD-DN (DHD129-xxxxxxx) added
- “Preset automatic” feature changed (always starts with “Day” preset now)
- Manual white balance issues after camera reboot resolved

V.8.2.1.15

- TCP live connection issues during “SmartBackfill” resolved
- DaVid protocol for Panomera® AutoCalibration tool extended (Panomera® Nightline series)
- Bootloader issues when reading information from flash memory during startup resolved

V.8.2.1.12

- Panomera®: exposure and focus control at low frame rates optimized
- Compatibility check of update files for Panomera® multifocal sensor systems added
- Internal SDK updated for overall system stability and performance improvements
- Security patch implemented to fix critical web server vulnerability
- Support for direct export of encrypted camera support file via PService3 added
- Several network parameters for use in low-bandwidth network environments improved

V.8.2.0.12

- “EdgeStorage for Emergency Recording with Smart Backfill” function added
- Basic network settings: validation of host name added
- Handling of space characters and plus signs in user and group names corrected
- MJPEG live video over TCP corrected
- Auto-correction of overlong camera names added
- H.264 live video over RTSP: compatibility with Apple*) QuickTime*) Player added
- Default GoP size (H.264) changed to 24 frames
- Resolution 1440 × 1080 pixels added
- “Digital Image Shift” function added
- Import/export of configuration settings completed
- Audio support added

V.8.1.1.21

- Automatic exposure (AE) presets for “SEDOR® Intruder” analysis application added
- “Exposure priority” function added
- “Privacy Zones” function revised (now usable in conjunction with “Flip” function)
- List of time zones completed (synchronized with Dallmeier recording systems)
- Timestamps in video streams optimized

V.8.1.0.9

- Initial release



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