TVIP41560 / TVIP61560

User manual

You can find important information and FAQs about this and other products online at:
www.abus.com

Version 1.0

English translation of the original German user manual.
Retain for future reference.

English

Introduction

Dear Customer,

Thank you for purchasing this product.

This device complies with the requirements of the applicable EU directives. The declaration of conformity can be obtained from:

ABUS Security-Center GmbH & Co. KG
Linker Kreuthweg 5
86444 Affing
GERMANY

To ensure this condition is maintained and that safe operation is guaranteed, it is your obligation to observe this user manual.

Please read the entire user manual carefully before putting the product into operation, and pay attention to all operating instructions and safety information.

All company names and product descriptions are trademarks of the corresponding owner. All rights reserved.

If you have any questions, please contact your specialist installation contractor or specialist dealer.

Data storage is subject to national data privacy guidelines.

Disclaimer

This user manual has been produced with the greatest of care. Should you discover any omissions or inaccuracies, please contact us in writing at the address provided above.

ABUS Security-Center GmbH does not accept any liability for technical and typographical errors, and reserves the right to make changes to the product and user manuals at any time and without prior warning.

ABUS Security-Center GmbH is not liable or responsible for direct or indirect damage resulting from the equipment, performance and use of this product. No guarantee is made for the contents of this document.

Explanation of symbols

	The triangular high voltage symbol is used to warn of the risk of injury or health hazards (e.g. caused by electric shock).
	The triangular warning symbol indicates important notes in this user manual which must be observed.
	This symbol indicates special tips and notes on the operation of the device.

Lists

1. ... **2. ...**	**Lists with a set order, given either in the text or warning notice**
• **...** • **...**	**Lists without a set order, given either in the text or warning notice**

Intended use

Only use the device for the purpose for which it was built and designed. Any other use is considered unintended!

This device may only be used for the following purpose(s):

- The WLAN HD 720p Outdoor Camera enables high-quality monitoring. This camera is designed for indoor and outdoor installation. The integrated infrared LEDs enable day and night surveillance for objects up to 10 metres away.
  Since it has protection class IP66, it can used both inside and outside.

Important safety information

General

Before using this device for the first time, please read the following instructions carefully and observe all warning information, even if you are familiar with the use of electronic devices.

	All guarantee claims are invalid in the event of damage caused by non-compliance with this user manual. We cannot be held liable for resulting damage.
	We cannot be held liable for material or personal damage caused by improper operation or non-compliance with the safety information. All guarantee claims are void in such cases.

Retain this handbook for future reference.

If you sell or pass on the device to third parties, you must include these instructions with the device.

The following safety information and hazard notes are not only intended to protect your health, but also to protect the device from damage. Please read the following points carefully:

Power supply

- Only operate this device through a power source which supplies the mains power specified on the type plate. If you are unsure which power supply is available, contact your utility company.
- Disconnect the device from the power supply before carrying out maintenance or installation work.
- To fully disconnect the device completely from the mains, the mains plug must be withdrawn from the mains socket.
- In order to eliminate the risk of fire, the device's mains plug should always be disconnected from the mains socket, if the device is not being used for an extended period of time.

Overload/overvoltage

- Prior to unstable weather and/or when there is a risk of lightning strike, disconnect the device from the mains network or connect the device to a UPS.
- Avoid overloading electrical sockets, extension cables and adapters, as this can result in fire or electric shock.

Cable

- Always grasp all cables by the plug connector and do not pull the cable itself.
- Never grasp the power cable with wet hands, as this can cause a short circuit or electric shock.
- Do not place the device itself, items of furniture or other heavy objects on the cable and ensure that it does not become kinked, especially at the connector plug and at the connection sockets.
- Never tie a knot in the cable and do not bundle it together with other cables.
- All cables should be laid so that they cannot be trodden on, or cause a hazard.
- Damaged power cables can cause fire or electric shock. Check the power cable from time to time.
- Do not modify or manipulate the power cable or plug.
- Only use adapter plugs or extension cables that conform to applicable safety standards, and do not interfere with the mains or power cables.

Children

- Do not allow electrical devices to be handled by children. Do not allow children to use electrical devices unsupervised. Children may not properly identify possible hazards. Small parts may be fatal if swallowed.
- Keep packaging film away from children. Risk of suffocation.
- This device is not intended for children. If used incorrectly, parts under spring tension may fly out and cause injury to children (e.g to eyes).

Surveillance

- The use of surveillance equipment may be forbidden or regulated by law in some countries.
- Before using this equipment, ensure that all of your surveillance activities are completely legal.

Installation location/operating environment

Operating temperature and operating humidity:

-20°C to 50°C, maximum 95% relative humidity.

Ensure that:

- no direct sources of heat (e.g. radiators) can affect the device
- the image sensor is not exposed to direct sunlight or strong artificial light
- the device is not in the immediate vicinity of magnetic fields (e.g. loudspeakers)
- no naked lights (e.g. lit candles) are on, or next to the device
- there is no contact with aggressive liquids
- the device is never submerged
- no foreign bodies penetrate the device
- the device is not exposed to wide temperature variations, as otherwise there may be condensation from humidity causing electrical short circuits
- the device is not exposed to excessive shock or vibration.

Unpacking the device

Handle the device with extreme care when unpacking it.

Packaging and packaging aids can be reused and, as far as possible, should be sent for recycling.

We recommend the following:

Paper, cardboard and corrugated cardboard as well as plastic packaging items should be placed in the appropriate containers provided.

If no such facility exists in the area, these materials should be put into the general household waste.

	Warning If the original packaging has been damaged, start by inspecting the device. If the device shows signs of damage, return it in the original packaging and inform the delivery service.

Start-up

- Observe all safety and operating instructions before operating the device for the first time.

	Warning When installing the device in an existing video surveillance system, ensure that all devices have been disconnected from the mains power circuit and low-voltage circuit.
	Warning Improper or unprofessional work on the power supply system or domestic installations puts both you and others at risk. Connect the installations so that the mains power circuit and low-voltage circuit always run separately from each other. They should not be connected at any point or become connected as a result of a malfunction.

Care and maintenance

Maintenance is necessary if the device has been damaged (e.g. damage to the power cable and plug, or the housing), or if liquids or foreign bodies have got into the interior of the device, or if it has been exposed to rain or damp, or if it does not work properly or has been dropped.

Maintenance

- If smoke, unusual noises or smells develop, switch the device off immediately and unplug from the socket. In such cases, the device should not be used until it has been inspected by a qualified technician.
- Have all maintenance tasks carried out by qualified technicians only.

Cleaning

- Only clean the device housing with a damp cloth.
- Do not use solvents, white spirit, thinners etc. or any of the following substances:
- Brine, insect spray, solvents containing chlorine or acids (ammonium chloride), or scouring powder.
- Rub the surface gently with the cotton cloth until it is completely dry.

	The device operates with a dangerous voltage level. When conducting maintenance work (e.g. cleaning), disconnect the device from the mains.

English

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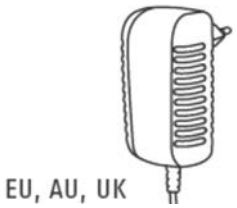
1. Scope of delivery

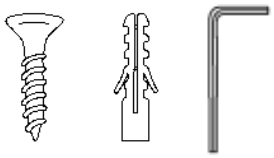
1.1. TVIP41560

WLAN HD 720p Outdoor Dome Camera

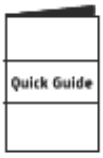


PSU

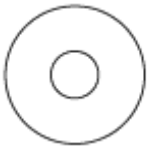
1 m network cable



Installation material

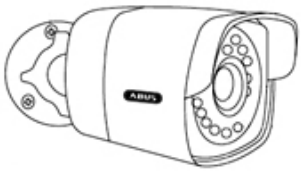


Quickstart guide

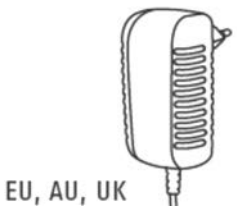


CD

1.2. TVIP61560

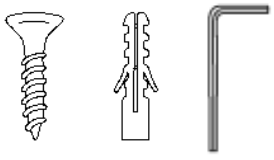


WLAN HD 720p Outdoor Camera

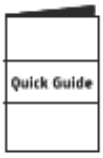


PSU

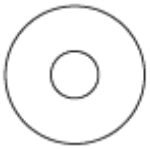
1 m network cable



Installation material



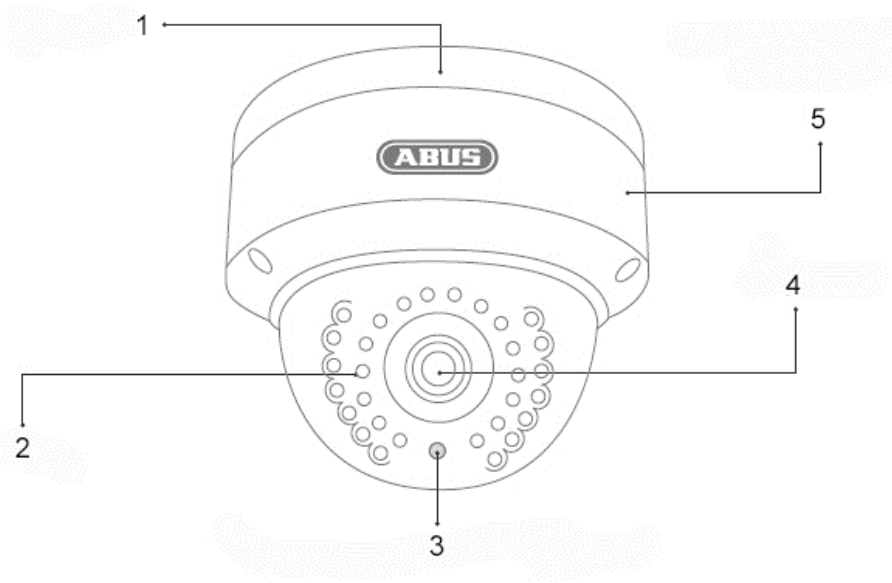
Quickstart guide



CD

2. Camera description

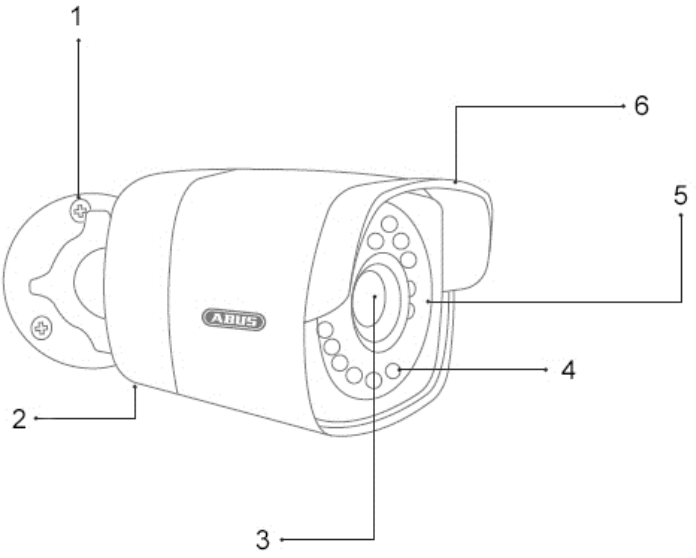
2.1. TVIP41560



No.	Description
①	Base plate
②	IR LEDs
③	Photo sensor for day/night switching
④	Lens
⑤	WPS/reset button & microSD card slot inside

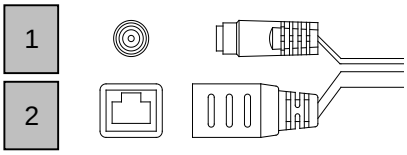
	Reset: (applies to TVIP41560 and TVIP61560) To reset the camera to its factory settings, first disconnect the power supply. Keep the WPS/reset button pressed and reconnect the power supply to the camera. Continue pressing the WPS/reset button for another 15 seconds, then release.

2.2. TVIP61560



No.	Description
①	Base plate
②	WPS/reset button & microSD card slot inside
③	Lens
④	Photo sensor for day/night switching
⑤	IR LEDs
⑥	Sun shield

3. Description of the connections



No.	Description
1	12 V DC power supply connection (round plug 5.5x2.1 mm)
2	Network access (RJ45, PoE-compatible) The network access includes a cover, which can be used if necessary. This cover provides additional protection by preventing moisture from entering the equipment. When using the cover, the network cable must only be connected (crimped) to the network plug once it has been passed through the cover. In addition, the connections (as well as the power supply connection) can be sealed with insulation tape.

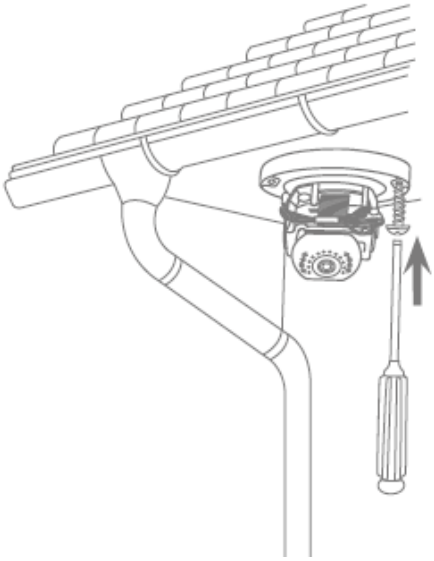
4. Mounting/installation

4.1. TVIP41560

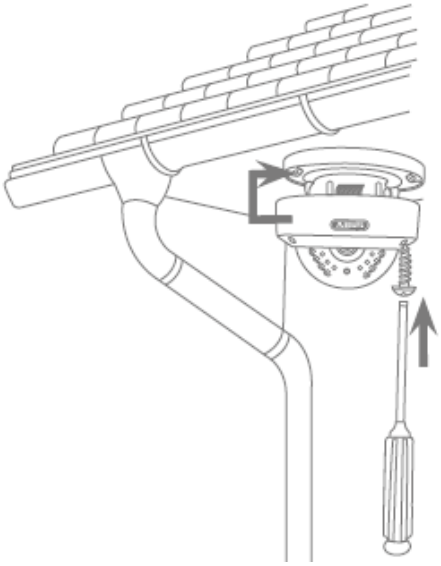
4.1.1. Mounting the camera

	IMPORTANT! The camera must be disconnected from the power supply during installation.

Loosen the fixing screws for the camera dome and remove them. Use the accompanying drilling template for drilling the mounting holes. Secure the base plate with the screws and dowels provided.



Use the fixing screws to screw the camera dome back on to the camera. Adjust the orientation of the camera before doing this.



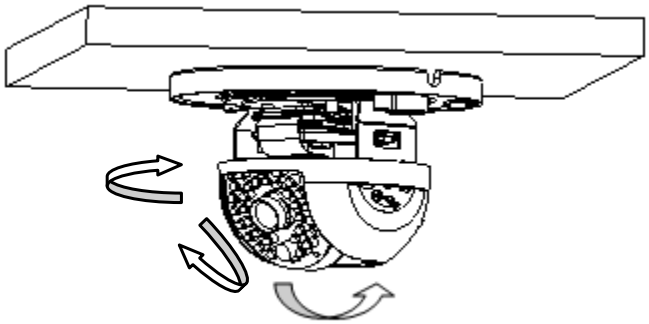
4.1.2. Orientation of the camera

First, undo the black dome cover. Loosen the screws at the side of the bracket to align the lens.

The camera can be aligned in three axes.
Setting the panning angle.
Panning: 0°–355°

Setting the angle of inclination.
Inclination: 0°–65°

Setting the angle of rotation.
Rotation: 0°–360°



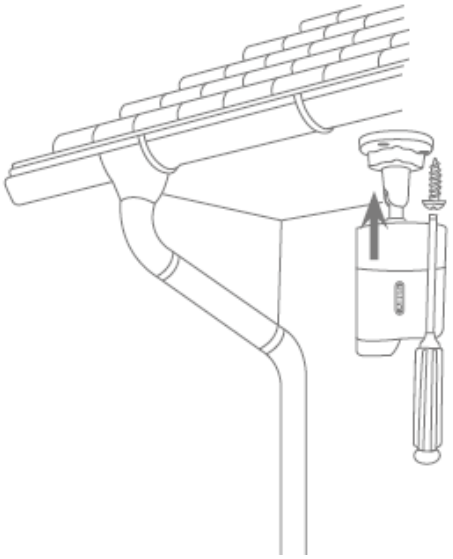
	Do not forget to tighten up the screws again!

4.2. TVIP61560

4.2.1. Mounting the camera

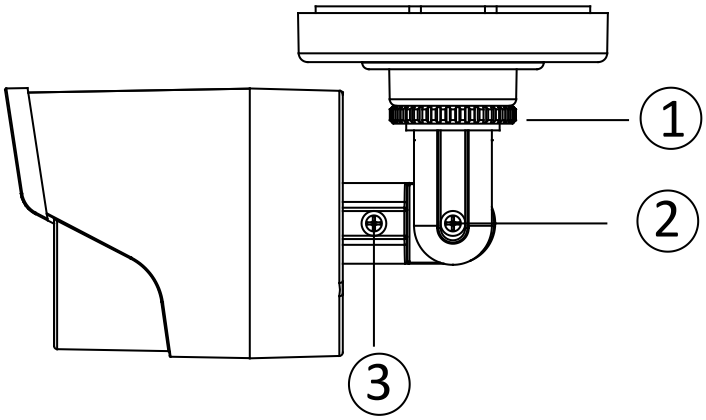
	IMPORTANT! The camera must be disconnected from the power supply during installation.

Use
the accompanying drilling template for drilling the mounting holes.
Secure the base plate with the screws and dowels provided.



4.2.2. Orientation of the camera

The camera can be aligned in three axes.



Panning: 0°–360°
Loosen the rotary wheel (1) to adjust the alignment horizontally.

Inclination: 0°–90°
Loosen the screw (2) to adjust the alignment vertically.

Rotation: 0°–360°
Loosen the screw (3) to adjust the rotation of the camera image.

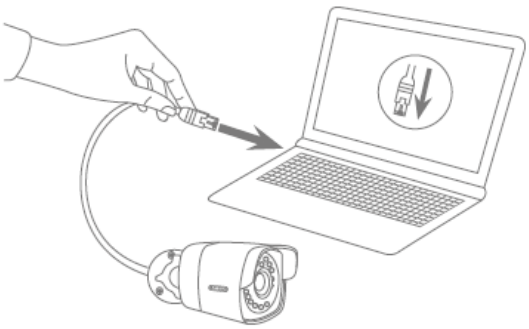
⚠	Do not forget to tighten up the screws again!

5. Initial start-up

The network camera automatically detects whether a direct connection between the PC and camera should be established. A crossover network cable is not required for this. You can use the supplied patch cable for direct connection for initial start-up.

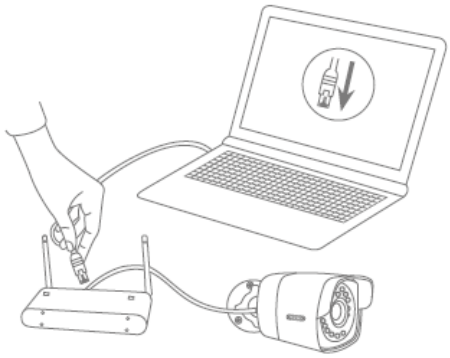
Connecting the network camera directly to a PC/laptop

1. Ensure that a CAT 5 network cable is used.
2. Connect the cable to the Ethernet interface of the PC/laptop and the network camera.
3. Connect the network camera to the power supply.
4. Configure the network interface of your PC/laptop to the IP address 192.168.0.2 and the default gateway to 192.168.0.1.
5. Proceed to point 8 to finish the initial set-up and establish the connection to the network camera.



Connecting the network camera to a router/switch

1. Ensure that a CAT 5 network cable is used for the connection.
2. Connect the PC/laptop to the router/switch.
3. Connect the network camera to the router/switch.
4. Connect the network camera to the power supply.
5. If a DHCP server is available on your network, set the network interface of your PC/laptop to "Obtain an IP address automatically".
6. If no DHCP server is available, configure the network interface of your PC/laptop to 192.168.0.2 and the default gateway to 192.168.0.1.
7. Proceed to point 8 to finish the initial set-up and establish the connection to the network camera.



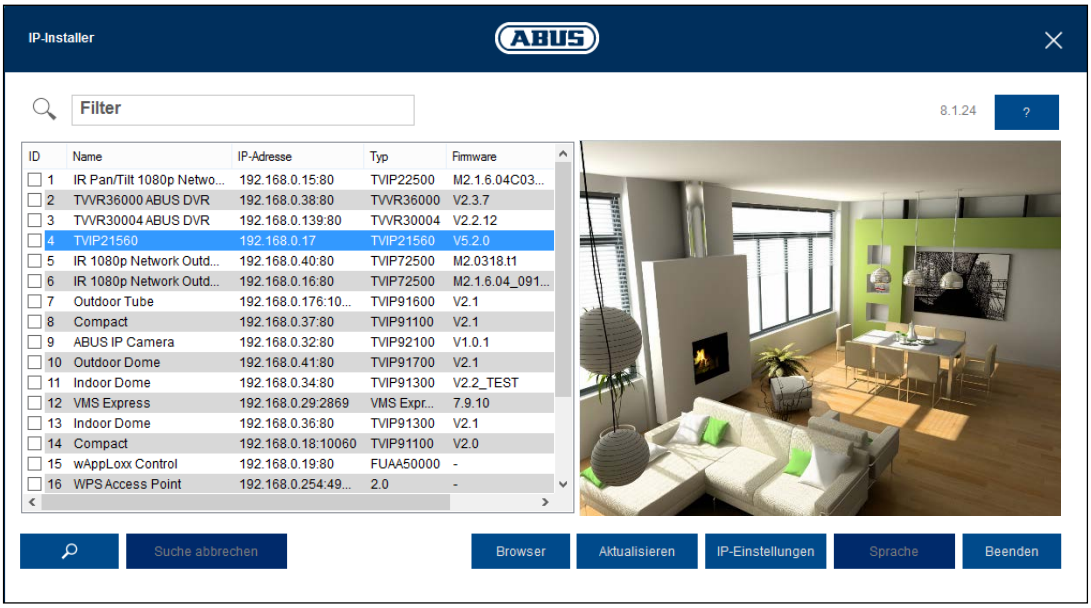
6. Accessing the network camera for the first time

The network camera is accessed for the first time using the ABUS IP Installer.
After the installation wizard is started, it searches for all connected ABUS network cameras and video servers on your network.

You can find the program on the CD-ROM included. Install the program on your PC and then run it.

If a DHCP server is available on your network, the IP address is assigned automatically for both the PC/laptop and the network camera.

If no DHCP server is available, the network camera automatically sets the following IP address: **192.168.0.100**.
Your PC system must be located in the same IP subnetwork to establish communication with the network camera (PC IP address: e.g. 192.168.0.2).



⚠	The default setting for the network camera is "DHCP". If no DHCP server is in operation on your network, we recommend setting the IP address manually to a fixed value following initial access to the network camera.

7. Password prompt

An administrator password is defined for the network camera prior to delivery. For reasons of security, however, the administrator should select a new password immediately. After this administrator password has been saved, the network camera asks for the user name and password every time it is accessed.

The administrator account is set up in the factory as follows: user name "**admin**" and password "**12345**". Each time the network camera is accessed the browser displays an authentication window and asks for the user name and password. Should your individual settings for the administrator account no longer be accessible, please contact our technical support team.

To enter a user name and password, proceed as follows:

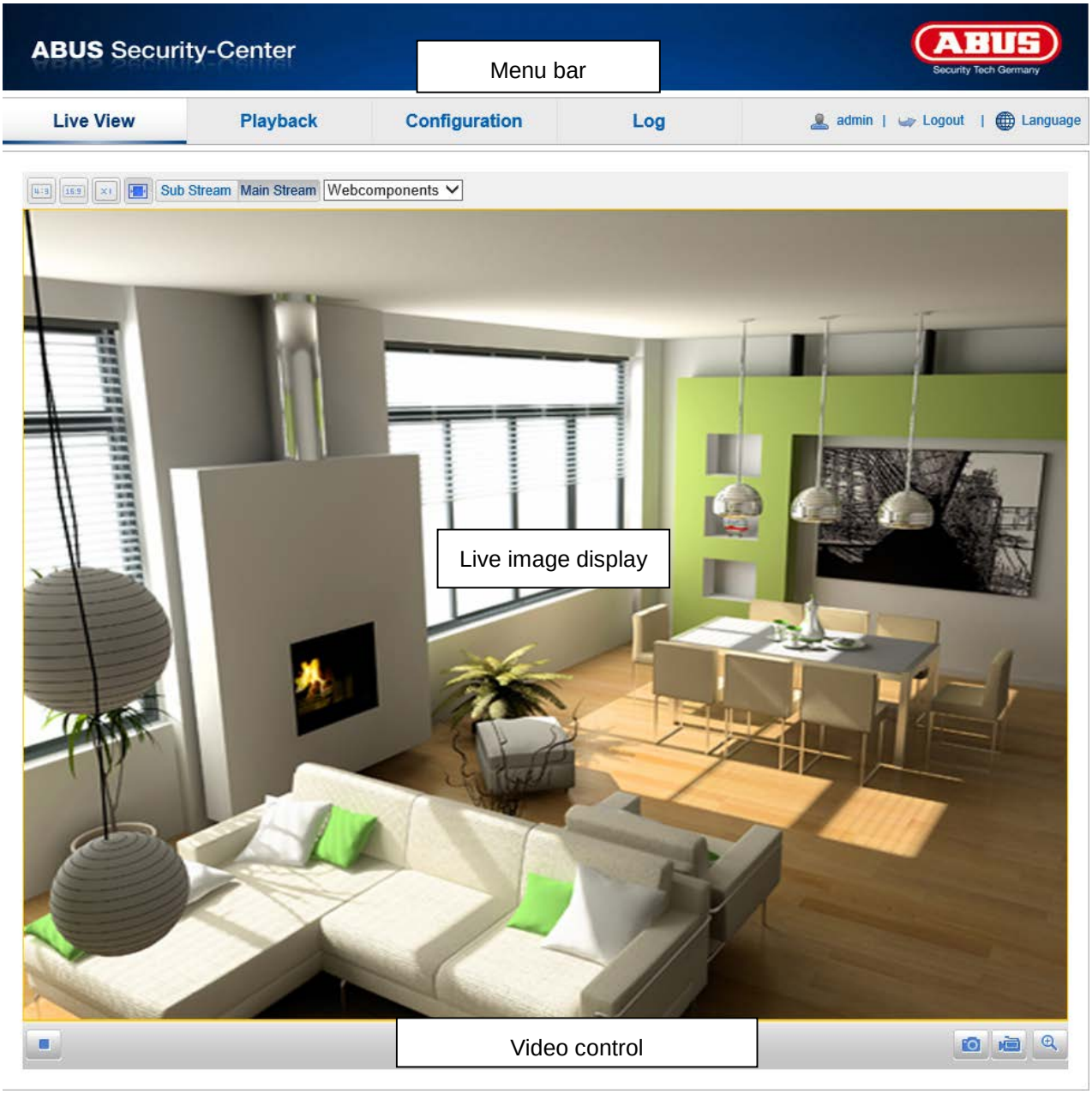
Open Internet Explorer and enter the camera's IP address (e.g. "http://192.168.0.100").

You will then be presented with the following authentication prompt:

-> You are now connected to the network camera and can already see a video stream.

8. User functions

Open the network camera home page. The interface is divided into the following main areas:



8.1. Menu bar

Make a selection by clicking on the appropriate tab: "Live View", "Playback", "Configuration" or "Log".

Button	Description
admin	Display of the user logged on
Abmelden	User logout
Sprache	Selection of the desired language

8.2. Live image display

You can access the full-screen view by double-clicking.

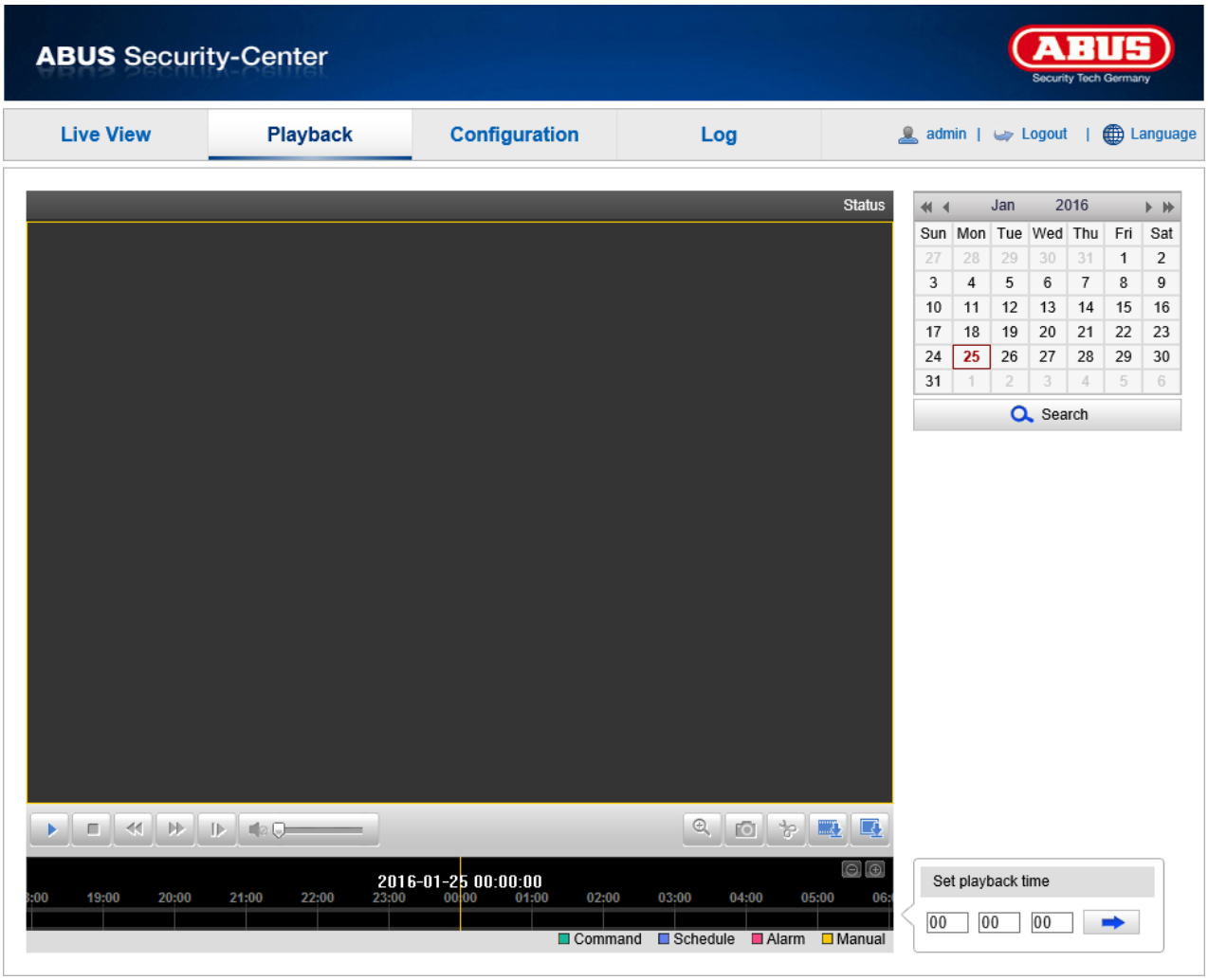
Button	Description
	Activate 4:3 view
	Activate 16:9 view
	Display original size
	Automatically adjust view to browser
	Selection of the streaming type for the live view

8.3. Video control

Button	Description
	Disable live view
	Enable live view
	Instant image (snapshot)
	Start/stop manual recording
	Digital zoom on/off

English

9. Playback



In playback, you can play back data that is recorded on the microSD card or network drive. Select the desired day in the calendar and click on "Search".

The recordings for the selected day are shown in the timeline. The coloured labelling indicate the nature of the event that triggered the recording.

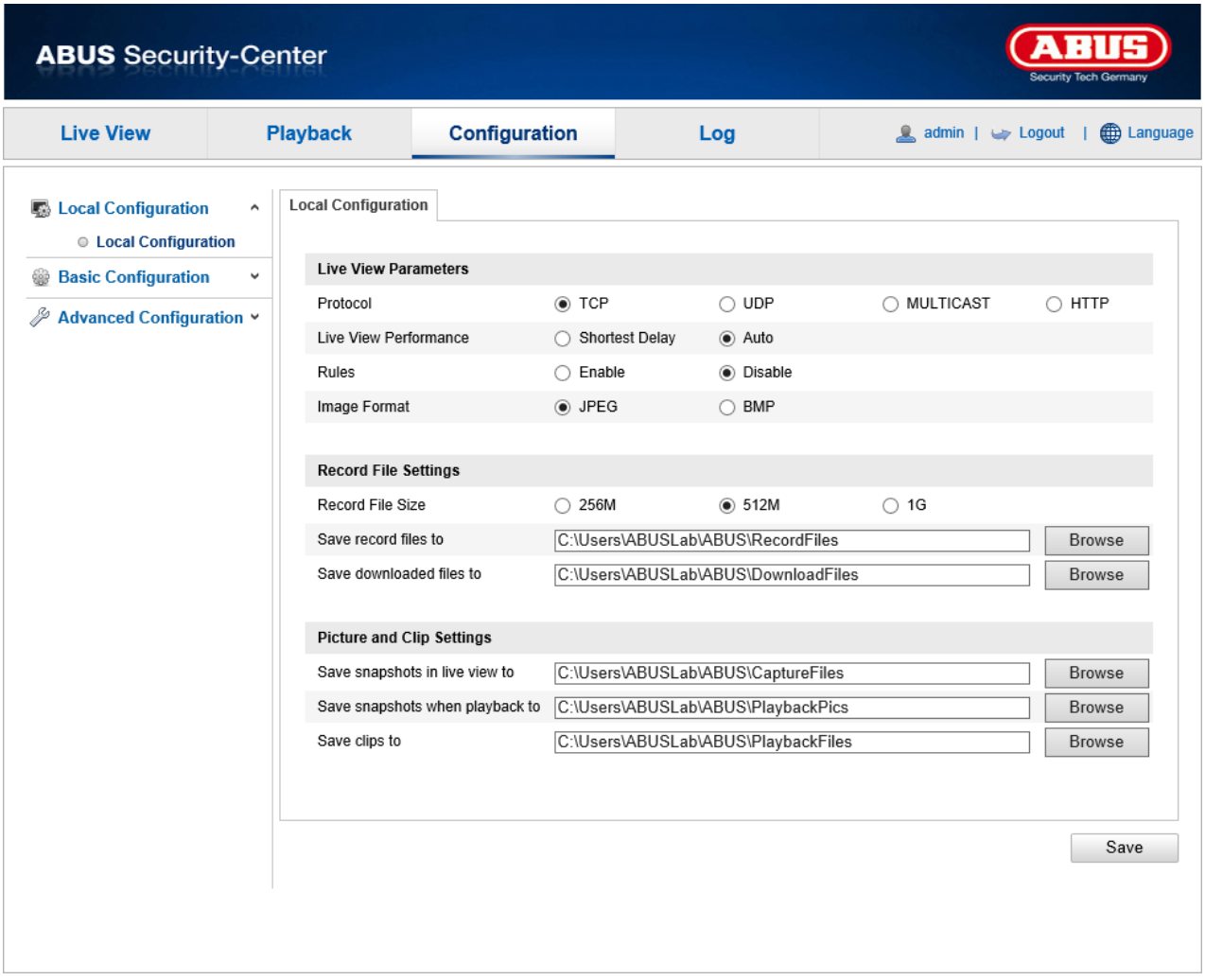
You can set the time of the desired recording under playback time.

10. Configuration

	When making settings in the individual menu items, you must click "Save" first to adopt these settings. The "Save" button can usually be found at the bottom of the individual menu tabs on the right hand side.

10.1. Local Configuration

Under the "Local Configuration" menu item, you can select settings for file paths of the recordings and snapshots.



Live view parameters

Protocol

Choose a protocol via which the camera will send network data.

Live view performance

Select the priority for display in the browser here. The shortest delay provides the best image stream; auto provides better image quality.

Rules

Display of all event animations in the live image (e.g. frame for motion detection). These animations are also recorded to the recording device.

Picture format

Select the encoding format for saving single frames using the browser live interface.

Record file settings

Record file size

Select the size of video sequences for saving videos using the browser live interface.

Save record files to

Select the path for video recording.

Save downloaded files to

Select the path for video files downloaded from the SD card.

Image/clip settings

Live Snapshot. Save As.

Select the encoding format for saving images using the browser live interface.

Snapshots during playback

Select the path for saving images during playback.

Save clips to

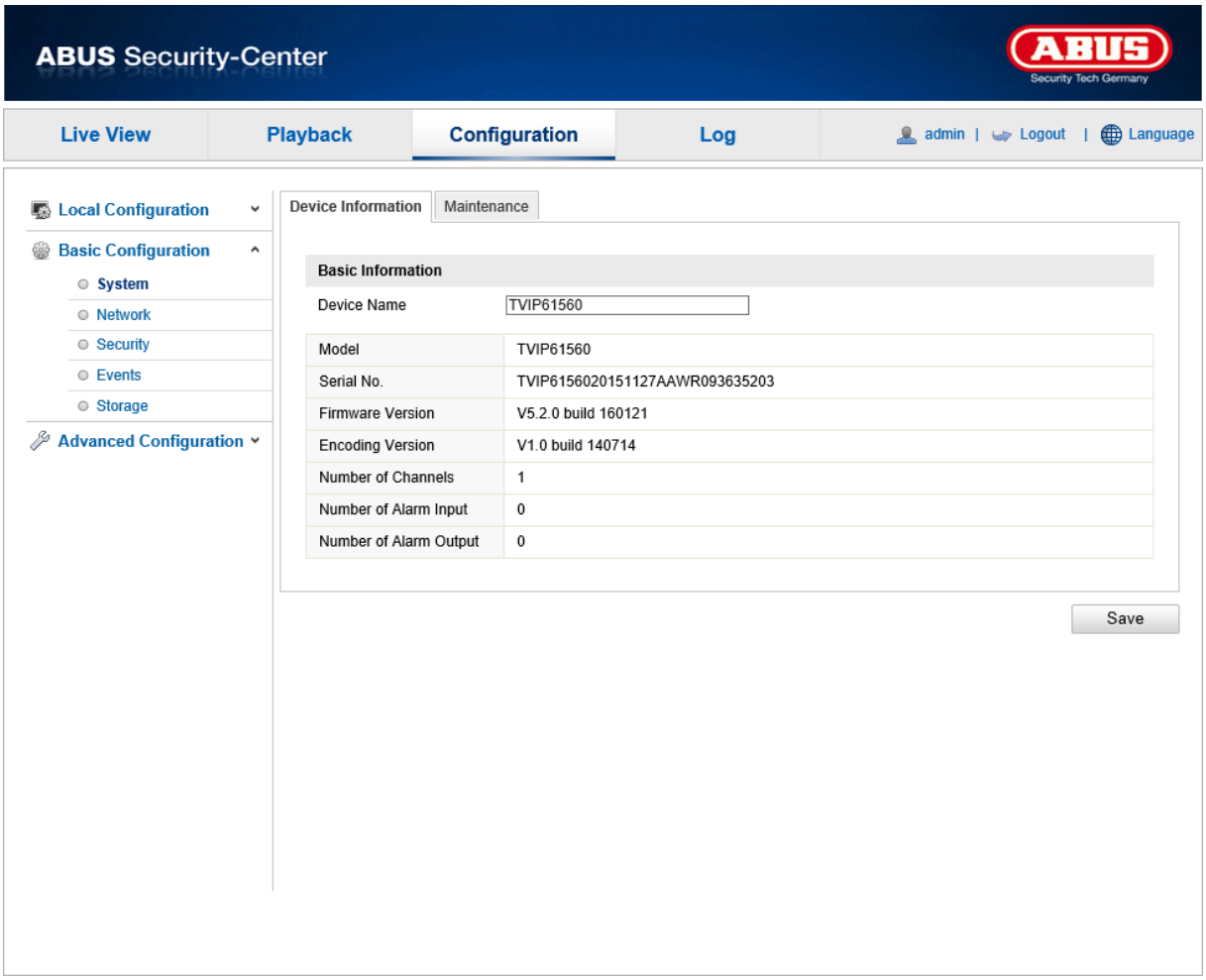
Select the path for saving video clips during playback.

English

10.2. Basic Configuration

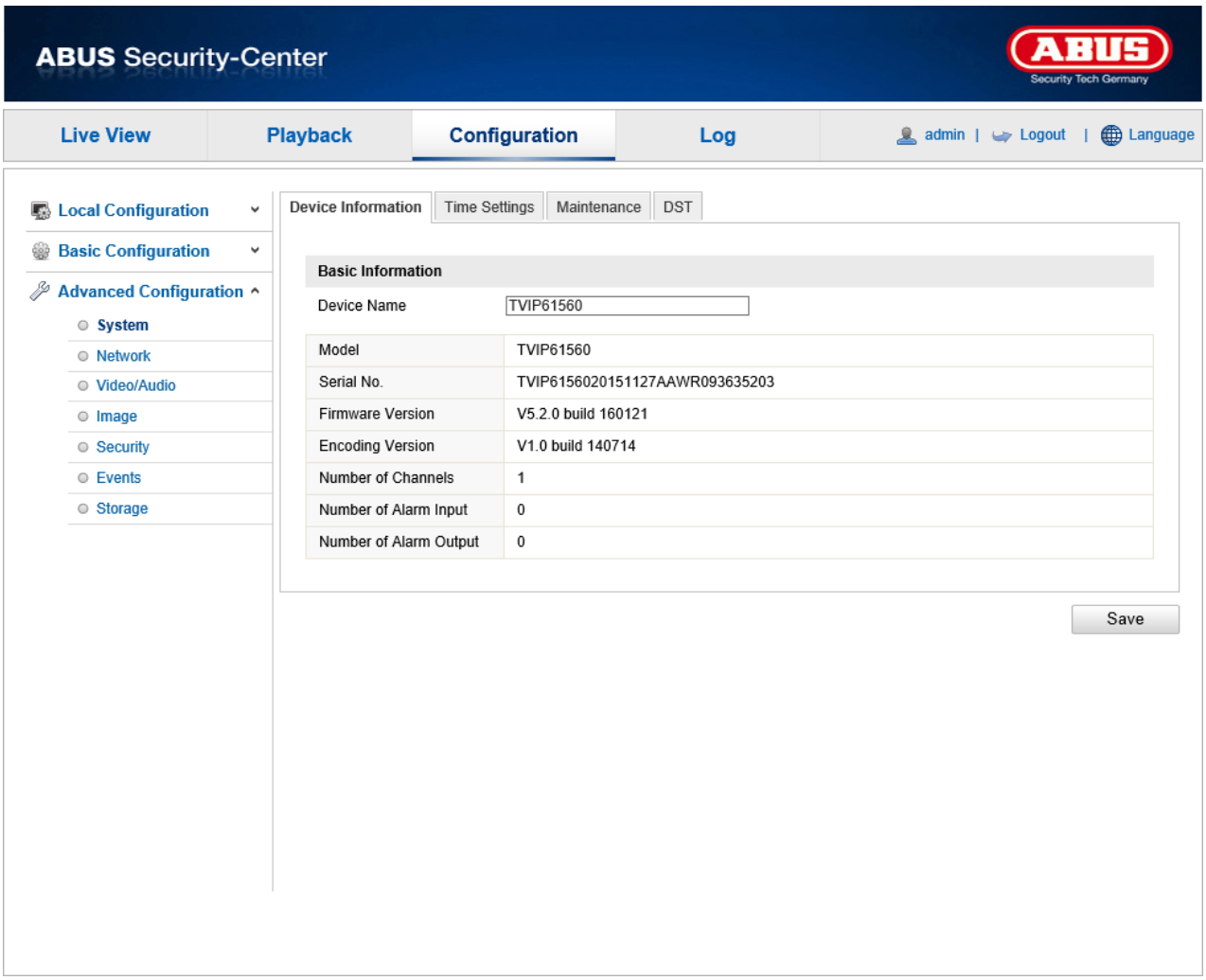
Under "Basic Configuration", you will find the relevant settings for network configuration, motion detection, saving to an SD card and sending emails.

All settings located under "Basic Configuration" can also be found under the menu item "Advanced Configuration". Please note the "Available in mode" column for the "Advanced Configuration" menu items.



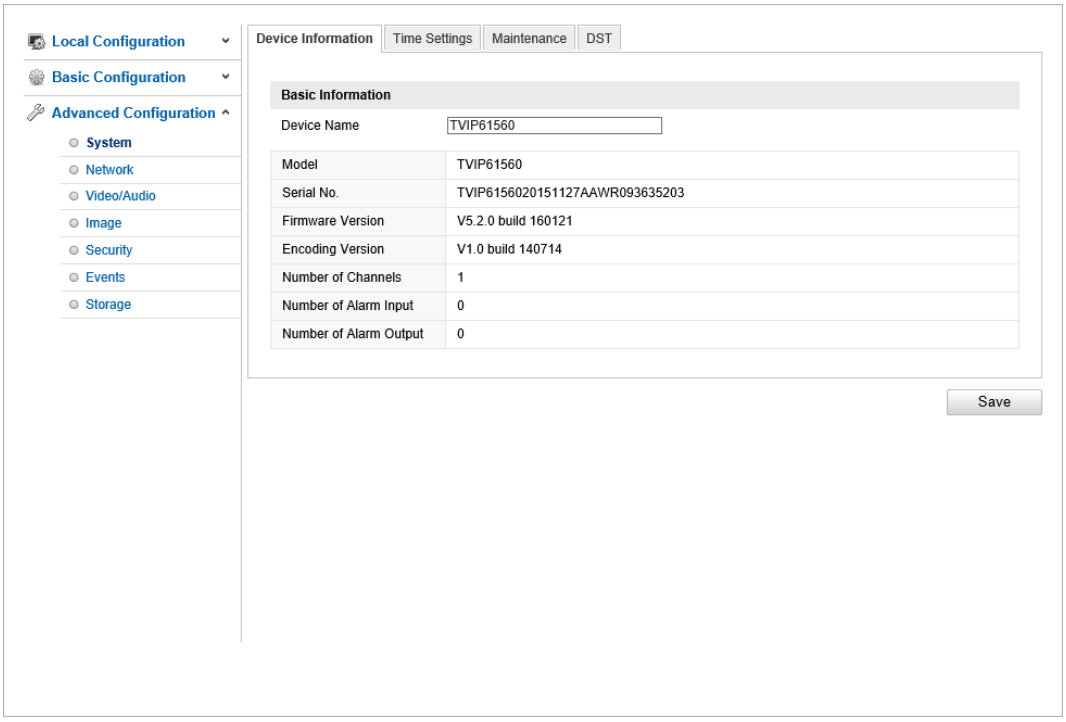
10.3. Advanced configuration

10.3.1. System



Menu item	Description	Available in mode
Device Information	Display of device information	Basic Configuration, Advanced Configuration
Time Settings	Configuration of the time specification	Advanced Configuration
Maintenance	Configuration of system maintenance settings	Basic Configuration, Advanced Configuration
DST	Configuration of the automatic daylight saving time switch	Advanced Configuration
Service	Configuration of special functions	Advanced Configuration

10.3.1.1. Device Information



Basic Information

Device Name:

You can specify a device name for the camera here. Click on "Save" to apply the change.

Model:

Model number display

Serial No.:

Serial No. display

Firmware Version:

Firmware version display

Encoding Version:

Encoding version display

Number of Channels:

Display of the number of channels

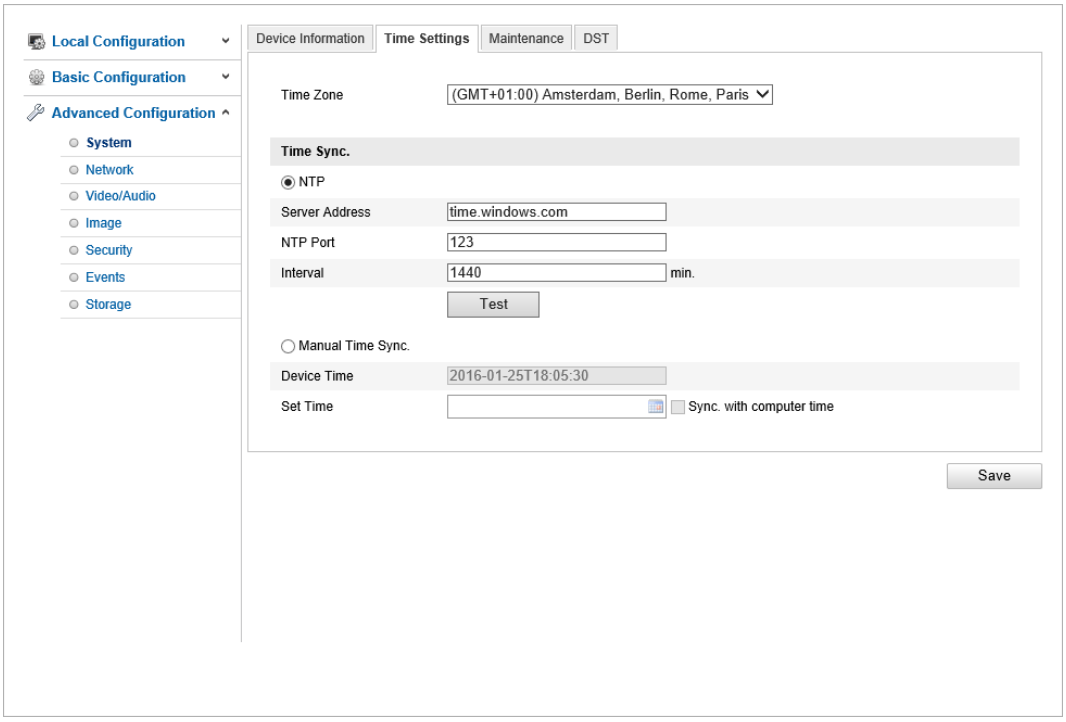
Number of Alarm Input:

Displays the alarm inputs

Number of Alarm Output:

Displays the alarm outputs

10.3.1.2. Time Settings



Time Zone
Time zone selection (GMT).

Time Sync.
NTP
Using the Network Time Protocol (NTP), it is possible to synchronise the time of the camera with a time server.
Enable NTP to use this function.

Server Address
IP server address of the NTP server.

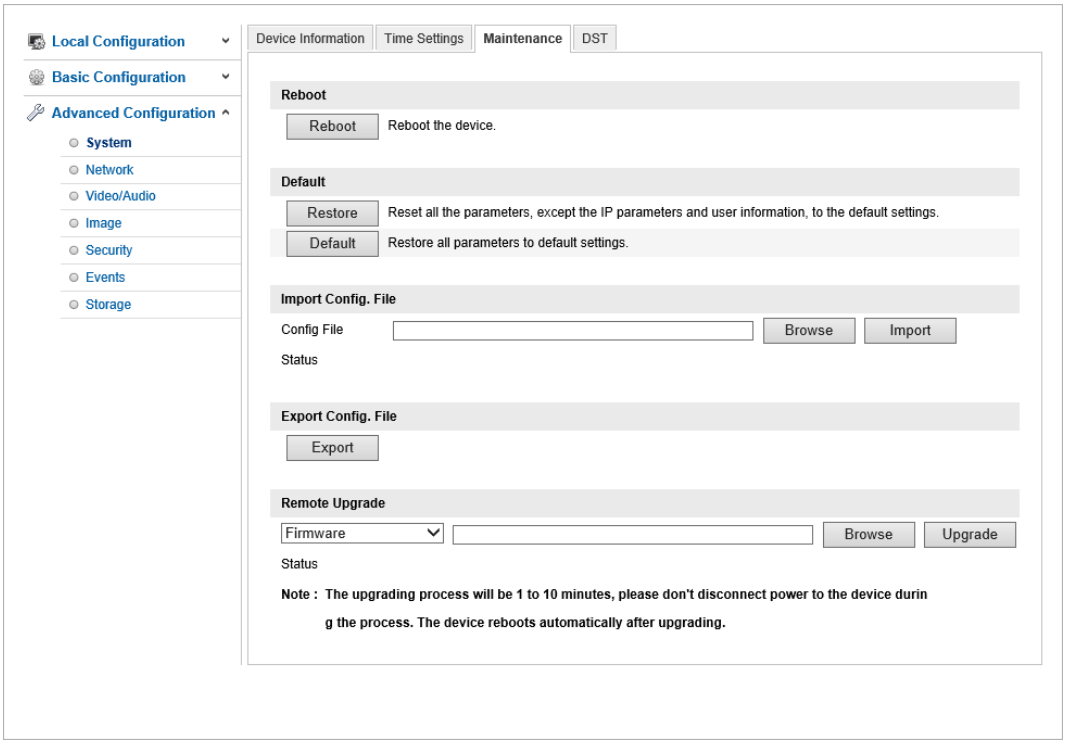
NTP Port
Network port number of the NTP service (default: port 123)

Interval
The interval for synchronising the time is entered here in minutes.
Click on "Test" to start a test run.

Manual Time Sync.
Device Time
Computer device time display.

Set Time
Display of the current time using the time zone setting.
Click on "Sync. with computer time" to adopt the device time on the computer.

10.3.1.3. Maintenance



Reboot
Click "Reboot" to reboot the device.

Default
Restore
Click on "Restore" to reset all the parameters, except the IP parameters and user information, to the default settings.

Default
Select this item to restore all parameters to default settings.

Import Config. File
Config File
Select a file path to import a configuration file here.

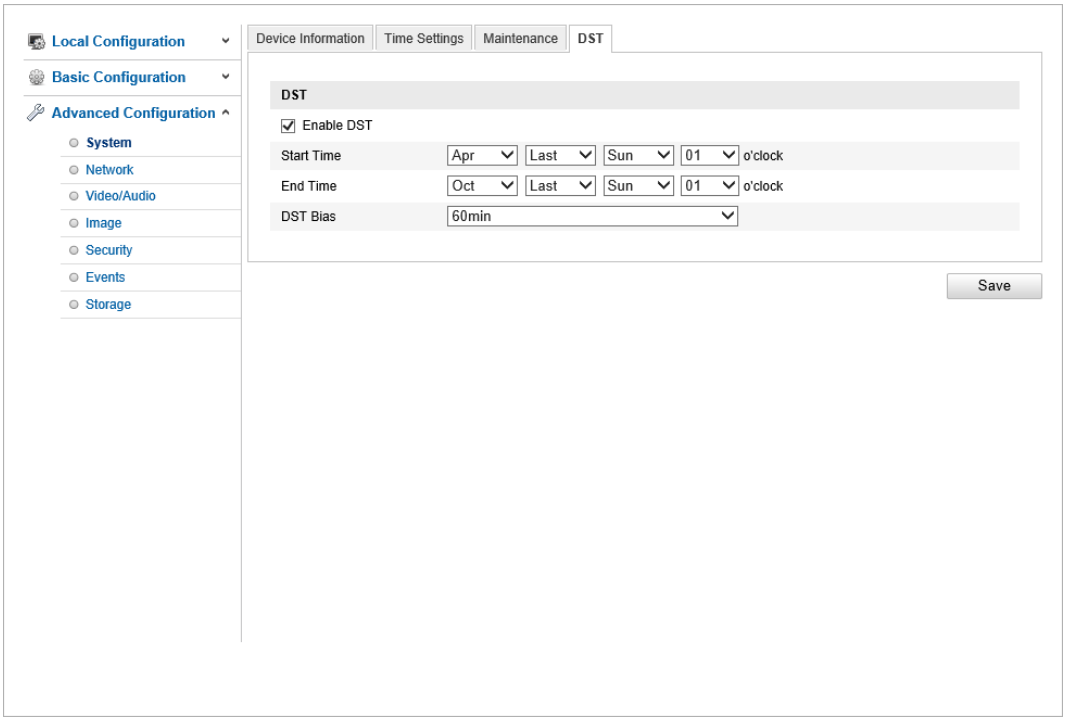
Status
Display of the import status.

Export Config. File
Click "Export" to export a configuration file.

Remote Upgrade
Firmware
Select the path to upgrade the camera with new firmware.

Status
Display of the upgrade status.

10.3.1.4. DST



DST

Enable DST

Select "Enable DST" to adjust the system time automatically to daylight saving time.

Start time

Specify the time for switching to daylight saving time.

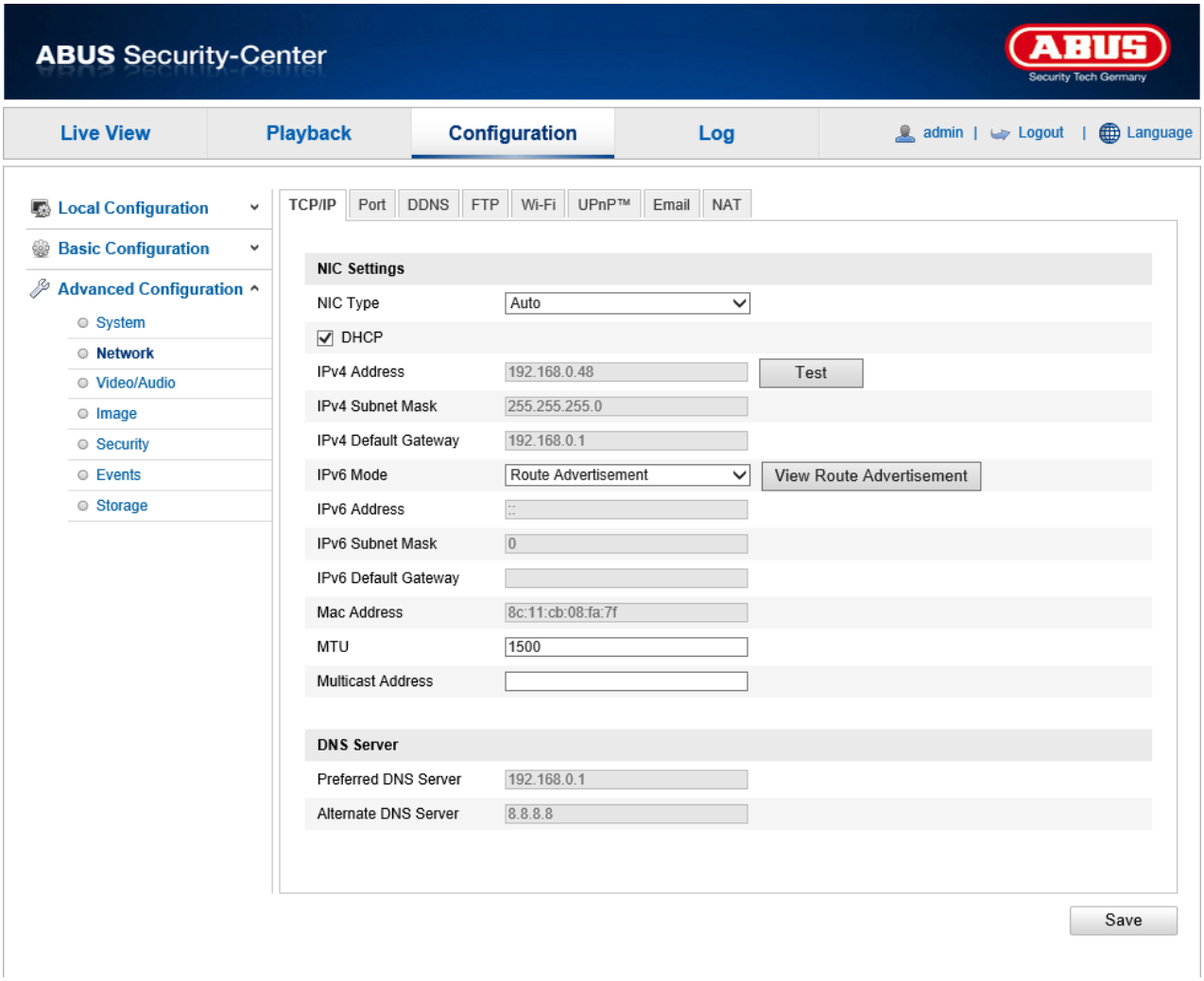
End Time

Specify the time for switching to standard time.

DST Bias

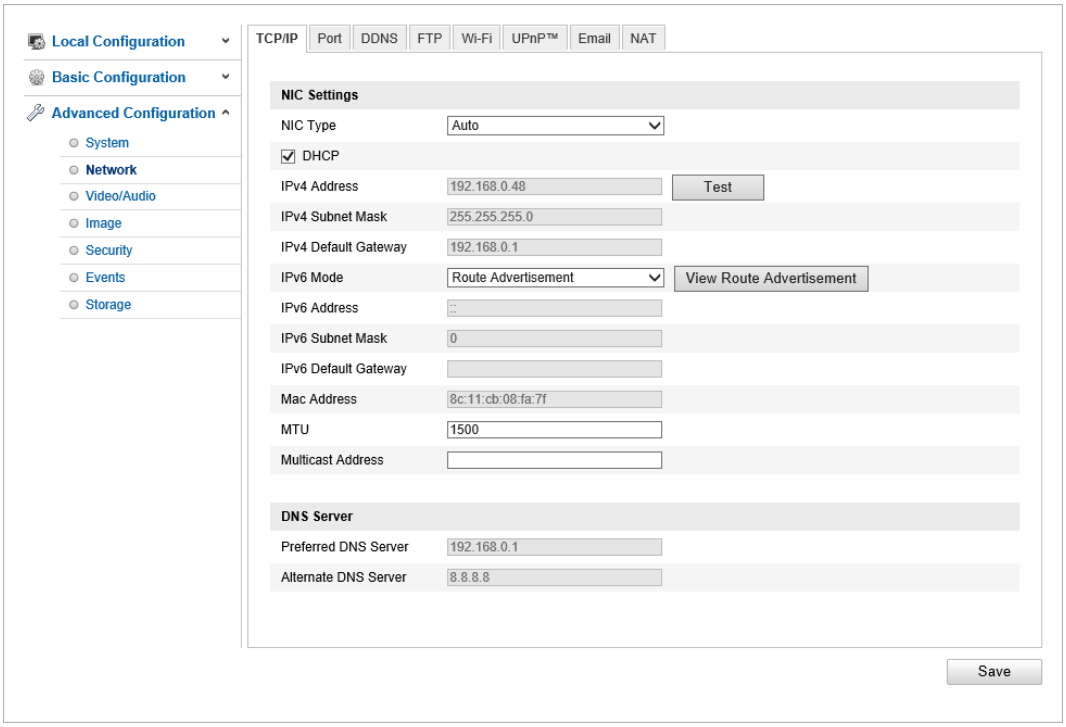
Set the time difference in minutes here.

10.3.2. Network



Menu item	Description	Available in mode
TCP/IP	Settings for the TCP/IP data	Basic Configuration, Advanced Configuration
Port	Settings for the used ports	Advanced Configuration
DDNS	Settings for the DDNS data	Advanced Configuration
FTP	FTP server settings	Advanced Configuration
Wi-Fi	Settings for the W-LAN access data	Basic Configuration, Advanced Configuration
UPnP™	Settings for the UPnP data	Advanced Configuration
Email	Email data settings	Basic Configuration, Advanced Configuration
NAT	Settings for the NAT data	Advanced Configuration

10.3.2.1. TCP/IP



NIC settings
To be able to operate the camera via a network, the TCP/IP settings must be configured correctly.

DHCP
If a DHCP server is available, click on "DHCP" to apply an IP address and other network settings automatically. The data is transferred automatically from the server and cannot be changed manually.

If no DHCP server is available, please enter the following data manually.

IPv4 Address
Setting of the IP address for the camera

IPv4 Subnet Mask
Manual setting of the subnet mask for the camera

IPv4 Default Gateway
Setting of the default router for the camera

IPv6 Mode
Manual: Manual configuration of IPv6 data.
DHCP: The IPv6 connection data is provided by the DHCP server.
Route Advertisement: The IPv6 connection data is provided by the DHCP server (router) in connection with the ISP (Internet Service Provider).

IPv6 Address
Display of the IPv6 address. The address can be configured in the IPv6 "manual" mode.

IPv6 Subnet Mask
Display of the IPv6 subnet mask.

IPv6 Default Gateway
Display of the IPv6 default gateway (default router).

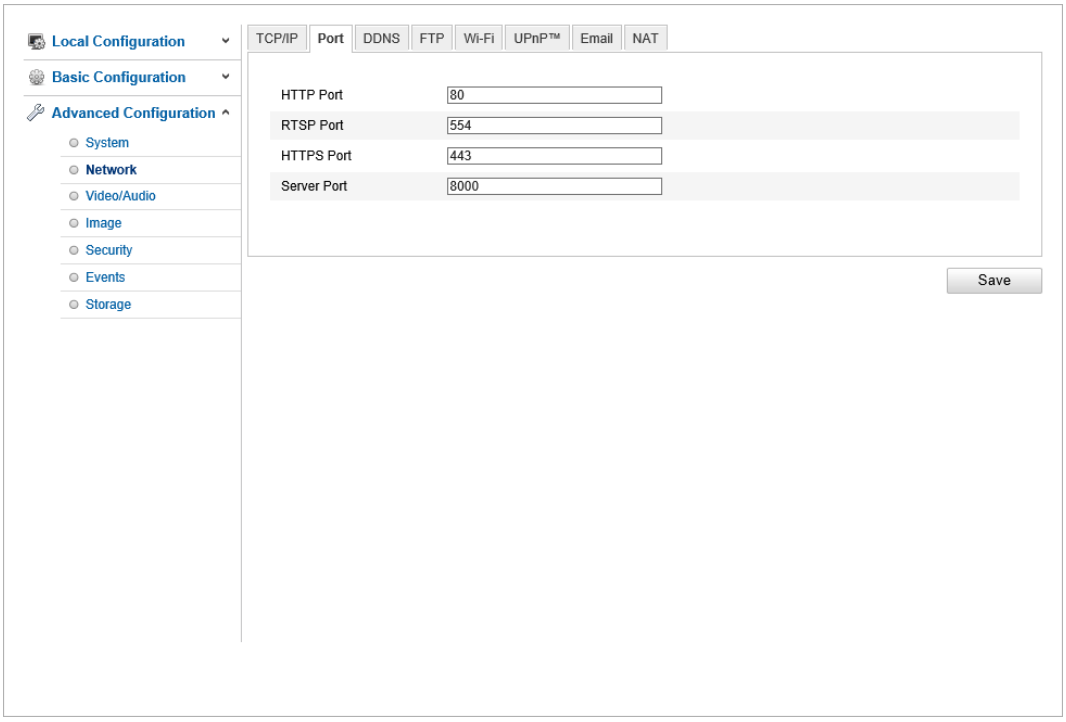
MAC Address
The IPv4 hardware address of the camera is displayed here. This cannot be changed.

MTU
Setting of the transmission unit. Select a value between 500 and 9676. 1500 is set by default.

DNS Server
Preferred DNS Server
DNS server settings are required for some applications (for example, sending emails). Enter the address of the preferred DNS server here.

Alternative DNS Server
If the preferred DNS server cannot be reached, this alternative DNS server is used. Please store the address of the alternative DNS server here.

10.3.2.2. Port



If you wish to enable external access to the camera, the following ports must be configured.

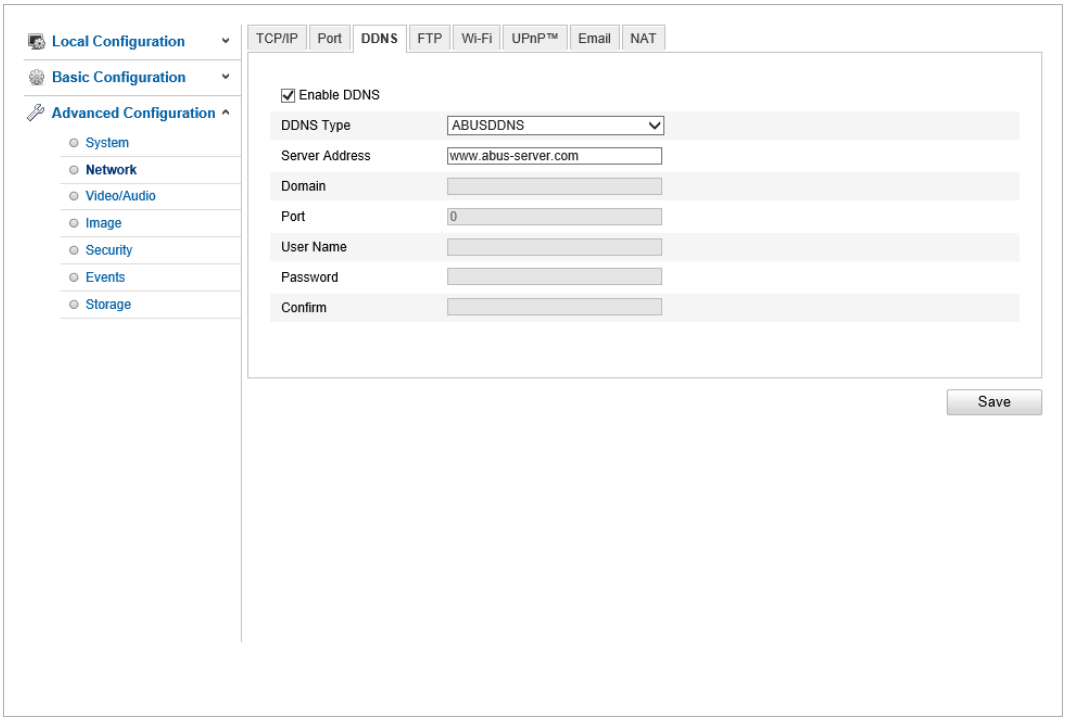
HTTP Port
The default port for HTTP transmission is 80. This port can alternatively be assigned a value in the range of 1024~65535. If several cameras are located on the same subnetwork, each camera should have its own unique HTTP port.

RTSP port
The default port for RTSP transmission is 554. This port can alternatively be assigned a value in the range of 1024~65535. If several cameras are located on the same subnetwork, each camera should have its own unique RTSP port.

HTTPS Port
The standard port for HTTPS transmission is 443.

SDK port (control port)
The standard port for SDK transmission is 8000. Communication port for internal data. As an alternative, this port can be assigned a value in the range 1025 ~ 65535. If several IP cameras are located in the same subnetwork, each camera should have its own unique server port.

10.3.2.3. DDNS



Enable DDNS
Enable or disable the DDNS function.

DDNS type
Select the DDNS type. You can choose between "DynDNS" and "ABUS DDNS".

Server Address
Select a DDNS service provider. You must have registered access to this DDNS service provider (e.g. www.dyndns.org).
If you select "ABUS DDNS" as the DDNS type, the server address is stored automatically.

Domain
Enter the registered domain name (host service) here (e.g. myIPcamera.dyndns.org).

Port
Store the port for port forwarding here.

User name
User ID of your DDNS account

Password
Password of your DDNS account

Confirm
You must confirm your password here.

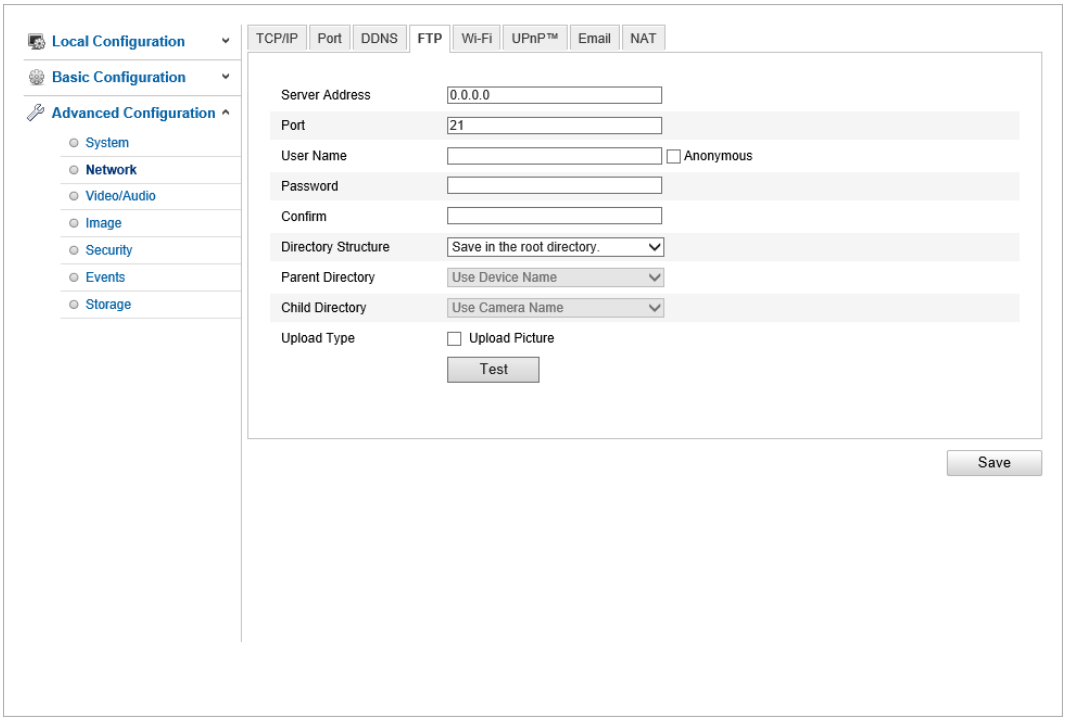
English

ABUS DDNS

1. To be able to use the ABUS DDNS function, you first need to set up an account at www.abus-server.com. Please read the FAQs on this topic on the website.
2. Select the "Enable DDNS" checkbox and select "ABUS DDNS" as the DDNS type.
3. Apply the data with **"Save"**. The IP address of your internet connection is now updated on the server every minute.

	Port forwarding of all relevant ports (at least RTSP + HTTP) must be set up in the router in order to use DynDNS access via the router.

10.3.2.4. FTP



Server Address
Enter the IP address or host name of the FTP server to which images are to be uploaded here.

Port
Enter your FTP server's port here. Ports 21 or 20 are used as standard.

User name
Enter the user name here. Make sure that the user has the necessary permissions on the FTP server.

Password
Enter the user's password here.

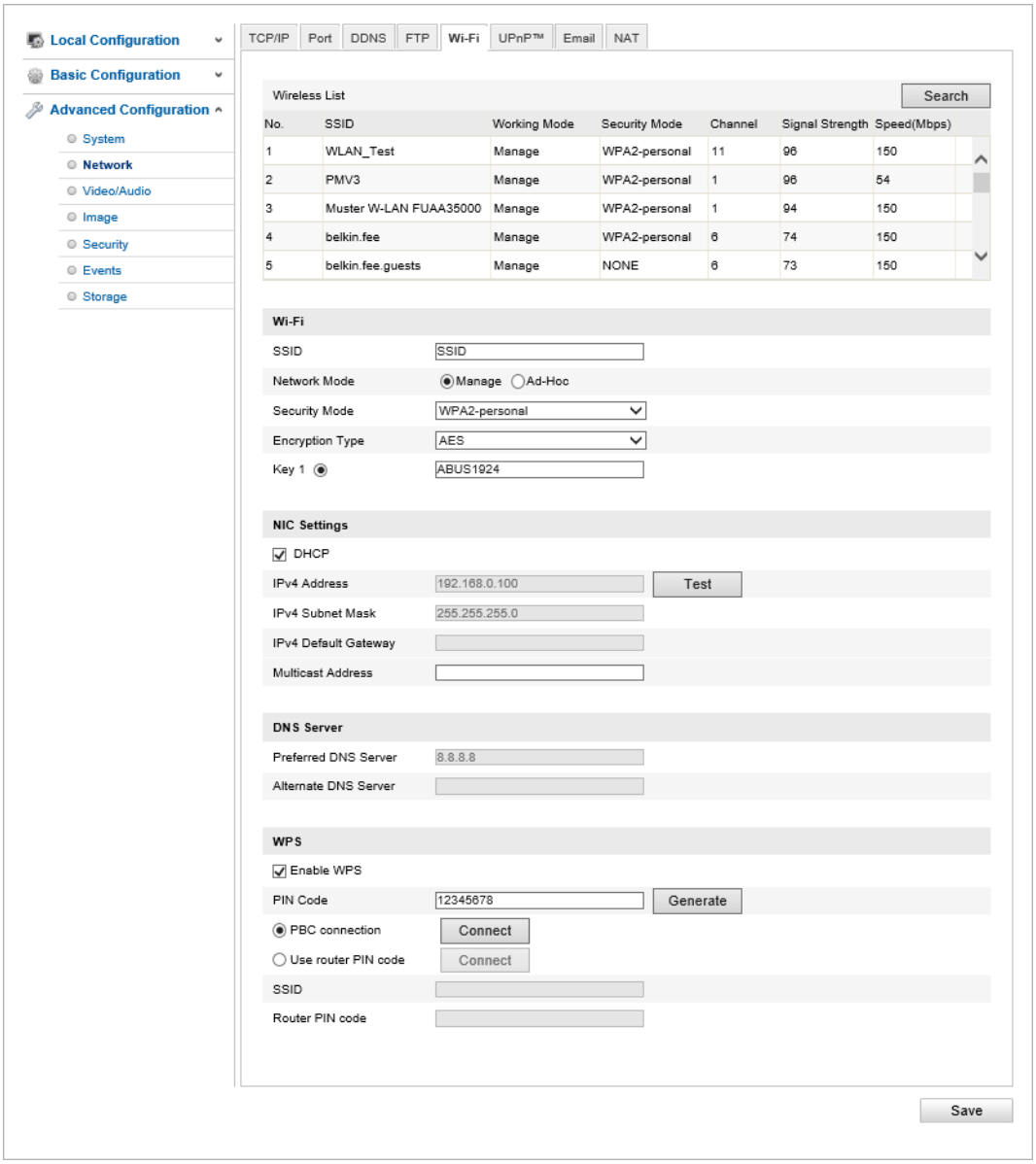
Confirm
Confirm the password by entering it again.

Directory Structure
Adjust the saving path on the FTP server here.

Upload Type
Select this checkbox to upload an image to the FTP server in the event of an incident.

	Make sure that the FTP server is only used for the event-triggered snapshot (see Events – Snapshot).

10.3.2.5. Wi-Fi



The following settings must be made to create a Wi-Fi connection between the camera and the router.

Wi-Fi list
Click "Search" to display available networks in the immediate vicinity.

	Please note that hidden networks are not shown in the list!

Wi-Fi
SSID
Enter the name of the network here.

Network Mode
You can choose between "Manage" and "Ad-Hoc" here.
Use "Manage" for conventional home routers or access points.

Security Mode
Here you can select the encryption type for your network.

Encryption Type:
Here you can select the encryption type for the network.

Key 1
Enter the network key (password) for access to the network here.

NIC settings
To be able to operate the camera via a network, the TCP/IP settings must be configured correctly. Here, you can configure the settings for the WLAN connection.

DHCP
If a DHCP server is available, click on "DHCP" to apply an IP address and other network settings automatically. The data is transferred automatically from the server and cannot be changed manually.

If no DHCP server is available, please enter the following data manually.

IPv4 Address
Setting of the IP address for the camera

IPv4 Subnet Mask
Manual setting of the subnet mask for the camera

IPv4 Default Gateway
Setting of the default router for the camera

WPS
The WPS function allows simple set-up of a wireless connection of the camera to a home router or access point, provided that these support this function.

Enable WPS
Enable this function to use a WPS connection.

PIN Code
The PIN code is required for creating the connection. By default, this is set to 12345678. Click on "Generate" to generate a new code.

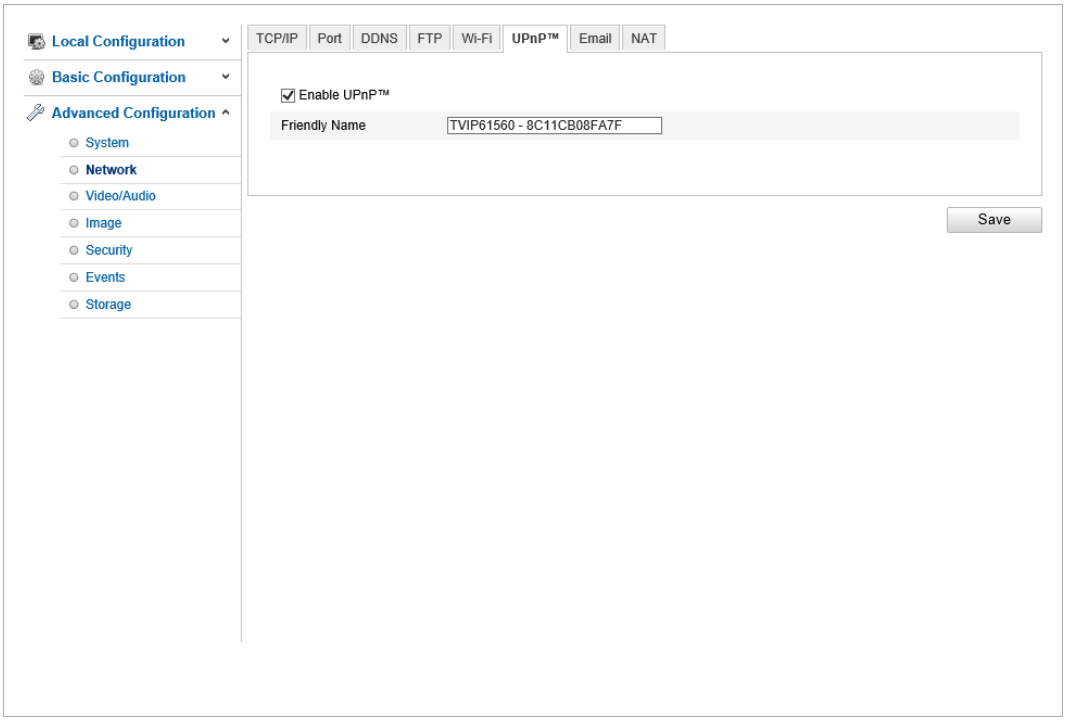
PBC Connection
If your router has a WPS button, enable this function.

1. First, press the WPS button on the router.
2. Then click on "Connect" within two minutes.
3. The WLAN connection between the camera and router is established after a short time.

PIN code of the router
Here, you can establish a WPS connection manually by entering the SSID and the router PIN code.

SSID:	Enter the SSID for the desired network.
Router PIN Code:	Enter the router PIN code. Refer to the user guide from your router's manufacturer to read out the WPS PIN code.

10.3.2.6. UPnP™

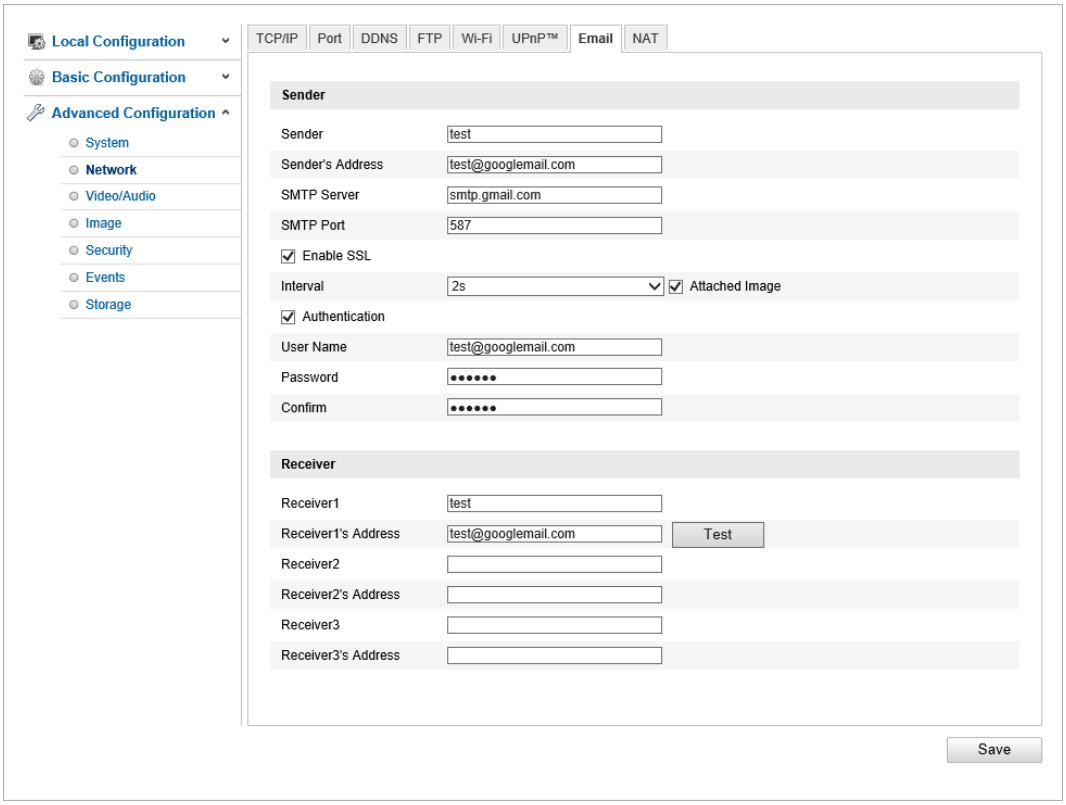


The UPnP (Universal Plug and Play) function makes it easy to control network devices in an IP network. This allows the network camera to be seen in the Windows network environment (e.g. as a network device).

Enable UPnP™
For enabling or disabling the UPnP function.

Friendly Name
Display of the MAC address of the camera

10.3.2.7. Email



You can apply the settings for sending emails here.

Sender

Sender

Enter a name here to be displayed as the sender.

Sender's Address

Enter the email address of the sender here.

SMTP server

Enter the IP address or host name of the SMTP server here. (For example: smtp.gmail.com)

SMTP port

Enter the SMTP port here. This is configured to 587 by default.

Enable SSL

Select the SSL function if the SMTP server requires this.

Interval

Set the interval between sending emails with attached images here.

Attached Image

Enable this function if images are to be attached to the email in the event of an alarm.

Authentication
If the email server in use requires authentication, enable this function to be able to log onto the server with authentication.
User names and passwords can only be entered once this function has been enabled.

User name
Enter the user name of the email account here.

Password
Enter the password of the email account here.

Confirm
Confirm the password by entering it again.

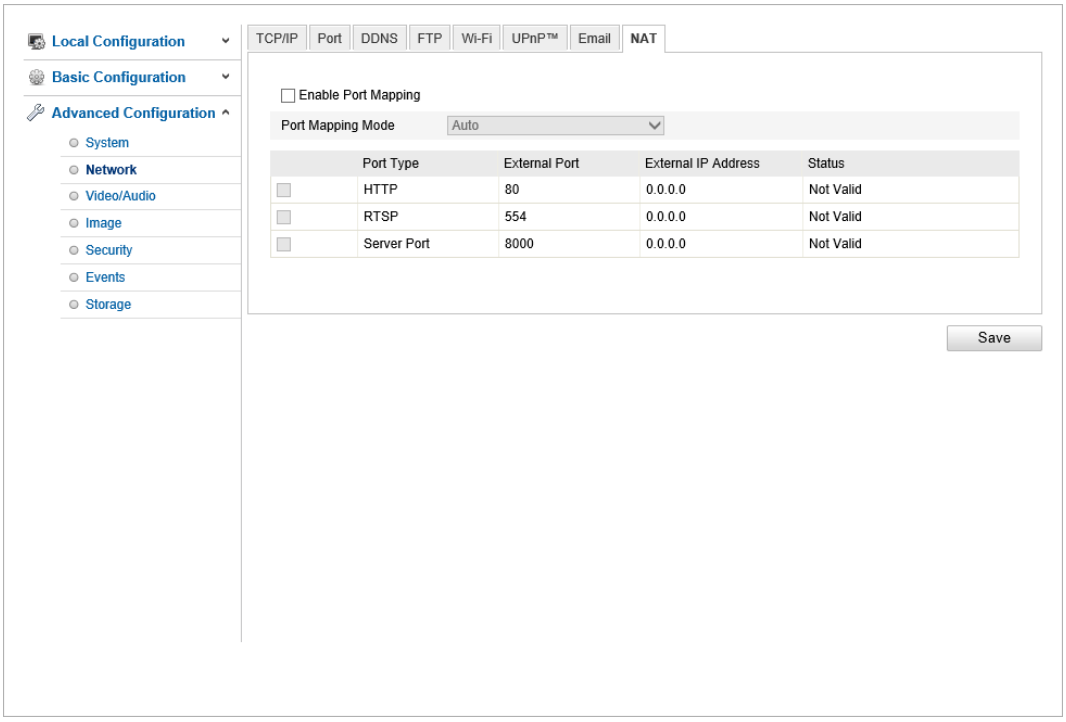
Receiver
Receiver1/Receiver2/Receiver3
Enter the name of the receiver here.

Receiver1's Address/Receiver2's Address/Receiver3's Address
Enter the email address of the person to be informed here.
Click on "Test" to send a test email.

Test
Press the "Test" button to send a test message. If this does not work, first make sure that the correct settings have been configured.

	Please bear in mind that some email providers require you to configure settings for your email account in advance, prior to sending any emails. Check with your email provider if you think this may be applicable.

10.3.2.8. NAT



Enable Port Mapping
This enables Universal Plug and Play port forwarding for network services. If your router supports UPnP, using this option means that port forwarding is enabled automatically.

Port Mapping Mode
Select here whether you wish to conduct port mapping automatically or manually.

Protocol Name:
HTTP
The default port for HTTP transmission is 80. As an alternative, this port can be assigned a value in the range 1025 ~ 65535. If several IP cameras are located on the same subnetwork, each camera should have its own unique HTTP port.

RTSP
The default port for RTSP transmission is 554. As an alternative, this port can be assigned a value in the range 1025 ~ 65535. If several IP cameras are located on the same subnetwork, each camera should have its own unique RTSP port.

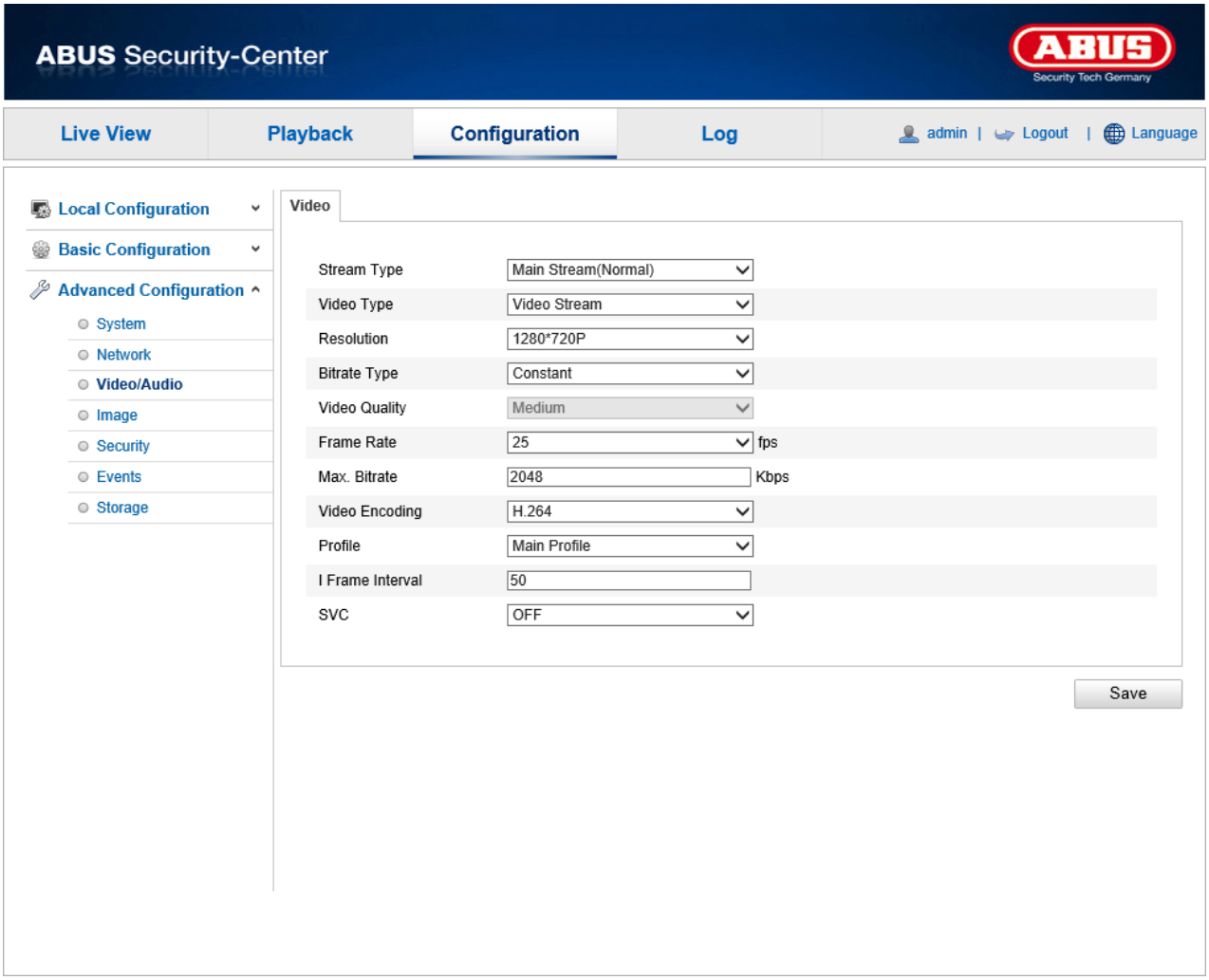
Server Port (control port)
The standard port for SDK transmission is 8000. Communication port for internal data. As an alternative, this port can be assigned a value in the range 1025 ~ 65535. If several IP cameras are located in the same subnetwork, each camera should have its own unique server port.

External Port
You can only change ports manually here if the "Port Mapping Mode" was set to manual.

External IP Address
Display the external IP address for mobile access.

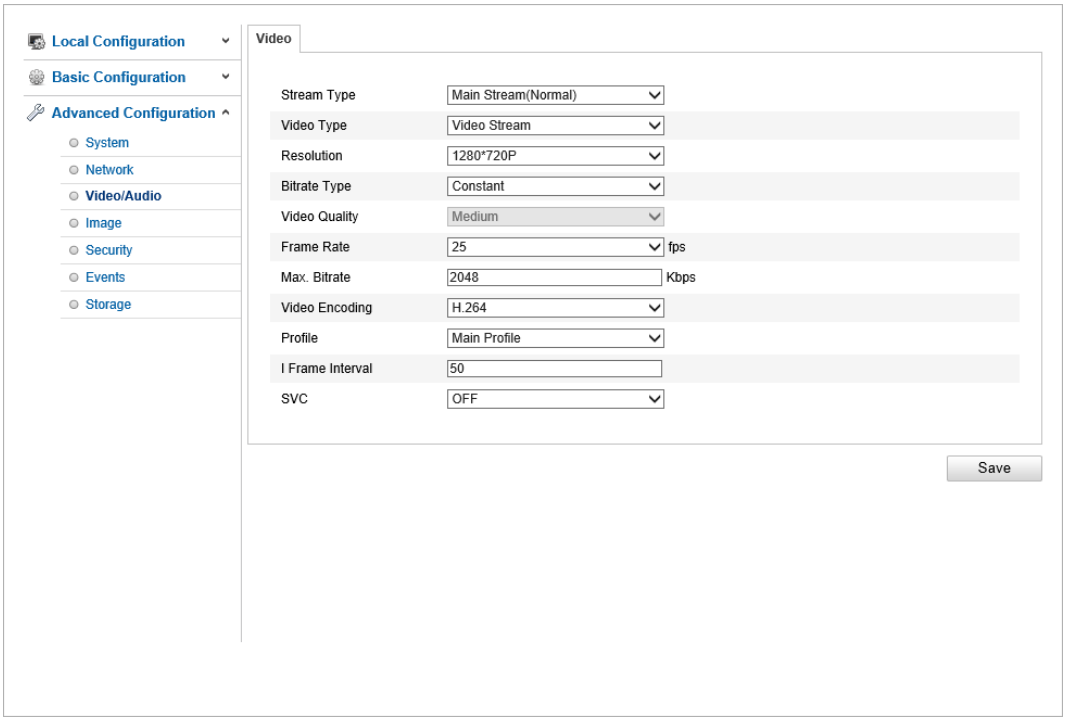
Status
Displays whether the external port entered is valid or not valid.

10.3.3. Video/Audio



Menu item	Description	Available in mode
Video	Settings for video output	Advanced Configuration

10.3.3.1. Video



Stream Type

Select the stream type that you wish to set for the camera. Select "Main Stream (Normal)" for recording and live view with good bandwidth. Select "Sub Stream" for live view with restricted bandwidth.

Video Type

Set the video type for the selected stream here.

Resolution

Set the resolution of the video data here. Depending on the camera model you can choose between 1280*720p and 1280*960;

Bitrate Type

Specifies the bitrate of the video stream. The video quality can differ depending on the intensity of movement. You have the choice between a constant bitrate and a variable bitrate.

Max. Bitrate

The bitrate of the video stream is set to a certain value. Set a max. bitrate of between 32 and 16384 Kbps. A higher value means better video quality; however, this requires more bandwidth and consequently more storage space.

Video Quality

This menu item is only available if you have selected a variable bitrate. Set the video quality of the video data here. The video quality can differ depending on the intensity of movement. You can choose from six different levels of video quality: "Lowest", "Lower", "Low", "Medium", "Higher" or "Highest".

Frame rate

Specifies the frame rate in frames per second.

Video Encoding

Select a default for video encoding. You can choose between H.264 and MJPEG.

Profile

here you can select the profile type for the video codec. A profile is standardised and determines the parameters that should be used for encoding.

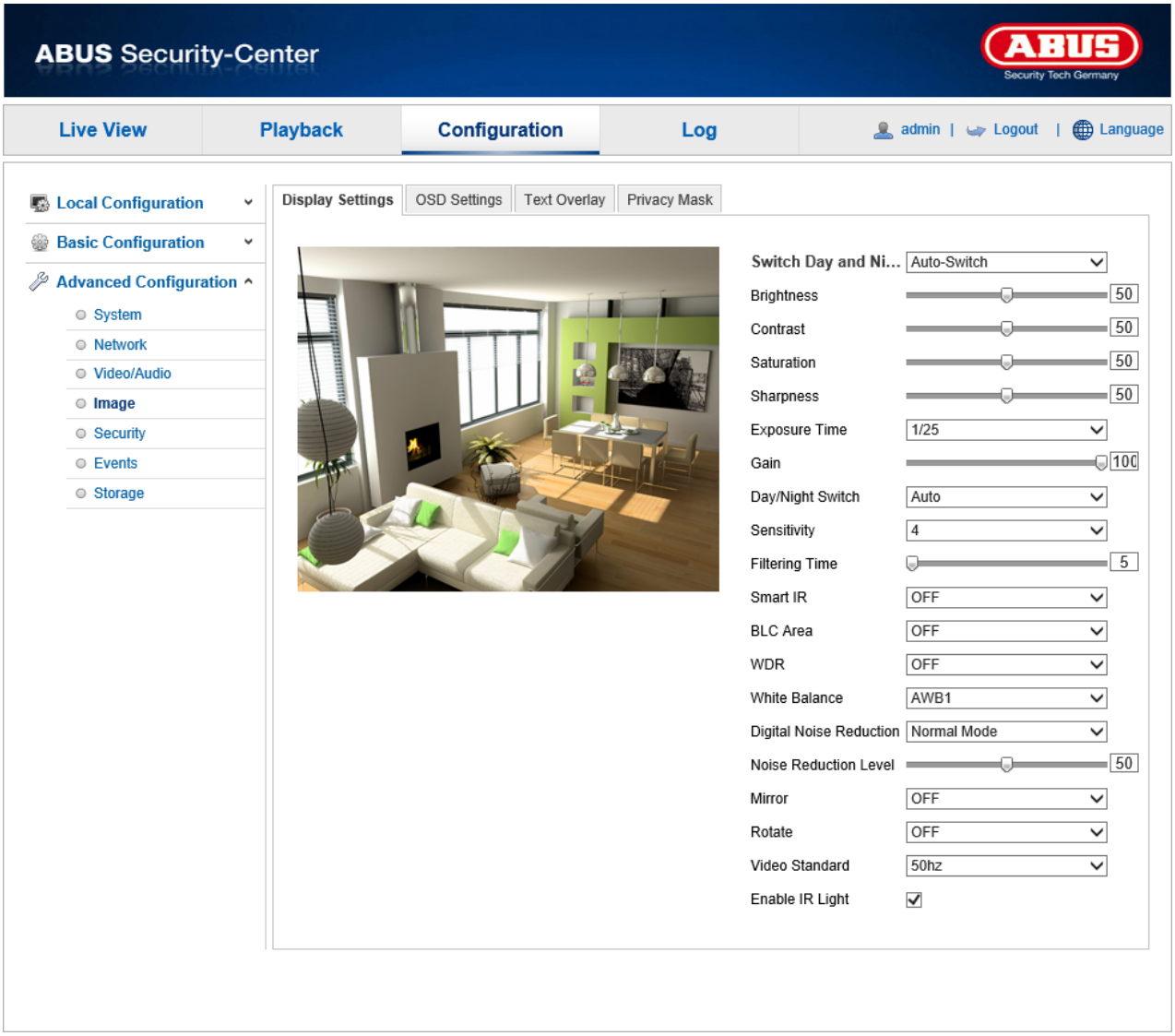
I frame interval

select how often an I frame should be sent (H.264 only). The more often an I frame (full image) is sent, the better the video quality is, but the more bandwidth is required.

SVC

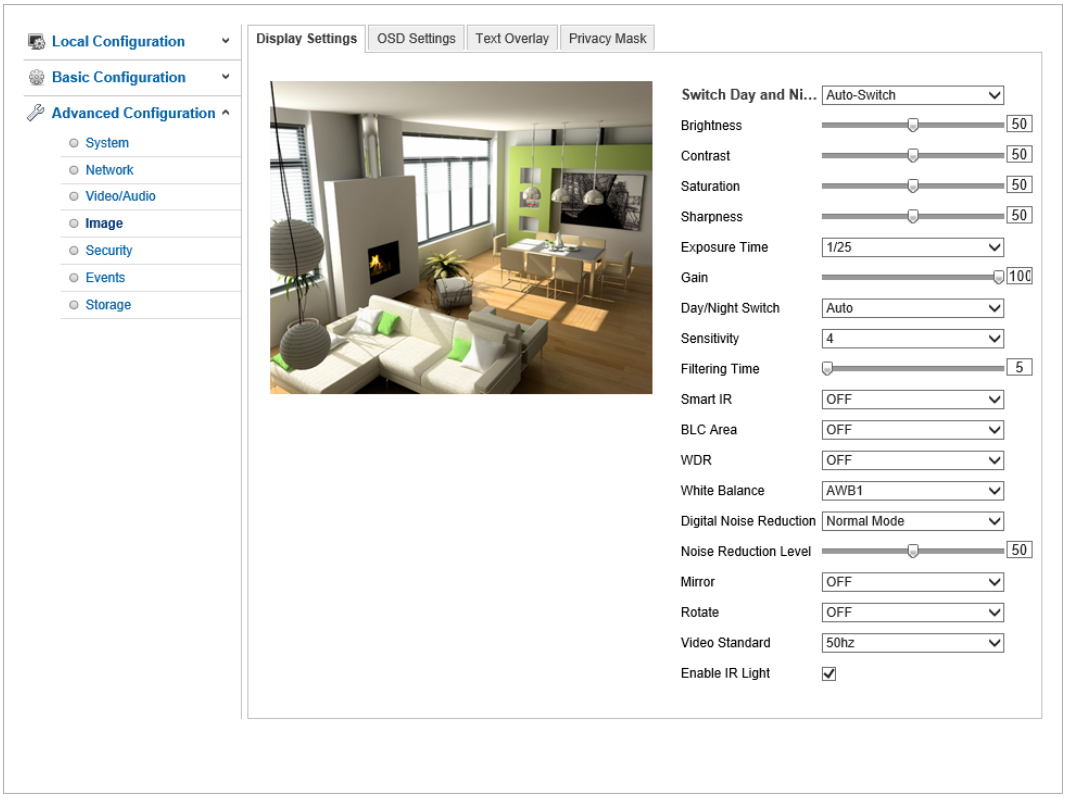
If the SVC is enabled, the live image will be adjusted to reflect the bandwidth available to the user.

10.3.4. Image



Menu item	Description	Available in mode
Display Settings	Displaying parameter settings	Advanced Configuration
OSD Settings	Setting the date and time format	Advanced Configuration
Text Overlay	Adding text fields	Advanced Configuration
Privacy masking	Adding privacy masking	Advanced Configuration

10.3.4.1. Display Settings



You can use this menu item to set the picture quality of the camera, including brightness, sharpness, contrast, etc.

	Please note: The display setting parameters can vary depending on the model.

Day and night switching
Here, you have the option between automatic day & night switch and the scheduled switch. A start and end time must be saved for the day mode here.
The following settings can be made individually for the day or night mode.

Brightness
Image brightness settings. A value between 0 and 100 can be set.

Contrast
Image contrast settings. A value between 0 and 100 can be set.

Saturation
Image saturation settings. A value between 0 and 100 can be set.

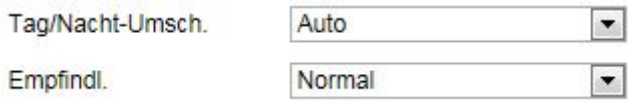
Hue
Setting for the image hue. A value between 0 and 100 can be set.

Sharpness
Image sharpness settings. A higher sharpness value can increase image noise.
A value between 0 and 100 can be set.

Exposure Time
Setting the maximum exposure time. This setting is dependent on iris mode.

Day/Night Switch
Day/Night Switch Provides options for Auto, Day and Night time schedule and triggered by alarm input.

Auto
Depending on the light conditions, the camera switches between day and night mode automatically.
The sensitivity can be set between "0 and 7", where 7 is the highest sensitivity level.



Day
In this mode, the camera only outputs colour pictures.

	Please note: Only use this mode if the light conditions remain constant.

Night
In this mode, the camera only outputs black/white pictures.

	Please note: Only use this mode if the light conditions are poor.

Schedule
In this mode, you can set the start and end time for day operation. Outside of the set interval, the camera switches to black/white mode.

Triggered by Alarm Input
The camera is triggered by the alarm input and changes to colour or black/white mode if there is a change in status.

Status
Choose night, so that the camera switches to black/white mode if the alarm input is triggered. Choose day, if the should switch to colour mode if the alarm input is triggered.

Sensitivity
Setting for the switching threshold for automatic day/night switching (0–7).
A lower value means that there is a lower lighting level for switching to night mode.

Filtering Time
Setting a delay time between recognising that a switching is required and carrying out the process.

Smart IR
If this function is activated, the IR light intensity is automatically reduced for objects that are too close.
This attempts to prevent object cross fading.

BLC Area (Backlight Compensation)
Objects in front of a bright background can be shown more clearly with the aid of the backlight compensation. The exposure of the objects is corrected, however the background is not shown in focus.

WDR
With the aid of the WDR function, the camera can return clear pictures even in disadvantageous backlight conditions. If there are both very bright and very dark areas in the picture area, the brightness level of the overall picture is balanced to provide a clear, detailed image.
Click on the checkbox to enable or disable the WDR function.
Set the Wide Dynamic Level higher to enhance the WDR function.

White balance
Here you select the lighting conditions in which the camera is installed.
You can choose between the options "AWB1", "Locked WB", "Incandescent Lamp", "Warm Light Lamp", "Natural Light", "Fluorescent Lamp".

AWB1
In AWB1 mode, the camera retains the colour balance automatically depending on the current colour temperature.

Locked WB
The white balance is performed once and saved.

Other
Use the additional white balance options to adjust the function to the light level (incandescent lamp, warm light lamp, natural light, fluorescent lamp).

Noise Reduction Level
Set the level for noise reduction here.

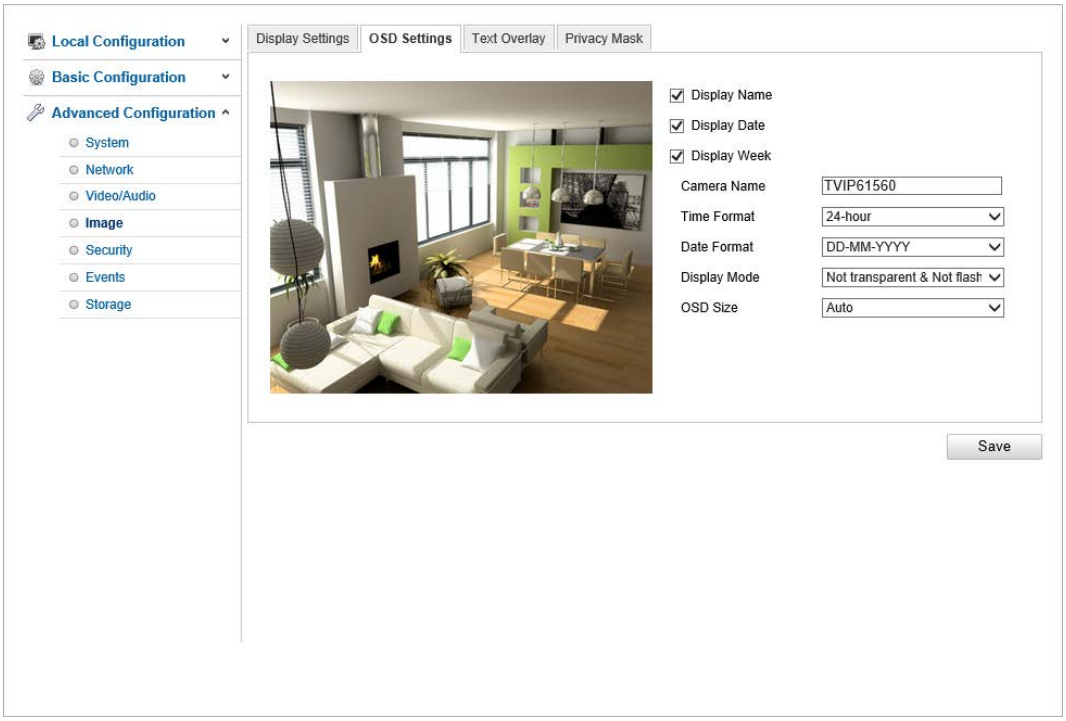
Mirror
If the mirror function is active, the image is mirrored horizontally.

Rotate
If the rotate function is active, the image is mirrored vertically.

Video Standard
Regulation of the exposure frequency
50 Hz: Fixed setting to 50 Hz network frequency
60 Hz; Fixed setting to 60 Hz network frequency

Enable IR Light
Set the IR light to continuously enabled or disabled.

10.3.4.2. OSD Settings



You can use this menu item to select the format of the date and time displayed in the live picture.

Display Name
Activate this checkbox if you wish to display the camera name.

Display Date
Activate this checkbox if you wish to display the date in the camera image.

Display Week
Activate this checkbox if you wish to display the day of the week.

Camera Name
Enter the camera name that is to be displayed in the image here.

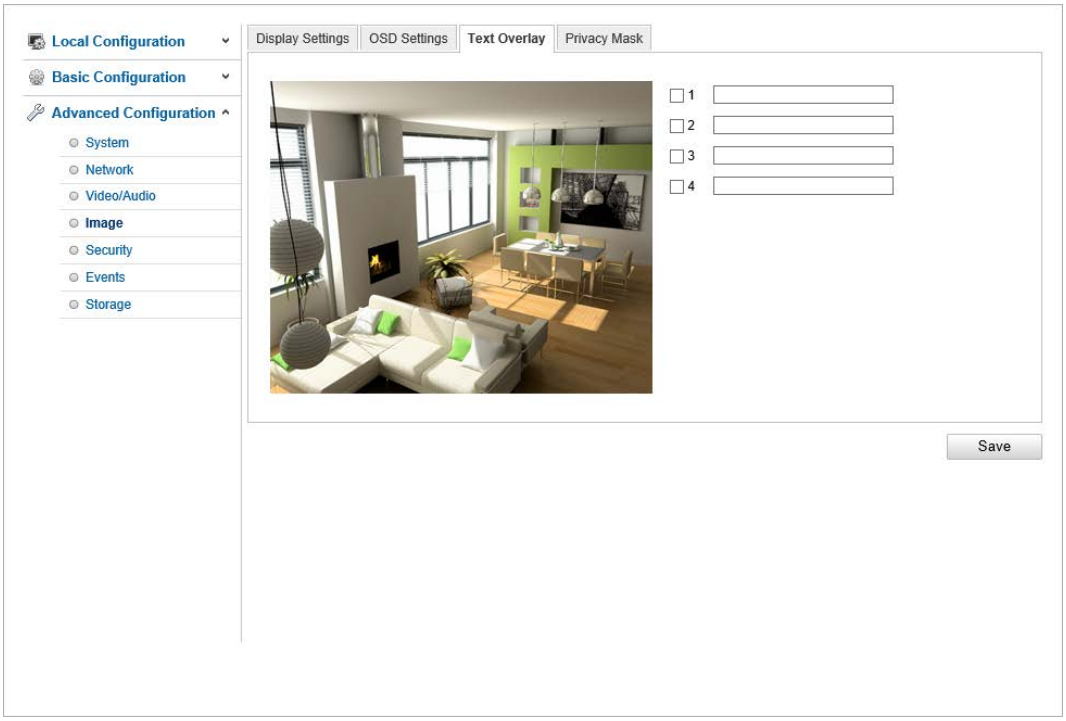
Time Format
Choose here whether you would like the time to be displayed in 24-hour or 12-hour format.

Date Format
Select the format for the date display here.
(D = day; M = month, Y = year)

Display Mode
Here you can select the display mode for the elements displayed.
You have the following options: "Transparent & Flashing", "Transparent & Not Flashing", "Not Transparent & Flashing", "Not Transparent & Not Flashing".

OSD Size
The on-screen display size can be set here. Options: 16x16, 32x32, 48x48, 64x64, auto.
In the auto option, the size is adjusted according to the resolution set. The OSD size setting can only be applied to the first video stream (main stream).

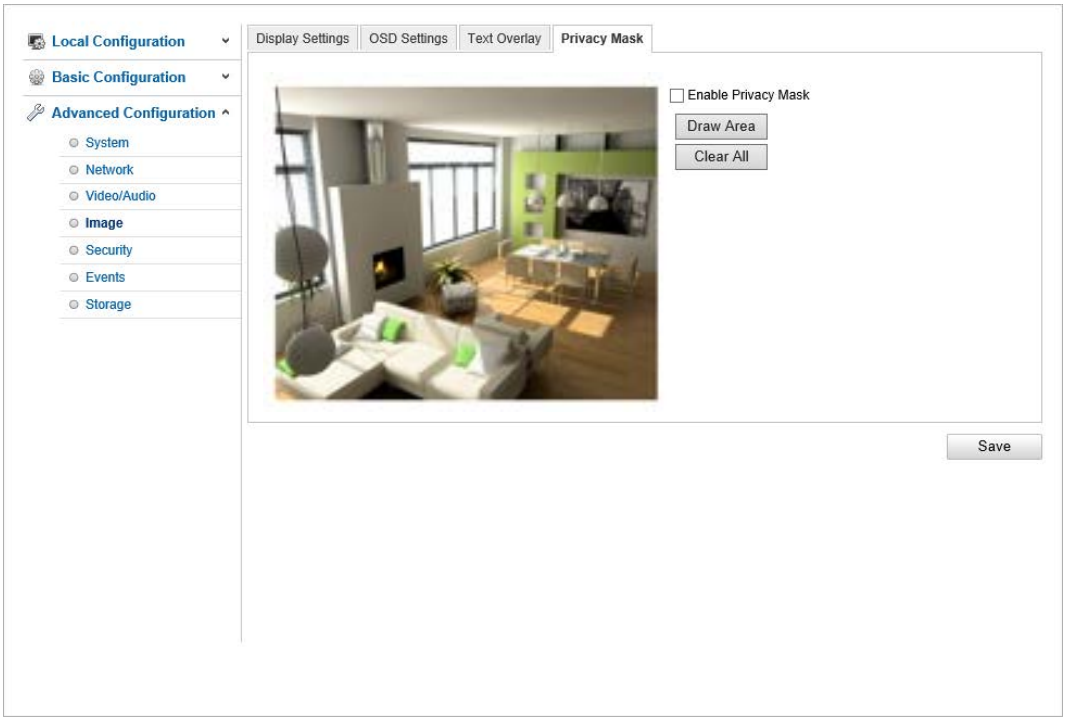
10.3.4.3. Text Overlay



You have the option to display up to four texts in the camera image. The maximum length is 45 characters. To display the text, please activate the checkbox.

You can move the text window with the mouse button.

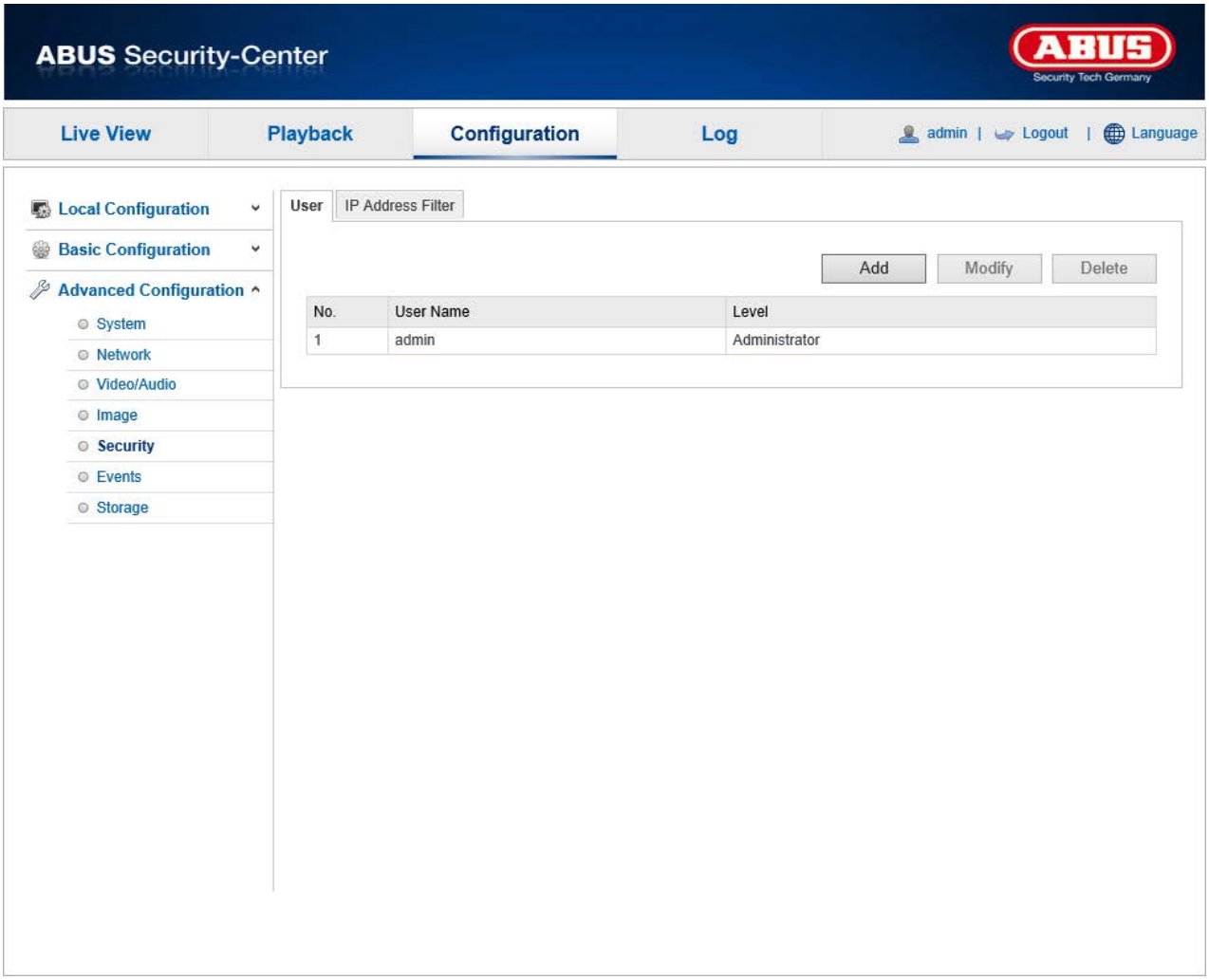
10.3.4.4. Privacy Mask



You can use privacy masks to hide certain areas in the live view to prevent these areas from being recorded and viewed in the live view. A maximum of four rectangular privacy masks can be set up in the video image.

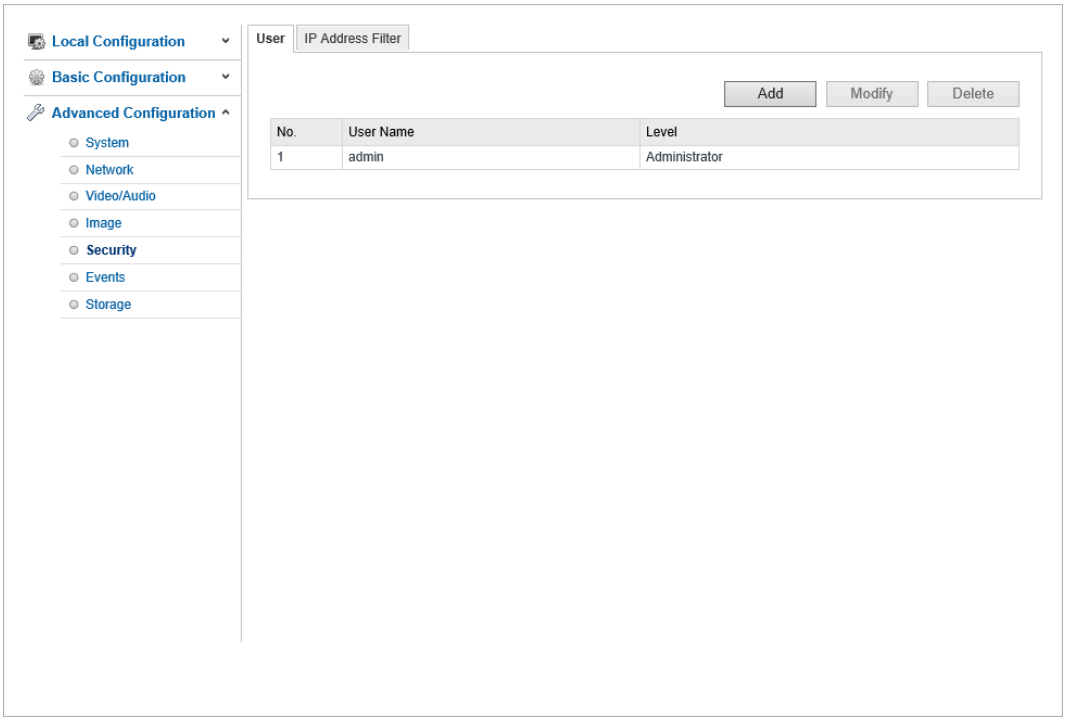
To set up a privacy mask, proceed as follows. Select the checkbox
"Enable Privacy Mask". To add a privacy mask, click "Draw Area". You can now select an area on the camera image using your mouse. You can then select three additional areas. By clicking on "Clear All", you can delete all configured privacy masks.

10.3.5. Security



Menu item	Description	Available in mode
User	User administration	Basic Configuration, Advanced Configuration
IP Address Filter	Filtering IP addresses to gain access for controlling the camera	Advanced Configuration

10.3.5.1. User



With this menu item, you can add, edit or delete users.

To add or modify a user, click "Add" or "Modify".

A new window with the data and authorisations appears.

User name
Here you assign the user name that needs to be entered for access to the camera.

Level
Select an individual user type for the user ID.
You can choose between two predefined levels: "Operator" or "User".

As an operator, the following remote functions are available to you: Live view, PTZ control, manual recording, playback, two-way audio, browse/query operating status.

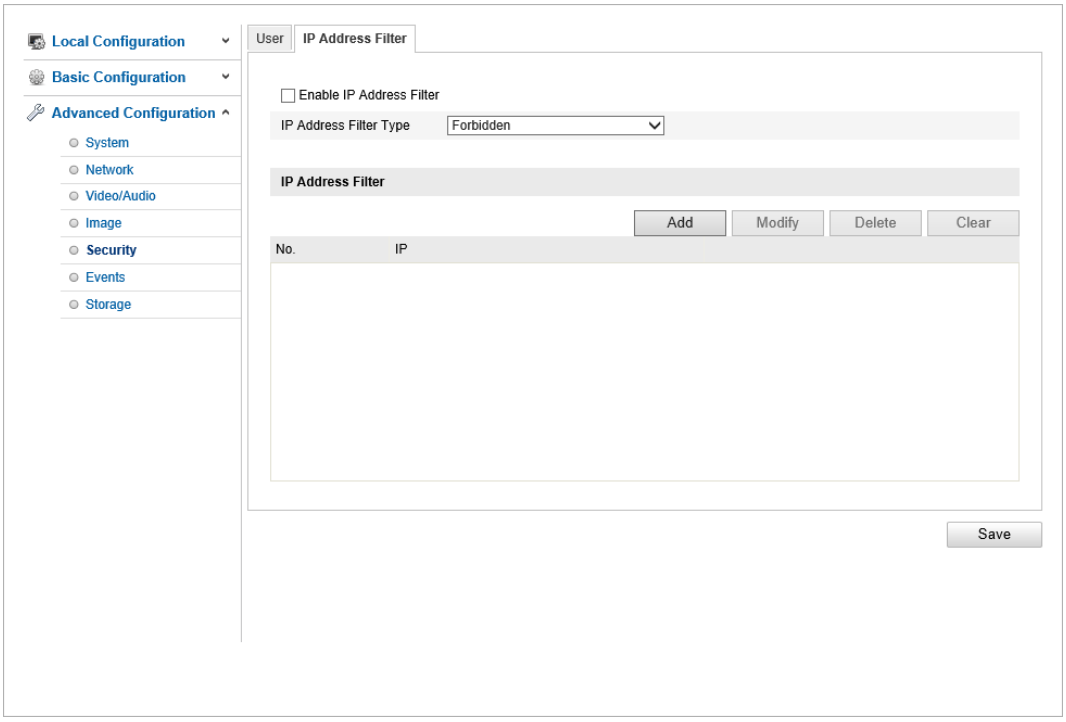
As a user, the following remote functions are available to you: playback, browse/query operating status.

To add further functions, select the corresponding checkbox.

Password
Here you assign the password that the corresponding user must enter to access the camera.

Confirm
Confirm the password by entering it again.

10.3.5.2. IP Address Filter



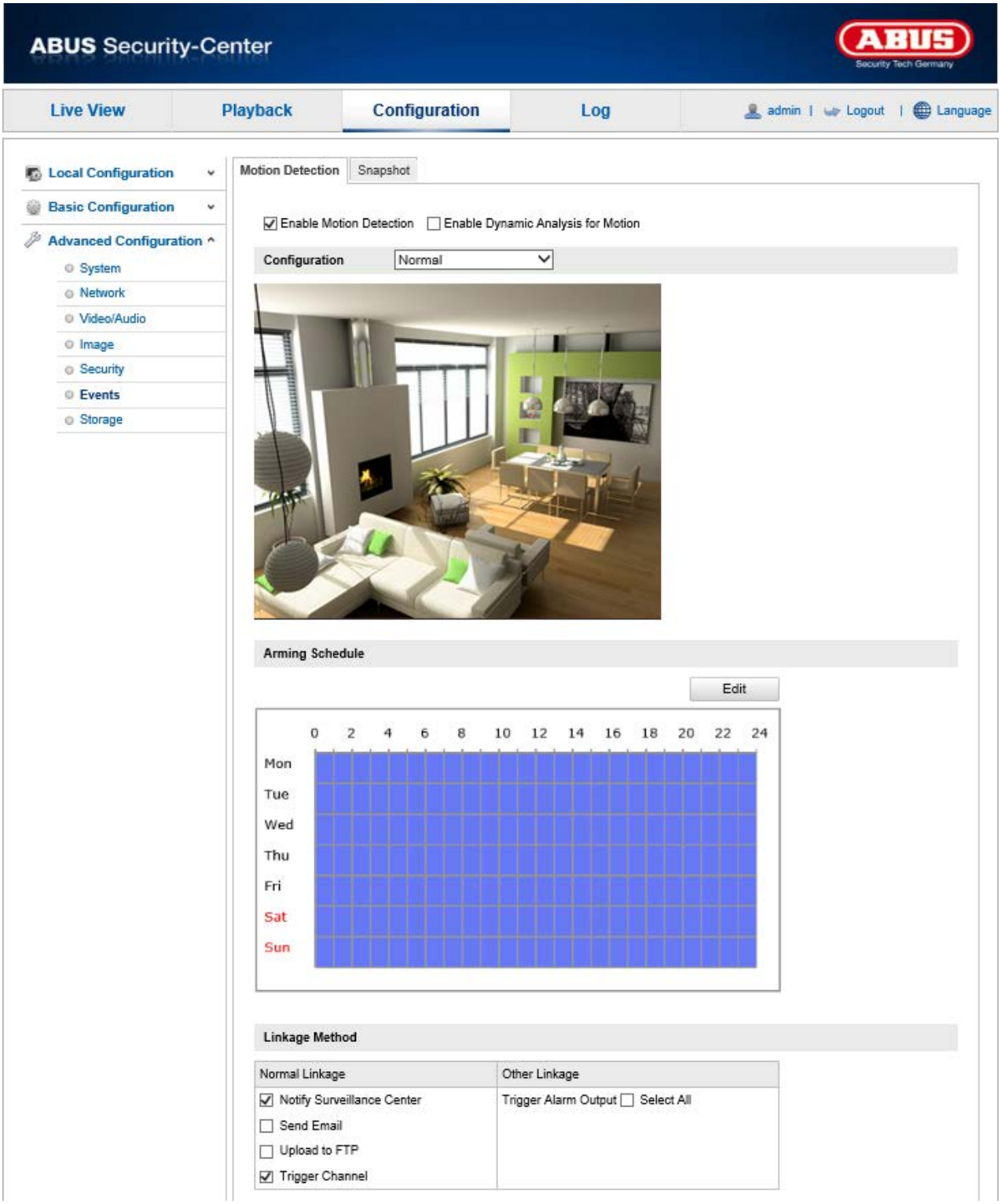
Enable IP Address Filter
Ticking the selection box enables the filter function.

IP Address Filter Type

Allowed: The IP addresses detailed further below can be used to access the camera.

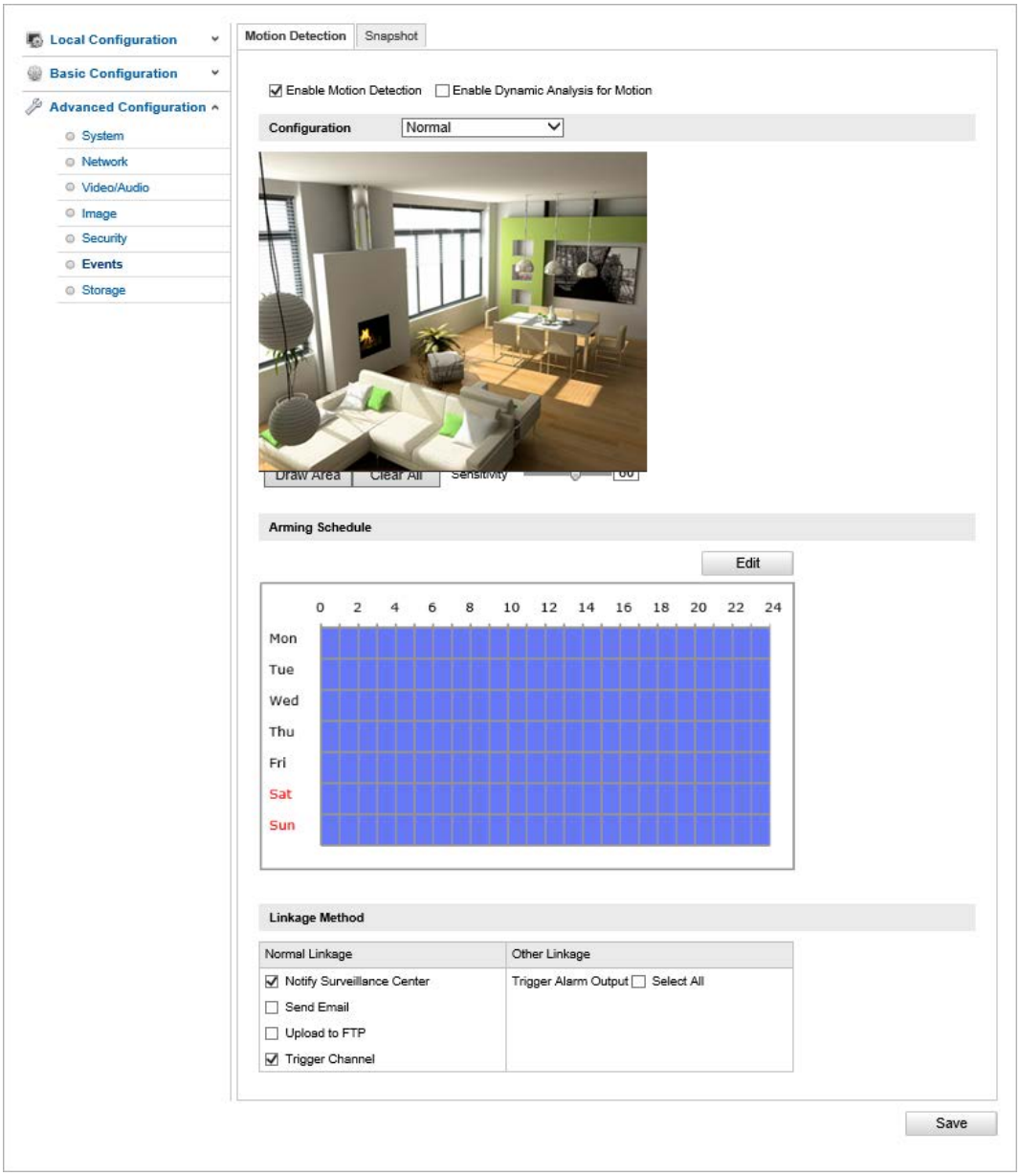
Forbidden: The IP addresses detailed further below are blocked. An IP is entered in the format xxx.xxx.xxx.xxx.

10.3.6. Basic event



Menu item	Description	Available in mode
Motion detection	Settings for motion detection	Basic Configuration Advanced Configuration
Snapshot	Setting the event-triggered snapshot	Advanced Configuration

10.3.6.1. Motion detection



Enable motion detection

Check this box to enable motion detection.

Enable dynamic analysis for motion

Check this box to highlight with a green frame when motion is detected.

The rules must also be enabled in the Local Settings here.

Configuration

Select either "Normal" or "Expert" mode.

Normal

Area Settings

To select an area, click on the "Draw Area" button. The entire area is selected by default. To discard this selection, click on "Clear All".
Drag the mouse pointer over the desired area. To apply the setting for the area, click on "Stop Drawing".

Sensitivity

Set the sensitivity using the regulation control bar. The higher the value, the higher the sensitivity of the motion detection. In "Normal" mode, the sensitivity values are rounded to 0, 20, 40, 60, 80 or 100.

Expert

Day/night switching settings

You can choose between "Off", "Automatic Switching" and "Scheduled Switching".
"Automatic Switching" and "Scheduled Switching" include settings for both day & night, which align either with the day & night on the camera ("Automatic Switching") or with the schedule you set ("Scheduled Switching").

Area

Select the desired area. You can define up to eight individual areas.
To define an area here, click on the "Draw Area" button. Drag the mouse pointer over the desired area. To apply the setting for the area, click on "Stop Drawing".

Sensitivity

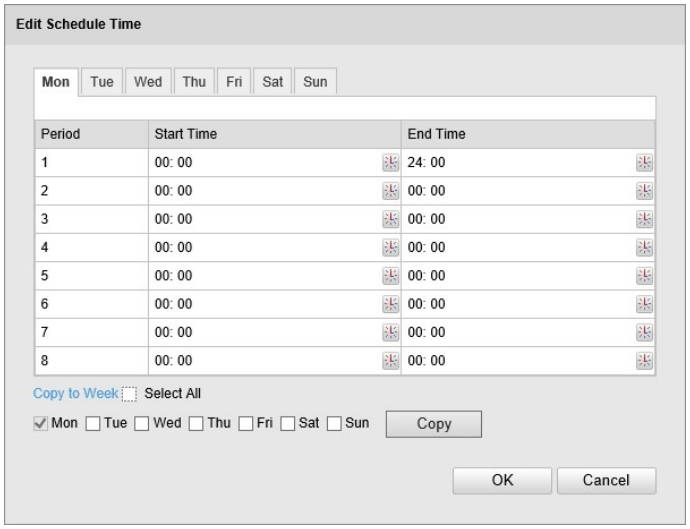
Set the sensitivity using the regulation control bar. The higher the value, the higher the sensitivity of the motion detection.

Object proportionality in area

Set the percentage required to ensure triggering in the area.

Arming Schedule

To save a schedule for motion-controlled recording, click on "Edit".
A new window appears. Specify here on which days of the week and at which times motion-controlled recording should take place.



Now select a day of the week for motion-controlled recording. To store particular time periods, enter a start and end time. To set up all-day motion detection, select 00:00 as the start time and 24:00 as the end time.

To apply motion detection for all days of the week, click the "Select All" checkbox. To copy motion detection to other days of the week, select the day of the week and click on "Copy".

To apply the changes, click "OK" and to discard them click "Cancel".
Apply the settings made by clicking "Save".

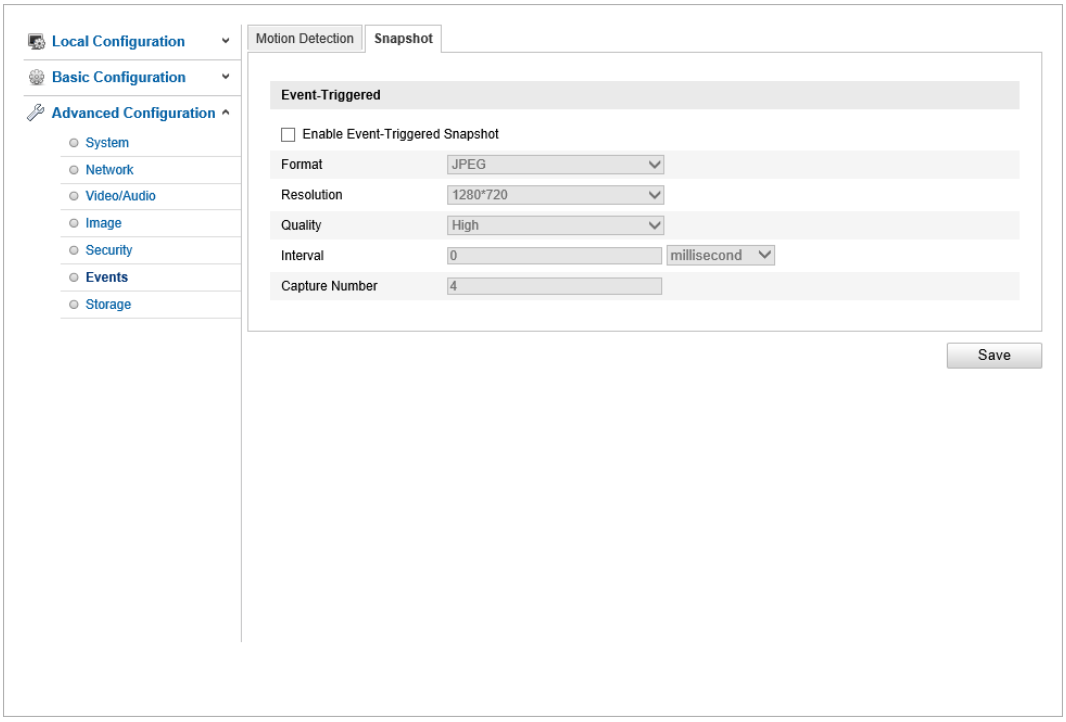
Linkage method

Notify Surveillance Centre:	Notify Surveillance Center
Send email:	You receive an email as notification; check the checkbox to activate this.
Upload to FTP:	The event-triggered snapshot is sent if motion is detected.
Trigger Channel:	Enables recording to the internal microSD card.

Other Linkage

There are no alarm inputs/outputs available for this camera.

10.3.6.2. Event-triggered snapshot



Event-Triggered

Enable Event-Triggered Snapshot

Enable this function to save event-triggered pictures.

Format

The format for the pictures is preconfigured as JPEG.

Resolution

Set the resolution of the picture here.

Quality

Select the quality for the saved pictures here.

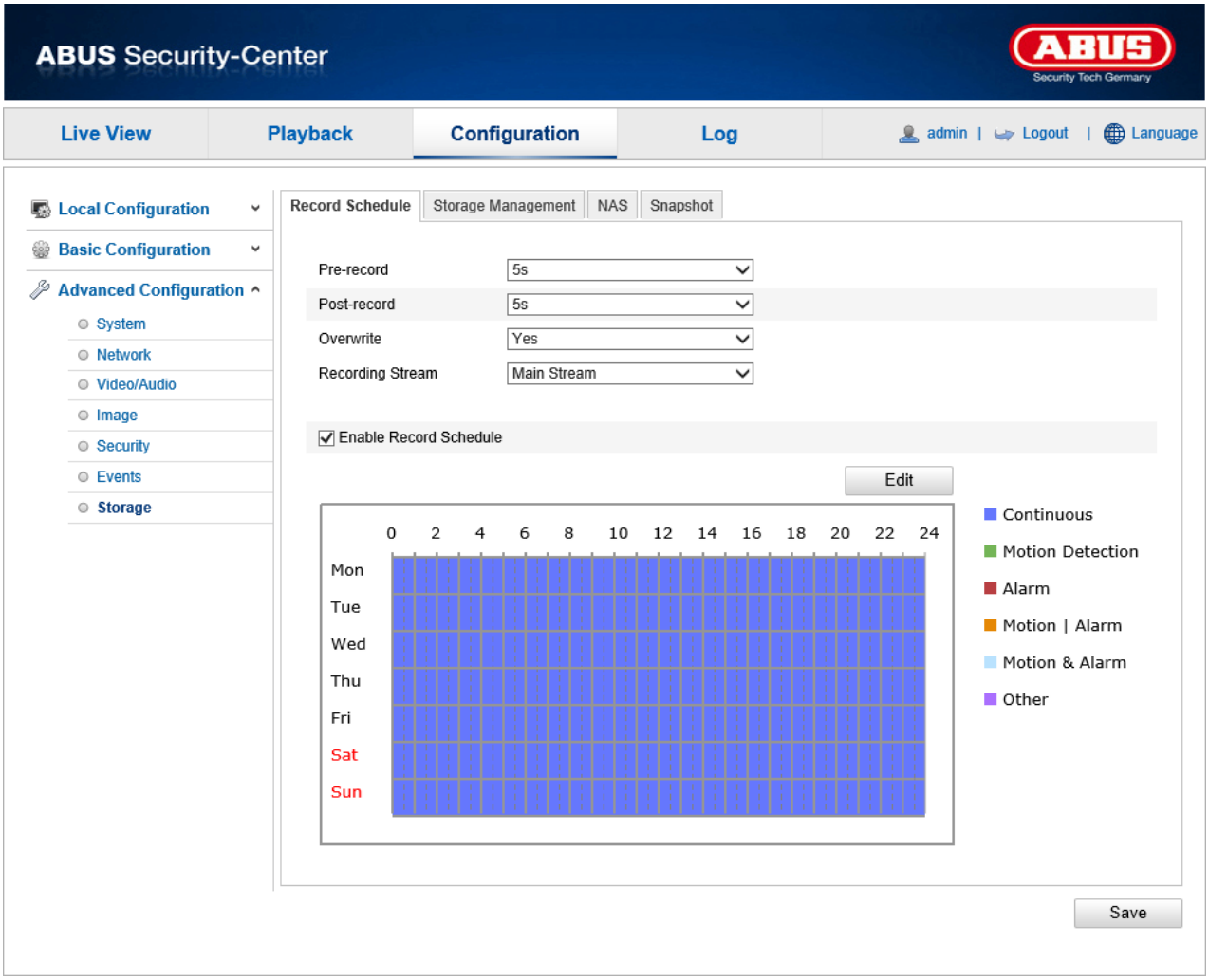
Interval

Set the interval to occur between the saving of two pictures here.

Capture Number

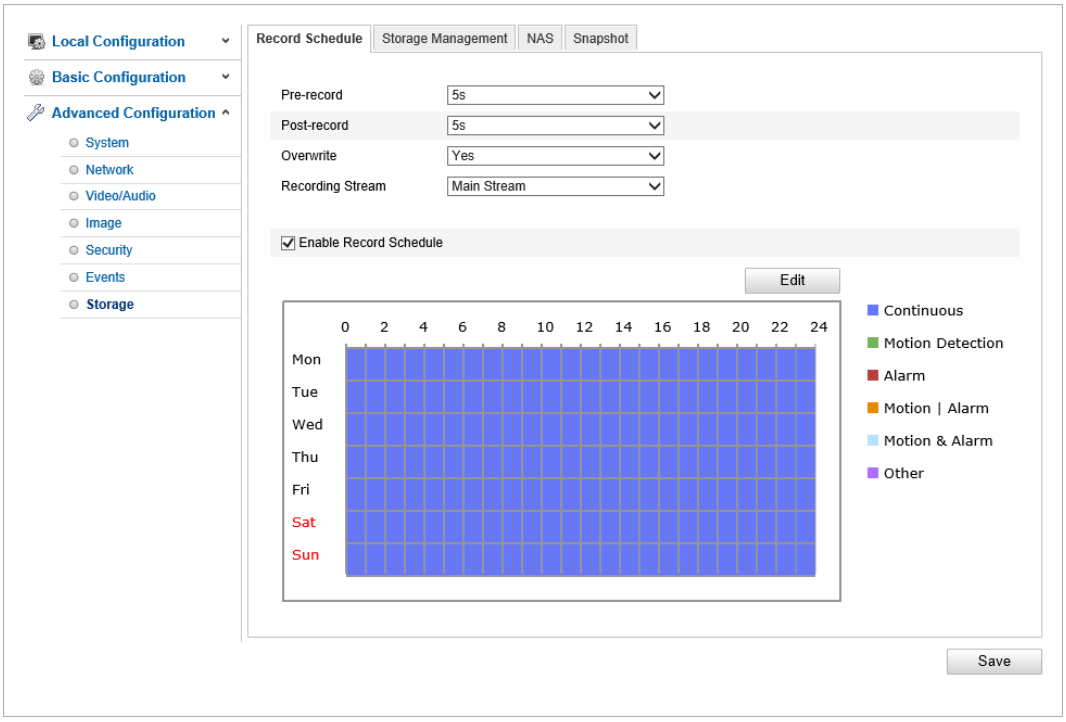
Set the number of images that should be saved for an event here.

10.3.7. Storage



Menu item	Description	Available in mode
Record Schedule	Set up a scheduled recording	Basic Configuration, Advanced Configuration
Storage Management	Management of the SD card, network drives	Advanced Configuration
NAS	Network drive settings	Advanced Configuration
Snapshot	Settings for the event-triggered snapshot	Advanced Configuration

10.3.7.1. Recording plan



Here, you can configure time and event-triggered recordings in order to be able to save them to an SD card or a network drive.

Pre-record

Set the duration for recording of the image data before a basic event here.

Post-record

Set the duration for recording of the image data after a basic event here.

Overwrite

Here, you can set whether the data should be automatically overwritten if the data carrier is full.

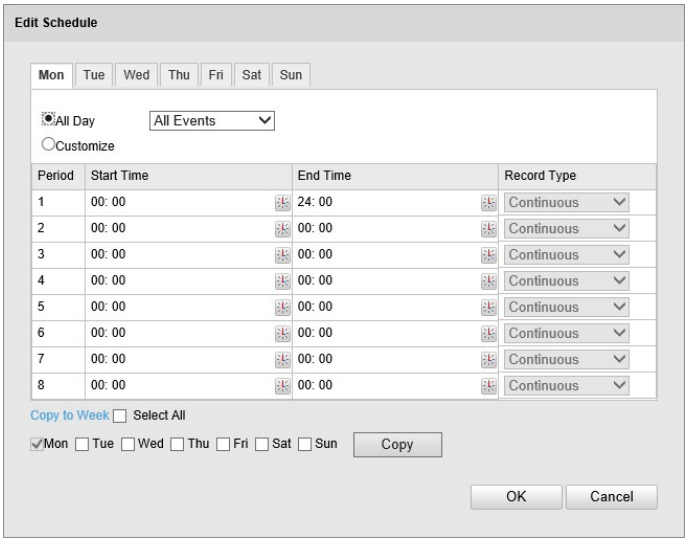
Recording stream

Here, select which stream will be used for recording on the data carrier.

Enable Record Schedule

Enable the schedule to store the desired schedule.

To store the schedule, click "Edit". A new window opens.



Now select a day of the week for the recording to take place. To store particular time periods, enter a start and end time. To set up all-day monitoring, select 00:00 as the start time and 24:00 as the end time.
To apply the settings for all days of the week, click the "Select All" checkbox. To copy the settings to other days of the week, select the day of the week and click on "Copy".

Under Record Type, select the recording mode for the desired schedule. You can

choose between the following record types:

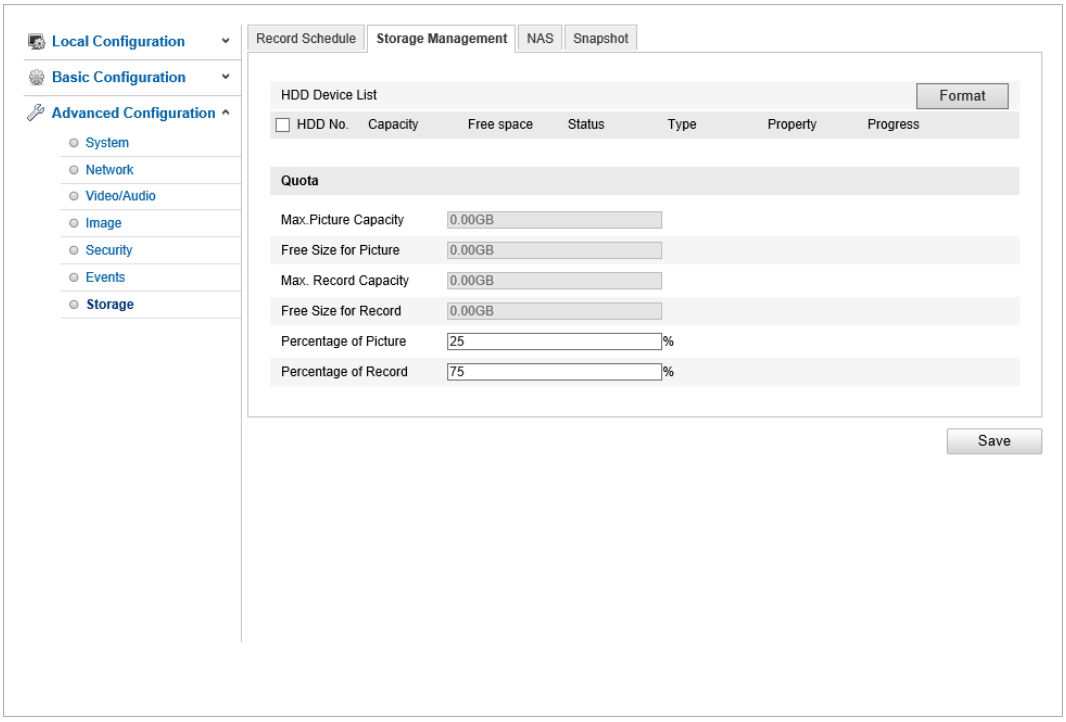
Normal: permanent recording.
Motion detection: motion-controlled recording
Motion detection | Alarm: recording triggered by motion or by alarm input. Camera begins recording either following motion detection or an alarm input.
Motion detection & Alarm: recording triggered by motion and by alarm input. Camera only starts recording if motion and alarm input are triggered simultaneously.
Other Alarm: recording controlled by PIR sensor

	Please note that motion detection must be enabled and configured.

To apply the changes, click "OK" and to discard them click "Cancel".

English

10.3.7.2. Storage Management



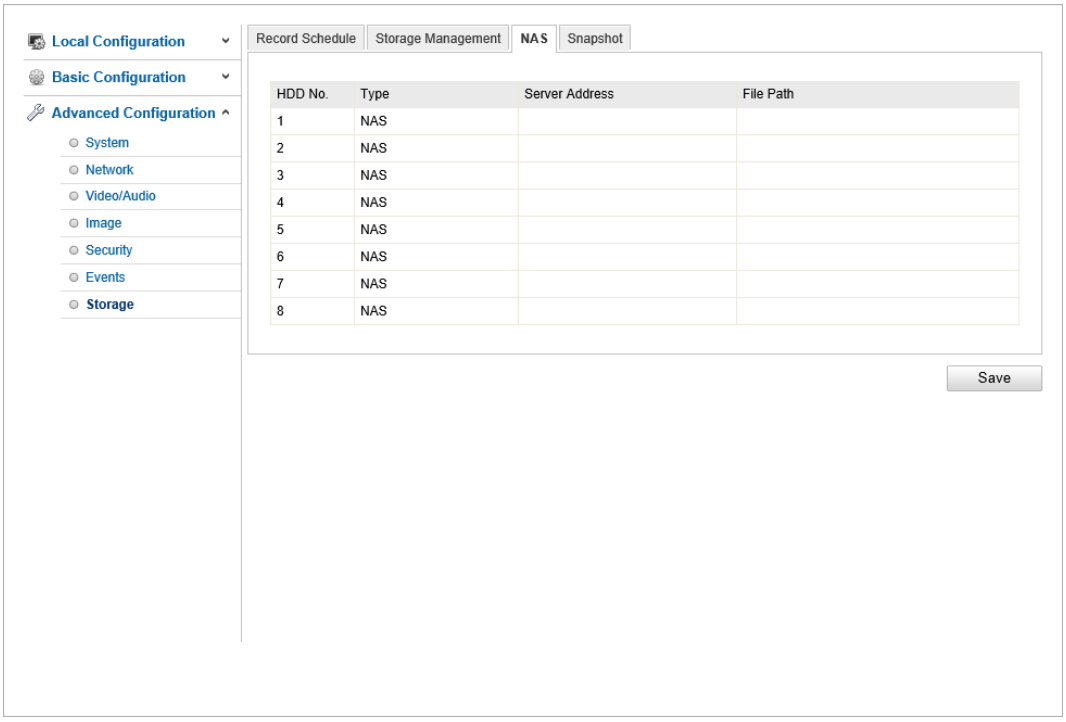
Here, you can format the inserted micro SD card or network drives and display their properties.

Percentage of Picture
Enter the percentage that should be taken up by snapshot images here.

Percentage of Record
Enter the percentage that should be taken up by recordings here.

Please format the SD card or the network drive before using it for the first time!

10.3.7.3. NAS



You can configure storage of the recordings on up to eight NAS devices here. Click in a row to specify server address, file path, server type, user name and password.

Server Address

Enter the IP address or host name of your NAS or network drive here.

File path

Enter the file path in which the data will be saved.

Installation type

NFS

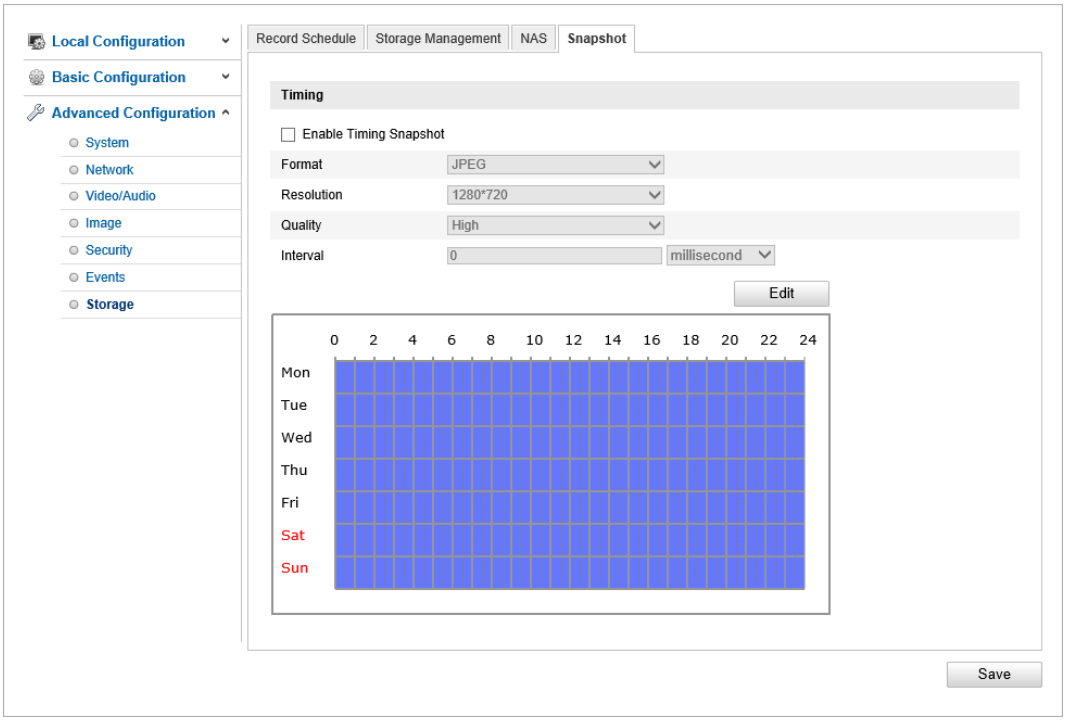
When using NFS, ensure that the IP address of your camera has the necessary read and write permissions in the settings in your NAS or network drive folder.

SMB/CIFS

Enter the user name and password to register on your NAS or network drive.

Ensure that the user has the necessary read and write permissions for this particular save location.

10.3.7.4. Time-triggered snapshot



Here, you can configure event-triggered snapshots in order to be able to save them to the microSD card or network drive.

Timing

Enable Timing Snapshot

Enable this function to save pictures at certain intervals.

Format

The format for the pictures is preconfigured as JPEG.

Resolution

Set the resolution of the picture here.

Quality

Select the quality for the saved pictures here.

Interval

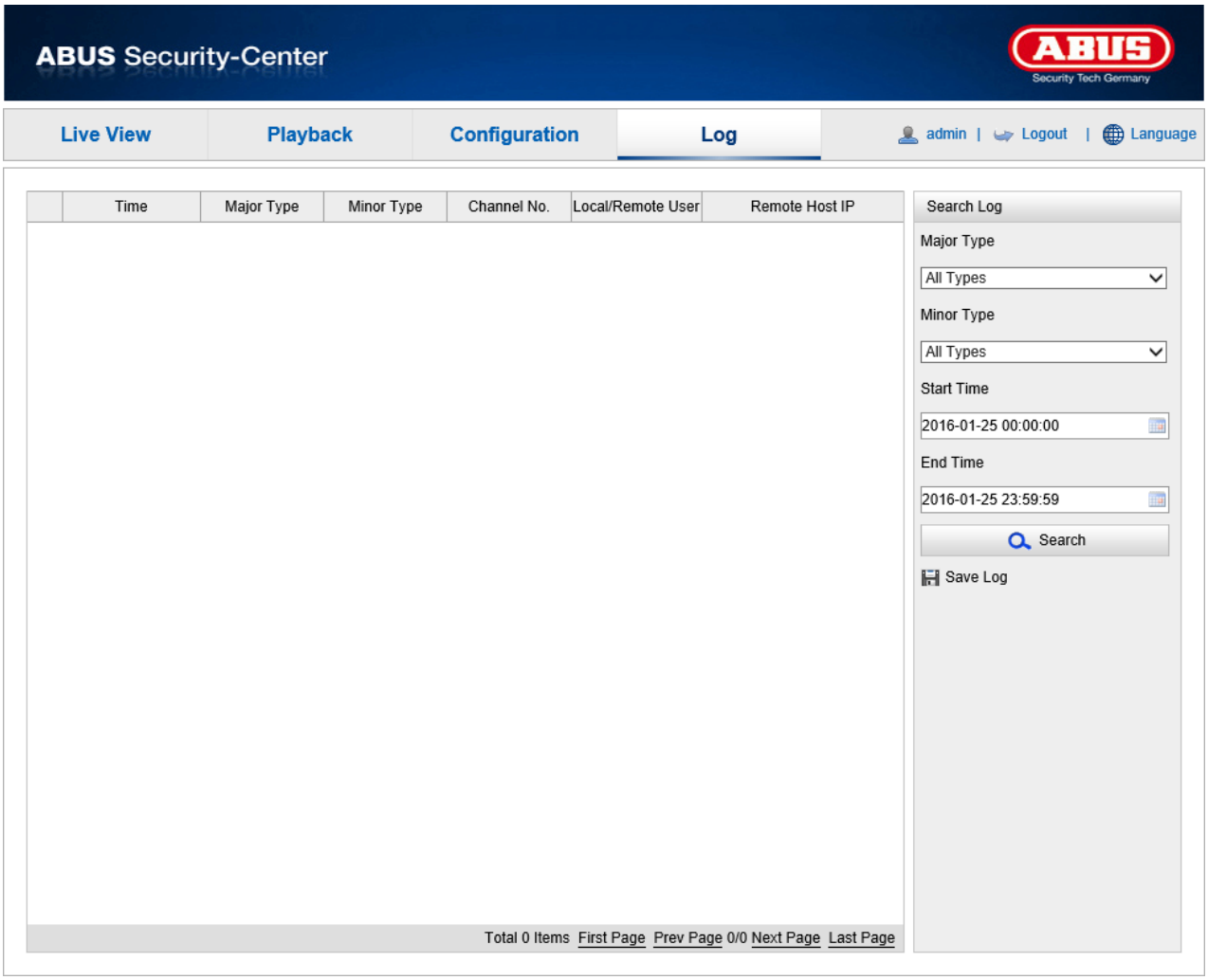
Set the interval to occur between the saving of two pictures here.

Schedule

Click "Edit" to configure the record schedule for the event-triggered snapshot.

To apply the changes, click "OK" and to discard them click "Cancel".

11. Protocol



Camera parameters, such as alarm, exceptions, operation and information can be saved in the log files. The files can be exported if necessary.

1. Click on Log in the menu bar to call up the search dialogue.
2. Specify the search criteria, including Major Type, Minor Type, Start Time and End Time.
3. Click on Search to search for log files. The corresponding log files are displayed in the log dialogue.
4. Click on Save Log to export the log files and save them on your computer.

12. Technical data

Model number	TVIP41560	TVIP61560
Dimensions (L x W x H)	Ø111 x 82 mm	145 x 61 x 60 mm
Danger detection	Email	
Connections	1xRJ45, 1xDC	
Number of parallel streams	2	
Resolution modes	Main Stream: 1280 x 960, 1280 x 720, 704 x 576, 640 x 480 Sub Stream: 704 x 576, 640 x 480, 352 x 288, 320 x 240	
Motion detection	Yes	
Image sensor	1/3" progressive scan CMOS sensor	
Pixels (effective)	1280 x 960 pixels	
Image overlay	Date, camera name, private zones	
Frame rate	25 fps	
Focal length	4.0 mm @ F2.0	
Dynamic range (WDR)	Digital WDR	
Electronic shutter regulation	1/3 – 1/100000 Sec.	
Backlight compensation	BLC, DWDR	
Simultaneous network access	Yes	
Horizontal angle of view	73.1°	73.1°
IR range	10 m	
Camera type	Day/Night Outdoor Camera	Day/Night Outdoor Dome Camera
Max. resolution @ frame rate	1280 x 960 @ 25 fps	
Max. operating temperature	50°C	
Max. humidity	95%	
Min. operating temperature	-20°C	
Minimum illumination colour	0.1 Lux @(F1.2, AGC an)	
Minimum illumination B/W	0 Lux	
Video network bandwidth	32 kBit/s – 8 MBit/s	
LAN network access	RJ-45 Ethernet 10/100 Base-T	
WLAN network access	IEEE802.11b, 802.11g, 802.11n	
Network camera protocols	TCP/IP, ICMP, HTTP, FTP, DHCP, DNS, DDNS, RTP, RTSP, RTCP, NTP, UPnP, SMTP, 802.1X, IPv6, Bonjour	
ONVIF	Profile S	
Private zones	Yes (4)	
Noise reduction	3D DNR	
IP protection class	66	
Power supply	12 V DC (+/-10%), PoE (802.3af)	
Storage medium	microSD card (up to 64 GB)	
Language of instructions	DE, UK, FR, NL, DK, ES, IT, PL, SWE	
OSD language	DE, UK, FR, NL, DK, ES, IT, PL, SWE	
Current consumption	Max. 580 mA	
Day/night switching	Electromechanically removable IR cut filter (ICR)	
Supported browsers	Mozilla Firefox, Safari or Internet Explorer 6.x and higher	
Supported software	ABUS VMS Express, IPCam App (iOS/Android)	
Encryption	64/128 bit WEP, WPA/WPA2, WPA-PSK/WPA2-PSK, WPS	
Video compression	H.264, MJPEG	
White balance	AWB	
Certifications	CE, RoHS, REACH	

13. Disposal

	Important: EU Directive 2002/96/EC regulates the proper return, treatment and recycling of used electronic devices. This symbol means that in the interest of environmental protection, the device must be disposed of separately from household or industrial waste at the end of its service life in accordance with applicable local legal guidelines. Used devices can be disposed of at official recycling centres in your country. Obey local regulations when disposing of material. Further details on returns (also for non-EU countries) can be obtained from your local authority. Separate collection and recycling conserve natural resources and ensure that all the provisions for protecting health and the environment are observed when recycling the product.

14. GPL license information

We wish to inform you that the TVIP41560 / TVIP61560 network surveillance cameras, amongst others, include open source software licensed exclusively under the GNU General Public Licence (GPL). To ensure that your use of the programs conforms with GPL, please refer to the GPL license conditions.