PPIC46520

Instruction manual

Important notes and FAQs about this product and other products can be found on the website
http://www.abus.com/

Version 1.0

Original operating instructions in German language.
Keep for future use!

English

Introduction

Dear Customer,

Thank you for purchasing this product.

Hereby ABUS Security Center declares that the camera PPIC46520 complies with the RED Directive 2014/53/EU. The equipment also complies with the requirements of the following EU Directives: EMC Directive 2014/30/EU, LVD Directive 2014/35/EU and RoHS Directive 2011/65/EU. The full text of the EU Declaration of Conformity is available at the following web addresses:

www.abus.com/product/PPIC46520

To maintain this condition and to ensure safe operation, you as the user must observe these operating instructions!

Read through the complete operating instructions before setup the product, observe all operating and safety instructions!

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If you have any questions, please contact your specialist dealer or visit us on the Internet at

https://www.abus.com

Data storage is subject to country-specific data protection guidelines .

The setup of monitoring systems may be prohibited or regulated by law in certain countries. Before setup the system, the operator must ensure that the monitoring is within the legal framework.

Data protection notice

The operator is responsible for the legally compliant use of the product in accordance with the GDPR as the responsible entity.

Warning in the sense of § 201 StGB:

Whoever unauthorizedly records the non-publicly spoken word of another on a sound carrier and uses such a recording or makes it accessible to a third party can be punished with imprisonment or a fine!

Likewise can be punished, who listens in unauthorized to the non-publicly spoken word of another not intended for his knowledge with an eavesdropping device or communicates the recorded or listened non-publicly spoken word of another in the wording or its essential content publicly.

Disclaimer

These operating instructions have been prepared with the greatest care. However, if you notice any omissions or inaccuracies, please notify us in writing at the above address.

ABUS Security Center GmbH assumes no liability for technical and typographical errors and reserves the right to make changes to the product and operating instructions at any time without prior notice.

ABUS Security Center shall not be liable or responsible for any direct or indirect consequential damages arising in connection with the equipment, performance, and use of this product. No warranty of any kind is made with respect to the contents of this document.

The Buyer acknowledges that according to current technological standards it is not possible to create a software program that is completely error-free. ABUS Security Center therefore does not guarantee uninterrupted or error-free operation of the products, nor does it guarantee that all errors will be corrected. ABUS Security Center expressly does not warrant that all ABUS Security Center products will operate properly on all Customer systems or in connection with integrations, solutions, applications and (or) programs, or that integrations, solutions, applications and (or) programs will operate properly with later versions of ABUS Security Center products and systems.

English

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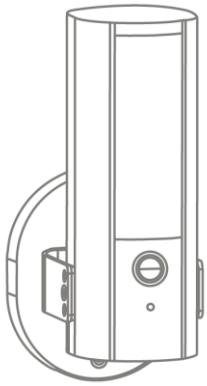
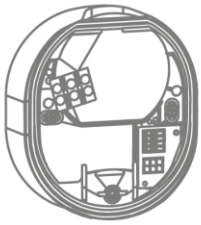
1. Scope of delivery

1		2	
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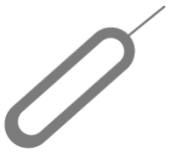
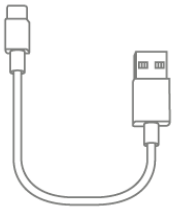
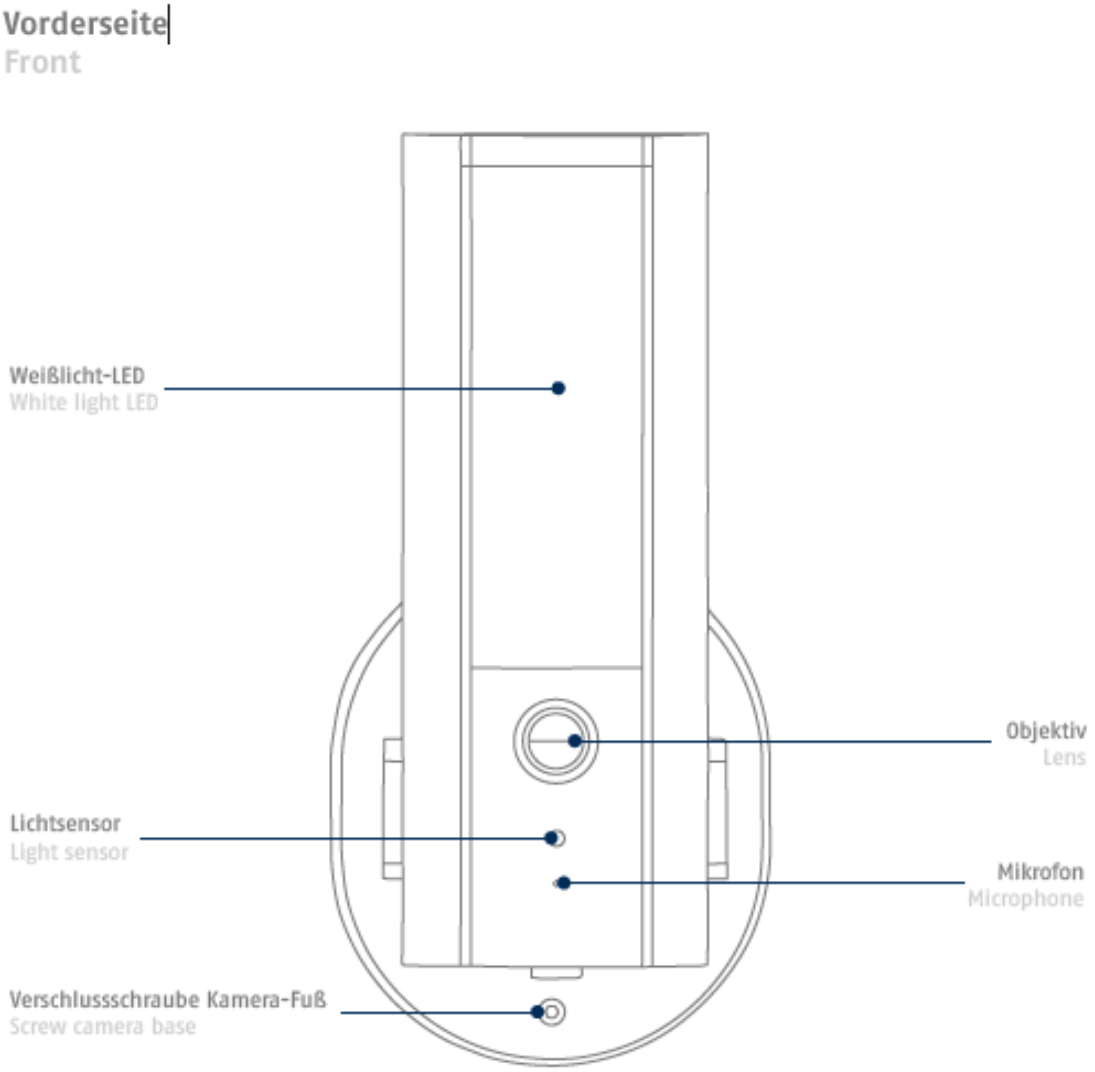
7		8	
9		10	

PPIC46520

- Wi-Fi Light Outdoor Camera (1)
- Camera foot (2)
- Antenna (3)
- Drilling template (4)
- Information (5)
- Mounting material (6)
- Reset tool (7)
- microSD card (preinstalled) (8)
- Allen key (9)
- USB A to USB C cable (10)

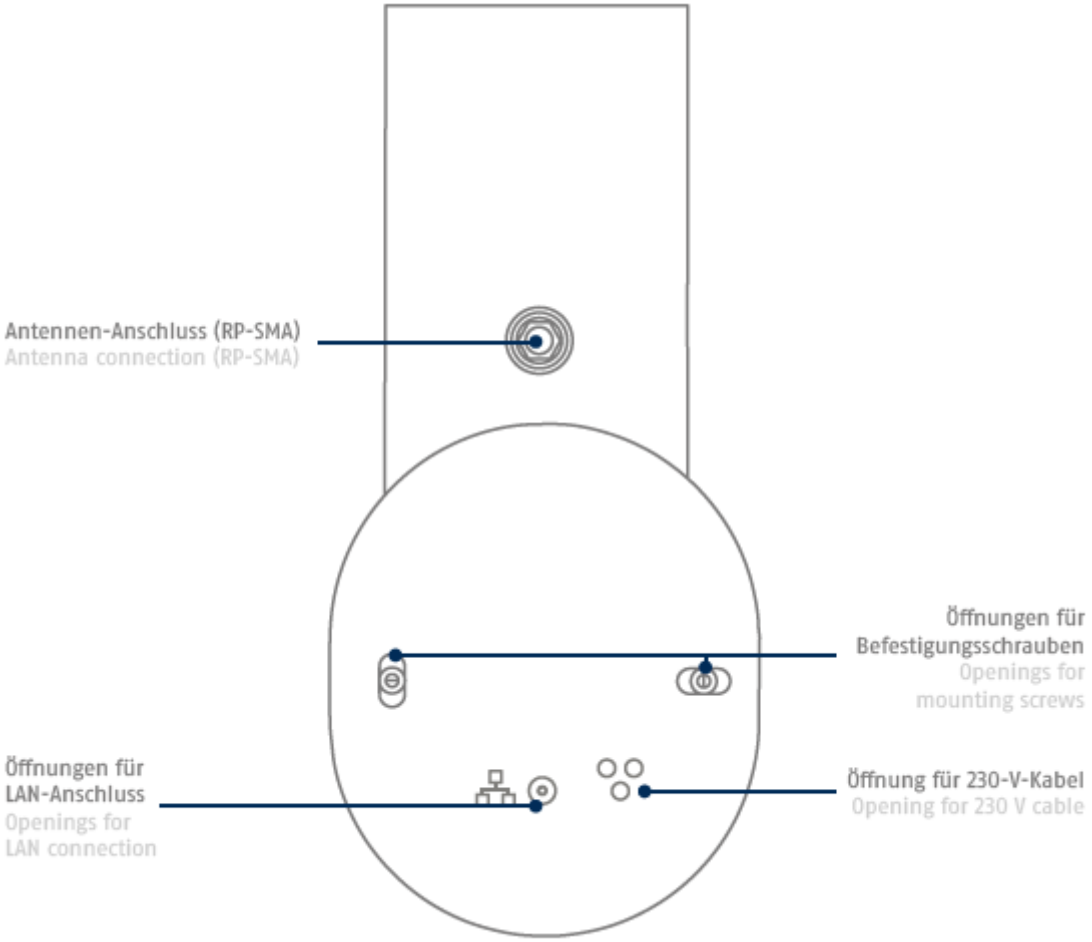
English

2. Description of the hardware



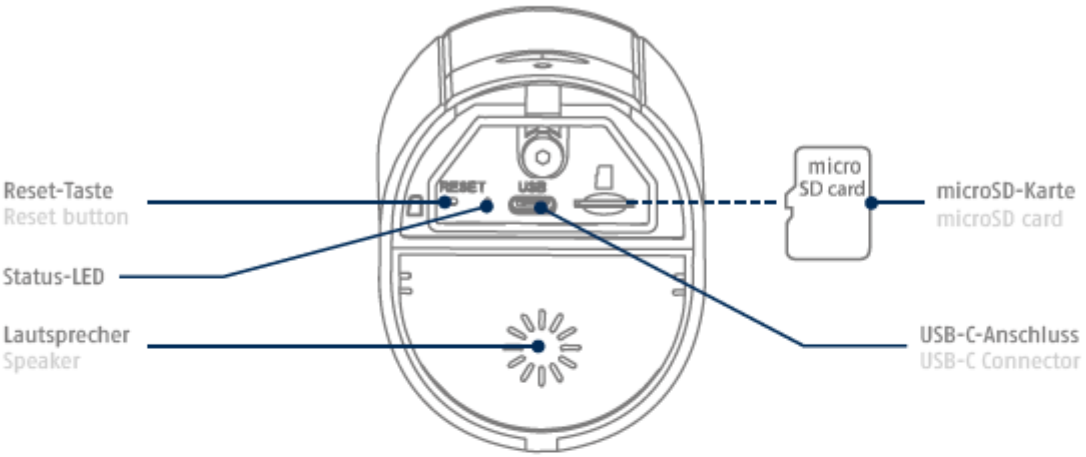
English

Rückseite
Rear

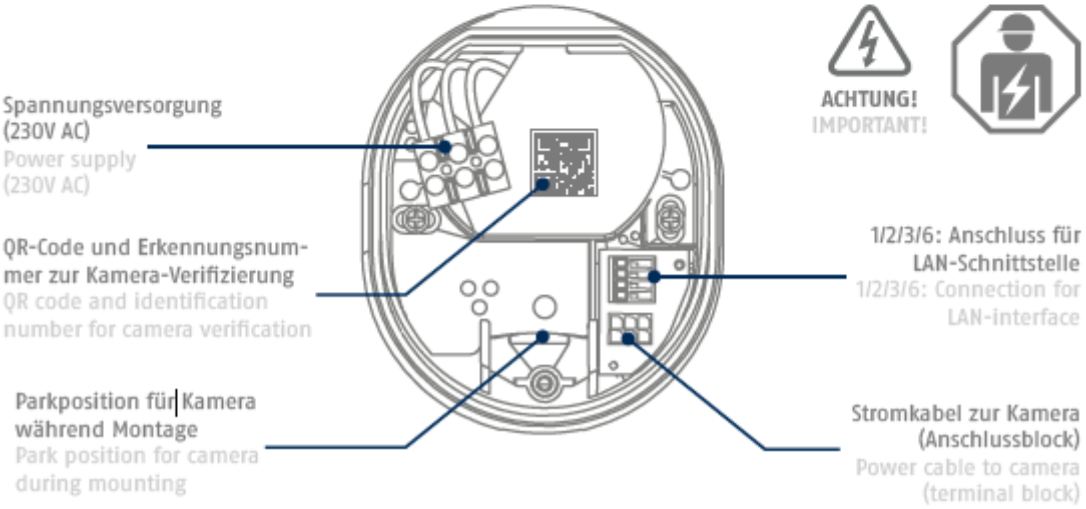


English

Unterseite (offene Abdeckung)
Bottom (open cover)



Kamera-Fuß (innen)
Camera base (inside)



3. Assembly / Installation

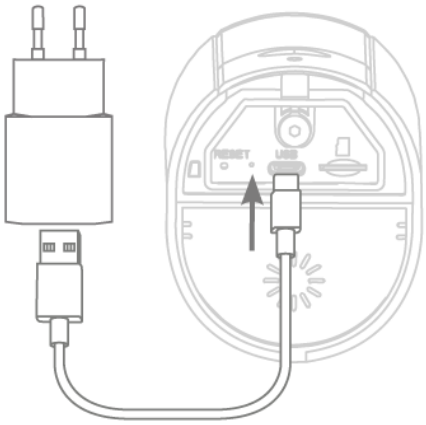
	ATTENTION! During installation, the camera must be disconnected from the mains voltage.

	Site The camera is suitable for outdoor use. Do not place the camera in the direct vicinity of heaters, ovens, other heat sources or under direct sunlight. Operate the device only in locations with temperatures within the permissible ambient temperature range -20°~50°C.

	Attention! Place the camera under a canopy or similar to avoid direct sunlight. The camera should not be pointed directly at a light source or at the sun.

During the installation of the camera, you have the option to access the following installation instructions via the help in the app.

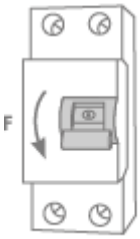
3.1. Temporary power supply



The setup of the camera via app can be performed before mounting.

Advantage: This way you can already see the first live image and directly fine-tune the bending direction of the camera during the following installation. During setup, use the enclosed USB cable and a standard smartphone charging plug (5V, 1 A) for the temporary power supply. Connect it to the corresponding port of the camera; this is located on the underside of the camera behind the cover.

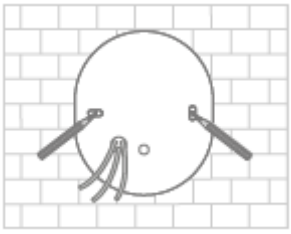
3.2. Installation



ATTENTION!

The installation of the device involves work on the mains voltage. It must therefore be carried out by a specialist in accordance with the usual national installation regulations and connection conditions. During installation, the electrical line to be connected must be de-energized. Therefore, first switch off the power.

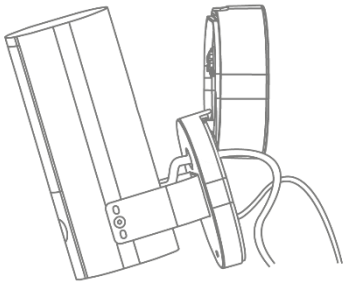
Make absolutely sure that the circuit breaker remains switched off during the entire installation. If possible, ensure that this circuit breaker is not accessible. Subsequently, determine the absence of voltage at all poles using a suitable measuring device.



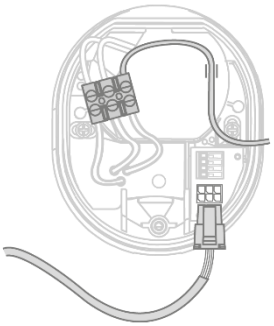
Using the drilling template, mark the position of the required drill holes, drill the holes and insert the dowels.

Three small openings are indicated on the back of the camera base, for the three wires of the power cable that are to supply the camera with regular voltage. Feed the three wires through the rubber seal at the corresponding points. Ensure the appropriate cable length for the following connection to the luster terminal in the base of the mount. Mount the base of the bracket at the intended camera position using the enclosed screws.

Connect the live conductor previously passed through the foot, neutral conductor and the protective conductor with the luster terminal.
Tip: The luster terminal can be removed from its holder.
L = Current carrying conductor (mostly black or brown)
N = neutral conductor (mostly blue)
PE= protective conductor (green-yellow)

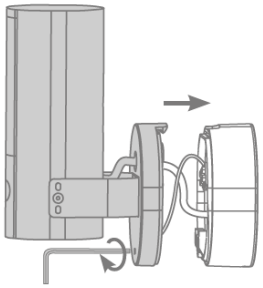


The base of the mount has a so-called parking position for the camera. Place the camera in the parking position for subsequent cabling.

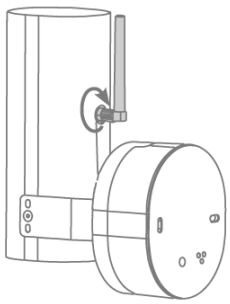


Important! Connect the (green-yellow) protective earth conductor, which is already connected to the cover of the foot at the factory, to the luster terminal in the camera foot.
If necessary: Use the small guide rail in the camera foot for the wire. Then correctly connect the power cable of the camera via the (black) plug to the corresponding connector in the camera foot.

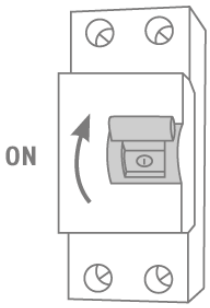
Note:
The connector is locked in the correct position to prevent accidental disconnection during further assembly. When disassembling, take into account the corresponding clamping mechanism in order not to damage the cabling.



Now remove the camera connected by power cable from the parking position and screw it back onto the base of the mount. Make sure that no cables are crushed.



Attach the antenna to the connector on the back of the camera.

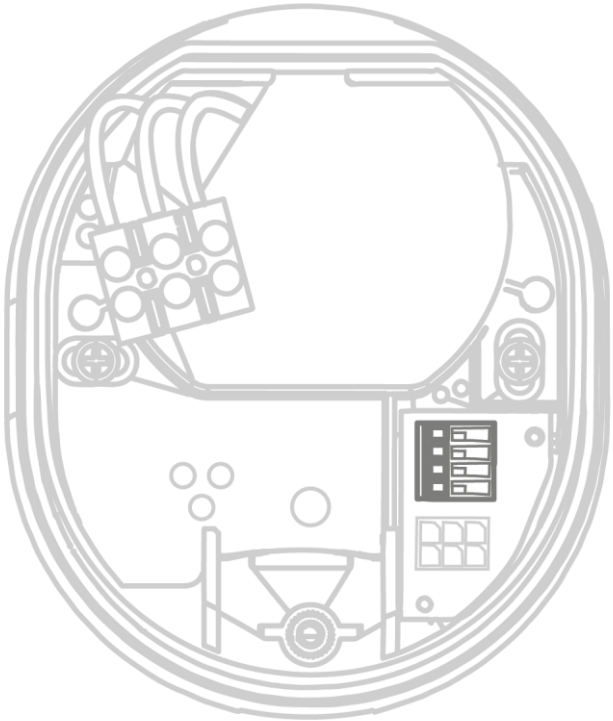


The camera is now fully operational. Make sure that no one is handling other open power conductors in the house and then switch on the power supply for the camera. After approx. 60 seconds, the live image can be accessed again if the start-up via app has already been carried out.

If you have not already done so: Start the initial setup via app now.

Optional: Connection to a LAN network

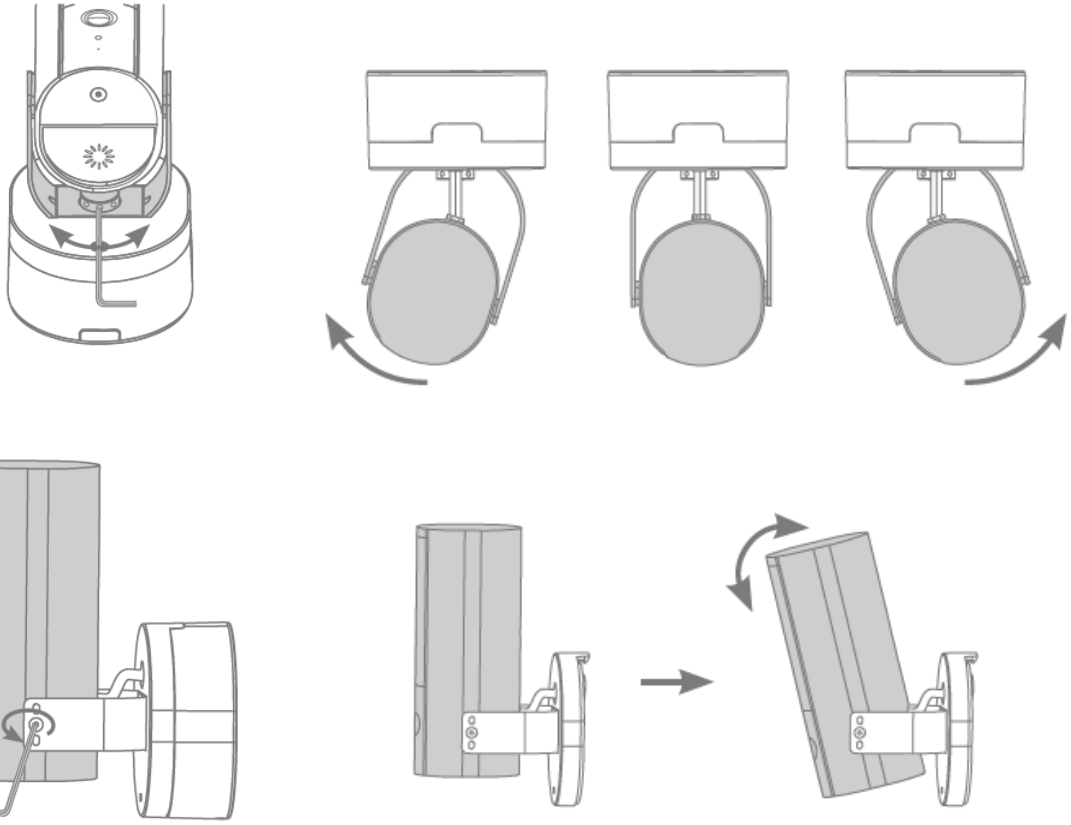
To connect the camera with a network cable, use existing or pulled network cable. Connect the cables to the network connector block according to the following color description.



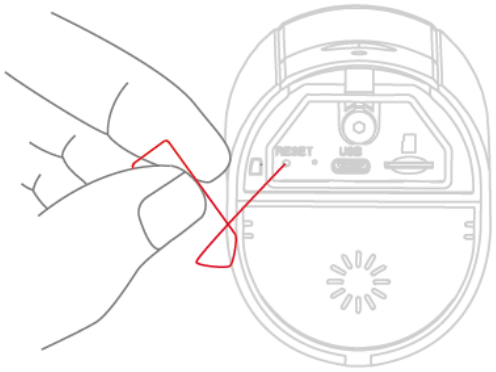
Terminal block	Color - Cat5e network cable
TD+	Green / White
TD-	Green
RX+	Orange / White
RX-	Orange

4. Set the viewing direction of the camera

To adjust the exact viewing direction of the camera: Slightly loosen the locking screw in the middle of the bracket using the Allen key and the two screws on the bracket to pan and/or tilt the camera. Tip: Use the live image in the app for fine adjustment.



5. Restore factory settings



If there are any difficulties during setup or if you have forgotten the access data (admin password and/or security code), reset the camera to factory settings:

Open the bottom cover of the camera using an Allen key and press the reset button using a thin object (e.g. the microSD card removal tool or a paper clip) for at least 5 seconds until the status LED flashes.

6. Installation instructions Wi-Fi operation

When installing the camera, make sure that it is within optimal range of the router. The camera can only be accessed if there is a sufficient Wi-Fi signal to the router.

For installations in larger objects, a Wi-Fi repeater is recommended to optimize the range. Optionally, you can also operate the camera via LAN.

Please note that structural conditions can influence the transmission.

⚠	**Note** Information about compatible Wi-Fi repeaters can be obtained from your network operator or the manufacturer of your router. ABUS Security Center GmbH & Co. KG will not make any recommendations for Wi-Fi repeaters. Pay close attention to the installation recommendations of the Wi-Fi repeater. The positioning should ideally be between the router and the camera.

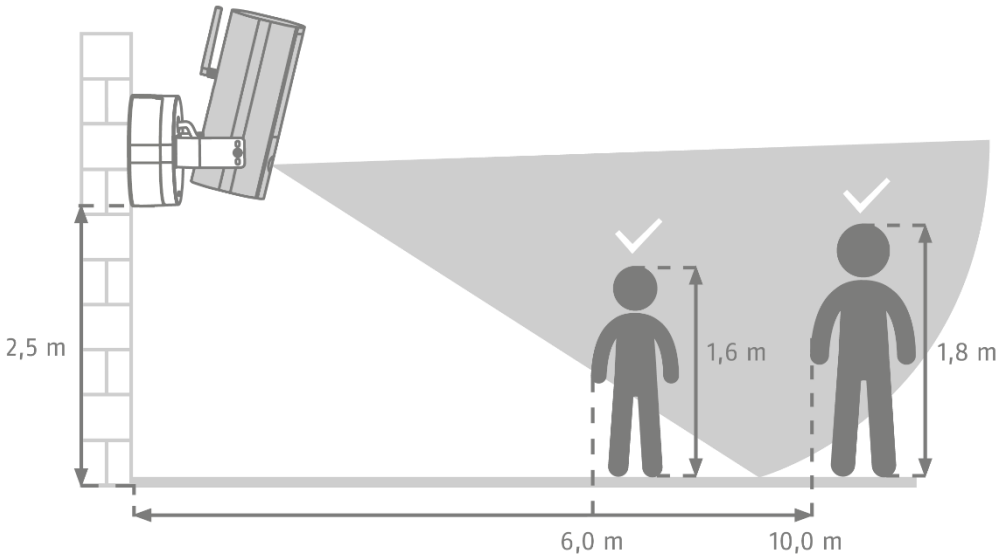
7. Camera coverage area

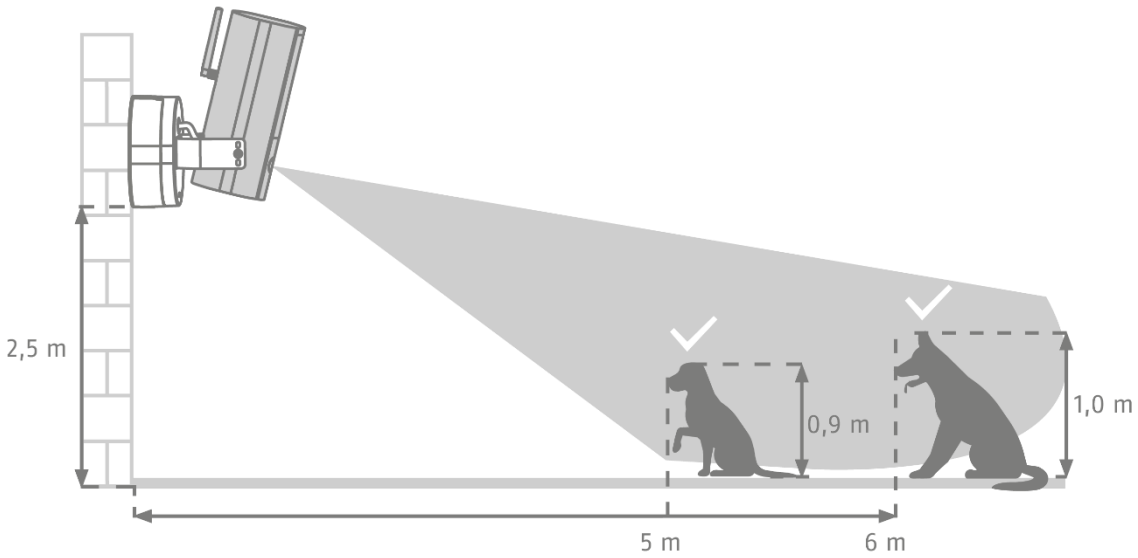
With intelligent object detection, the detection range of the camera is based on the selected object. If the object is outside this area, it can be "seen" by the camera and displayed on the live image, but it does not trigger an exposure.

Intelligent Object Detection works reliably over the following range, motion detection may occur outside these specified ranges but is not guaranteed.

Object type	Max. Range
Person	8 - 10 meters*
Animal	4 - 6 meters
Vehicle	10 - 15 meters

* Range is based on a person with a height of approx. 1.80 m .





The detection area of the camera must be aligned as shown above so that the Intelligent Object Detection works smoothly. If the camera is installed at a steep angle to the ground, some objects will be detected too late or not at all. The reason for this is that the detection is not sufficient to specify the object more precisely.

	Note The reliability of object detection depends on local factors. In some situations, false alarms may still occur. Environmental influences such as rain, snow, insects or dirt can have a negative effect on the results.

7.1. Installation location

The camera with IP66 protection class is suitable for outdoor use. The teach-in into the app is described under 5. App2Cam Plus: First access. For external access to the camera, you need a router with Internet access.

	Note Place the camera so that it is not covered by objects. If possible, place the camera under a canopy or similar to avoid direct sunlight. The camera should not be pointed directly at a light source or at the sun.

8. Intelligent image analysis (object recognition)

8.1. Notes on object recognition

Intelligent object detection allows you to differentiate between different types of objects (human, animal, car) during a detection of objects. Thus, you have the possibility that objects, for example, do not trigger at all or with a lower priority.

Please note that the object detection depends on the distance, the viewing angle and the object size (seen from camera to object). Please read the section "7 Detection range of the camera".

	Note **Intelligent object detection is used to significantly reduce false alarms compared to traditional methods of motion detection.** Traditional methods are, for example, motion detection via heat radiation by PIR sensors or classic software motion detection without object detection, which only considers the object size but not the object type. It always requires environment-dependent individual fine-tuning of sensitivity and use of "areas without detection" to achieve maximum accuracy, but 100% accuracy and complete exclusion of false alarms is not possible.

Vehicles which are in the parking position do not trigger any recordings, not until the vehicle is moving again or there is any movement in the image.

In the case of animal and person detection, recording is triggered even if they are not moving. If a mannequin or an image with people is visible in the recording area, for example, please hide this area.

	Note When detecting animals, the algorithm checks for the presence of 4 legs. The main target group of animals to be recognized are dogs and cats.

If several objects are detected simultaneously in the image, the object detected first is always displayed in the event list.

For example, when a vehicle enters the driveway, the event list shows the vehicle as the trigger, even if a person exits the car in the video sequence.

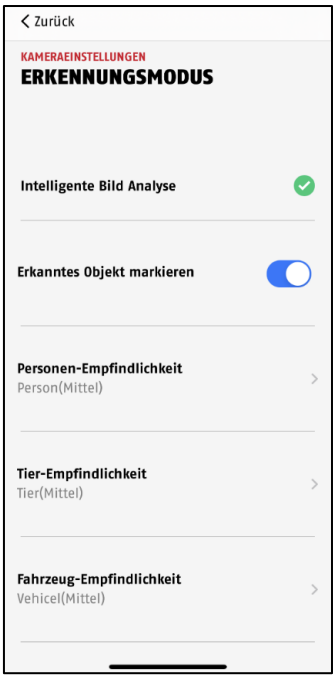
The person is nevertheless marked with a colored recognition frame in the video.

Please note that an object recognition searches for specific properties of an object in the image, but these can be falsified by environmental influences such as wind, rain, snow or insects. Therefore, there is always a residual risk that an object is incorrectly classified. For example, objects that look similar to the outline of a person can be detected as a person. An example could be a flag that is moving in the wind and in this case could be detected as a person in a raincoat.

To exclude areas that are particularly susceptible to interference from detection, you can set an area without detection here. The area is still visible, but no object detection takes place here and therefore no push message and recording.

In case of increased false triggers caused by objects, it is recommended to adjust the sensitivity of the objects. Often, these are already avoided at a lower level.

You can fine-tune the sensitivity of the detectors using the sliders.



The following settings are recommended for the various objects:

Person: Medium

Animal: Medium

Vehicle: Medium

	Note The reliability of object detection depends on local factors. In various situations, false alarms can occur. In particular, environmental influences such as rain, snow, insects, dirt and difficult lighting conditions can have a negative effect on the results.

To achieve an optimal performance of the object detection, certain frame conditions have to be considered during the installation or the field of view of the camera (see also section 7):

1. The installation height of the camera should be chosen between 2 and 3 meters.
2. The object height in the selected image section must be between 1/16 and 1/2 of the image height. If objects in the image are displayed too large or too small, they may not be detected correctly.
3. Note that below the camera a certain area is unmonitored.
4. Reflective surfaces in the image section can irritate object recognition.
5. Make sure that there are no branches or leaves in the close-up range of the camera in the image section.
6. Do not use object detection in areas with a correspondingly high number or frequency of objects (people, vehicles). This will result in a high number of alarms.

9. App2Cam Plus: First access

9.1. System requirements

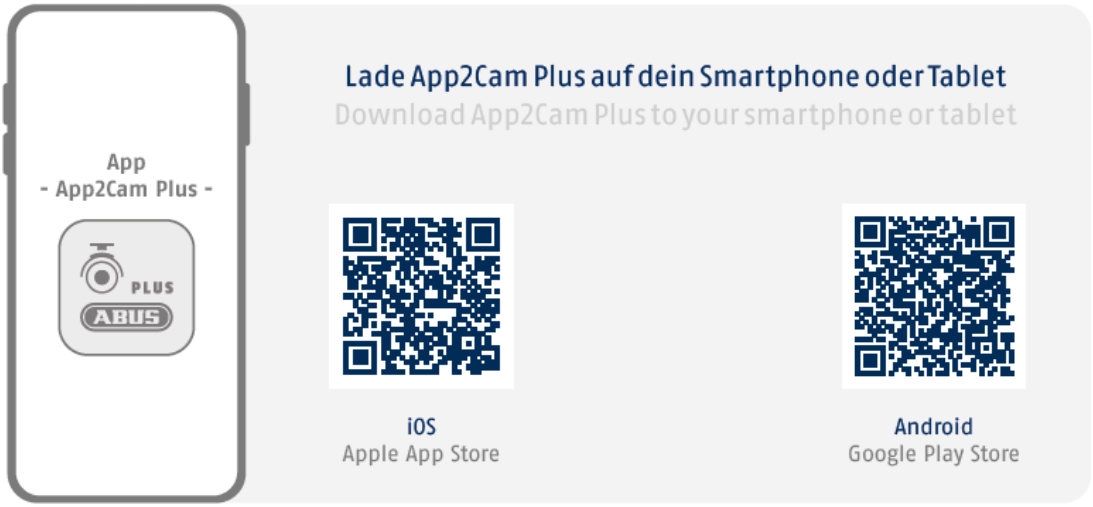
Please note the following points to ensure easy setup:

- 2.4 or 5GHz Wi-Fi network with password and encryption.
- The location service of the mobile terminal must be activated for network integration.
- Bluetooth of the mobile device must be activated.
- Network integration can only be performed in conjunction with the App2Cam Plus.
- Only the following special characters are possible when entering the Wi-Fi password.

%	(	)	-	.	:	=
^	_	{	}	~	!	#
$						

9.2. Download app

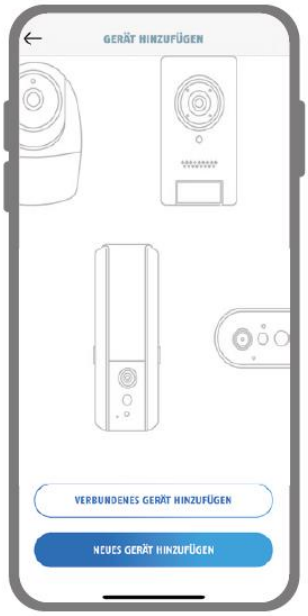
To access it for the first time, download the "App2Cam Plus" app from the Google Playstore or Apple App Store.



During the installation, help pages are available for the various steps. Click on the icon to access the help pages.

9.3. Set up camera

9.3.1. Bluetooth setup



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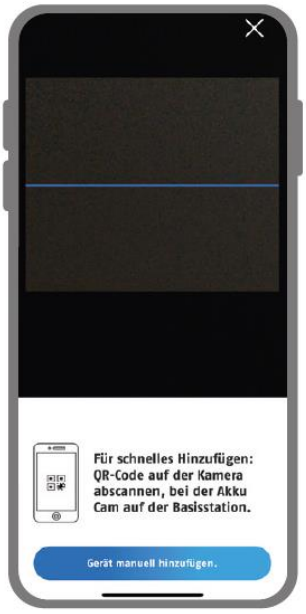

2

3

1. Launch the App2Cam Plus and select "Add new device" to start the setup process.
2. Option 1: Scan the QR code; located in the camera foot.
3. Option 2: Tap the "Add camera manually" button and then select your camera model from the list.

⚠	**Note** For optimal startup, the camera and the smartphone/tablet must be as close to each other as possible, at a maximum distance of 3 meters.

4

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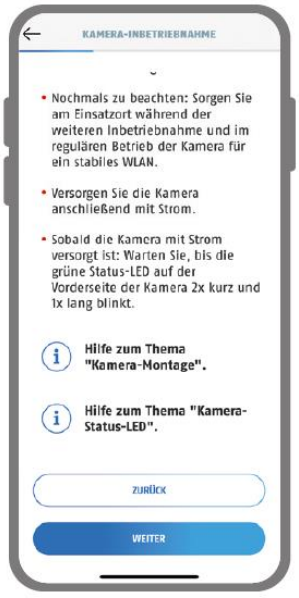


6

4. Select "setup via Bluetooth".
5. If you have not already done so: Activate Bluetooth in the settings of your mobile device. Then tap on "Next".
6. Now supply the camera with power, if not already done, and wait 2 minutes until the status LED of the camera (behind lower cover) flashes 2x short and 1x long.

   Then tap on "Next".

7

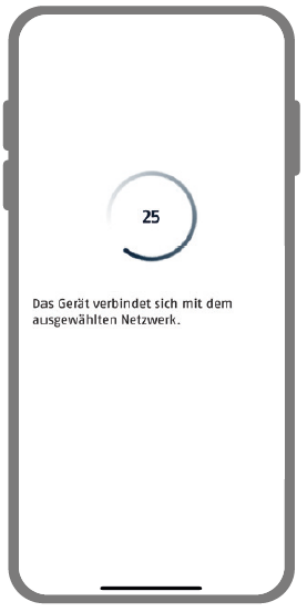
8

9

7. Select your camera based on the identification number. You will find the identification number (DID) enclosed in the packaging. Alternatively, in the camera foot, below the QR code. Then tap on "Next".
8. Select your home network/Wi-Fi in which you want to operate the camera permanently. Then tap on "Next".
9. Enter the password of your network. Then tap on "Next".

	Note For optimal startup, the location services must be enabled in the settings.

10

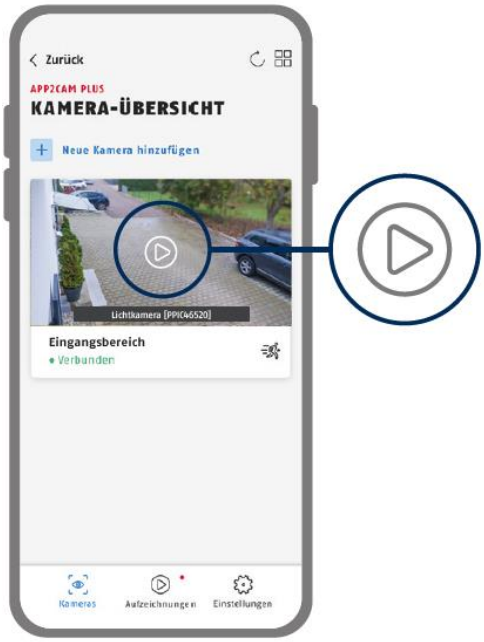


11

12

10. Now assign a security code or admin password. These must be identical for the setup via Bluetooth. Then tap on "Next".
    The admin password can be changed in the camera settings after installation.
11. The camera will now restart. This can take up to 60 seconds.
12. For the best possible camera experience, we recommend always running the camera with the latest firmware.

	Note For the best possible camera experience, we recommend that you always operate the camera with the latest firmware. You can find the current firmware version and available updates under "Camera settings" > "Device settings" -> Search firmware update

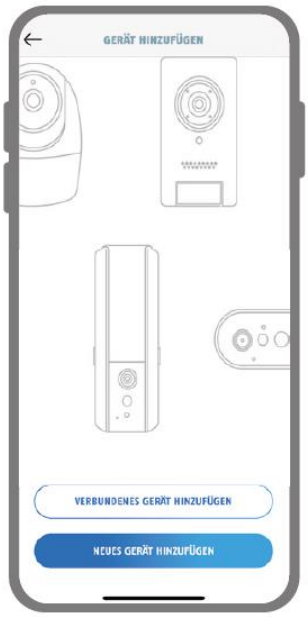


setup via the app is now complete. The app now shows the camera overview with a first preview image of the security camera.

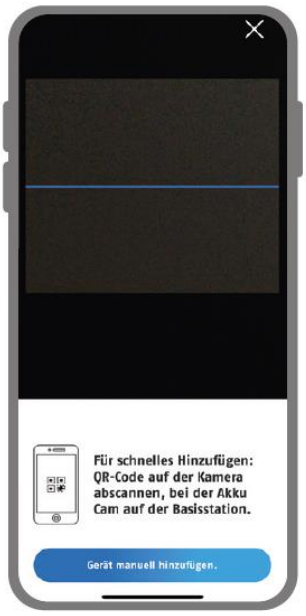
Tap the play icon in the preview image to display the first live image. In rare cases, e.g. if the reception is too poor, the app displays the "missing connection" icon.

Tap it to open the live view.

9.3.2. Setup via network cable (optional)



1

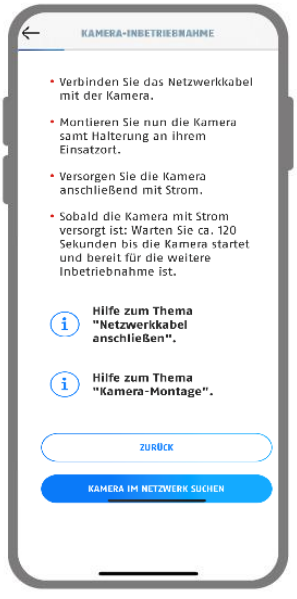


2

3

1. Launch the App2Cam Plus and select "Add new camera" to start the setup process.
2. Option 1: Scan the QR code; located in the camera foot.
3. Option 2: Tap the "Add camera manually" button and then select your camera model from the list.

4



5

4. Select "setup via LAN".
5. Now connect the network cable and supply the camera with power. Now supply the camera with power, if not already done, and wait 2 minutes until the status LED of the camera (behind lower cover) flashes 2x short and 1x long. Click on "Search camera in network".

6

7

8

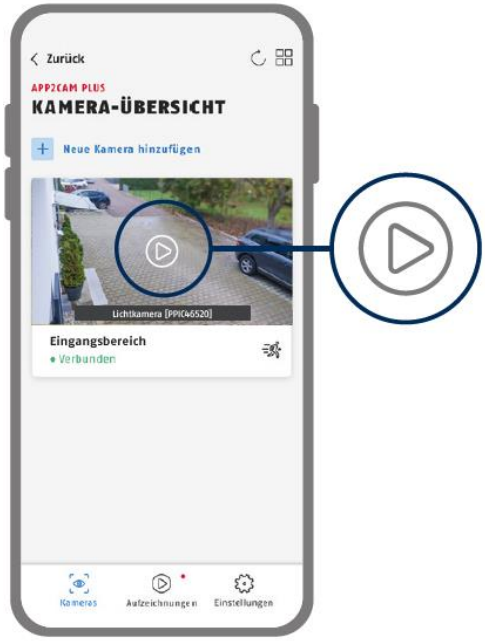
6. Select your camera based on the identification number. You will find the identification number (DID) enclosed in the packaging. Alternatively, in the camera foot, below the QR code. Then tap on "Next".
7. Assign a camera name.
8. Now assign a security code or admin password. These must not be identical. Then tap on "Next".

⚠	**Note** For optimal startup, the location services must be enabled in the settings.

9

9. For the best possible camera experience, we recommend always running the camera with the latest firmware.

	Note For the best possible camera experience, we recommend that you always operate the camera with the latest firmware. You can find the current firmware version and available updates under "Camera settings" > "Device settings" -> Search firmware update



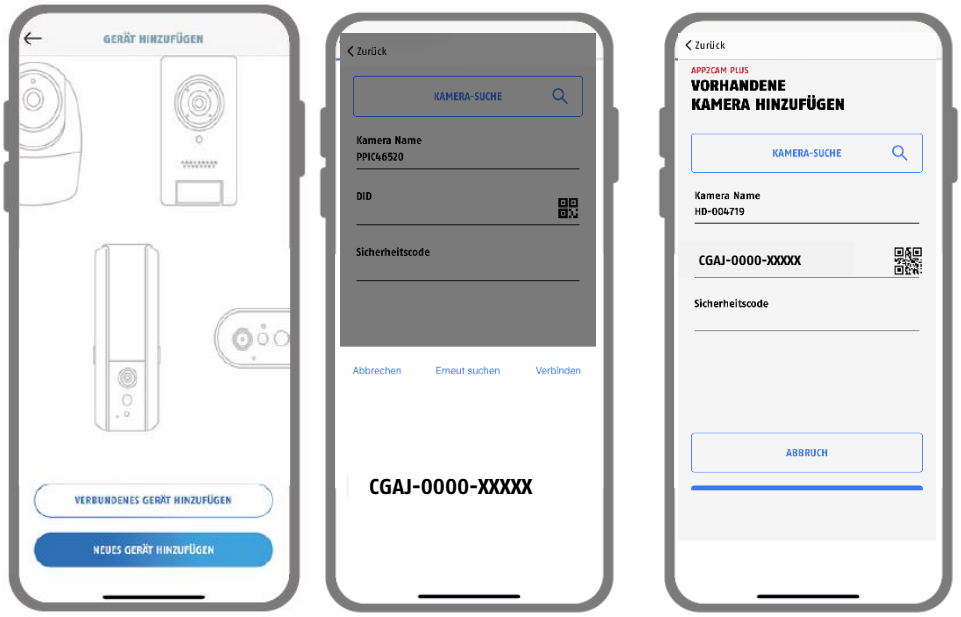
setup via the app is now complete. The app now shows the camera overview with a first preview image of the security camera.

Tap the play icon in the preview image to display the first live image. In rare cases, e.g. if the reception is too poor, the app displays the "missing connection" icon.

Tap it to open the live view.

9.3.3. Add cameras already set up

To set up a camera that is already connected to the network, please proceed as follows.



Open the app and click "+ Add New Camera" to add a camera, then click "Add Connected Camera".

Enter a name for your camera. To enter the DID you have the following options, scan the QR code; located in the camera footer or search for the camera on the network using the "Camera Search" button or enter the DID of the camera manually.

Enter the security code already assigned to the camera.

Press the "Save" button to add the camera.

You have successfully completed setup.

	Note If a camera has already been set up via another smartphone or user, select this method to add cameras that have already been set up.

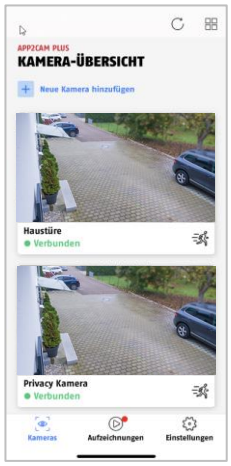
9.4. App2Cam Plus: Overview

	Note Please note that some explained or shown functions in this manual may not be compatible with cameras of older generations or the functionalities of the cameras may differ due to hardware differences.

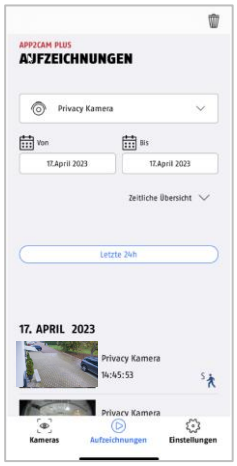
	Note The screenshots and icons shown were taken from the iOS app. There may be slight differences to the Android app in the labeling, arrangement or functionality. This is described in the respective points or mentioned with an addition (iOS only) or (Android only).

In the overview, you can open the live view of the camera by clicking on one of the preview images. In the recording menu, available recordings can be played back and downloaded.

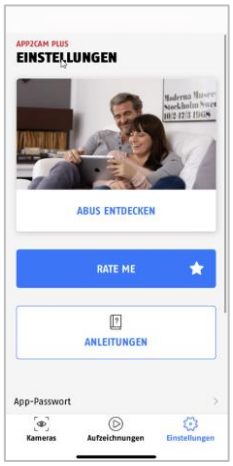
In the settings of the app you can also find some info about our products.



Camera overview

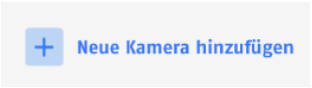


Recording menu



App Settings / Info

9.4.1. Camera overview

Kameras	
	**Set up new camera / Add camera**
	Camera activated (motion detection active)
	Activation of the 4-fold view
	Connection update Updating the connections to the cameras

9.4.2. Recording menu

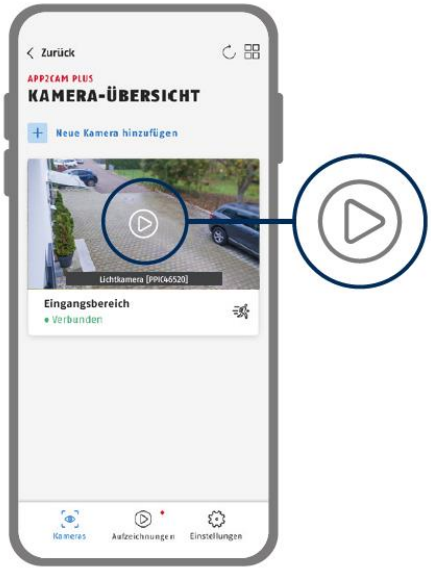
Aufzeichnungen	
	Delete displayed recordings
	Camera selection
	Select period
	Display of the bar chart
	Filter

9.4.3. Info / App settings

Discover ABUS	Here you can find ideas on how to use the app, its camera and compatible devices.
Rate app	Rate our app and send us your suggestions for improvement.
Instructions	For more info on the app and your device, see the Quick Guide, support.abus-sc.com, the ABUS YouTube channel or abus.com.
Video acceleration (Android only)	**Enable/disable hardware decoding** For Android, the use of hardware decoding is available. Some Android devices have special hardware features that optimize the decoding of video streams. For older products or older Android devices, this can lead to a degradation in performance.
Notification settings	**Activation / deactivation of push notifications**
App code	**Assign a secure app password to protect against unauthorized access.**
Legal topics	**Here you will find all legally relevant documents**
App info	**Information about the currently installed app version**

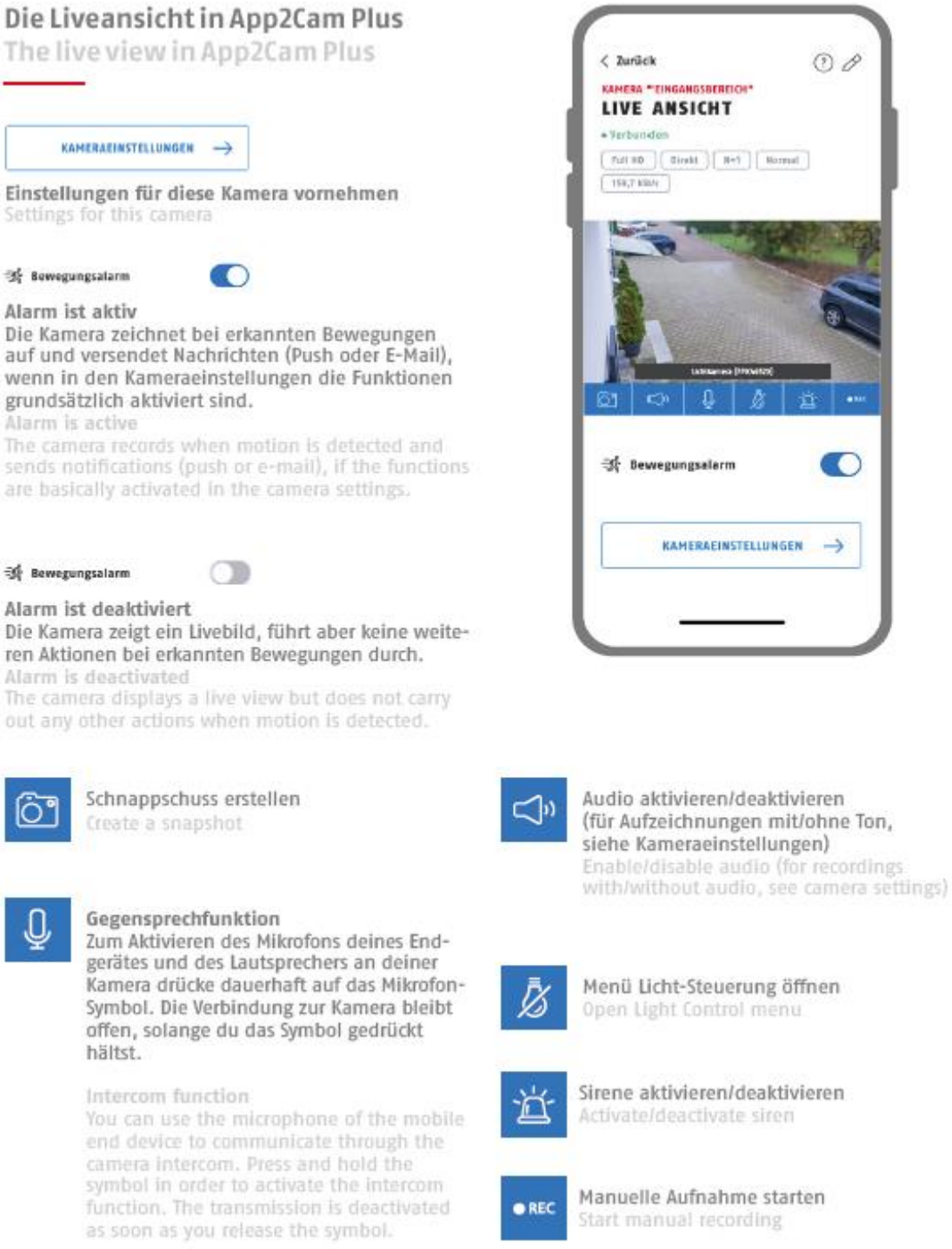
9.5. App2Cam Plus: Live View

Various functions are available in the live view depending on the camera model. The functions are additionally available in landscape mode. Click on the preview image of the camera to access the live view.



Tap the gear icon in the camera overview to make settings that affect the app.

9.5.1. Live view functions



Here you set the light intensity.

The "Auto" function controls the light behavior depending on the "Motion alarm" function. In addition, the light comes on when it is dark on site and you are watching the live stream in the live view.

9.5.2. Camera indicators

KAMERA "EINGANGSBEREICH"	**Camera name** You can change the name of the camera in the advanced settings.

9.5.3. Stream indicators

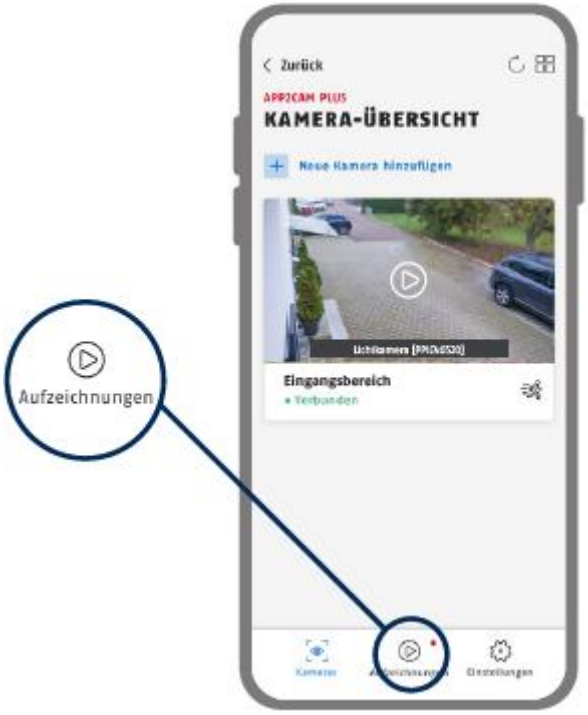
Full HD, Direkt, N=1, Normal, 122.7 KB/s	
CIF **VGA** **HD** **Full HD**	**Display of the resolution of the current stream**
Direct **Relay server**	**Display of the current connection status** **Direct:** The Peer2Peer server was able to establish a direct connection between your end device and the camera. **Relay server*:** The Peer2Peer server could not establish a direct connection. The video data is stored on the relay server for a short time so that your end device can obtain the data from the server. This causes a delay in the stream.
N = 1	**Number of simultaneous camera accesses**
Low **Normal** **Good**	**Display of the current estimation of the connection** This represents the connection between the camera and the router.
xxx KB/s	**Display of the currently consumed kilobits per second**

	***Note** If the connection to your camera is always made via the relay server, please check the following settings: • Check if UPnP is enabled in your router • Check if a hardware firewall or a software firewall denies a direct connection • Check if multiple "hops" (routers) are installed between the terminal and the Internet.

9.6. App2Cam Plus: Recording menu

9.6.1. Recording menu

Tap the recordings icon in the camera overview to call up the event list.



In the event list you can set a start and end time, click on the date selection for this. For this filter the app will show you all recorded events in this time.

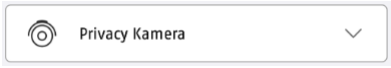
In the temporal overview, the frequency of the triggers is displayed for different time periods.

Images with object detection are displayed with icons for the detection.

Click on the preview image to view it, here the triggering object is shown.

English

9.6.2. Recording menu functions

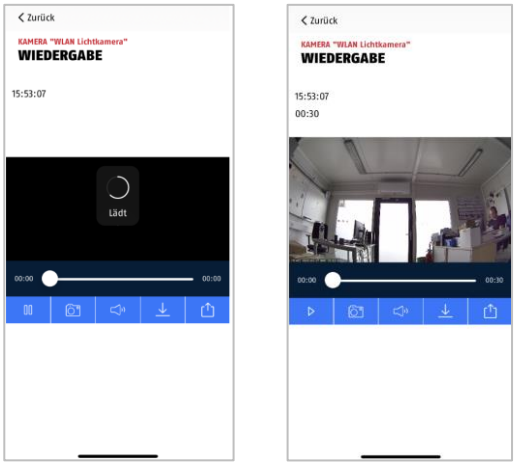
Aufzeichnungen	
	Delete displayed recordings
	**Camera selection**
	Select period
	Display of the bar chart
	Filter

	***Note** During a recording, the recordings cannot be accessed.

9.7. Playback

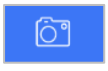
In the playback of the events, different functions are available depending on the camera model. In Landscape mode (= landscape format), a full view without functions is shown.

The events usually need a short buffer time until the event can be played.

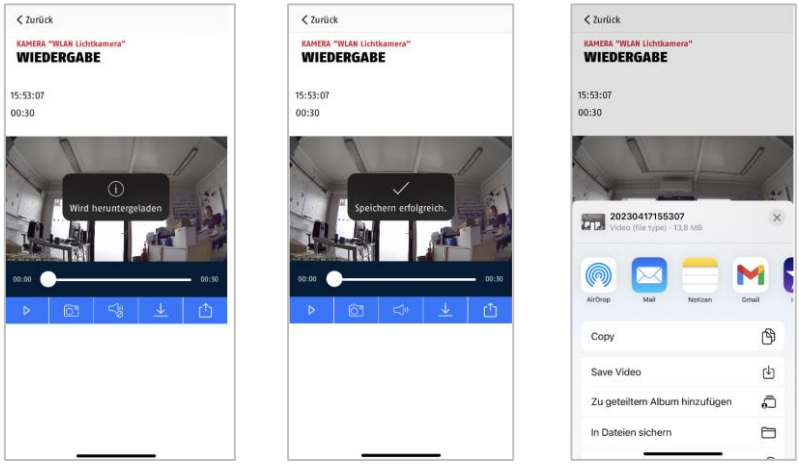


	Note When playing back events, the event is automatically downloaded to your end device. We therefore recommend that you mainly operate the playback via Wi-Fi to keep the consumption of the data volume low.

9.7.1. Playback functions

	Pause playback/playback
	**Create snapshot**
	Enable/disable audio Here you have the option to enable or disable audio for playback.
	Download recording
	Share recording

9.7.2. Download & Forwarding



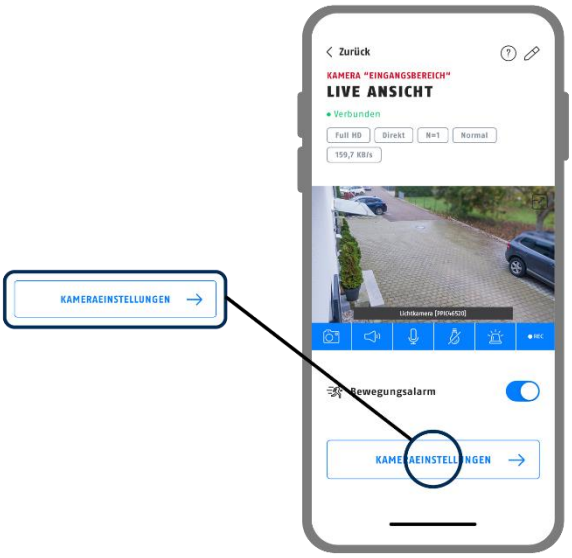
To download a file to your smartphone, click on the download icon. The file will now be downloaded and will be displayed in red in the recording list.
You have the possibility to share the file by clicking on the Share icon.

⚠	**Note** The downloaded data is stored differently on the iOS and Android operating systems. **iOS: The** events are saved on the device and can be accessed in the gallery. **Android: The** saved data can be found in the device manager under *"internal memory/movies".*

9.8. Camera settings

9.8.1. Open camera settings

To open the camera settings, click the lower button in the live view.

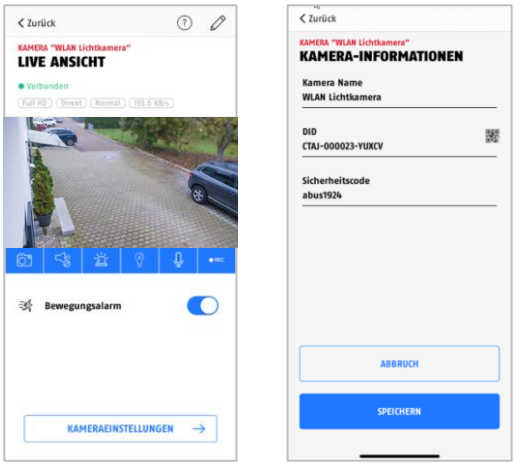


Use the admin password you assigned during the initial installation.

⚠	**Note** The admin password is a purpose password, not a security password, and is intended to help you allow other people to see the live view and notifications of the camera, but deny the advanced settings.

9.8.2. Login data

You can manually change the camera's credentials in the settings:



System Name:	Change the name of the camera here.
DID:	Manually change the DID of the camera here.
Security code:	Enter the camera's security code here.

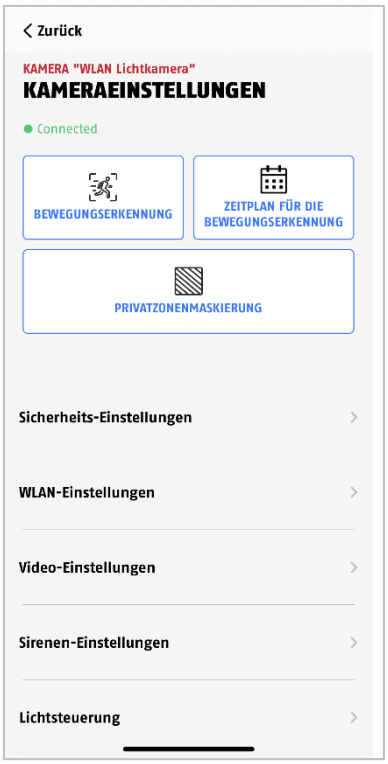
Discard changes with the "Cancel" button or save them with the "Save" button.

9.8.3. Automatic login

When entering the admin password, you can use the "Save admin password" button to save the admin password on your end device so that you do not have to enter it the next time you call up the advanced settings on your end device. This does not apply to access from other end devices.

9.8.4. Advanced settings

The individual menu items are grouped.

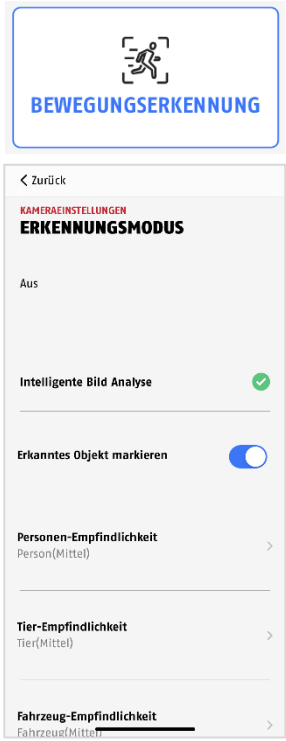
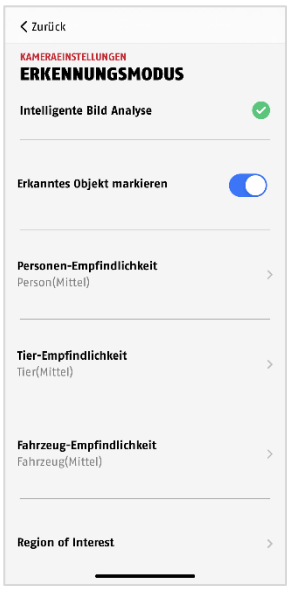


In the camera settings you have the option to delete the camera from your app, please note that it will only be deleted from the app and will not be reset,

⚠	**Note** The arrangement of the individual points differs from Android. The functionalities are nevertheless available and identical on both platforms.

⚠	**Note** Please always make changes to the settings (e.g. changes to the admin password) of the camera in the local network of the camera. We strongly advise you not to make changes to settings in a public Wi-Fi, as it is always possible for other people to make recordings here.

9.8.5. Motion detection settings

Motion detection settings		Click the Motion Detection button to make settings for it. Click Intelligent Image Analysis for further settings. If you select "Off", there will be no motion detection. The changes in the settings are only applied after leaving the menu.
Intelligent image analysis		Via Intelligent Image Analysis, they can access Intelligent Detectors, which evaluate the current video image. Multiple selection is possible. **Mark detected object** When activated, detected objects are marked with colored frames. **Intelligent object recognition** Thanks to a built-in AI controller, the camera can distinguish between individual objects to achieve a lower false alarm tolerance. The camera distinguishes between the following objects: - People - Animals - Vehicles You can fine-tune the sensitivity of the detectors using the sliders, with the "low" value representing the lowest sensitivity and the "high" value representing the highest sensitivity of detection. Please refer to the notes under point "8. Intelligent image analysis".

		The reliability of object detection depends on local factors. Nevertheless, false alarms may occur in various situations. Environmental influences such as rain, snow, insects or dirt can have a negative effect on the results.
Areas with detection		The areas with recognition describe the areas in which the Intelligent Object Recognition searches for persons, vehicles or animals. You can activate up to 3 regions and place and customize them individually via drag and drop. By default, the entire image area is selected. Please observe the notes under point "8. object detection".
Areas without detection		The areas without detection, describe the areas that can be hidden for intelligent object detection. No persons, vehicles or animals are detected within this area You can activate up to 3 regions and place and customize them individually via drag and drop. Please observe the notes under point "8. object detection".

English

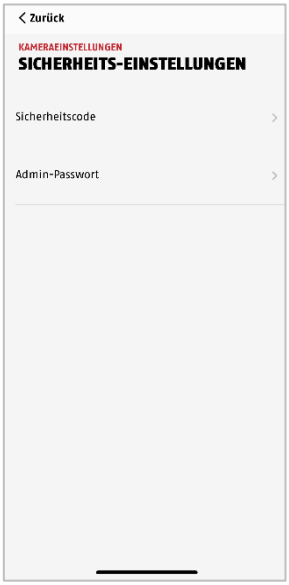
9.8.6. Schedule settings

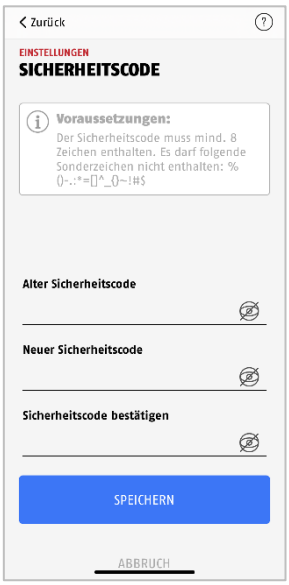
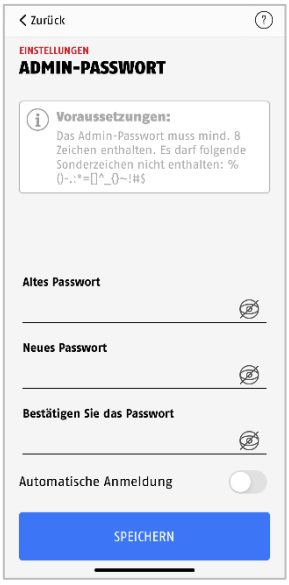
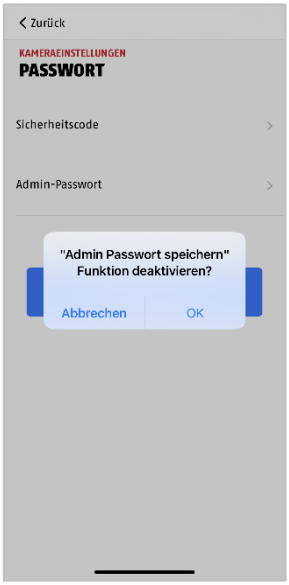
Activation / deactivation schedule		Click the Schedule for motion detection button to set schedules. **Schedule settings** Press the plus symbol to add a schedule. Separate activations are created for the start time and the end time. Select the start time and assign a schedule name for it. Select the days for the repetition and the action (enable / disable) for the start time. Save by clicking "Done". For the end time, press the plus symbol again . Now enter the end time, the schedule name and the repetition. Please select the contrast to the previous one at Action and save it by clicking "Done". E.g. Start time 21.00 from Mon-Fri, action activation End time 06:00 from Mon-Fri, action deactivation The camera records only in the period between 9 pm - 6 am when there is movement. To delete a schedule, click on the trash can icon in the upper right corner and then on the minus symbol next to the desired setting.

9.8.7. Privacy zone masking

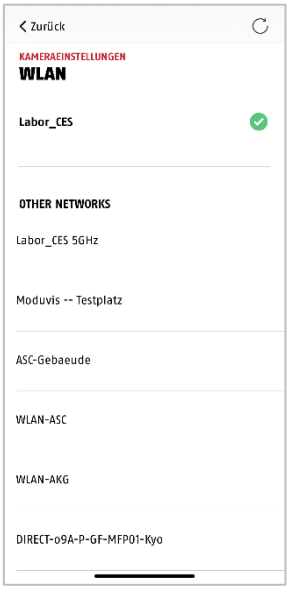
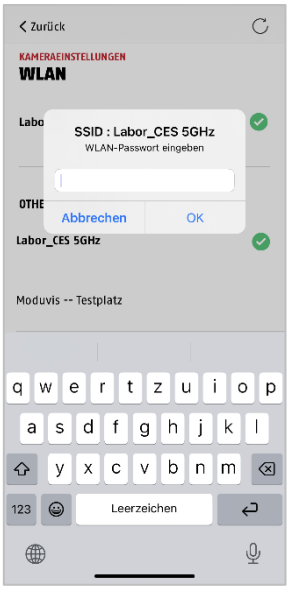
Privacy zones masking		Click the Privacy Zone Masking button to make settings for it. A preview of the live image and the privacy zone set up is displayed here. Drawing privacy zones is done directly in the preview area. You can activate up to 3 areas and place and customize them individually using drag and drop. The drawn area is made unrecognizable in black and is therefore not visible in the live image or in the recording. Click the check mark in the upper right corner to save the settings. To delete zones click on Delete all zones and then on the check mark in the upper right corner.

9.8.8. Security settings

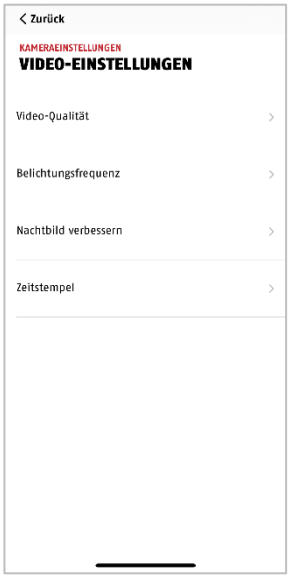
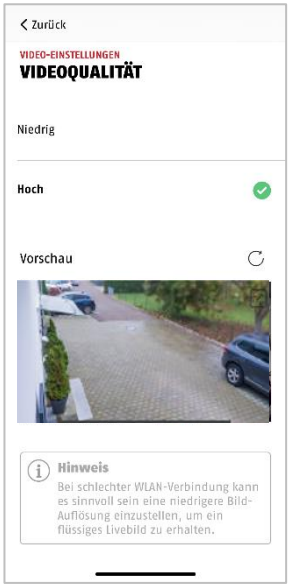
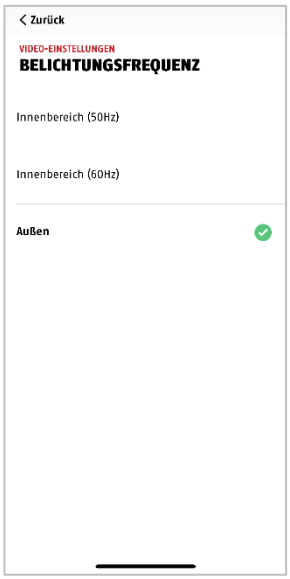
Security settings		Make the security settings for your camera here. The changes in the settings are only applied after leaving the menu.

Change security code		The security code is used to set up the light camera in the app. The default code is "123456" and must be changed during the initial installation. If you forget your security code, you can reset the light camera by pressing the reset button for about 5 seconds. **Attention: All settings including the network connection will be lost.**
Change admin password		The admin password grants access to the camera settings and enables / disables the camera recordings. During the installation you assign your own admin password. If you forget your admin password, you can reset the camera by pressing the reset button for about 5 seconds. The default admin password is "123456". **Attention:** All settings including the network connection will be lost.
End car login		If you have already activated Auto Login, you can deactivate the function here. This menu item is only displayed if the function has already been activated.

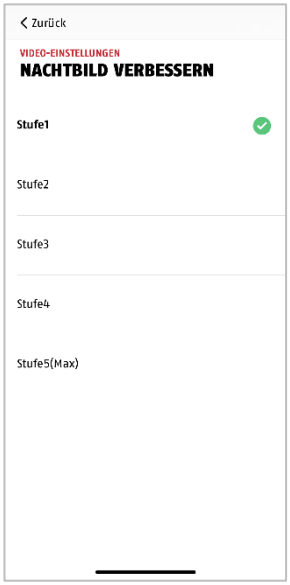
9.8.9. Wi-Fi settings

Wi-Fi settings		Under the Wi-Fi settings, you can select the desired network to which the camera should be connected. When you select the menu item, all networks in the vicinity are displayed. Select your network and enter your in-house Wi-Fi password. Make sure that the signal strength is sufficient to avoid transmission problems. Enter the password and confirm with OK. To prevent access by strangers, protect your network by encrypting it with WPA/ WPA2/ WPA2-PSK. The settings are not applied until you exit the menu.
		 If the connection was not successful or the wrong Wi-Fi information was entered, press the reset button for 3 seconds to set the camera to factory settings.

9.8.10. Video settings

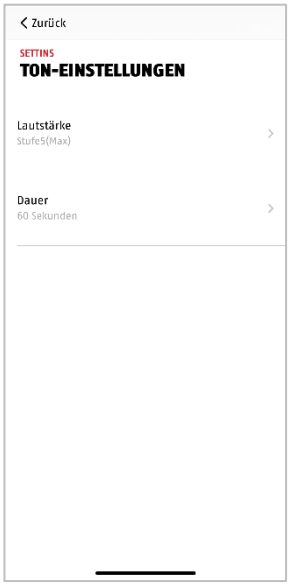
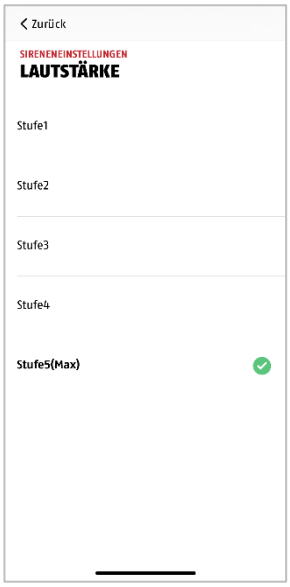
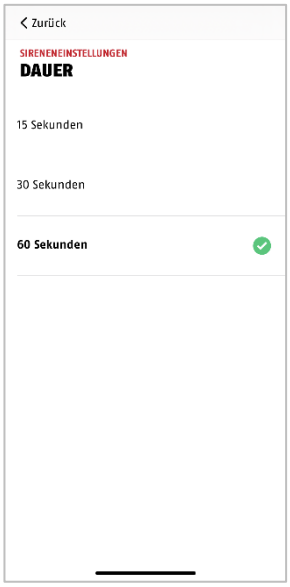
Video settings		Make the video settings for your camera here. The changes in the settings are only applied after leaving the menu.
Video quality		Here you have the possibility to change the resolution for the live view. At a lower resolution, you can get a smoother image when accessing externally, but less image detail is available. The value set here has no effect on the recording which is always stored in 2k g.
Exposure frequency		Here you have the possibility to select the mains frequency for your camera. The following selections are available: Select Indoor (50Hz), Indoor (60Hz) and Outdoor. **Default value Germany:** 50 Hz

English

Improve night image		Here you can adjust the brightness of the night image. A higher level brightens the image more, a lower level less. As soon as there are objects in the immediate vicinity of the camera, it is recommended to set the intensity to a lower level to avoid reflections in the image, but this will reduce the range of the LEDs.
Timestamp		Change the position of the timestamp by briefly holding and sliding the timestamp to the desired corner. Change the color of the timestamp by clicking on the desired color. Remove the timestamp by clicking once on the image. Changes are only applied when saved.

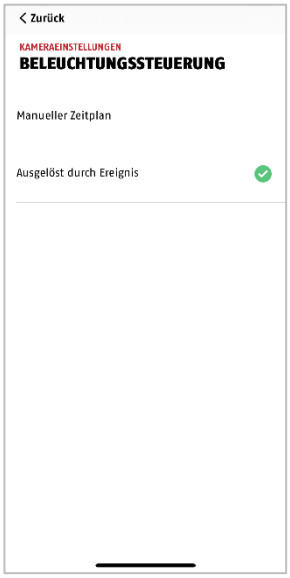
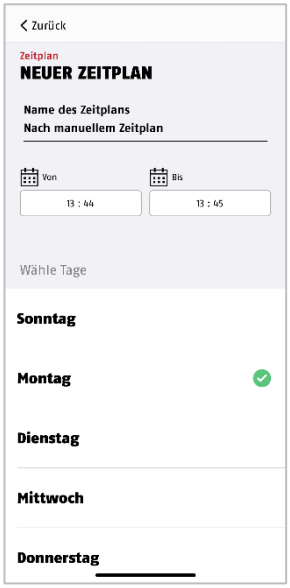
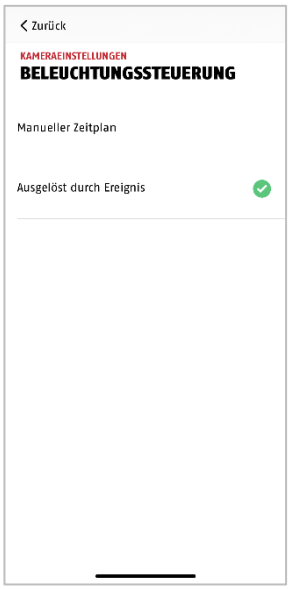
English

9.8.11. Siren settings

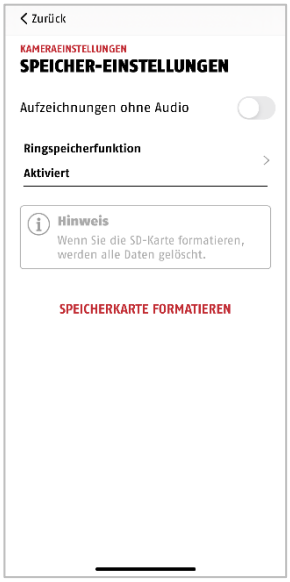
Siren settings		Make the siren settings here. The changes in the settings are only applied after leaving the menu.
Volume		Change the volume of the integrated siren here.
Duration		Change the duration of the integrated siren.

English

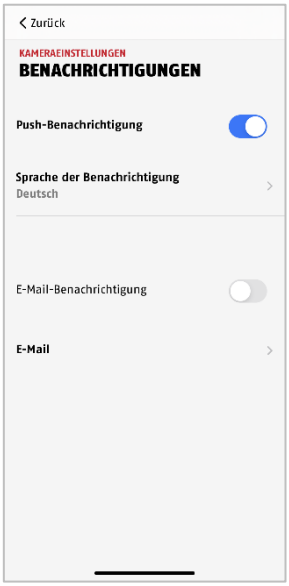
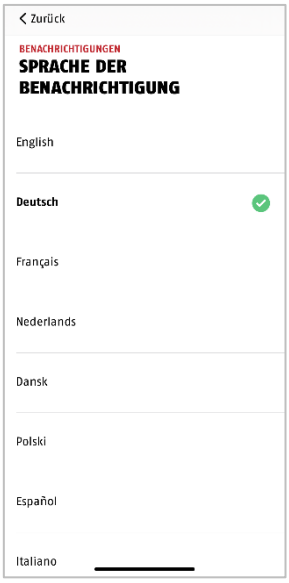
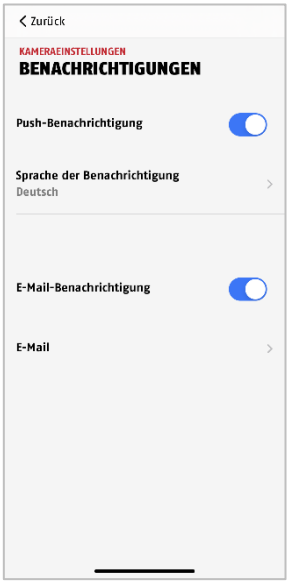
9.8.12. Light control

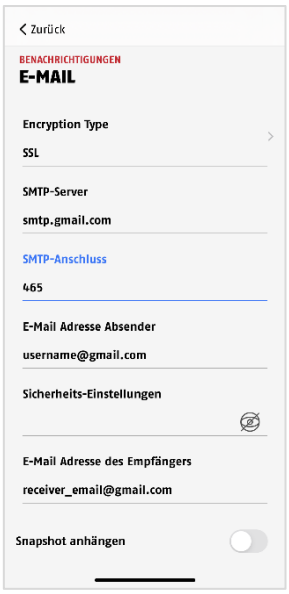
Lighting control		Make the settings for the light control here. The changes in the settings are only applied after leaving the menu.
Manual schedule		Here you can set a fixed period for the control of the lighting. During this time, the lighting is permanently on and does not activate in case of an event outside this period.
Triggered by event		Set Light Control in Live View to Auto. The lighting now reacts according to the light sensor. If you enter the live view in sufficient darkness or if a recording is started, the light activates automatically.

9.8.13. Memory settings

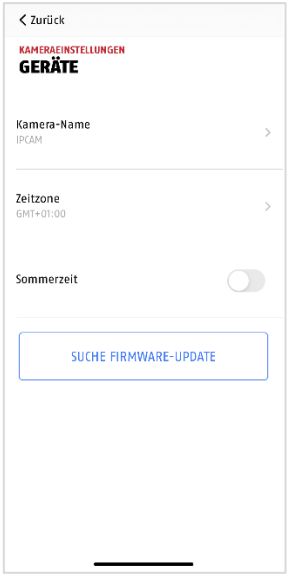
Memory settings		Make settings for saving here. **Recording without audio** Activate the function to save the recordings without audio. During the live view it is possible to activate audio. **Ring memory function** There are several ways to overwrite the events on the SD card. **OFF** — Once the SD card is full, no more recordings are saved. **Enabled** — If this function is activated, the oldest recordings are overwritten with newer ones as soon as the SD card is full. **3 / 7 / 30 cycle** — The data on the SD card is deleted or overwritten after the selected number of days. The changes in the settings are only applied after leaving the menu.
Format memory card		Format the SD card. For permanent use of an SD card, please use an SD card of class 10 or U1. Formatting the SD card will delete all data. Please back up the data before formatting.

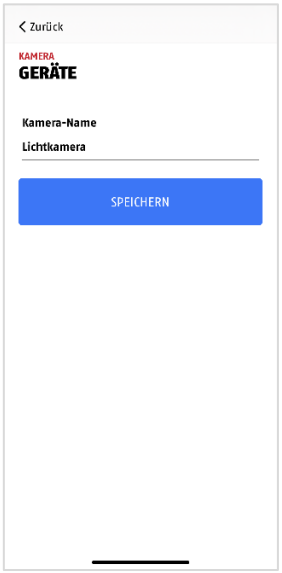
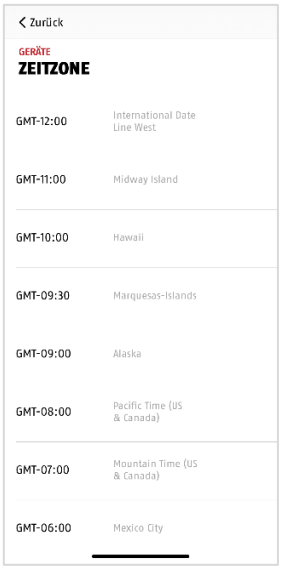
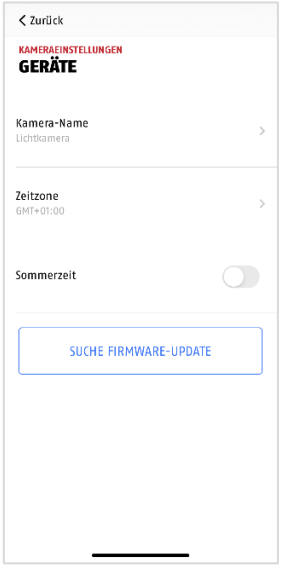
9.8.14. Notification settings

Enable PUSH notification / Notification language	 	Enable notifications to receive PUSH messages to their smartphone when motion is detected. You have the possibility to change the language of the notification under Notification language. Please note that only the language of PUSH notifications will be changed. The language setting for the app remains and must be changed in the smartphone.
E-mail notification / e-mail		**E-mail settings** The email settings are required for sending a notification. **Use SSL/TLS:** Activate the checkbox to transmit the e-mail encrypted. You can obtain the necessary settings from your e-mail provider. **SMTP Server:** Enter the SMTP server address here. e.g. smtp.test.com **SMTP Port:** Enter the SMTP port here. e.g. 465

		**Username:** Enter the sender e-mail address here. e.g. xxx@test.com **Password:** Enter the password of the sender e-mail here. **Recipient:** Enter the recipient's e-mail address here. e.g. xxxx123@test.com Save the settings by pressing OK. When leaving the advanced settings, press "Confirm". Only then will the e-mail settings be applied. We recommend using "googlemail" to send emails. You can find instructions on how to set it up under Downloads.

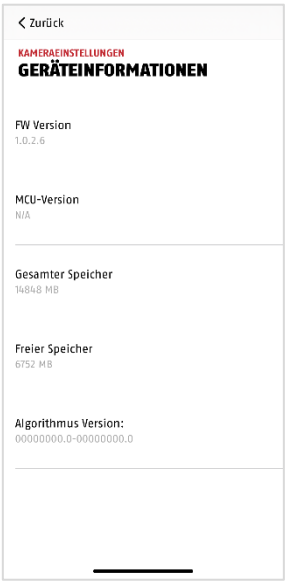
9.8.15. Devices settings

Device settings		Make the device settings for your camera here. The changes in the settings are only applied after leaving the menu.

Camera name		Change the camera name here. The name is displayed in the live view as well as in the push notifications.
Time zone / Daylight saving time		The world time zones are listed in the selection list. Select the time zone where the camera will be installed. If the world time zone uses daylight saving time changeover, enable daylight saving time.
Check for firmware update now		By selecting the menu item "Check for firmware updates now" you can search for current firmware updates. Please note that a microSD card is required for this! The firmware update is downloaded in the background and saved on the microSD card. To do this, exit the settings of the camera. After about 5 minutes, you will receive a PUSH notification or, after re-entering Advanced Settings, a notice that a new update has been successfully downloaded. Now click on "Install firmware update now" to start the installation process. This may take a few minutes.

English

9.8.16. Device information

Device information		The device information tells you the current firmware version of the camera, the total available memory and the free memory on the SD card.

10. Update firmware

You can update your camera's firmware in two different ways. Please note that both methods still preserve the camera's settings, so you don't have to set them again.

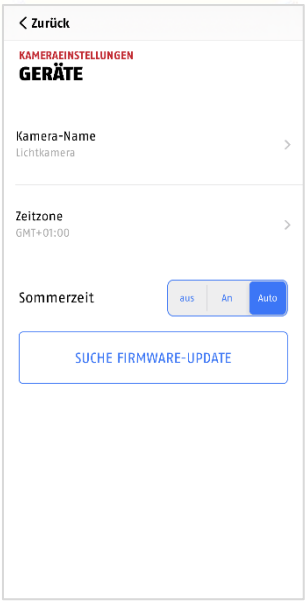
	Please note that a microSD card is required for both variants.
	The update of the camera takes approx. 3-5 minutes. Do not disconnect the camera from the power supply during this time!

10.1. Update via server

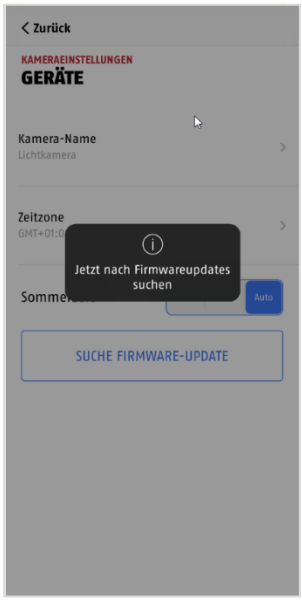
Option 1:

The camera checks for new firmware on the firmware server for the camera at 6-hour intervals. Insert a microSD card into your camera so that it can download the firmware automatically. After the camera has downloaded the firmware, the next time you enter the advanced settings, a notice will appear or you will receive a PUSH message so you can begin the update. Click on the "Check for firmware update now" menu item. A message appears indicating that the camera is ready for the update.

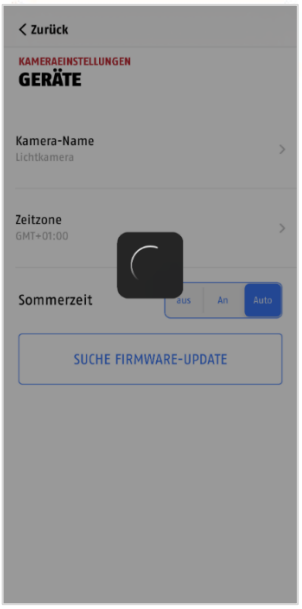
Now click on "Install firmware update now".



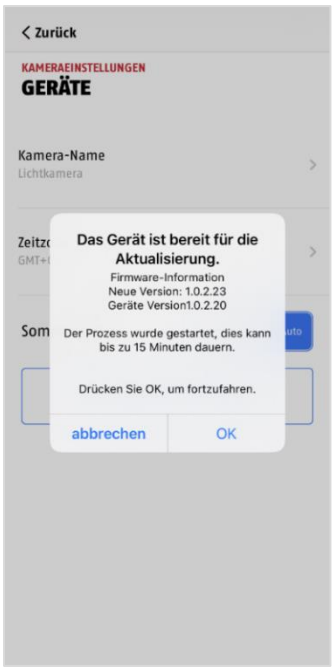
1



2



3



4

5

Option 2:

If you do not want to wait for the 6-hour interval, you can also have the camera actively search for a newer firmware. To do this, press the menu item "Check for firmware updates now" in the advanced settings if a firmware has not already been downloaded, the camera will now actively search for a newer version and then save it to the SD card, this can take up to 5 minutes, exit the camera settings for this.

After the camera has downloaded the firmware, the next time you enter the advanced settings, a notice will appear or you will receive a PUSH message so that you can confirm the firmware installation.

To do this, click on the menu item "Install firmware update now",

10.2. Current firmware version

For the cameras, some functions are only available with the latest firmware version. Therefore, make sure that your devices are always up to date.

11. Troubleshooting tips

Camera image is not displayed
Check the signal strength in the Wi-Fi settings.
Is the camera connected?
Is there an Internet connection?
Is the camera supplied with voltage?

Push messages are not received
Is the camera disabled? Also check the schedules.
Are the push messages disabled?
Is there an Internet connection?

How can I set my camera to factory settings?
Unscrew the cover and press the reset button for at least 3 seconds with the enclosed reset tool or e.g. a paper clip. The LED starts to flash red. As soon as the factory settings are loaded, the LED flashes permanently.

Your Wi-Fi is not displayed in the selection list in the camera app.
If your personal Wi-Fi network does not appear in the selection list, please check the following:

1. Make sure that the SSID of your router is visible.
2. Change the encryption type of your router to WPA / WPA2 /WPA2-PSK.

Low network signal or poor image quality
Possible causes could be:

1. Wi-Fi network devices can affect signal transmission, ensure sufficient distance between the camera and other Wi-Fi devices.
   Possible interfering factors can be: thick brick walls, exterior walls, glass, water pipes and metal.
2. Remove dirt from the camera. This can have a negative effect on the image quality.

What could be the causes that the device does not record when moving?
Possible causes could be:

1. Is the SD card inserted correctly?
2. Is the camera activated?
3. Are the schedules set correctly?
4. Make sure that you use an SD card with class 10.
5. Check the hidden areas.
6. Adjust the sensitivity of the motion detection.

What could be the causes of SD card error.
Please check the following:

1. Make sure that the SD card has been inserted and formatted correctly. Please save important data before formatting, they will not be available afterwards.
2. Make sure to use only an SD card of class 10 or higher.
3. When inserting the SD card, the camera must be disconnected from the power supply.

The time and date display are not correct.
Possible causes could be:

1. Are the date and time settings of your mobile device set correctly? The system takes the time from your mobile device.
2. Is the correct time zone selected? Is the switch to daylight saving time disabled?
3. Restart the camera by unplugging it and plugging it back in after about 5 seconds.

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