Technical Information

Software Version 6.4.3.11

Box Cameras	Dome Cameras	IR Cameras
DF4510HD	DDF4510HDV	DF4910HD-DN/IR
DF4910HD	DDF4910HDV	DF4920HD-DN/IR
DF4910HD-DN	DDF4910HDV-DN	
DF4820HD-DN	DDF4820HDV-DN	
DF4920HD-DN	DDF4920HDV-DN	

English

Version 1.0 / 2014-06-20

Dallmeier

1 Abstract

This document contains information on new features and changes introduced with the latest software version.

In addition, it includes descriptions for a correct update process.

Finally, this document provides an overview of the tested and supported functionality of the different software versions.

2 Validity

This document applies for the following Dallmeier HD cameras:

Box Cameras
- DF4510HD
- DF4910HD
- DF4910HD-DN
- DF4820HD-DN
- DF4920HD-DN

Dome Cameras
- DDF4510HDV
- DDF4910HDV
- DDF4910HDV-DN
- DDF4820HDV-DN
- DDF4920HDV-DN

IR Cameras
- DF4910HD-DN/IR
- DF4920HD-DN/IR

The descriptions in this document are based on the software version **6.4.3.11**.

3 Compatibility

The software version **6.4.3.11** is compatible with the following hard- and software:

- Dallmeier Live Video ActiveX as of version 1.3.1.10
- SMAVIA Viewing Client as of version 1.0.2.16
- SMAVIA Viewer as of version 1.0.2.16
- SMAVIA Appliances as of version 8.x.3
- Recording systems gen. 4 (DMS, DLS, VNS, VNB) as of version 7.1.4
- Recording systems gen. 4 (DMX) as of version 7.3.5

4 General Notes

Note that

- the software update to version **6.4.3.11** is free of charge.
- the changes are only generally described in this document.
- the Dallmeier support hotline is always available for further questions.
- some features may be subject to costs.
- the product pages in the Dallmeier Partner Forum contain all information on features with costs.
- due to dynamic development and constant improvement some functions can not be offered in all software versions.

5 Update Procedure

The software update to version **6.4.3.11** is available in the Dallmeier Partner Forum on the corresponding product page.

The update can be performed over the network using the software **PService** which is also available for download in the Dallmeier Partner Forum.

You only need to download and install PService once.

Updating your IP device is only possible via TCP/IP. Therefore, your IP device must be available in your local area network (LAN) in order for data to be transferred successfully.

Perform Update

1. Download the required zip files.
2. Unzip the downloaded zip files into a local directory on your hard disk (using WinZip or similar program).
3. Run PService.
4. Follow the update instructions in the respective PService documentation.

NOTICE:

Only files with the ending *.sh can be opened.

Leave the field “Update code” blank.

5. Once all required information has been entered, click “OK”.

The update process is then started.

NOTICE:

Do not disconnect the device from the power supply during the update (up to 5 minutes).

The device will automatically reboot after the update is completed.

6 Important note about the versions 6.4.3.10 and 6.4.3.11

The current version 6.4.3.11 includes all the new features and improvements of the previous version 6.3.4.10. In addition, it contains an optimization for entering the serial number during the initial installation of the software.

The update of a camera with version 6.3.4.10 to version 6.3.4.11 is not required. However, older versions should be updated with the latest version.

Notice the new features and improvements described in the following They are included in both versions of the camera software.

7 New Features and Improvements

SNMP Extensions

Description	The previous version already supported the Simple Network Management Protocol (SNMP v1 and SNMP v2c) that is used to manage and monitor network elements with a Network Management System (NMS). In the current version, the SNMP functionality is extended with the following features (“Network” > “SNMP”): • Possibility to change the community string (default: public) for SNMP v1 and SNMP v2c (case sensitive) • Protocol version SNMP v3 • Security settings for SNMP v3: - *noAuthNoPriv:* Access mode without authentication (user name only) - *authNoPriv:* Access mode with authentication (user name and password): Password at least 8 characters, Hash Message Authentication Code (HMAC) MD5 or SHA - *authPriv:* Access mode with authentication and privacy encryption of SNMP packets (DES or AES) • Details for the location (e.g. 3rd floor) and contact person (e-mail address) of the device/node (SNMP agent) Inter alia, the following information can be queried with an SNMP client: • General version • System version • Application version • Device type • Device description • Device serial number • Number of connections • DaVid connections • Streaming Server • RTSP connections The following SNMP queries are supported: • snmpwalk • snmpget For security reasons, the “snmpset” and “snmptrap” commands are not supported. The device-specific MIB file with OID (Object Identifier) and detailed query parameters can be directly downloaded from the camera via “Service” > “Download”.			
Availability	X	Update	X	Reinstallation
Hardware		Necessary	X	Not necessary
Requirements				

Firmware Update Directly from WebConfig User Interface

Description	As of the current version, a firmware update directly from the WebConfig user interface is possible (“Service”> “Firmware update”). When connected to the Internet, you can first check for the latest firmware version. As the case may be, the new firmware can then be directly downloaded from the Internet (saved on a storage device in the local area network or stored on the local PC). Finally, the saved update file can be transmitted to the camera. Note that only files with the extension *.sh can be transferred to the camera. A firmware update using the PService software is thus no longer necessary.			
Availability	X	Update	X	Reinstallation
Hardware		Necessary	X	Not necessary
Requirements				

Optimization of Slider Rendering in Microsoft Internet Explorer 10 & 11

Description	Under certain circumstances, sliders in the WebConfig user interface were not displayed correctly in Internet Explorer 10 and 11. This problem was fixed in the current software version.			
Availability	X	Update	X	Reinstallation
Hardware		Necessary	X	Not necessary
Requirements				

Dallmeier Live Video ActiveX Version 1.3.1.10

Description	With this update, the version 1.3.1.10 of the Dallmeier Live Video ActiveX is available for download on the device (“Service” > “Download”).			
Availability	X	Update	X	Reinstallation
Hardware		Necessary	X	Not necessary
Requirements				

Gamma Curve

Description	As of the current version, the “Gamma curve” option is available in the sensor settings. The gamma setting allows you to adjust the relative distribution of brightness in the midtones (the distribution of light between black and white) and thus the image contrast. However, note that the effect of the gamma setting always depends on the individual display device The following settings can be selected: • Default • REC 709 • Linear			
Availability	X	Update	X	Reinstallation
Hardware		Necessary	X	Not necessary
Requirements				

Manual Setting of Shutter Speed and Signal Amplification (Gain)

Description	As of the current version, both the exposure time (shutter speed) and the signal amplification (gain) can be manually adjusted in the sensor experts settings.			
Availability	X	Update	X	Reinstallation
Hardware		Necessary	X	Not necessary
Requirements				

Performance Optimization when Drawing Privacy Zones

Description	With this version, the performance when drawing rectangles for privacy zones was optimized. Rectangles can now be drawn by holding down the left or right mouse button and also by holding down the wheel button. In addition, now, it is possible to draw a rectangle in all directions starting from its origin.			
Availability	X	Update	X	Reinstallation
Hardware		Necessary	X	Not necessary
Requirements				

Selective System Shutdown or System Restart

Description	As of the current version, the system can be selectively shut down or restarted (“Service” > “System shutdown”). A selective shutdown is useful, for example, to prevent data loss/inconsistencies or incorrect configuration entries when disconnecting the power supply. A system restart can be necessary, for example, after the connection of peripheral devices.			
Availability	X	Update	X	Reinstallation
Hardware		Necessary	X	Not necessary
Requirements				

“EdgeStorage for Emergency Recording with Smart Backfill”

Description	As of the current version, the function “Edge Storage for Emergency Recording with Smart Backfill“ is supported. Edge Storage uses the internal random access memory (ring buffer) of the camera for storing encoded data in order to compensate for network failures. Depending on the camera model, the internal storage can be expanded to up to 32 GB using a SDHC card. SmartBackfill serves for the automatic recognition of the recovery of the network and ensures a fast transmission of the locally stored data to the SMAVIA Appliance. For more information, see the handout “Edge Storage & Smart Backfill”.			
Availability	X	Update	X	Reinstallation
Hardware		Necessary	X	Not necessary
Requirements	SMAVIA Recording Server Software as of version 8.x.6			

Display of Date/Time in the Encoded Video

Description	As of the current version, displaying and positioning the Date/Time (optionally in US date format) in the encoded video is supported. The Date/Time video overlay can be configured via “Common settings” > “Camera name”.			
Availability	X	Update	X	Reinstallation
Hardware		Necessary	X	Not necessary
Requirements				

Support of ONVIF Profile S

Description	As of the current version, the standardized methods for the communication according to the ONVIF Profile S standard are supported.			
Availability	X	Update	X	Reinstallation
Hardware		Necessary	X	Not necessary
Requirements				

Optimization of the Analog Video Preview Output (CVBS)

Description	In the current version, the analog video preview output (CVBS) is optimized. Cross-color effects on fine brightness structures were significantly reduced.			
Availability	X	Update	X	Reinstallation
Hardware		Necessary	X	Not necessary
Requirements				

Turkish Language

Description	As of the current version, the WebConfig user interface can be displayed in Turkish (“Common settings” > User interface”).			
Availability	X	Update	X	Reinstallation
Hardware		Necessary	X	Not necessary
Requirements				

Maximum Transmission Unit (MTU)

Description	As of the current version, the Maximum Transmission Unit (MTU) can be specified in the basic network settings. The MTU defines the maximum packet size of TCP/IP packets sent by the camera (default: 1500 bytes, maximum size for Ethernet standard). A large MTU normally provides the best data throughput, a smaller MTU, however, can be useful to avoid packet fragmentation. Highly fragmented packets may not be forwarded by routers or firewalls. For more information and assistance, contact your network administrator.			
Availability	X	Update	X	Reinstallation
Hardware		Necessary	X	Not necessary
Requirements				

Optimization MJPEG Transmission over HTTP

Description	In the current version, the transmission of MJPEG-encoded video data over HTTP is optimized.			
Availability	X	Update	X	Reinstallation
Hardware		Necessary	X	Not necessary
Requirements				

RTSP Multicast Streaming

Description	As of the current version, RTSP multicast streaming is supported.
	For each encoder, the multicast IP address, the port number (default: 1024, even port numbers recommended) and the TTL value (default: 1) can be specified independently.
	
	The settings for RTSP multicast streaming can be configured via “Network” > “Streaming” > “RTSP”.
	
	Use the following URL requests for the RTSP multicast stream of the different encoders:
	
	Encoder 1:
	`rtsp://IP address of the device/encoder1?multicast=1`
	
	Encoder 2:
	`rtsp://IP address of the device/encoder2?multicast=1`
	
	Encoder 3:
	`rtsp://IP address of the device/encoder3?multicast=1`
	
	For the audio stream, it is advisable to use the same multicast IP address as for the respective video encoder.
	In addition, the port number +2 should be chosen.
	
	Example:
	Port number video encoder 1 = 1024
	Port number audio encoder 1 = 1026
	
	For the metadata stream, it is also advisable to use the same multicast IP address as for the respective video encoder.
	The port number +2 should be chosen here again.
	
	Example:
	Port number video encoder 1 = 1024
	Port number audio encoder 1 = 1026
	Port number metadata encoder 1 = 1028
	
	Note that the combination of a RTSP multicast address and a port number must never be repeated (even between different cameras on the network).			

Availability	X	Update	X	Reinstallation
Hardware		Necessary	X	Not necessary
Requirements				

DPC (Dead Pixel Correction)

Description	As of the current version, the “DPC” (Dead Pixel Correction) option is available in the sensor expert settings. This option is useful to detect and replace abnormal pixels usually caused by random manufacturing defects that may occur during image sensor production. The “DPC” option is enabled by default.			
Availability	X	Update	X	Reinstallation
Hardware		Necessary	X	Not necessary
Requirements				

“Wide Angle” Support for DF4820HD-DN & DDF4820HDV-DN

Description	As of the current version, the “Wide Angle” function is supported for the camera models DF4820HD-DN and DDF4820HDV-DN (“Video” > “Encoder settings ...” > “Encoder 1”). More information on the “Wide Angle” function can be found in the “Angle of View & Image Resolution” white paper that is available in the Dallmeier Partner Forum.			
Availability	X	Update	X	Reinstallation
Hardware		Necessary	X	Not necessary
Requirements				

8 Functional Range

The described general functional range of the software may possibly not be relevant for all devices. Always observe the corresponding specifications of the respective device.

Function	Version						
	6.0.0	6.1.1.8	6.1.2.9	6.3.1.9	6.3.2.23	6.3.2.29	6.4.3.11
Zoom and focus fine tuning	O	X	X	X	X	X	X
Setting of the slow shutter limit	O	X	X	X	X	X	X
SNMP support	O	O	X	X	X	X	X
4-megapixel resolution	O	O	X	X	X	X	X
Automatic signal gain limiting in normal light conditions	O	O	X	X	X	X	X
Automatic contrast control	O	O	X	X	X	X	X
Privacy zones up to 20% of the entire image	O	O	X	X	X	X	X
Changed format of analogue preview output	O	O	X	X	X	X	X
RTCP support	O	O	X	X	X	X	X
Noise filter disengageable	O	O	X	X	X	X	X
ONVIF 1.02 support	O	O	X	X	X	X	X
Manual White Balance (MWB)	O	O	O	X	X	X	X
Redundant backup of Config file	O	O	O	X	X	X	X
Optimized video preview output: 4CIF/4SIF support at 25/30 fps in 4:3 format	O	O	O	X	X	X	X
Cleanup of inconsistent ONVIF entries	O	O	O	O	X	X	X
Optimization of response times for encoder settings via ONVIF interface	O	O	O	O	X	X	X
Dallmeier Live Video ActiveX Version 1.3.0.5	O	O	O	O	X	X	X
LDAP improvement for use in domains with double extension	O	O	O	O	X	X	X
Optimization “Port Security”	O	O	O	O	X	X	X
Optimization of network settings	O	O	O	O	X	X	X
Watchdog for boot procedure	O	O	O	O	O	X	X
SNMP extensions	O	O	O	O	O	O	X
Firmware update directly from WebConfig user interface	O	O	O	O	O	O	X
Optimization of slider rendering in Microsoft Internet Explorer 10 & 11	O	O	O	O	O	O	X
Dallmeier Live Video ActiveX version 1.3.1.10	O	O	O	O	O	O	X
Gamma curve	O	O	O	O	O	O	X
Manual setting of shutter speed and signal amplification (gain)	O	O	O	O	O	O	X
Performance optimization when drawing privacy zones	O	O	O	O	O	O	X
Selective system shutdown or system restart	O	O	O	O	O	O	X
“EdgeStorage for Emergency Recording with Smart Backfill”	O	O	O	O	O	O	X
Display of Date/Time in the encoded video	O	O	O	O	O	O	X
Support of ONVIF Profile S	O	O	O	O	O	O	X
Optimization of the analog video preview output (CVBS)	O	O	O	O	O	O	X
Turkish language	O	O	O	O	O	O	X
Maximum Transmission Unit (MTU)	O	O	O	O	O	O	X

Function	Version						
	6.0.0	6.1.1.8	6.1.2.9	6.3.1.9	6.3.2.23	6.3.2.29	6.4.3.11
Optimization MJPEG transmission over HTTP	O	O	O	O	O	O	X
RTSP Multicast Streaming	O	O	O	O	O	O	X
DPC (Dead Pixel Correction)	O	O	O	O	O	O	X
“Wide Angle” support for DF4820HD-DN & DDF4820HDV-DN	O	O	O	O	O	O	X

X = Function is available in version

O = Function is not available in version

Furthermore, note that the functional range is subject to a dynamic development and determined by the requirements of the market and the product policy.

The following functions are designated for implementation in a later version or may not be implemented at all.

- Motion detection on camera
- Message to alarm host at motion detection

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