



# Full Manual

## IP Camera

IS-Series

ISM-42F0037MEB

ISM-42F0036MCB

ISM-42F0036MMB

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## ABOUT THIS DOCUMENT

This document provides a comprehensive description of a specific device series, which has been carefully and accurately created to give you a detailed insight into the general functions and features that characterise this device series.

Please note, however, that the detailed characterisation in this document refers to the general product line. The individual functional scope of individual models or versions within this series may vary depending on the configuration.

These deviations may result in an expanded or reduced functional and performance scope, so that the actual specifications of individual products may differ in some respects from the versions presented in this document.

For this reason, we strongly recommend that you carefully read the specific data sheet for the respective product. The data sheet contains specific and detailed information tailored to the respective model. It is the primary reference document that provides the most authentic and accurate information about the individual functions and properties of each specific product in our device series.

We thank you for your understanding and for your willingness to invest time to gain a thorough knowledge of the product you have selected from our range. Please do not hesitate to contact us if you have any further questions or require additional information.

## OPEN SOURCE SOFTWARE LICENSE INFORMATION

The software components supplied with eneo products may contain copyrighted software that is licensed under various open-source software licences.

Detailed information about the included open-source software packages, the package versions used, licence information and the complete licence conditions can be found at...

- the open-source information in the user interface of your product,
- the product detail pages on the eneo website ([www.eneo-security.com](http://www.eneo-security.com)),
- the eneo download portal (<https://datacloud.videor.com/s/eneodownloadportal>). If the previous link no longer works, you can find the current link to the eneo download portal on the respective eneo product page at [www.eneo-security.com](http://www.eneo-security.com).
- the download package of your firmware. The complete open source software licence information for your product is included in the corresponding software download package that you can find on our download portal.

If you are missing any information, please contact [opensource@eneo-security.com](mailto:opensource@eneo-security.com). We will be happy to provide you with the missing information and also make it available to the public.

If you wish to access the open-source components (source codes) used in our products, please contact [opensource@eneo-security.com](mailto:opensource@eneo-security.com).

## SAFETY INSTRUCTIONS

Read the safety instructions and the operating instructions carefully before installing the product.

Depending on the product type, individual points may be omitted.

### Mounting & Installation

- Ensure that the intended mounting location is suitable for the respective product (e.g. in terms of weight).
- Securely fasten the products to the locations and surfaces recommended by the manufacturer to ensure stability and safety.
- Ensure that the products are weatherproof when installed outdoors, e.g. protect cameras from direct sunlight or extreme temperatures.
- Make sure that any ventilation slots are not blocked to ensure sufficient air circulation and cooling.
- Make sure that cameras, switches, etc. are installed with sufficient safety distance to flammable materials, power sources, running water, etc.
- Assembly, commissioning and maintenance may only be carried out by authorized specialist personnel in compliance with the relevant standards and guidelines.

### Power supply & wiring

- To ensure a safe power supply, use only power supplies and cables recommended by the manufacturer.
- Make sure that the cables are properly routed and protected from tampering and damage (e.g. kinking) to avoid power failures or short circuits (e.g. due to moisture ingress).
- Make sure that the cables are not routed through doors, windows or other moving parts to avoid damage and tripping hazards.
- To disconnect the system from the power supply, pull the cable only by the plug and never directly by the cable.
- When shortening flexible connection cables, use wire end ferrules.

## Security

- Use strong passwords for all cameras and devices to prevent unauthorized access.
- Keep device firmware up to date to minimize security vulnerabilities.
- Protect (remote) access to the devices using secure methods such as encrypted connections or VPN.

## Operation

- The devices may only be operated within the temperature and humidity ranges specified in the data sheet.
- Sufficient ventilation must be provided to prevent overheating. This applies in particular to devices such as recorders and switches that can generate heat.
- Ensure that no sight lines are blocked and that accessories do not obscure areas used by other equipment or people.
- Ensure cameras are oriented to provide a clear view of the desired area without interfering with people's privacy.

## Cleaning & Maintenance

- Clean the lenses and housings of the cameras regularly to ensure a clear view.
- Keep the ventilation slots clean and free of dust to ensure efficient cooling.
- Use a mild detergent for cleaning. Harsh cleaning agents such as thinner or benzine may permanently damage the surface.
- Check the product regularly for damage and signs of wear.
- Only use original spare parts (e.g. connection cable) or accessories from VIDEOR E. Hartig GmbH.
- Any tampering by unauthorized persons will void the warranty.
- Before opening the housing, disconnect the power supply.

## Warning, Privacy & Legal Notices

- Draw the attention of visitors to the fact that they are being recorded by means of clearly visible notices.
- If necessary, point out rules of conduct.
- Ensure that cameras are oriented in such a way that privacy is not violated, e.g., by recording neighbours or public areas.
- Comply with local laws and regulations on video surveillance and data protection (GDPR).

## Notes within the document

You will occasionally find the notes below within the document.



### **Warning!**

*For example, a warning is displayed here.*



### **Notice!**

*For example, additional information is displayed here.*





## 1 – OVERVIEW

### 1.1 – Applicable scenarios

IP cameras with powerful image processing capabilities can be used in a variety of public places, such as shopping centres, supermarkets, schools, factories and workshops, as well as in environments where high-resolution video images are required, such as banks and traffic monitoring systems.

### 1.2 – Product description

An IP camera is a digital network surveillance camera that can operate independently with a built-in web server and can be used with a web browser or client software for real-time monitoring from anywhere in the world.

Based on a state-of-the-art digital solution, the IP camera is an integrated media processing platform for audio/video capture, compression and network transmission on a single board. It complies with the H.264/H.265 High Profile encoding standard. Any remote user can perform real-time monitoring by entering the IP address or domain name of the IP camera into a web browser. The IP camera solution is suitable for residential and commercial environments, as well as a variety of locations where network-based video monitoring and transmission is required.

For ease of management, the IP camera can be set up with multiple users and different user rights. The IP camera has a motion detection function and actively sends emails, recordings or alarm video when an event occurs and stores alarm video on the SD card for easy retrieval.

### 1.3 – Operating requirements

**Protocol:** TCP/IP, UDP, IPv4, HTTP, HTTPS, FTP, RTP, RTSP, RTCP, DHCP, ARP, ICMP, Zeroconf

**Onvif:** Onvif (Profile S)

**Browser:** Chrome, Firefox, Edge, Opera. (HTML5, H.264 Streaming)

## 2 – SETTING UP

### 2.1 – eneo Site Manager



Download the eneo Site Manager App from:

<https://eneo-security.com/en/eneo-site-manager.html>

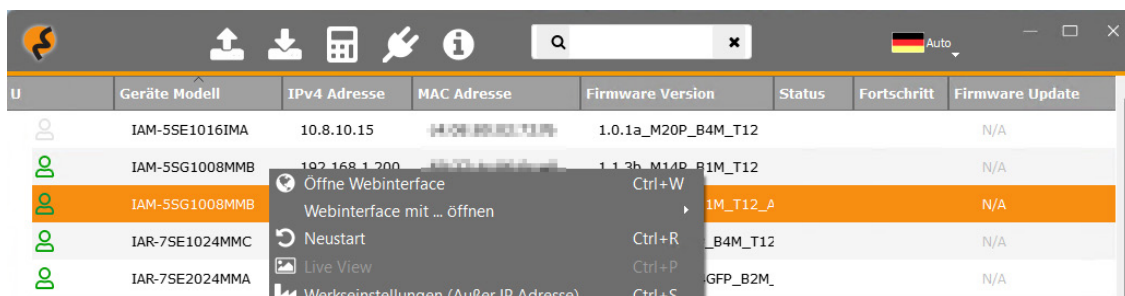
#### 1. Step

Install the *eneo Site Manager App*.

If the device is on the same network as the computer on which the app was installed, the new device will be detected immediately. You can access the device from here.

#### 2. Step

Right-click on the device in the list to open the camera's web interface using the context menu in the browser of your choice.



### 2.2 – Initial login

For the first login, you will need the default login details.

User name	Password
admin	admin

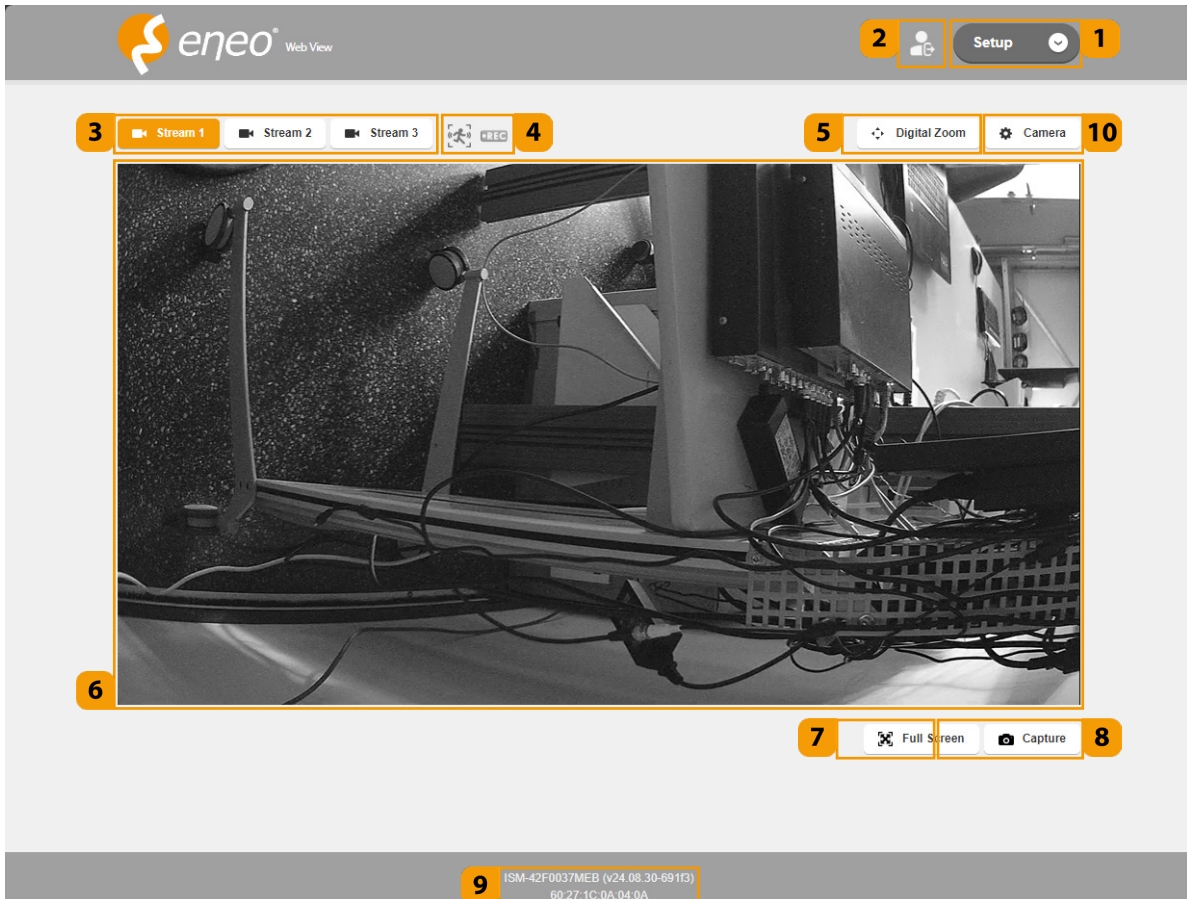


#### Warning!

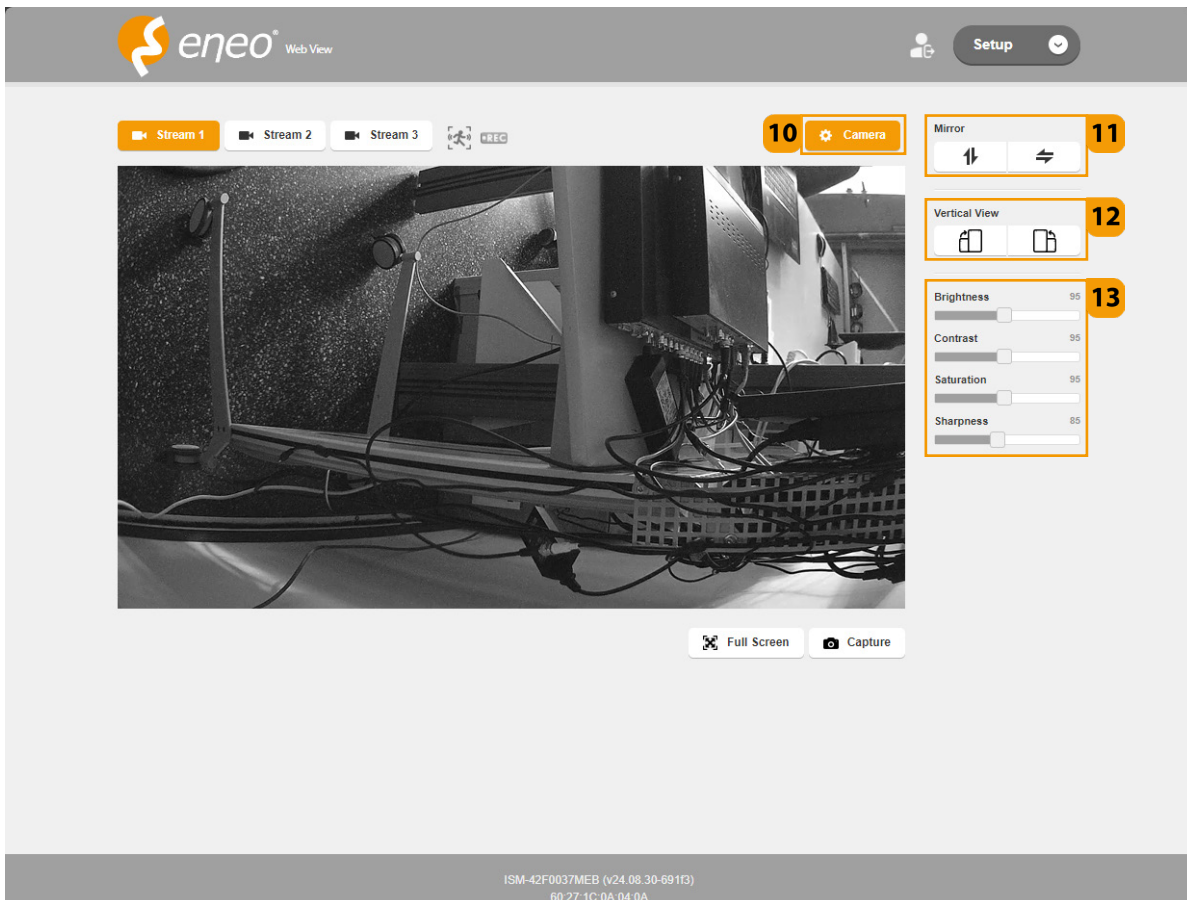
*It is highly recommended that you change the admin password to prevent unauthorised access to the camera.*

## 3 – WEB VIEW

### 3.1 – Live - View



1. Switch between **Live** and **Setup**.
2. Log out and close the web viewer.
3. Displays the current stream.
4. Displays motion detection and recording progress.  
When motion is detected, the icon turns red.
5. Activate the digital zoom in the live video and drag a square with the mouse to zoom in. Right-click to return to the unzoomed image.
6. Live video.
7. Click to view the live video in full screen.
8. Save a snapshot of the live video.
9. Displays the product model name, installed firmware version and MAC address.



- 10. When you click the camera button, an additional menu will appear on the right.
- 11. Settings for the mirror view when watching live video.
- 12. The Vertical View function provides an image with a vertical aspect ratio of 9:16, which is suitable for narrow passageways, and expands the area and the required waste of bandwidth and storage space by optimising the required monitoring area.
- 13. You can adjust brightness, contrast, saturation and sharpness while watching live video.

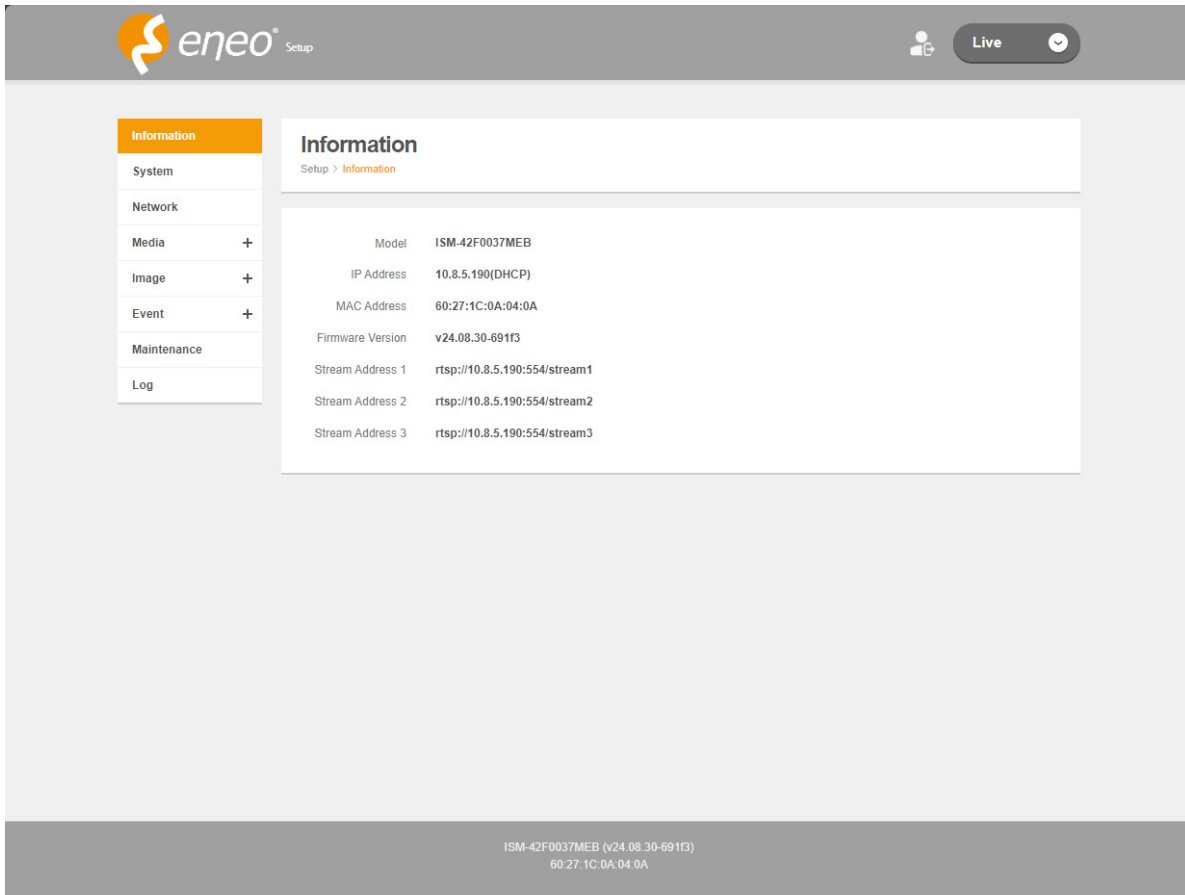


**Notice!**

*To use the **vertical view** function, the product must be installed rotated by 90° or 270°.*

## 3.2 – Setup - View

### 3.2.1 – Information



The screenshot displays the 'eneo Setup' web interface. At the top left is the 'eneo Setup' logo. On the top right, there is a 'Live' button with a refresh icon. A left-hand navigation menu is visible, with 'Information' selected and highlighted in orange. The main content area is titled 'Information' and shows the following system details:

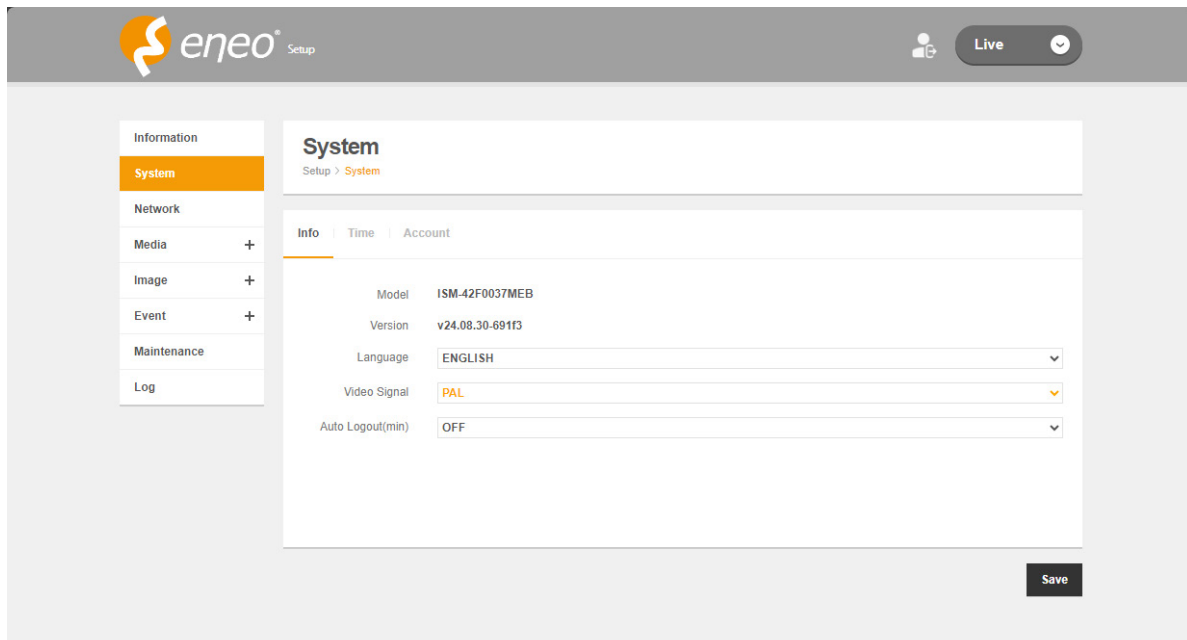
Model	ISM-42F0037MEB
IP Address	10.8.5.190(DHCP)
MAC Address	60:27:1C:0A:04:0A
Firmware Version	v24.08.30-691f3
Stream Address 1	rtsp://10.8.5.190:554/stream1
Stream Address 2	rtsp://10.8.5.190:554/stream2
Stream Address 3	rtsp://10.8.5.190:554/stream3

At the bottom of the page, a footer displays the model and MAC address: ISM-42F0037MEB (v24.08.30-691f3) and 60:27:1C:0A:04:0A.

This menu provides you with general information about the system, such as the model name, MAC address, IP address, RTSP address, firmware version.

## 3.2.2 – System

### 3.2.2.1 – Info



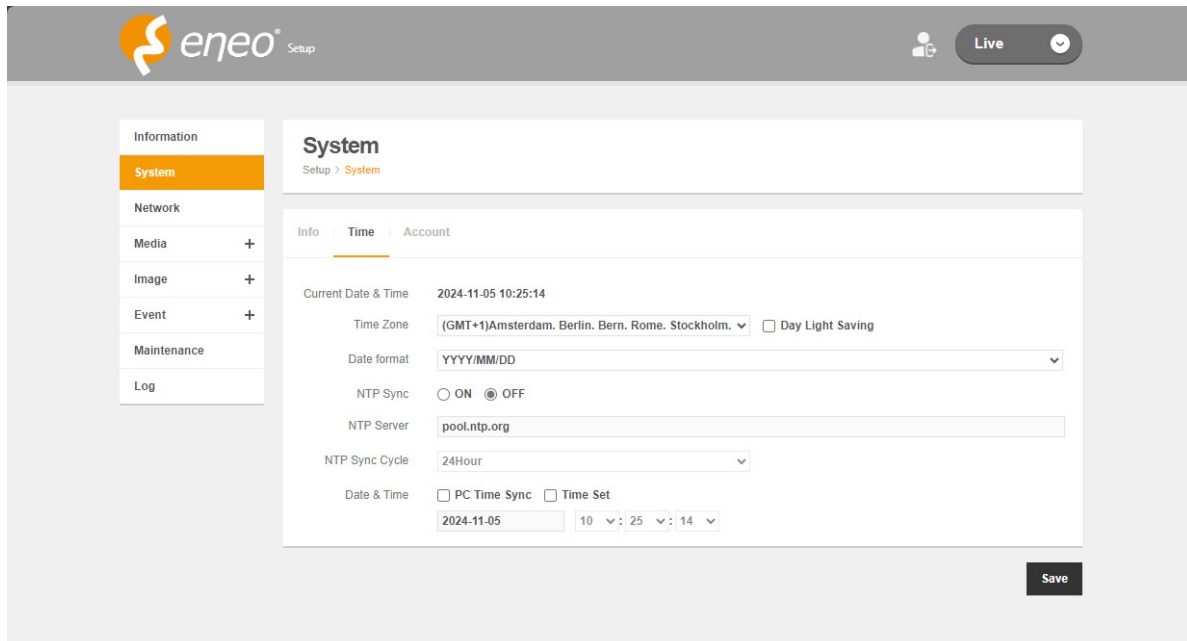
In this menu, you will find the model name and firmware version, as well as the following settings options:

**Language:** German, English, Korean, Japanese

**Video signal:** NTSC/PAL mode

**Auto Logout (min):** You can set an automatic logout time for your web browser. The default setting is 5 minutes.

### 3.2.2.2 – Time



**Current Date & Time:** Displays the current time settings of your system.

**Time Zone:** Specify the local time zone based on GMT.

**Daylight Saving Time:** When enabled, the time is set one hour ahead of the local time zone for the specified period. This option appears only in areas that observe daylight saving time.

**Date Format:** Select the date and time formats to display.

**NTP Sync:** Toggles the connection to the NTP server on/off.

**NTP Server:** Synchronises with the time of the specified server address.

**NTP Sync Cycle:** Sets the NTP synchronisation cycle.

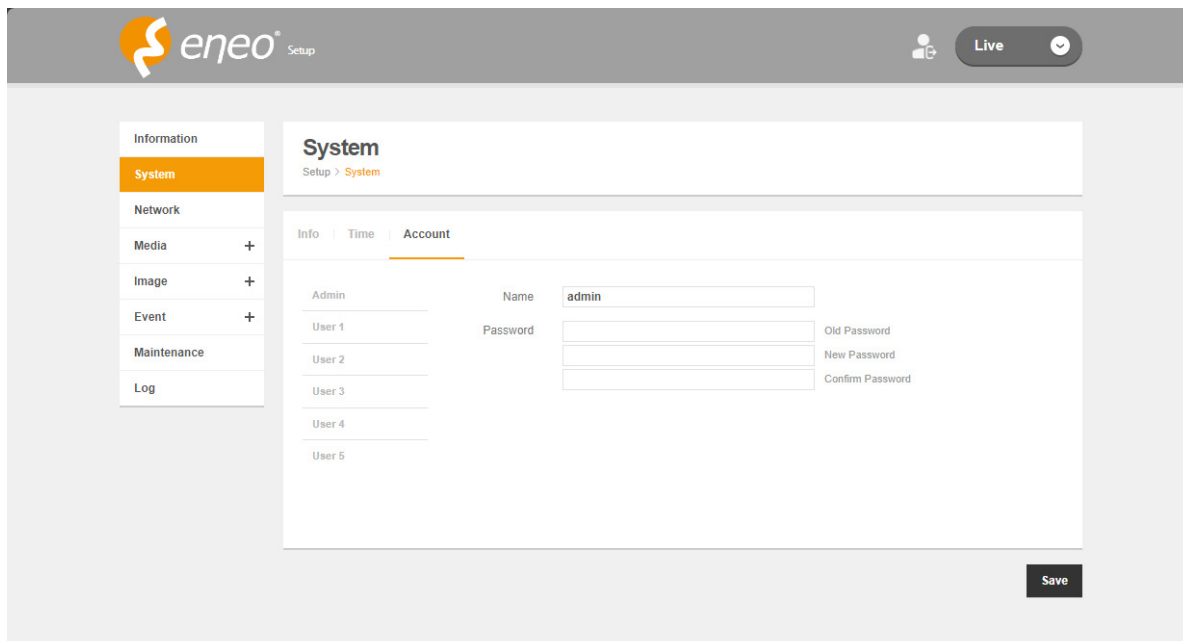
**Date & Time:** Choose between one of the two options.

**PC Time Sync:** The time of the web viewer is set to the time of the PC used to access the web interface.

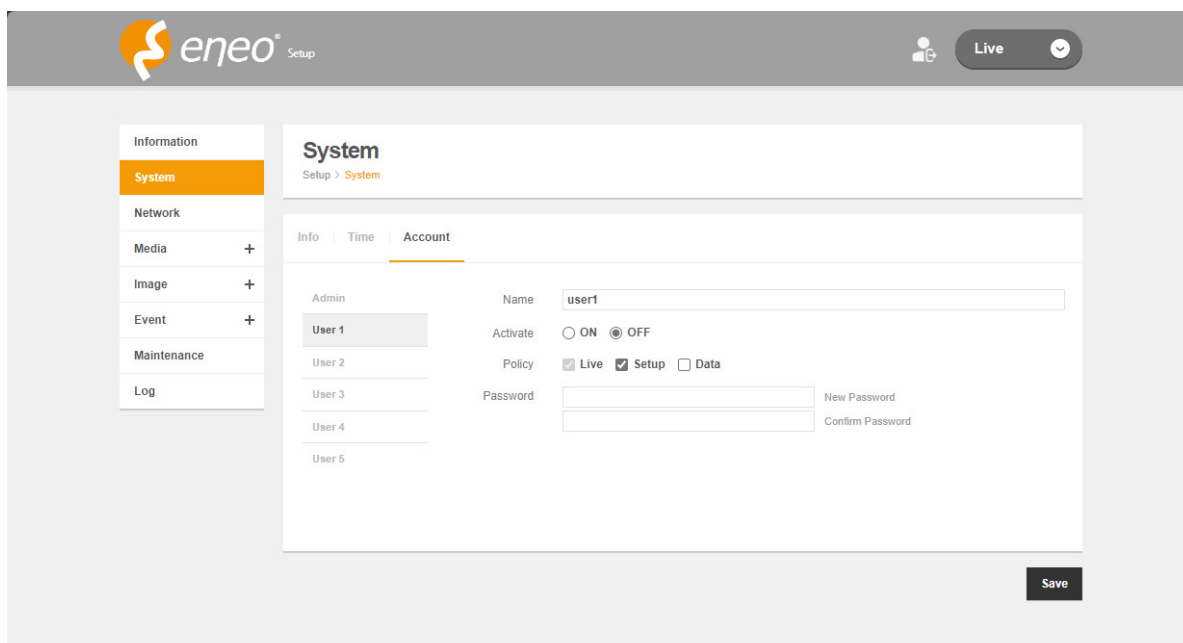
**Set Time:** Manually set the current time of the camera. Clicking on the year and date fields will display a calendar window.



### 3.2.2.3 – Account

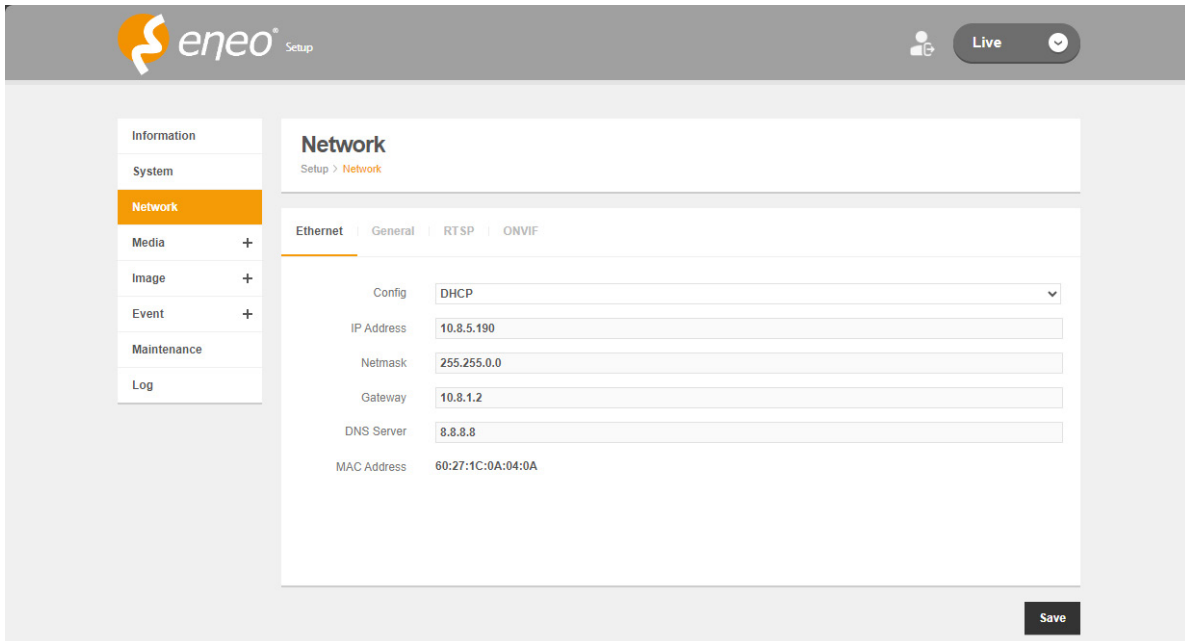


In this menu, you can change the access data and authorisations of the users.



### 3.2.3 – Network

#### 3.2.3.1 – Ethernet



**Configuration:** You can set DHCP and STATIC settings.

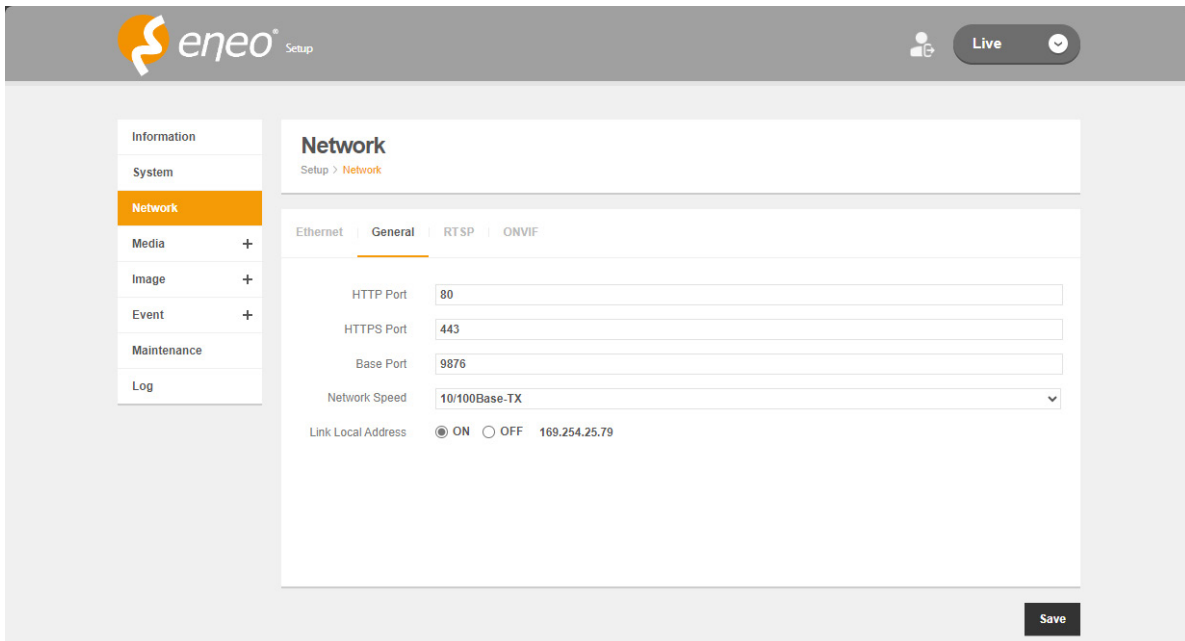
**IP Address:** The IP address is used to connect the IP camera to the control centre or the NVR. If DHCP is set to 'Disable', the IP address must be assigned by the network administrator to avoid network conflicts. In addition, the subnet mask and default gateway should be set correctly. For more information about this setting, please contact your network administrator.

**Netmask:** The subnet mask is set up for the IP communication range assigned by the network administrator. (If DHCP is enabled, this menu is not enabled).

**Gateway:** To connect the camera to an external network, the gateway address must be entered. The gateway address must be assigned by the network administrator. (If DHCP is enabled, this menu is not enabled).

**DNS-Server:** DNS (Domain Name Server) should be entered to access the network using the domain name. DNS should be assigned by the network administrator. (If DHCP is enabled, this menu is not enabled).

### 3.2.3.2 – General



**HTTP Port:** HTTP port used when accessing the camera via a web browser. The default is 80 (TCP).

**HTTPS Port:** A more secure version of HTTP, a web communication protocol. It can be used when setting the HTTPS mode in SSL, and the initial value is 443 (TCP).

**Base Port:** Port for the camera search program and communication with the camera. The initial value is 9876.

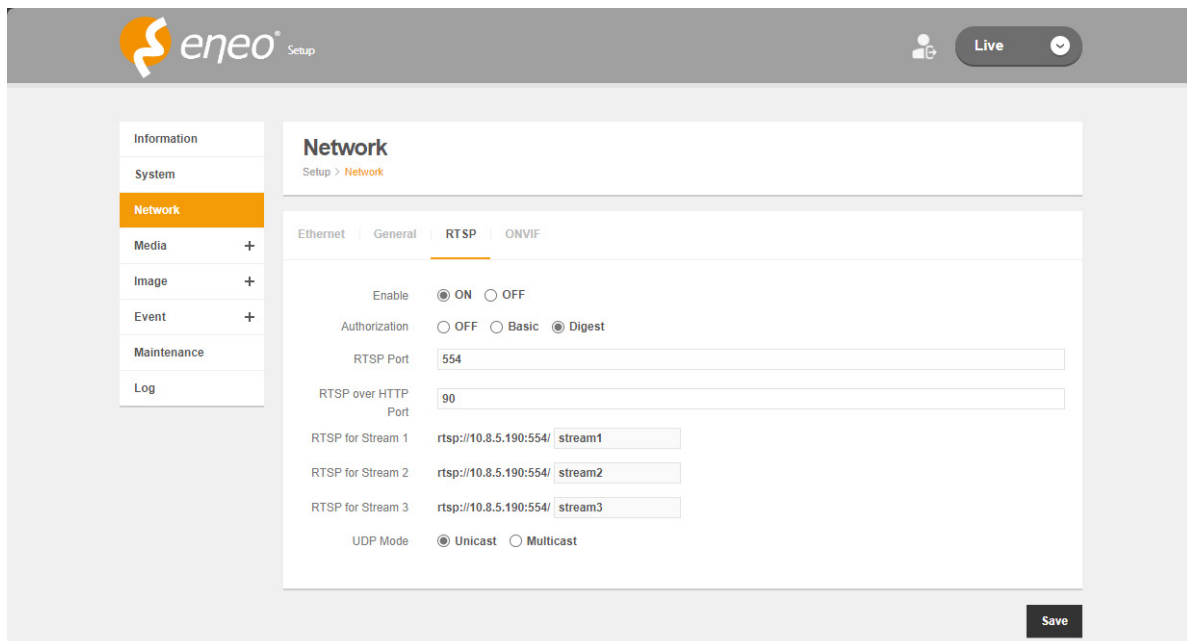
**Network Speed:** Choose between 10 Base T and 10/100 Base TX:

**10 Base T:** When using UTP cable Category 3 or higher, the maximum transmission distance is 100m at a network speed of 10Mbps.

**10/100 Base TX:** When using UTP cable Category 5 or higher, the maximum transmission distance is 100m at a network speed of 10/100Mbps.

**Link Local Address:** Networking enables automatic network setup with automatic assignment of numeric network addresses without the need for manual intervention by the operator or special configuration servers if the DHCP server is not available on the network.

### 3.2.3.3 – RTSP

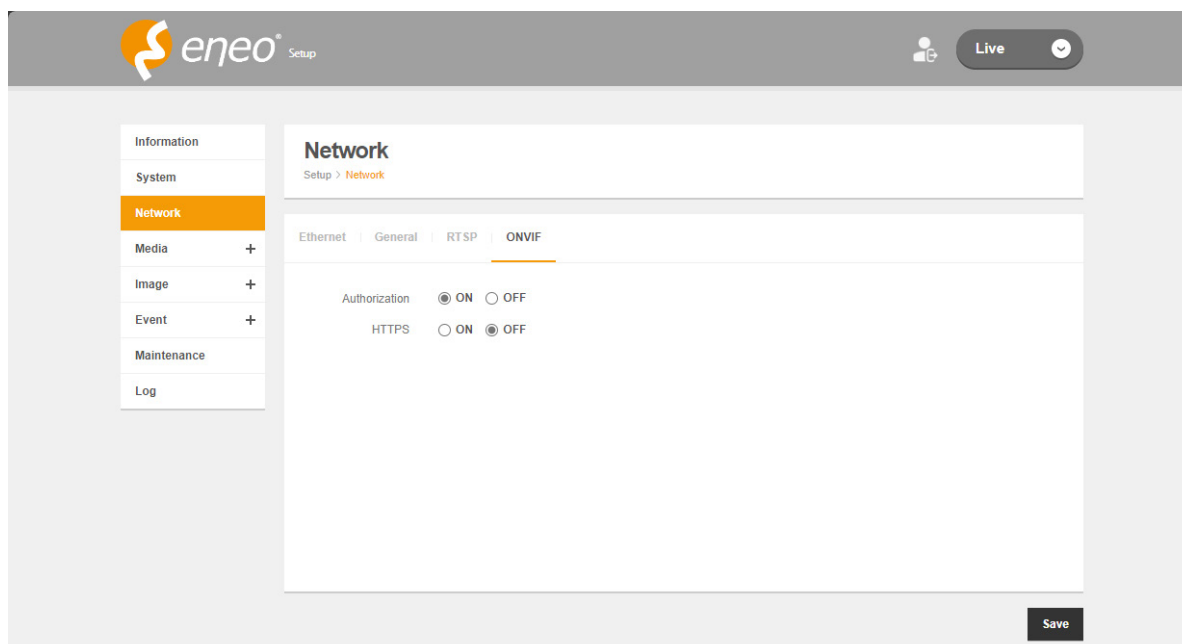


**Authorisation:** You can select an authentication method for RTSP streaming access.

**RTSP Port:** A port that controls real-time streaming. The initial value is 554.

**RTSP over HTTP-Port:** RTSP transmission is possible over HTTP. The initial value is 90.

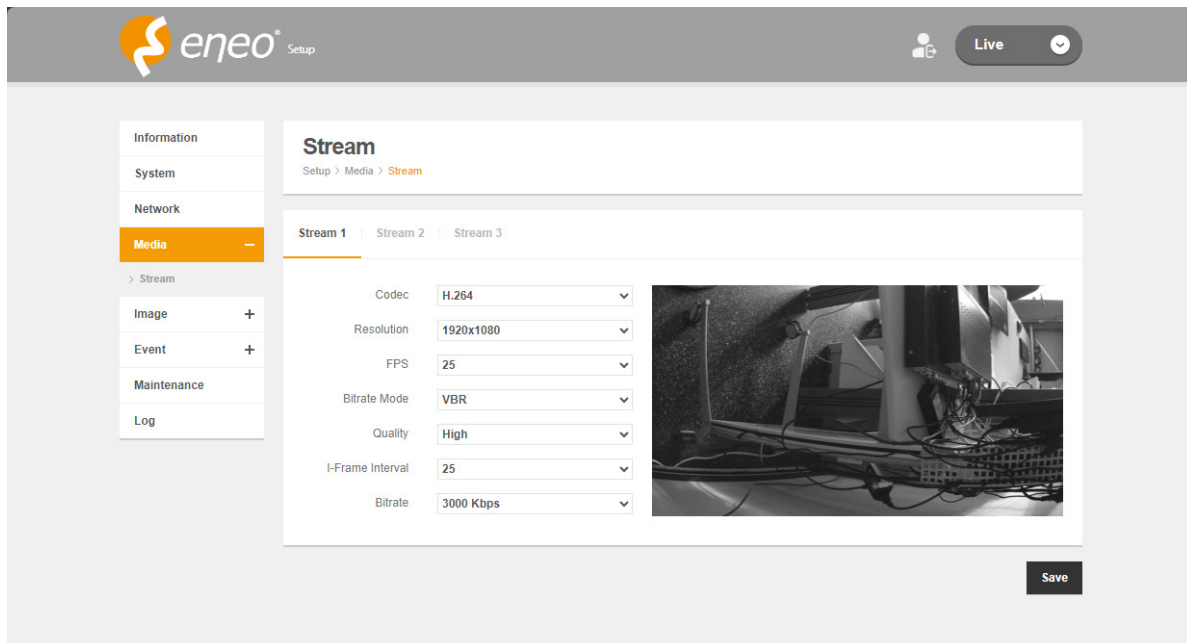
### 3.2.3.4 – ONVIF



**Authorisation:** You can enable or disable authentication for Onvif connections.

## 3.2.4 – Media

### 3.2.4.1 – Stream



**Encoding:** You can select the profile of the H.264 codec.

**Resolution:** For each stream, an individual resolution can be selected from the list.

**FPS:** For each stream, an individual frame rate in fps can be selected from the list.

**Bitrate Mode:** You can choose between constant and variable bitrate for compression. Fixed bitrate means that the bitrate of the network transmission is fixed, while the video quality or frame rate varies. Variable bitrate means that the video quality is given a higher priority, while the bitrate varies.

**Quality:** Determines the quality. You can choose between low, medium, high and super.

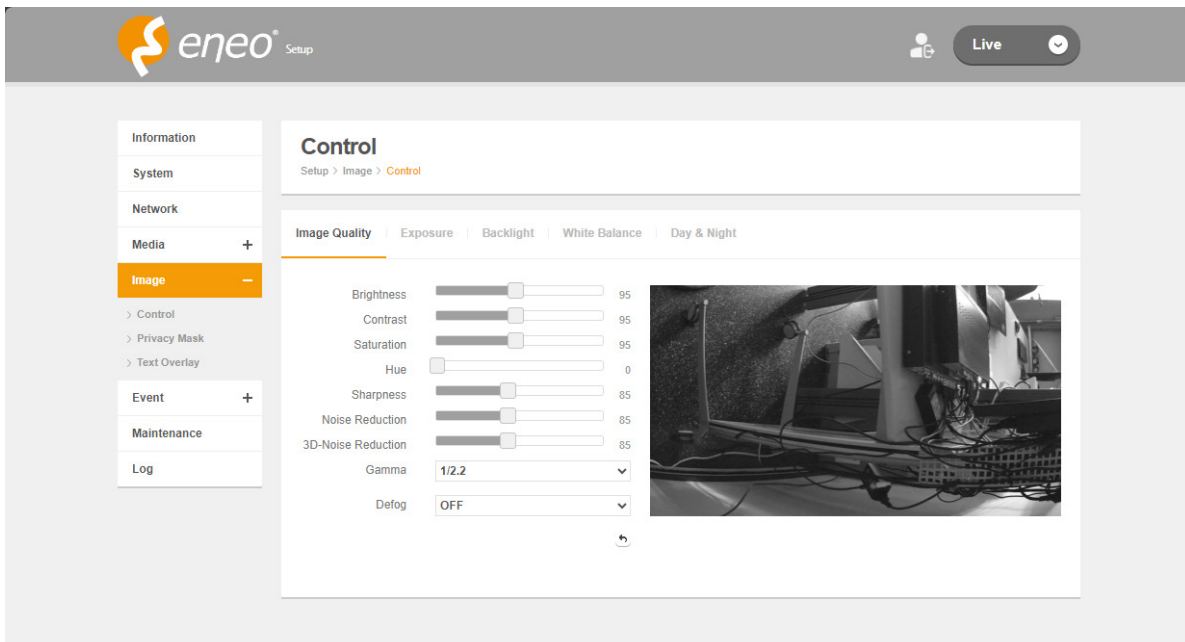
**I-Frame Interval:** indicates the interval (in terms of the number of frames) between two consecutive I-frames in a video sequence when the H.264 codec is selected. (One I-frame + 0 to multiple P-frames)

**Bitrate:** indicates the transmission speed over the network and defines the overall image quality together with the image resolution, frame rate, size of the I-frame interval and the compression codec for H.264. A high value ensures better image quality, but the total bitrate for the streams must be taken into account when calculating the network load.

## 3.2.5 – Image

### 3.2.5.1 – Control

#### Image Quality



**Brightness:** Adjusts the overall brightness of the scene. Increasing the value increases the brightness.

**Contrast:** Adjusts the contrast of the scene. Increasing the value increases the contrast.

**Saturation:** Adjusts the colour saturation of the scene. Increasing the value increases the colour saturation.

**Hue:** Adjusts the hue (only for NTSC). Decreasing the value produces a greenish hue, while increasing the value produces a pinkish hue.

**Sharpness:** Adjusts the sharpness of the scene. Increasing the value increases the sharpness.

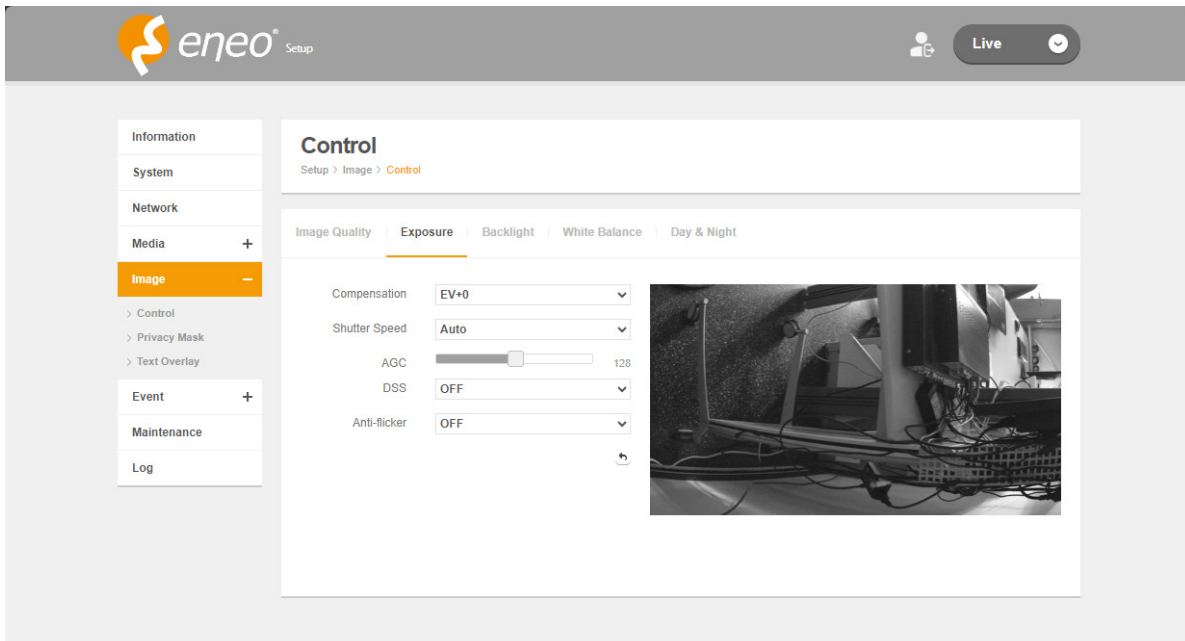
**Noise Reduction:** This is a method of reducing noise by using the pixel information of neighbouring pixels in a single video frame.

**3D Noise Reduction:** This is a noise reduction method that uses multiple video images. Increasing the level reduces noise, but the video may slow down.

**Gamma:** Adjust the contrast of the image.

**Defog:** Compensate for video in foggy or cloudy weather.

## Exposure



**Compensation:** This function adjusts the amount of light in specific increments (EV). Setting a positive value will display an overall bright image, while a negative value will display a slightly darker image.

**Shutter Speed:** Select how the exposure is to be controlled, AUTOMATIC or MANUAL

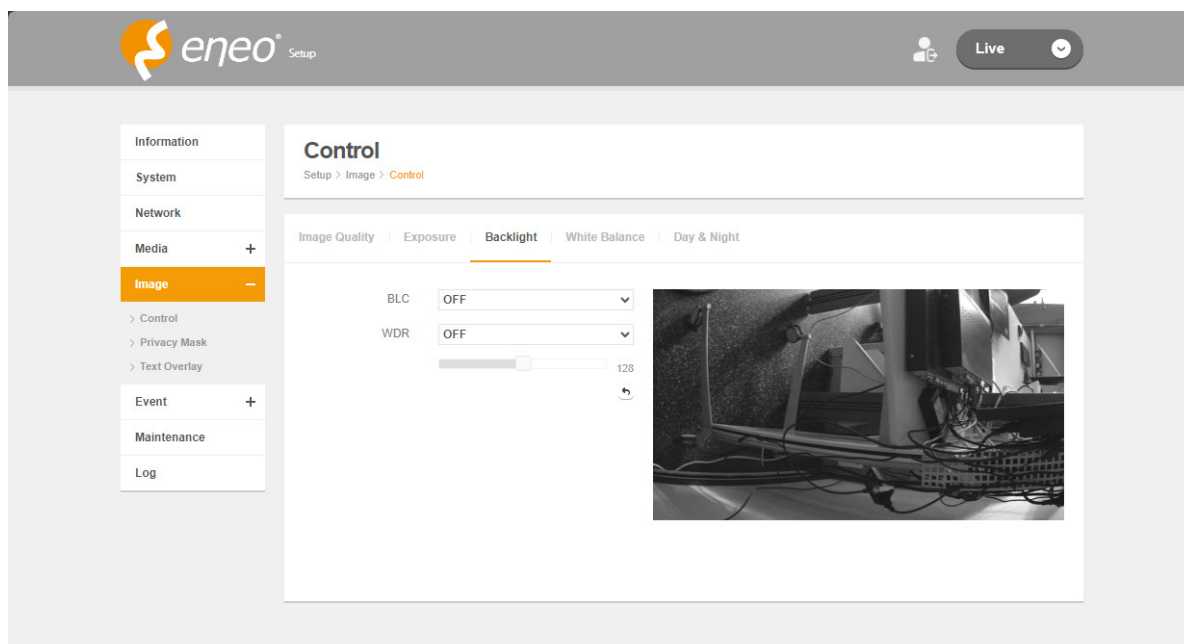
**AGC:** Adjust the gain value of video (especially captured at a low-contrast scene with brightness lower than normal) to control video brightness.

**DSS:** Extends shutter speed beyond the maximum shutter speed by multiples of the value in DSS

**Anti-flicker:** Prevents screen flicker caused by the dissonance between the ambient lighting and the frequency.



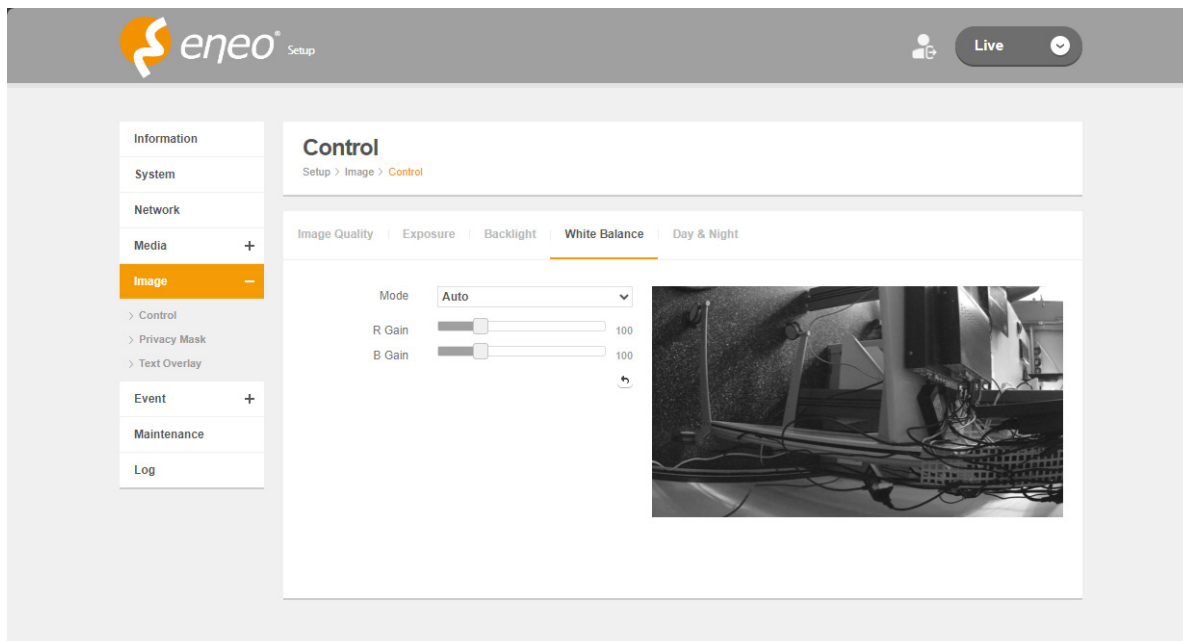
## Backlight



**BLC:** Improves the visibility of backlit objects.

**WDR:** Improves visibility by spatially equalising dark areas.

## White Balance



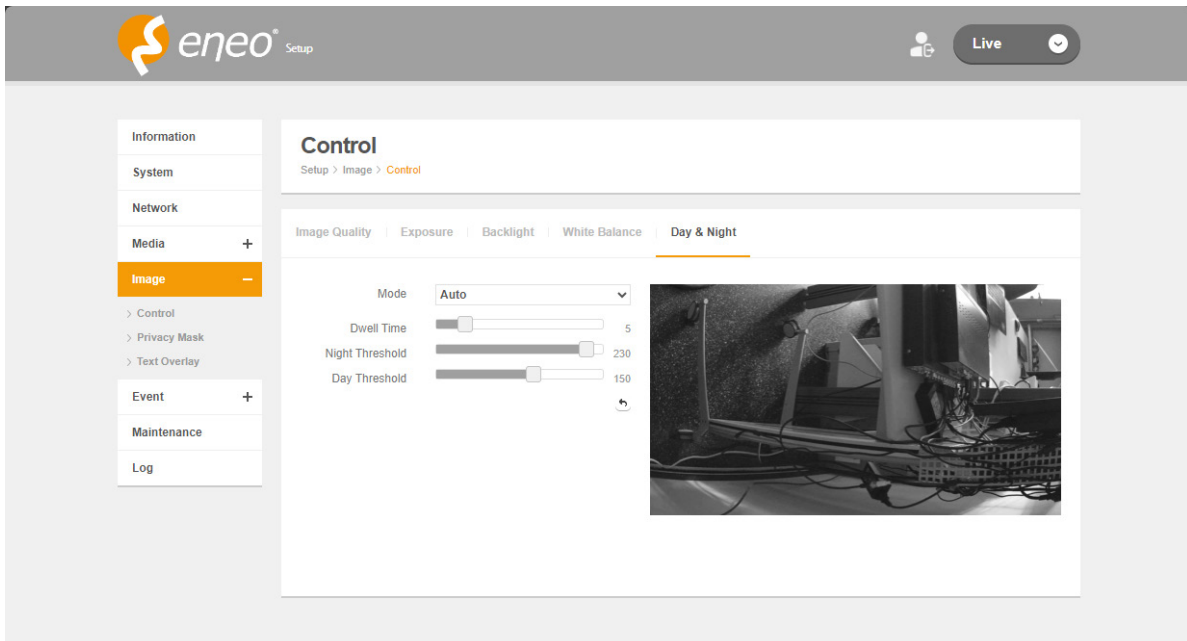
**Mode:** You can correct the image colours based on white under all lighting conditions

**Auto:** Corrects the colours of the camera video automatically.

**Manual:** You can manually adjust the red and blue gain of the camera video.

**R-/G-/B-Gain:** Adjust the colour temperature. (Only available in Manual mode)

## Day & Night



**Mode:** Selects how the day/night function is to be controlled.

**Auto:** Normally set to colour, but switches to black and white at low light levels at night.

**Day:** The video is always output in colour.

**Night:** The video is always output in black and white.

**CDS:** Controls the colour of the video when it is synchronised with an external device. The CDS must be maintained in order to switch the lighting mode from day to night or vice versa.

**Dwell Time:** Specifies the period for which the selected brightness condition must be maintained in order to switch the lighting mode from day to night or vice versa.

**Night Threshold:** Sets the threshold for Day->Night switching. Decrease the value to switch at low luminance.

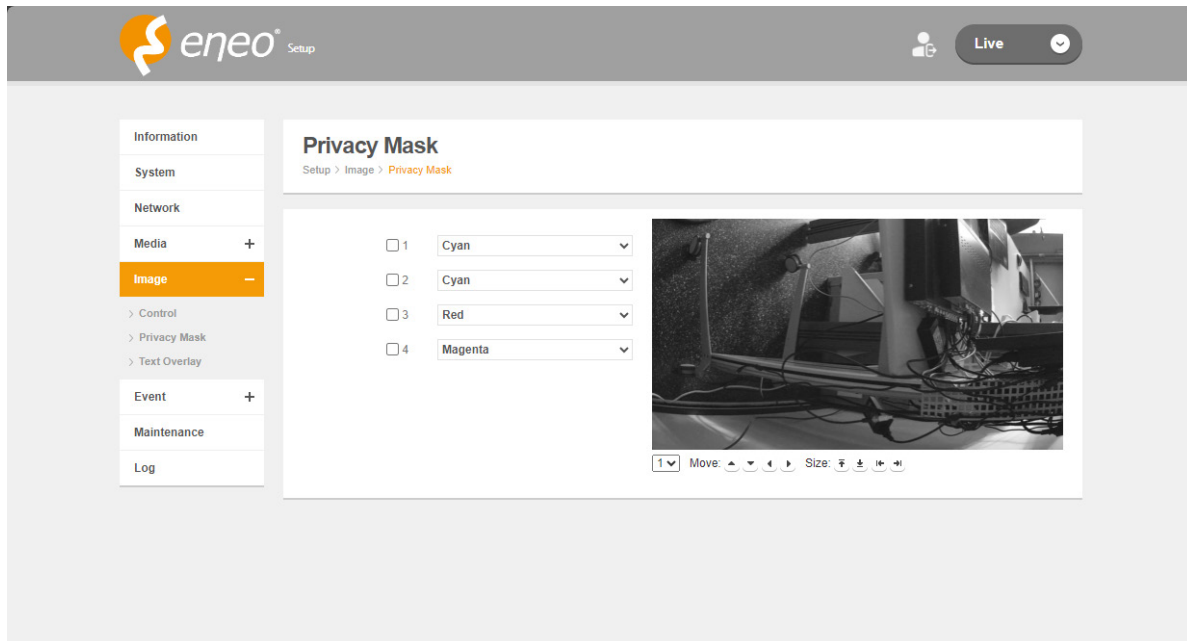
**Day Threshold:** Sets the threshold for Night->Day switching. Increase the value to switch at high luminance.

**Schedule:** Set the time during which the camera operates in colour mode.

**Start of Day:** Set the time for which Day will be maintained.

**End of Day:** Set the time to switch to Night.

### 3.2.5.2 – Privacy Mask

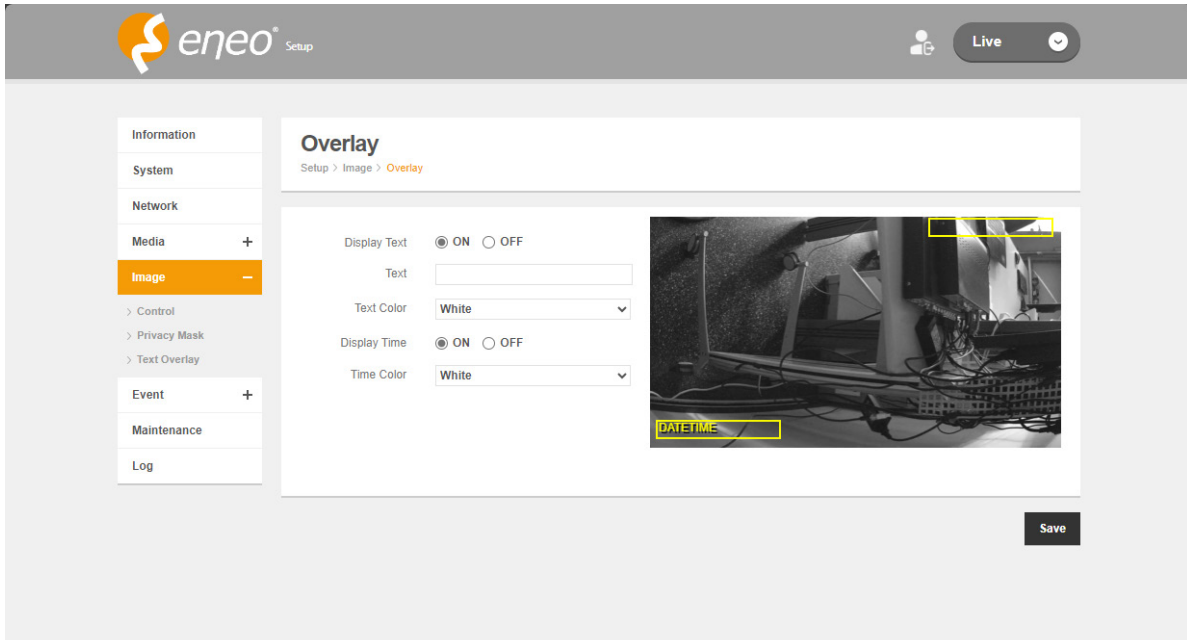


A maximum of four privacy zones can be defined.

Each zone can be assigned its own colour from a selection of eight colours

### 3.2.5.3 – Overlay

It is possible to display text in the live image.



**Text:** Enter the desired text (e.g. camera position) and select a colour for the text display. By default, the text is displayed in the upper right corner.

**Time:** If you have activated the display of the time in the live image, it will be displayed by default in the lower left corner (indicator: DATETIME).

**Save:** The changes are only applied when you click on Save.

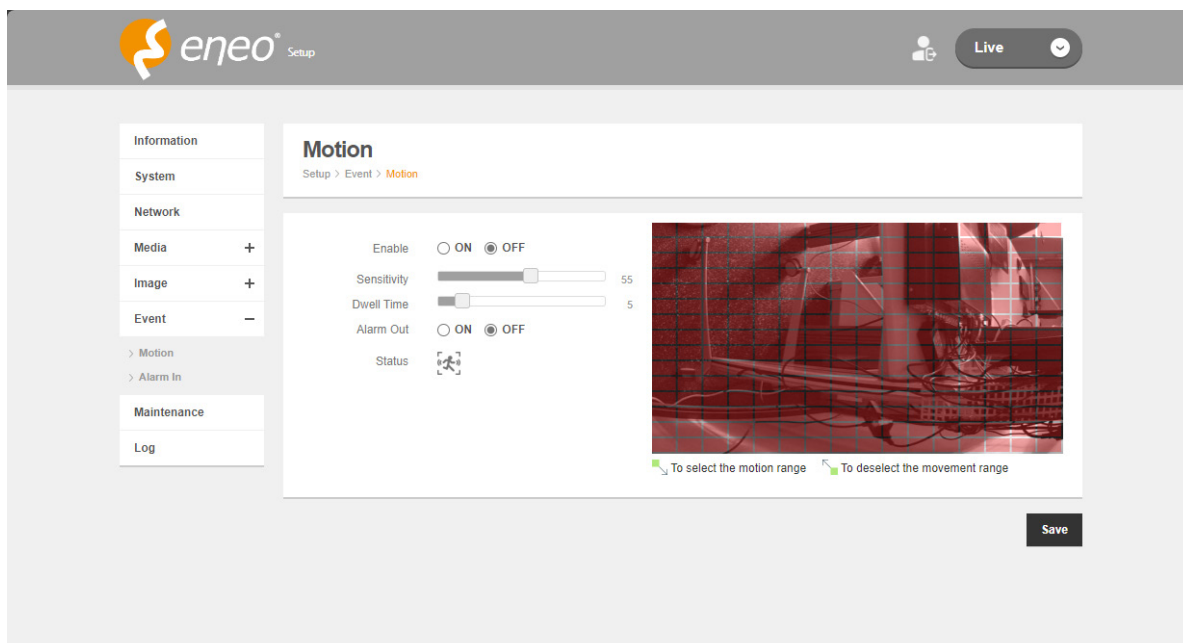


#### **Notice!**

*You can move the yellow boxes for the overlays to the position you want.*

## 3.2.6 – Event

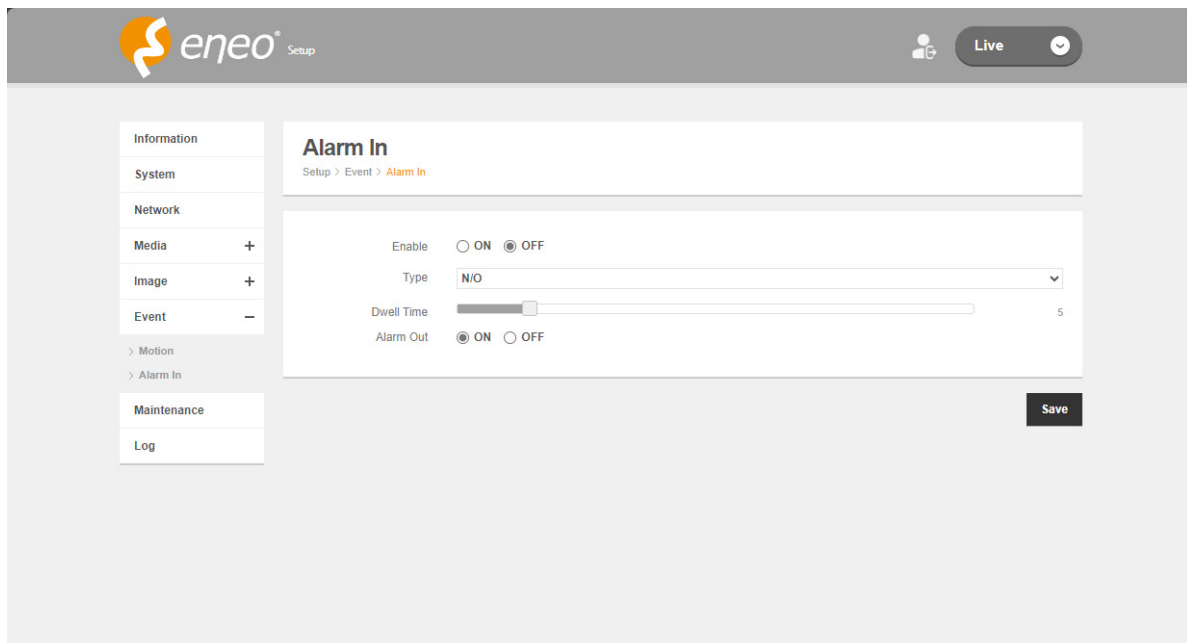
### 3.2.6.1 – Motion



You can set an event signal to trigger when motion is detected.

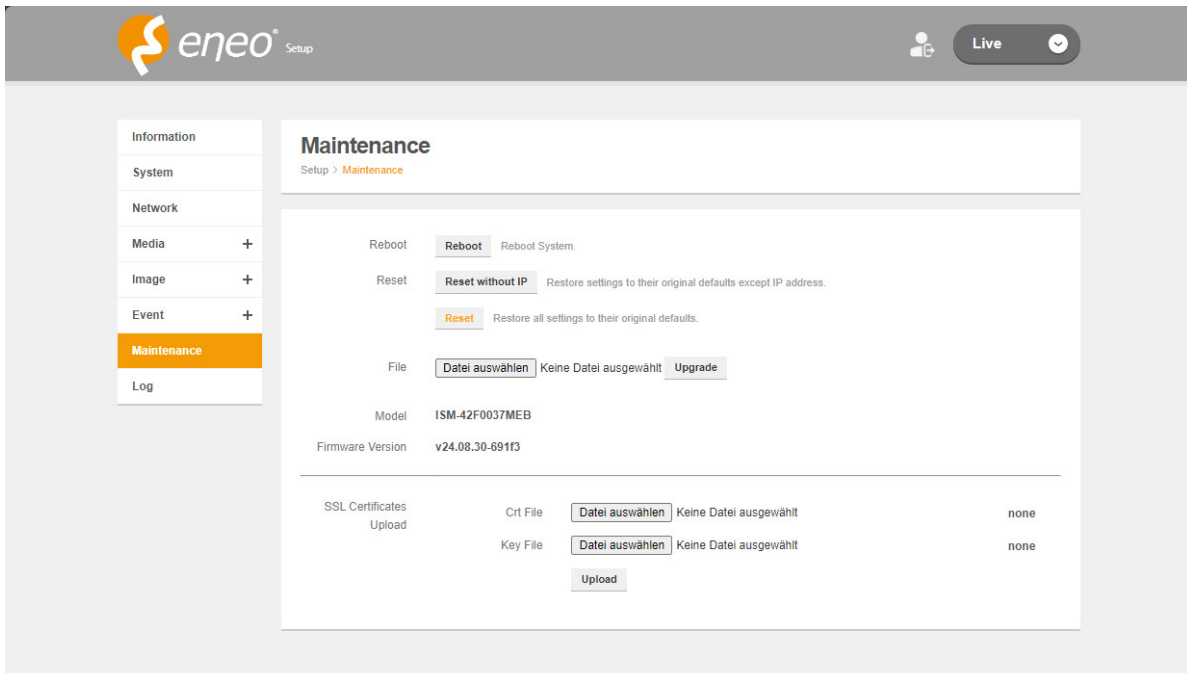
To set the area, follow the instructions below the live image view.

### 3.2.6.2 – Alarm Input



Even if this function appears on your device, it is only available if the corresponding inputs and outputs are present on the device.

### 3.2.7 – Maintenance



**Restart:** Reboots the camera without changing any settings.

**Reset without IP:** Reboots and loads the factory settings, but does not change the IP address settings.

**Reset:** Loads and saves the factory settings for all parameters, including the IP address settings.

**File:** Select a file and then click the Update button.

**SSL Certificates:** You can upload an SSL certificate for HTTPS connections.



### 3.2.8 – Log

The log records events since the last system restart.

The screenshot shows the 'eneo Setup' web interface. On the left is a sidebar with a menu containing 'Information', 'System', 'Network', 'Media', 'Image', 'Event', and 'Maintenance'. The 'Log' option is highlighted in orange. The main content area is titled 'Log' and shows a list of system events. The events are timestamped and include details such as 'Default setup loaded', 'System Closing', 'Stop ONVIF server', 'Start IP Camera v24.08.30-691f3...', 'Security checking was success!!!', 'Check CPU...Ok (73%)', 'Check Memory...Ok (15MB/74MB)', 'Linklocal IP: 169.254.25.79', 'Apply network configuration', 'Restore configuration', 'Check Ethernet...Ok (Link Up)', and 'STATUS (76400/32944)'. A 'Clear' button is located at the bottom right of the log area.

**Clear:** You can delete the protocol by clicking on the button.







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