



Security Tech Germany

PPIC90000 / PPIC90010 / PPIC90200 / PPIC90520



Instruction manual

Important notes and FAQs about this product and other products can be found on the webpage

<https://.akku-cam.abus.com>

Version 1.3



*Original operating instructions in English language.
Keep for future use!*

inauguration

Dear customer, dear customer,

Thank you for purchasing this product.

ABUS Security Center hereby declares that the base station and camera PPIC90000, PPIC90010, PPIC90200, PPIC90520 comply with RED Directive 2014/53/EU. The devices also meet the requirements of the following EU Directives: EMC Directive 2014/30/EU and RoHS Directive 2011/65/EU. The full text of the EU Declaration of Conformity is available at the following Internet addresses:

www.abus.com/product/PPIC90000

www.abus.com/product/PPIC90010

www.abus.com/product/PPIC90200

www.abus.com/product/PPIC90520

In order to maintain this condition and ensure safe operation, the user must observe these operating instructions!

Before putting the product into operation, read through the complete operating manual and 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://akku-cam.abus.com>



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



Warning in the sense of § 201 StGB:

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

Similarly, an unauthorised person may be punished if he or she intercepts with a tapping device the non-publicly spoken word of another person which is not intended for his or her knowledge or if he or she communicates publicly, in full or in part, the recorded or intercepted non-publicly spoken word of another person.



Disclaimer

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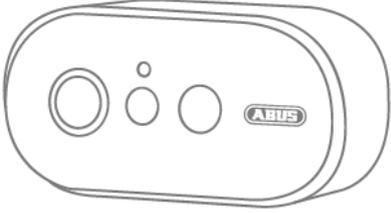
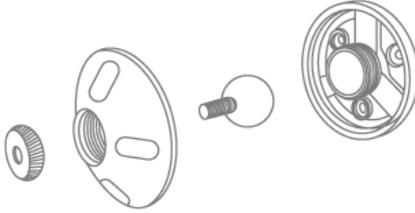
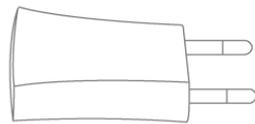
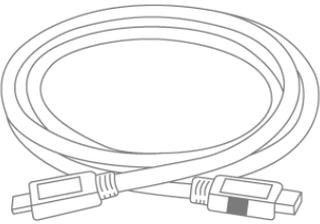
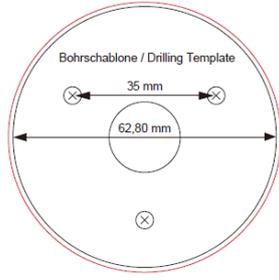
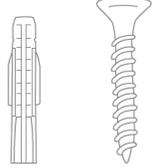
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1. Scope of delivery

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PPIC90000

- Wi-Fi Battery Cam (1)
- Base station (2)
- wall bracket (3)
- USB power supply (4)
- USB to micro-USB cable (5)
- Drilling template (6)
- Reset tool (7)
- Mounting material (8)

PPIC90200

- 2x Wi-Fi Battery Cam (1)
- Base station (2)
- 2x wall bracket(3)
- USB power supply (4)
- USB to micro-USB cable (5)
- Drilling template (6)
- 2x reset tool (7)
- 2x mounting material (8)

PPIC90010

- Base station (2)
- USB power supply (4)

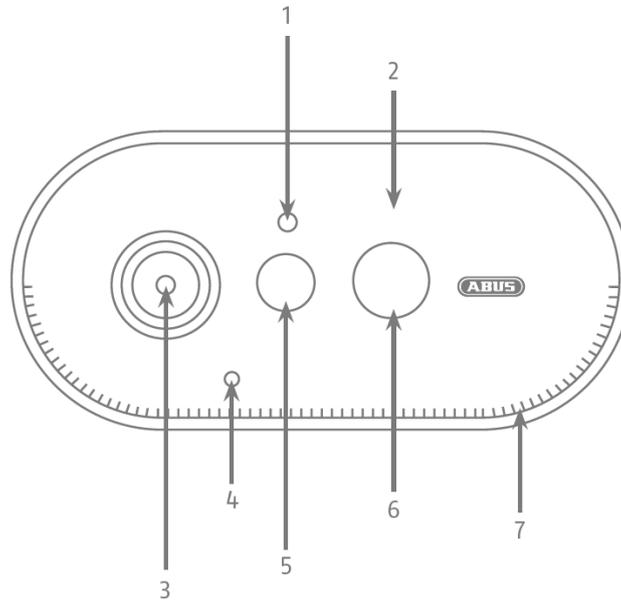
PPIC90520

- Wi-Fi Battery Cam (1)
- wall bracket (3)
- USB to micro-USB cable (5)
- Drilling template (6)
- Reset tool (7)
- Mounting material (8)

2. Hardware description

2.1. Wi-Fi Battery Cam

Front view

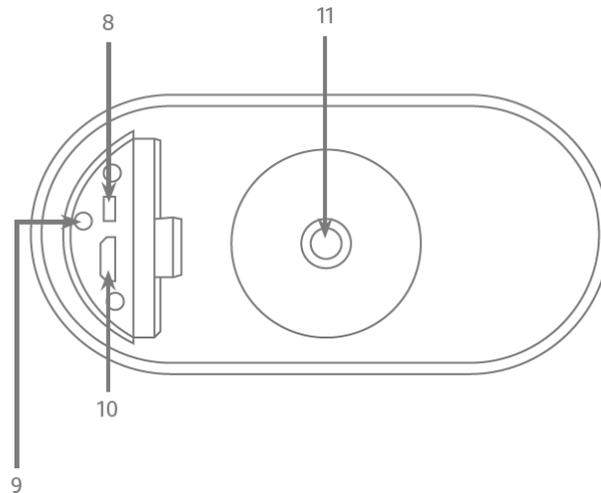


1	Light sensor	2	Internal antenna*
3	Lens	4	Microphone
5	PIR Sensor (Passive Infrared Sensor)	6	White light LED (lights up blue during the pairing process)
7	Loudspeakers		

* Radio frequency: 2.4Ghz (802.11 b/g/n)
Max. Transmitting power: 20dBm

* Radio frequency: 2.4Ghz (802.11 b/g/n)
Max. Transmission power: 20dBm

Rear view



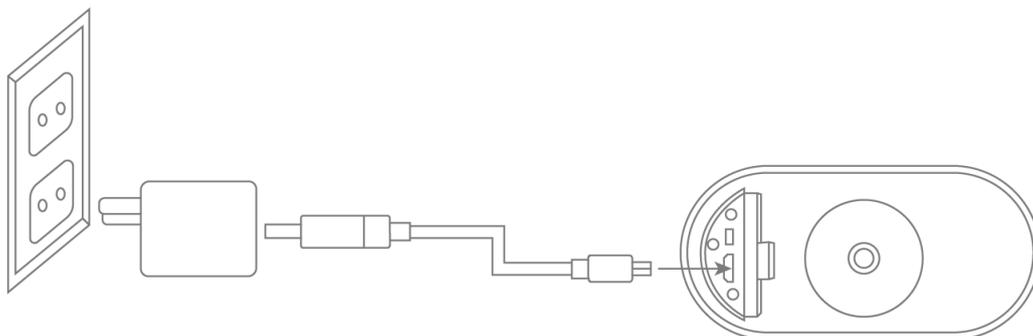
8	Pairing button Press 1x shortly to turn on the camera, Press 3x shortly, the camera is ready for pairing, Press and hold the button for at least 5 seconds to turn off the camera.
9	Status LED Flashes during charging. When fully charged and in cable operation, it shines red permanently. During a recording or a live view, the LED lights up permanently.
10	Micro-USB connection Connection for charging the integrated rechargeable batteries
11	¼" Thread for fixing the bracket Each bracket with ¼" thread is supported.

**Attention!**

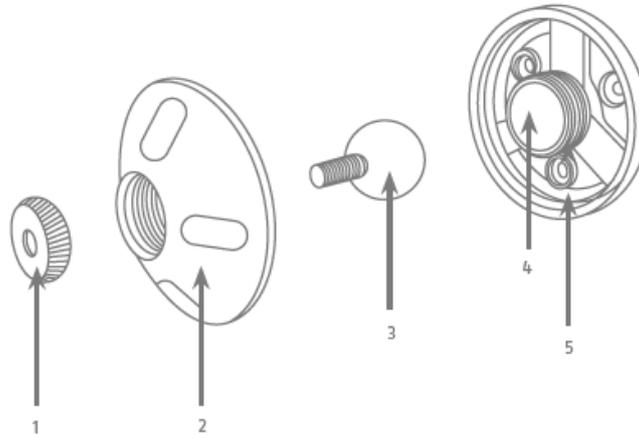
If the Micro-USB cable is used permanently, the weather protection capability of the camera will expire.

Loading the Camera

Remove the camera from the bracket and connect the included Micro-USB cable. Use a 5VDC / 2A power plug to charge the camera, the base station's AC adapter is suitable for quick charging of the camera. The camera will be fully charged in about 4 hours. During charging, the red LED on the back flashes when the charging process is completed and the LED shines permanently. The battery lasts up to 13 months, depending on the trigger frequency, live image access and external environmental influences. More information can be found at the menu item 13. Battery FAQs.

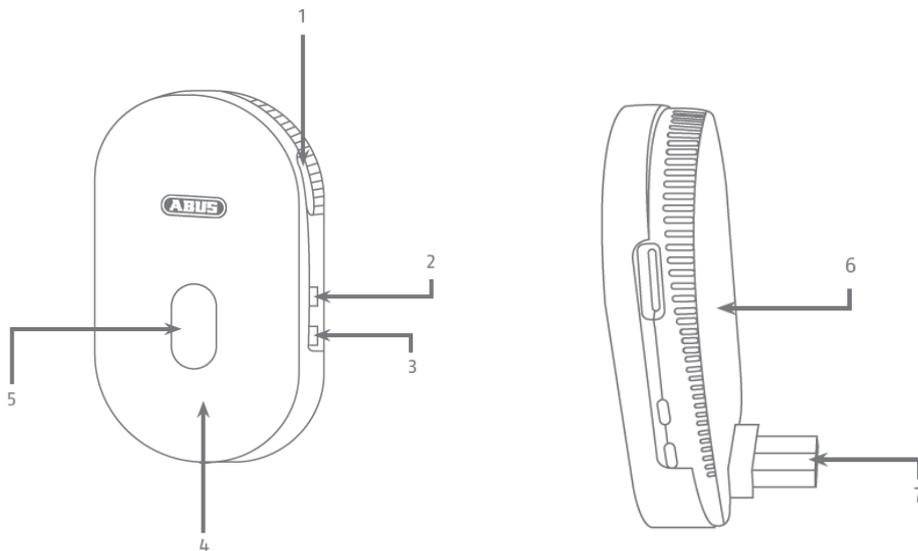


2.2. Mounting



1	Fixing ring	2	Cover
3	Ball joint	4	Rubber
5	Back panel		

2.3. base station



1	MicroSD card slot (max. 128 GB)	2	Pairing button Press the Pairing button for approx. 3 seconds until the LED lights up red.
3	Reset button Press and hold the reset button for approx. 5 seconds until the status LED flashes red.	4	Internal antenna
5	Status LED	6	Loudspeakers and ventilation openings
7	USB connector for power supply		

3. Assembly / Installation

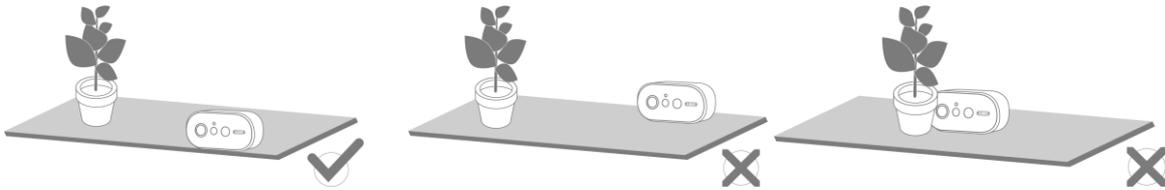


ATTENTION!

The camera must be disconnected from the mains voltage during installation.

3.1. Installing the Camera Without a Wall Mount

You have the option of placing the camera on a flat surface, such as a shelf or cupboard. There should be no large objects between the camera and the base station. There should be no large objects between the camera and the base station as these may affect the transmission between the devices.



Attention!

Place the camera on the edge of the shelf, otherwise the white light LED may cause cross fading in the camera image.

Please note that no objects are placed directly in front of the camera lens to avoid crossfades.

The camera should not be placed on a glass shelf as reflections may occur.

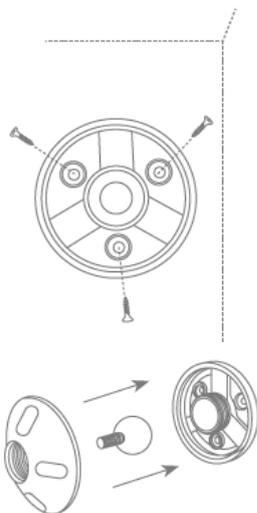


installation site

The camera is suitable for both outdoor and indoor use.

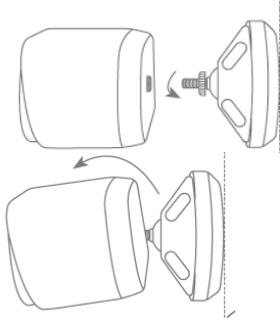
Do not place the camera near heaters, stoves, other heat sources or in direct sunlight. Operate the device only in locations with temperatures within the permissible ambient temperature range of -20°~50°C.

3.2. Installing the Camera with Wall Bracket



Pre-drill the holes using the drilling template. Unscrew the cover of the wall bracket and mount the floor plate to the wall / ceiling using the supplied mounting material.

Insert the ball joint and screw on the cover, do not tighten it to align the camera.



Now screw the fixing ring and the camera onto the bracket. Now you can align the camera using your smartphone. Once the desired viewing angle is reached, screw the cover on tightly.



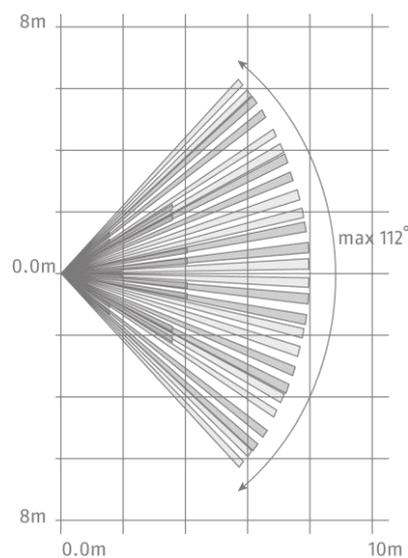
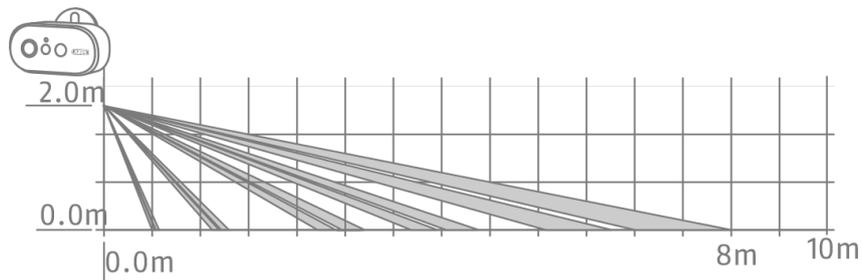
Watch your step!

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

3.3. Alignment and detection range of the camera

The passive infrared sensor (PIR) of the camera has a maximum detection range of 8 meters, this can be achieved at an installation height of 2 meters and an tilt angle of 12.5° . The PIR viewing angle is 112° . The PIR reacts to heat movement and triggers an image upon detection.

Optimum alignment:

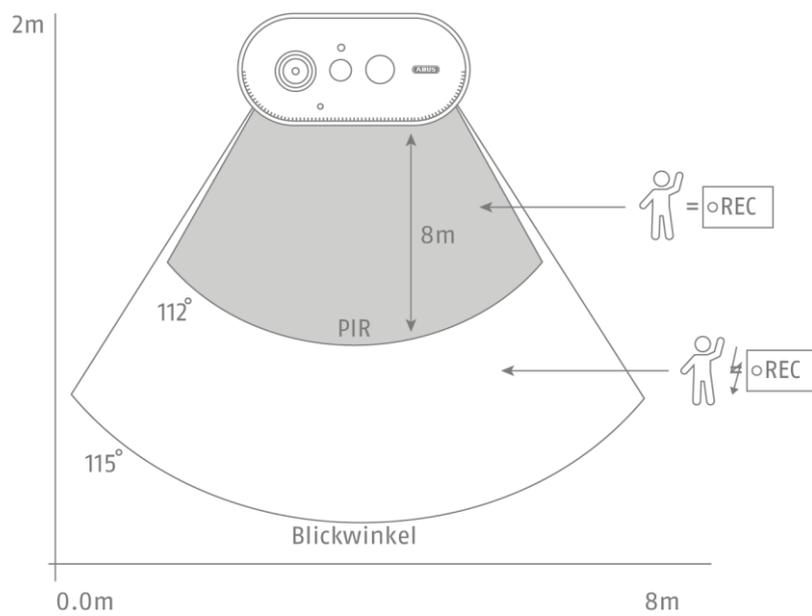


The higher the camera is installed, the greater the downward tilt angle must be. This affects the range of the PIR sensor.

Installation height	Tilt angle	Max. PIR Range
1,5 m	0°	8 meters
2,0 m	12,5°	8 meters
3,0 m	24°	7 meters
4,0 m	34°	6 meters
5,0m	43°	5 meters
6,0 m	50°	4 - 5 meters

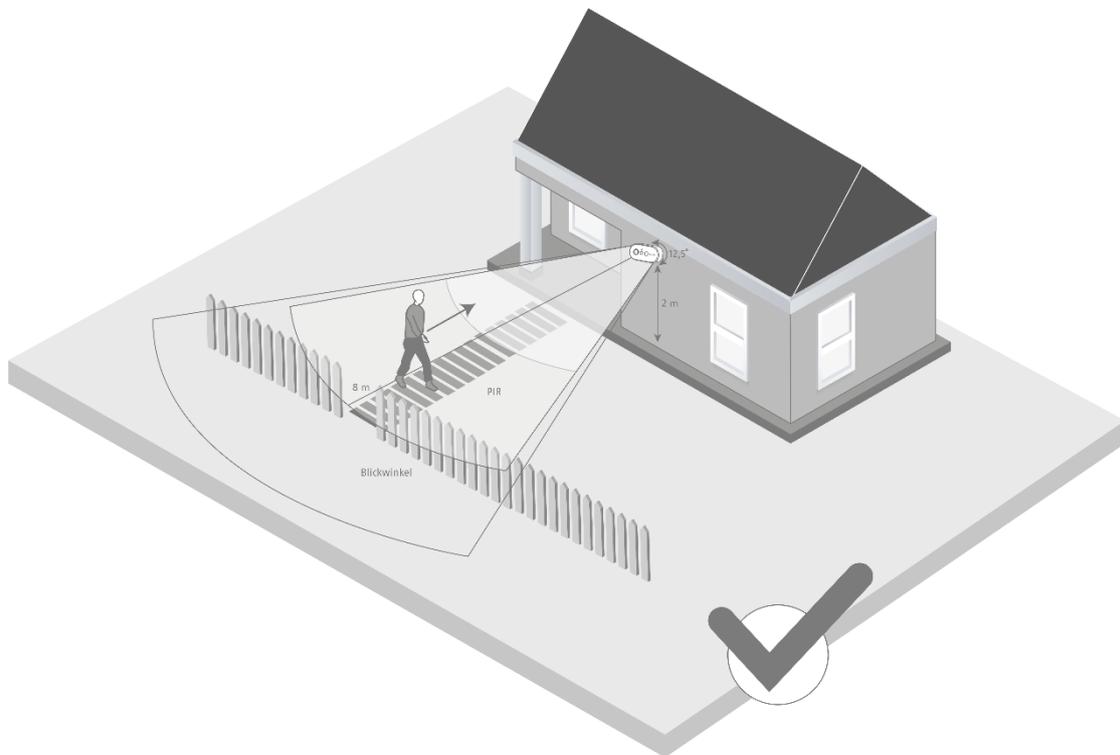
The viewing angle of the camera is larger than the PIR viewing angle. During an installation it can occur that people are visible on the live image but do not trigger a recording.

Since the person is outside the PIR detection range of 8 meters.



Camera Alignment

The camera needs a small moment to connect to the base station after motion detection. Therefore the movement should ideally be detected in the outer area of the PIR detection angle in order to record the object longer in the video sequence.



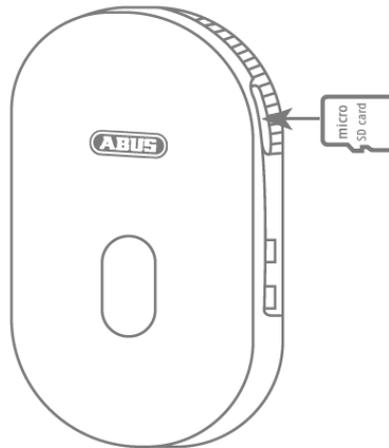
If the movement is detected in the front area of the PIR detection range, the object may not be completely visible on the video sequence.



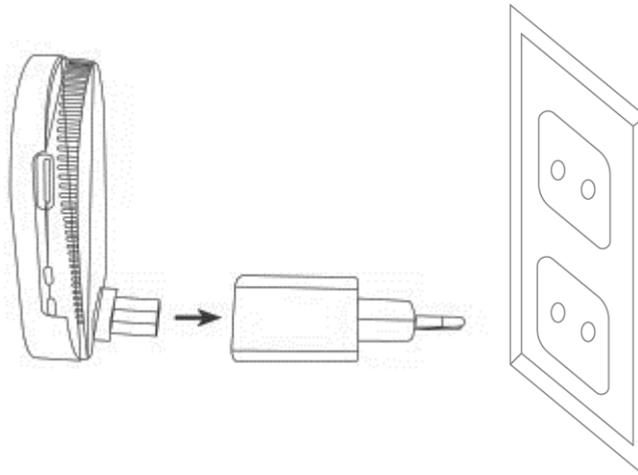
Please note that detection only takes place in the specified PIR detection range. Objects that move outside the PIR range will not trigger recordings but may be visible when the camera image is viewed live.

3.4. Installing the base station

A microSD card is required for recording, which is optionally available. Please insert as shown below and make sure that it clicks into place.



Next, plug the base station into the USB power supply and plug it into a wall outlet.

**Attention!**

Place the base station so that it is not covered by objects.
Ensure optimum ventilation of the base station.

3.5. Installing the Camera and Base Station

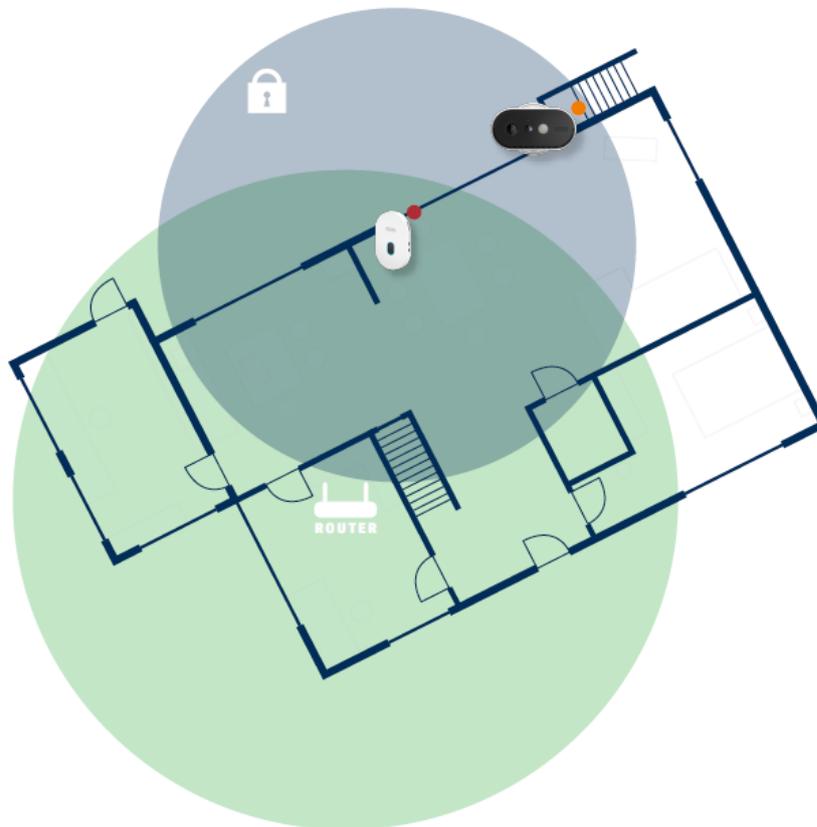
The camera with protection class IP65 is suitable for outdoor use. The base station is intended for indoor installation only. The base station supports up to two battery cams. The pairing process of the base station into the app is described under 4. *App2Cam Plus: First Access*. For external access to the camera, you need a 2.4 GHz router with Internet access.

**reference**

Place the base station so that it is not covered by objects.

Ensure optimum ventilation of the base station.

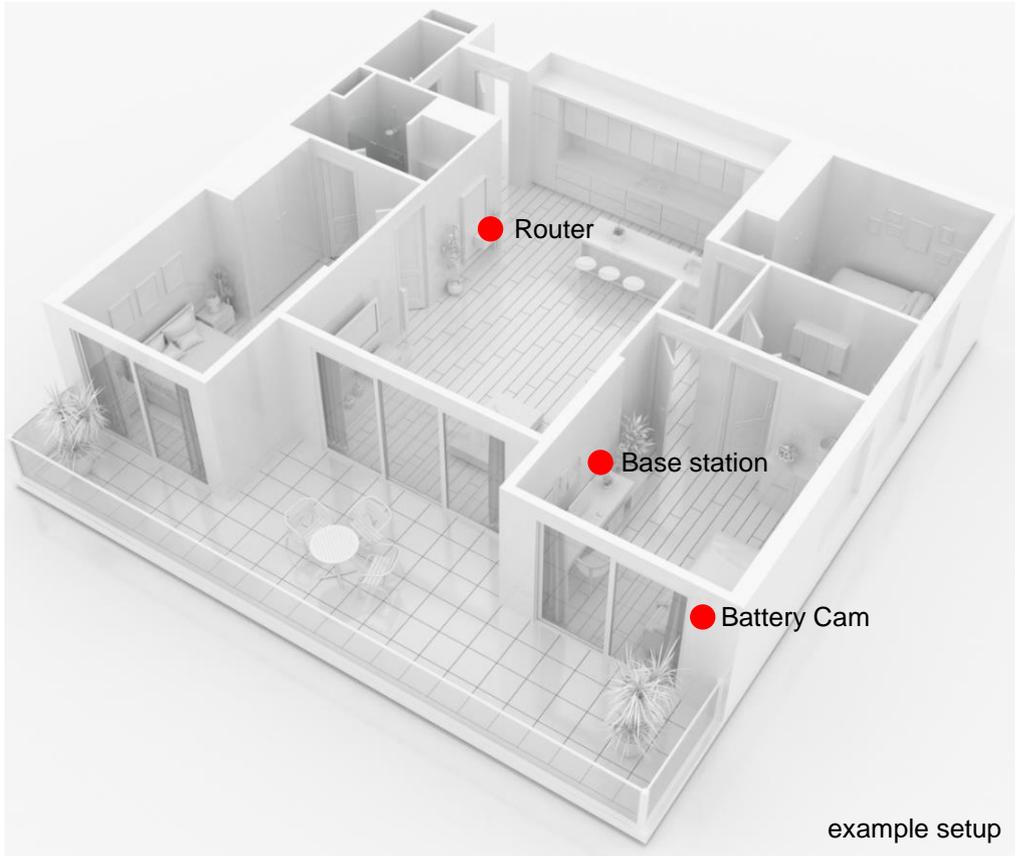
Routers with 5 GHz frequency are not supported. For dual frequency routers it is recommended to separate the two frequencies by name.



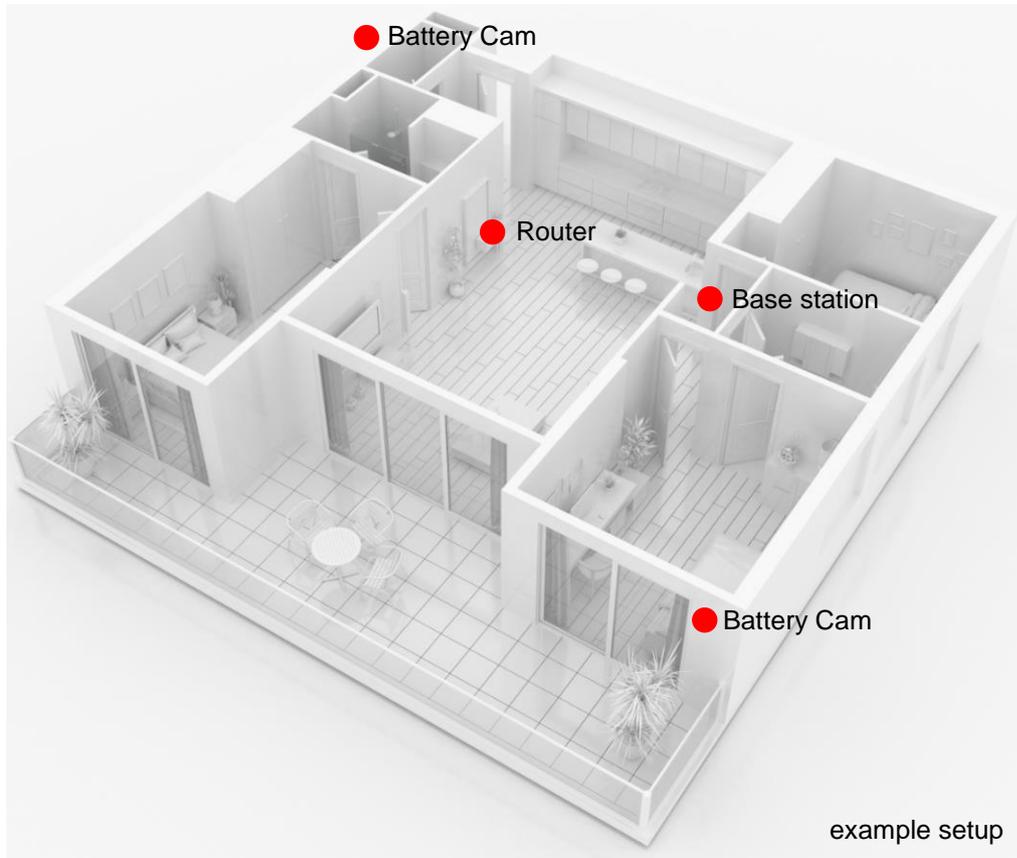
Positioning camera and base station

When installing the camera and base station, make sure that the base station is within optimal range of the router. The base station can only be accessed if the Wi-Fi signal to the router is sufficient. Ideally, install the base station close to the camera.

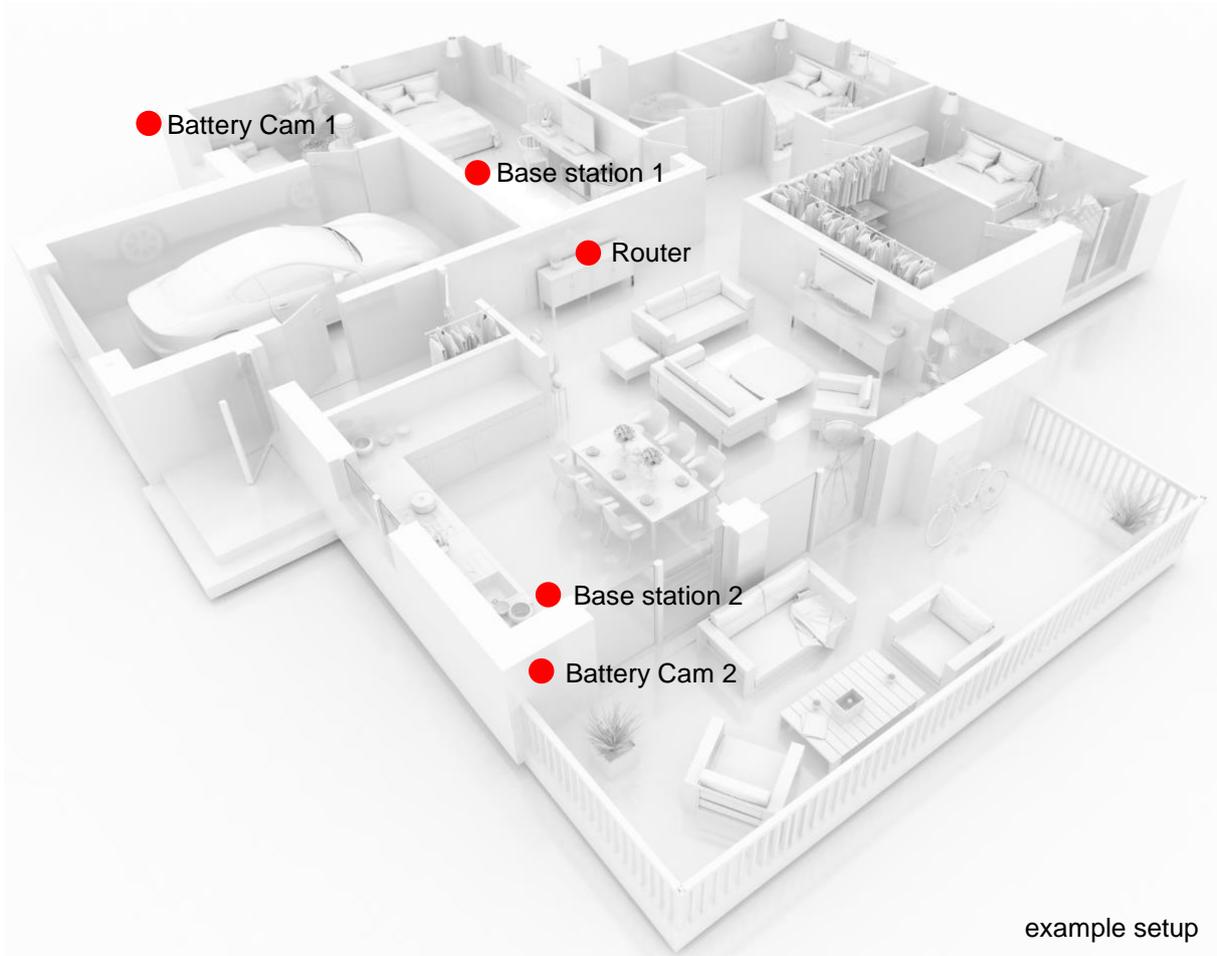
Please note that structural conditions can influence the transmission.



When installing with two cameras, the base station should be centered so that both cameras are within range of the base station. The range of the individual camera to the base station is shown in the live image of the camera by the icon. 



For installations in larger objects with two or more cameras, a second base station (PPIC90010) is recommended to optimize the range.



4. App2Cam Plus: First Access

4.1. Download App

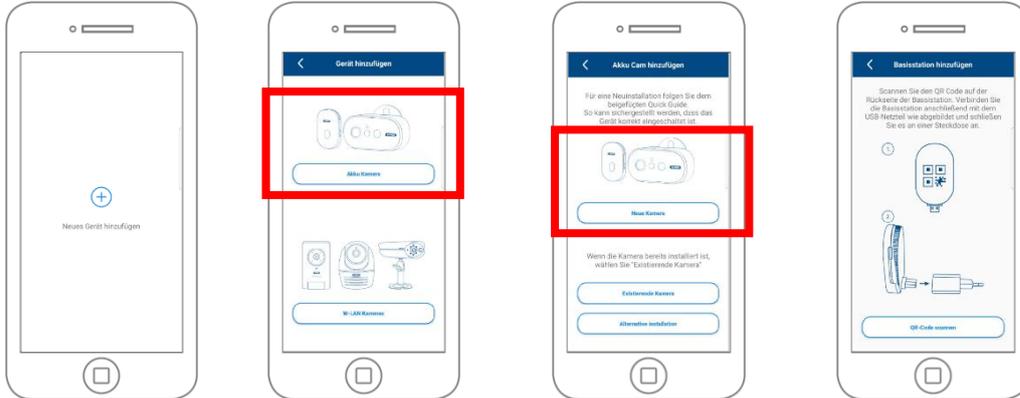
Download the App2Cam Plus app from Google Playstore or Apple Appstore for first access.

App
- App2Cam Plus-



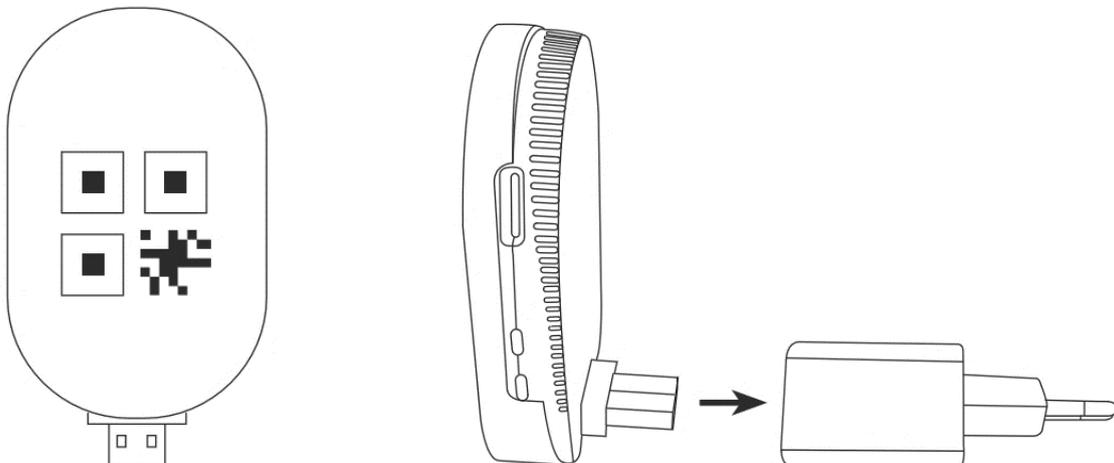
4.2. Camera setup

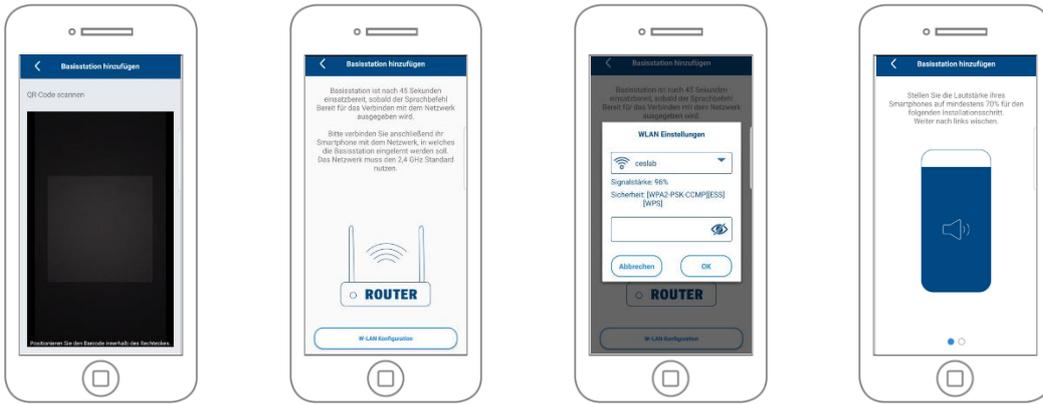
4.2.1. Wi-Fi setup



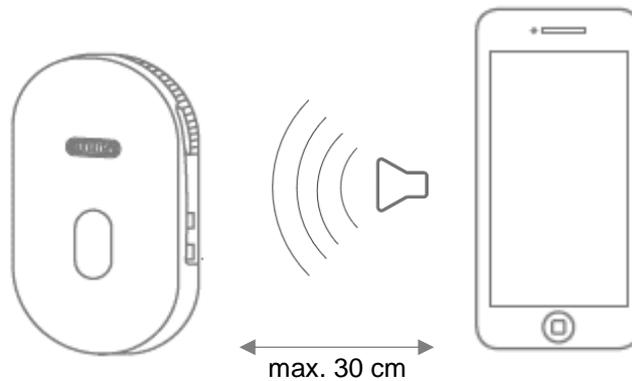
Before starting the installation, turn on the camera by pressing the Power On button on the back panel. Open the app and click on the "+" to add a base station then click on the Battery Cam. Click on "New Camera" during the initial installation. Base stations that are already connected to the network can be added by clicking on "Existing device".

In the next step, scan the QR code on the back of the base station. Now connect it to the USB power supply and plug it into a wall outlet.



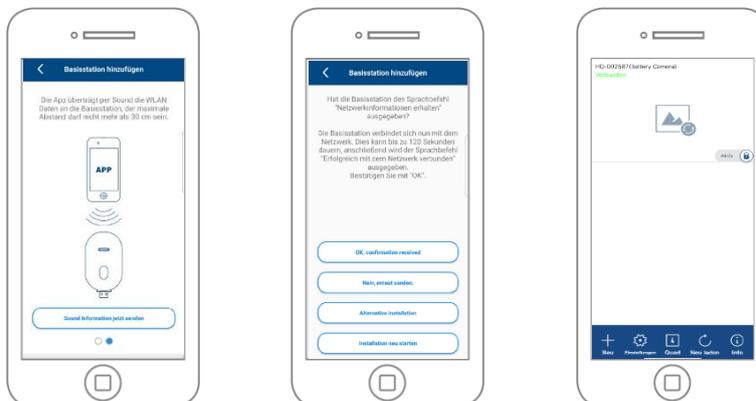


The base station is ready for use after approx. 45 seconds as soon as the voice command "Ready to connect to the network" is issued. Connect your smartphone to the network in which the base station is to be taught-in. The network must use the 2.4 GHz standard.



Now set the media volume of your smartphone to at least 70%. In the next step, the app transmits the sound information to the base station. Please note that the distance between the base station and the smartphone must not exceed 30 cm.

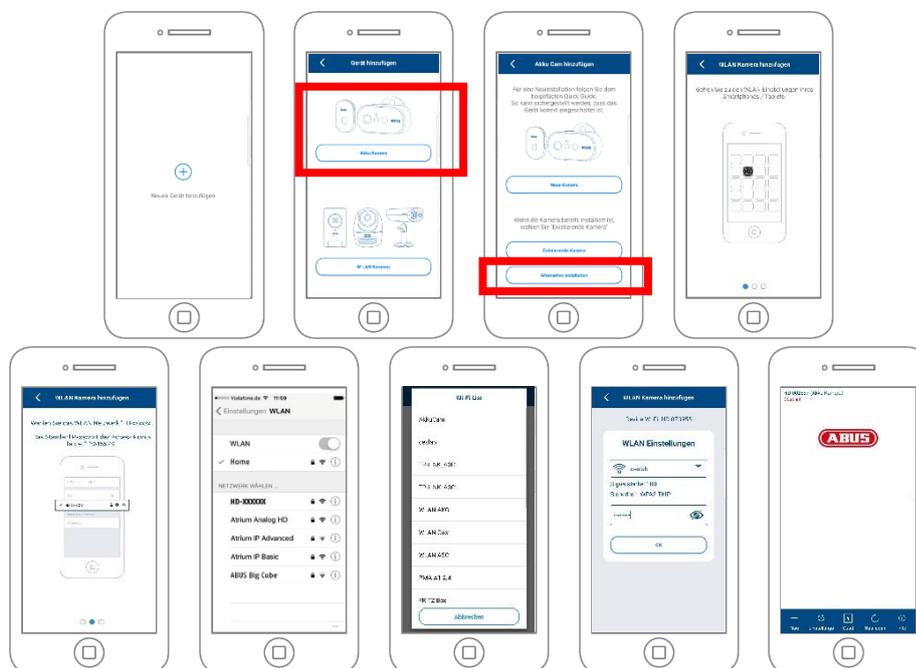
	<p>Note</p> <p>Please note that external ambient noise may drown out the sound information. Try performing the installation in a quiet environment.</p>
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Click on "Send sound information now" to start the transmission. If the transmission was successful, the base station issues the voice command "Receive network information". Confirm this with "OK,

confirmation received", with "No, resend" you can retransmit the information. The camera now connects to the network. This can take up to 120 seconds. You can now access the live image of the camera.

4.2.2. Alternative Installation



Open the app and click on the "+" to add a base station. Click "Alternative Installation" to add the base station.

Go to the network settings of your device as described in the app and connect to the WLAN access point of the base station. This can be recognized by the name "HD-XXXXXX". The password for the Wi-Fi access point of the base station is: "12345678".

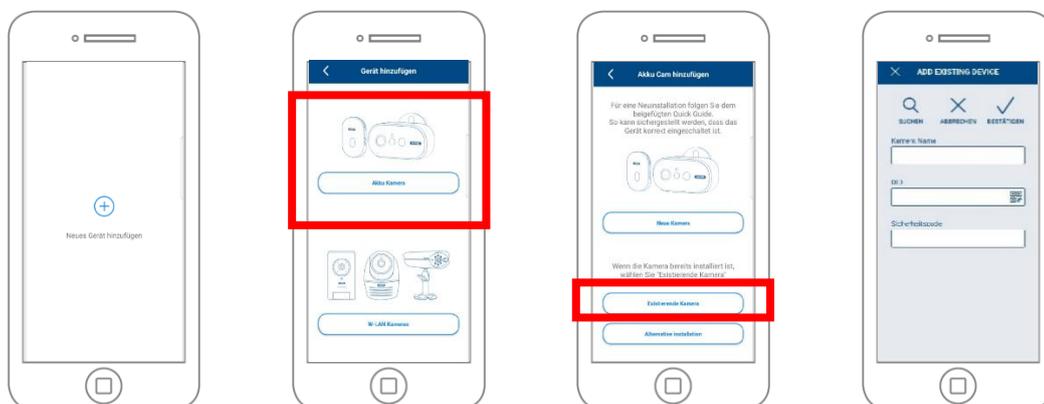
When the connection is established, click "OK" in the app. Select the WLAN of your home network from the list of Wi-Fi networks and enter the password of the Wi-Fi of your home network. Press "OK" to establish the connection.

The base station will now connect to the network. This can take up to 120 seconds. You can now access the live image from the camera.

The base station takes about 120 seconds to connect to the Wi-Fi network. If the base station cannot be reached after setup, reset the base station using the reset button and perform the steps again.

4.2.3. Add already configured base station

To set up a base station that is already set up with the network, please proceed as follows.



Open the app and click on the "+" to add a base station click on the battery cam. Click on "Existing device" to add the base station already learned in the network to another smartphone.

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

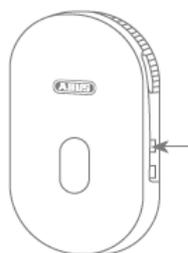
The camera's default security code is "123456". If the base station has already been set up, enter the security code assigned to the base station.

Press the "Confirm" button to add the camera.

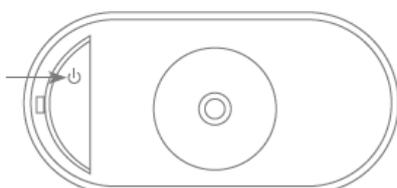
	<p>Note</p> <p>If the base station with the default security code "123456" is added, it must be changed the first time the camera's Live screen is accessed.</p>
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	<p>Note</p> <p>If a base station has already been set up from another phone or user, select this method to add base stations that have already been set up.</p>
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4.2.4. Pairing a new camera with a base station



Press the pairing button for at least 3 seconds until the LED flashes blue. The voice command "Ready for Camera Connection" is played. If the camera has already been paired in another base station, please delete it from the camera list in the app beforehand.



Shortly press the power icon 3 times to turn the camera on. The red LED on the back and the blue LED at the white light LED flash alternately during the teach-in process. If the connection is successful, the voice command "Camera connection successfully completed" is played back.

4.3. App2Cam Plus: Compatibility

The App2Cam Plus is compatible with the following devices:

- PPIC90000 / PPIC90010 / PPIC90200
- PPIC32020 / PPIC32520 / PPIC34520
- PPIC35520 / PPIC36520

	<p>Note</p> <p>Please note that some features explained or shown in this manual may not be compatible with older generation cameras, or the camera functionality may differ due to hardware differences.</p>
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4.4. App2Cam Plus: Overview

	<p>Note</p> <p>The displayed screenshots and icons were taken from the iOS App. There may be slight differences compared with the Android App in the description, arrangement or functionality. This is described in the respective points or mentioned with an addition (iOS only) or (Android only).</p>
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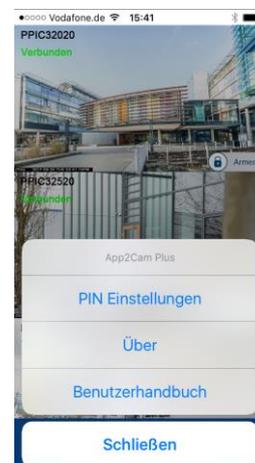
In the overview you can open the live view of the camera by clicking on one of the thumbnails. You can use further functions in the menu bar, camera bar and in the Info / App setting.



Menu bar



Camera bar



App Settings / Info

4.4.1. Menu bar

	
	Set up new camera / Add camera
	Activate / Deactivate camera bar
	Activation of the quad view
	Connection update Updating the connections to the cameras
	Info / App Open settings

4.4.2. Camera bar

	
	Open base station settings
	Delete base station
	Open event list

4.4.3. Info / App Settings

PIN Settings	App Pin Menu for assigning an app pin. If activated and assigned, this will be requested at every app start.
About	About Check here for the latest app version, privacy policy and API version.
User Manual / Instruction	instructions Go to the product page of the selected camera. Here you can download the manual in the download sector.
Video Ccceleration (Android only)	Activate/Deactivate Hardware Decoding Hardware decoding is available for Android. Some Android devices have special hardware features that optimize the decoding of video streams. With older products or older Android devices, this can lead to a deterioration in performance.
Notify me (Android only)	Activation / deactivation of push notifications

Rate Me!	App Rating Rate our app and send us your suggestions for improvement.
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4.5. App2Cam Plus: Live view

Various functions are available in the live view depending on the camera model. The functions are also available in landscape mode. Click on the thumbnail of the camera to go to the live view.



4.5.1. Live View Functions

	Create Snapshot Here you have the possibility to take a screenshot of your live image. The image will then be stored in your photo gallery on your mobile device. The saved images are timestamped and saved in the Photo Gallery.
	Activate/deactivate audio Here you can activate or deactivate audio for live view.
	Starting Manual Recording Here you have the possibility to start a manual recording on SD card. The recording time for one camera is changeable, for two cameras it is fixed on 15 seconds. The icon appears during recording.
	Switching between Camera 1 and Camera 2 If two cameras are paired at the base station, you can switch between the two camera views.
	Intercom function You can intercom by using the microphone of the mobile device on the camera. Press and hold the icon to activate the intercom function. As soon as you release the icon, the transmission is deactivated.

**Back**

Click here to return to the camera overview.

4.5.2. Active/Deactive Function

By clicking on the "Arm" or "Disarm" button you can activate or deactivate the camera. The input of the admin password is always required, as soon as the auto-login is activated in the settings, the password will not be asked again.

	<p>Camera is active In the "arm" state, the camera records detected movements and sends messages (push or e-mail).</p>
	<p>Camera is disabled In the "Disarm" state, the camera does not perform any further actions on detected movements.</p>

4.5.3. Camera Indicators

<p>ABUS Akku Cam(Channel1) Live  Verbunden </p>	
<p>ABUS Akku Cam(Channel1)</p>	<p>Name of the base station (Channel 1 / 2) displays the currently selected camera. You can change the names of the base station / cameras in the advanced settings.</p>
<p>Live </p>	<p>Display of connection strength between base station and Battery Cam</p>
<p></p>	<p>Battery Status of the selected camera</p>

4.5.4. Stream Indicators

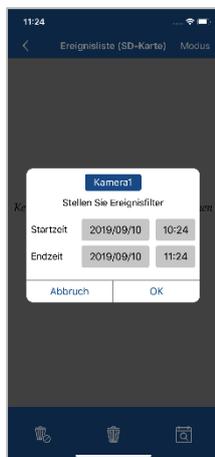
Full HD, Direkt, N=1, Normal, 122.7 KB/s	
CIF VGA HD Full HD	Display of the resolution of the current stream
Direct / relay server	Display of the current connection status Direct: The Peer2Peer server was able to establish a direct connection between your device and the camera. Relay server*: The Peer2Peer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

	<p>*Note</p> <p>If the connection to your camera is always made via the relay server, please check the following settings:</p> <ul style="list-style-type: none"> • Check if UPnP is enabled in your router • Check whether a hardware firewall or software firewall denies a direct connection • Check whether several "hops" (routers) are installed between the terminal device and the Internet.
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4.6. App2Cam Plus: Event List / Playback

4.6.1. Event list

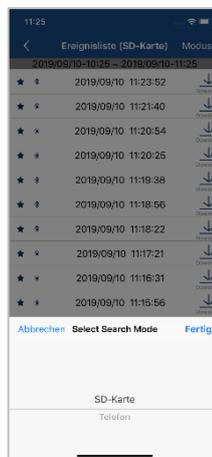
You can define a start and end time in the event list. For this filter, the app displays all recorded events for setup time. Click Camera1 to switch between recordings of the 2 cameras.



4.6.1



4.6.2



4.6.3

4.6.2. Event list Functions

	<p>Delete all events With this selection all events in the list are deleted.</p>
	<p>Delete individual events Delete individual events from the list</p>
	<p>Set event filter again To filter events better, you can set the period again here.</p>

	<p>*Note The recordings cannot be accessed during a recording.</p>
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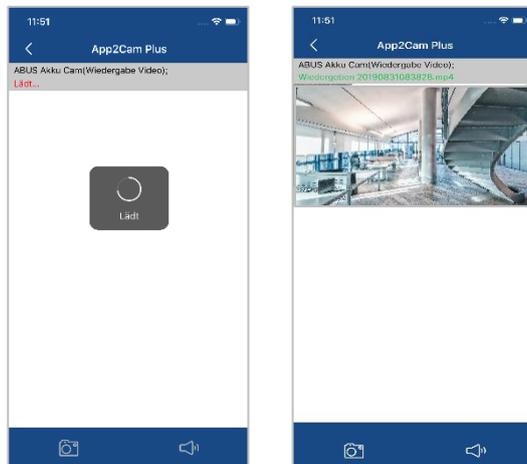
4.6.3. Mode (iOS only)

By clicking on the "Mode" button, you can choose whether you want to view the files on the SD card in the specified period or the files already downloaded on your device in the specified period.

4.7. Playback

Various functions are available in the playback of events, depending on the camera model. In landscape mode a full view without functions is shown.

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

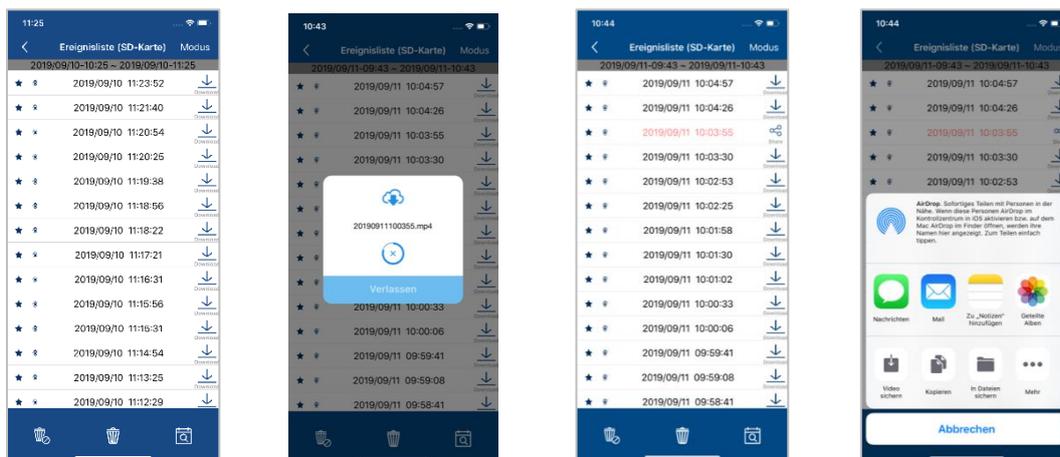


	<p>Note</p> <p>When events are played back, the event is automatically downloaded to your mobile device. We therefore recommend that you operate the playback primarily via Wi-Fi in order to keep the consumption of data volume low.</p>
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4.7.1. Playback Functions

 	
	<p>Create Snapshot</p> <p>Here you have the possibility to take a screenshot of your played video. The image will then be stored in your photo gallery on your mobile device.</p> <p>The saved images are timestamped and saved in the Photo Gallery.</p>
 	<p>Activate/deactivate audio</p> <p>Here you can activate or deactivate audio for playback.</p>

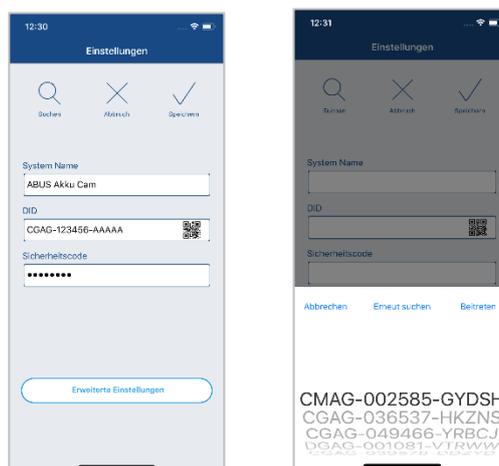
4.7.2. Download & Forwarding



To download a file to your smartphone, click on the download icon to the right of the event. The file will now be downloaded and will then be displayed in red in the event list. Now you have the possibility to share the file by clicking on Share.

	<p>Note</p> <p>The downloaded data is stored differently on the operating systems iOS and Android.</p> <p>iOS: The events are stored on the device and can only be played back with iTunes.</p> <p>Android: The stored data can be found in the Device Manager under "Internal Memory/Record/Camera DID".</p>
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4.8. Advanced Settings



4.8.1. Login data

In the settings, you can change the base station login data manually:

- System name:** Change the name of the base station here.
- DID:** Here you can manually change the DID of the base station.
- Security code:** Enter the security code of the base station here.

The "Search" button allows you to automatically replace the DID of the base station with another found base station. Discard changes with the "Cancel" button or save them with the "Save" button.

4.8.2. Open advanced settings

The button "Advanced settings" opens the settings of the base station.

Use the default password "123456" for the first call. The app then prompts you to change the admin password.



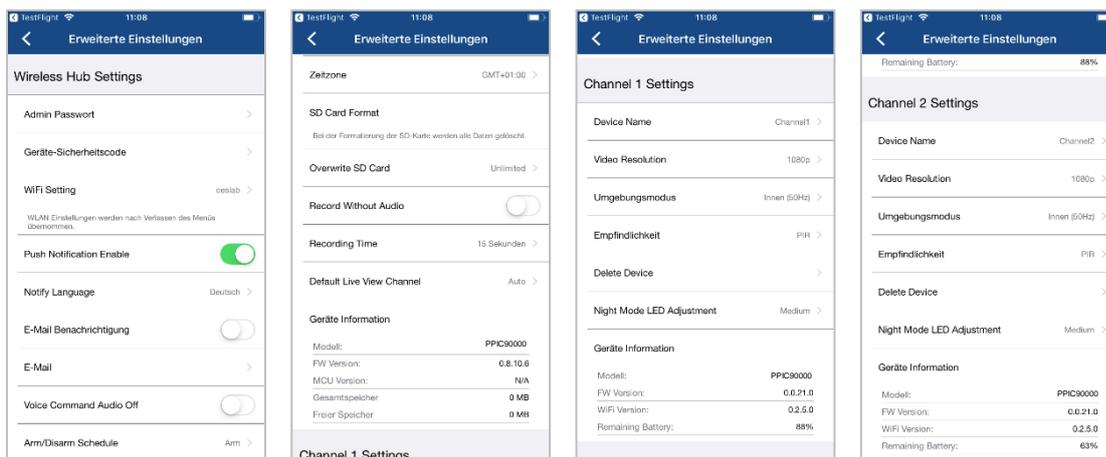
Note

The admin password is a purpose password and not a security password and is intended to help you grant other people the live view and notifications of the base station, but deny the advanced settings.

4.8.3. Automatic login

When entering the admin password, you can use the "Auto Login" button to save the admin password on your terminal device so that it no longer has to be entered on your terminal device the next time you call up the advanced settings. This does not apply to access from other devices.

4.8.4. Advanced settings Base station



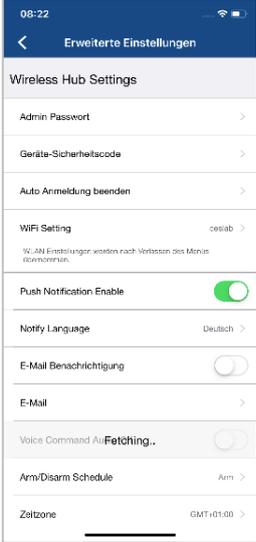
Note

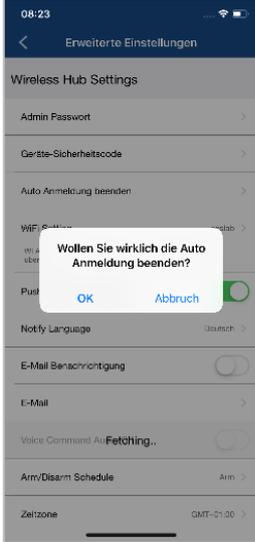
The arrangement of the individual points differs from Android. Despite this, the functionalities are available and identical on both platforms.

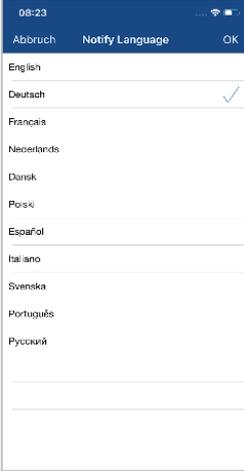


Note

Please always make changes to the settings (e.g. password changes) of the base station in the local network of the base station. We strongly recommend that you do not change any settings in a public Wi-Fi, as it is always possible for other people to record your settings here.

<p>Base station settings</p>		<p>Make the settings for the base station here. The changes in the settings are only saved after leaving the menu.</p>
<p>Admin Password</p>		<p>The Admin password allows access to the advanced settings and enables / disables the camera recordings.</p> <p>The default password is "123456" and must be changed the first time the settings are accessed.</p> <p>If you have forgotten your password, you can reset the base station by pressing the reset button for about 5 seconds.</p> <p>Attention: All settings including the network connection will be lost.</p>
<p>Security Code</p>		<p>The security code is used to set up the base station in the app.</p> <p>The default code is "123456" and must be changed during the initial installation.</p> <p>If you have forgotten your security code, you can reset the base station by pressing the reset button for about 5 seconds.</p> <p>Attention: All settings including the network connection will be lost.</p>

<h3>End Auto Login</h3>		<p>If you have already activated the Auto Login function, you can deactivate it here. This menu item is only displayed if the function has already been activated.</p>
<h3>Wi-Fi Settings</h3>		<p>At the Wi-Fi settings, you can select the desired network to which the camera should be connected.</p> <p>When the menu item is selected, all networks in the environment are displayed. Select your network and enter your own Wi-Fi password.</p> <p>The password entry window also shows you the signal strength to the network, make sure you have enough signal strength to avoid transmission problems. Enter the password and confirm with OK. The settings are only accepted after leaving the menu.</p> <p> To avoid access by unauthorized persons, protect your network by encrypting it with WPA/ WPA2/ WPA2-PSK.</p> <p> The settings are only accepted after leaving the menu.</p> <p> If the connection was not successful or incorrect Wi-Fi information was entered, press the reset button for 5 seconds to reset the base station to factory settings.</p>

<p>Activate PUSH notification/ notification language</p>		<p>Enable notifications to receive PUSH messages on your phone when motion is detected.</p> <p>You have the option of changing the language of the notification under Notification language.</p>
<p>E-Mail notification / E-Mail</p>		<p>Email Settings The e-mail settings are required for sending a notification.</p> <p>Use SSL Activate the checkbox to transfer the e-mail encrypted. You can obtain the necessary settings from your e-mail provider.</p> <p>SMTP server: Enter the SMTP server address here. e.g. smtp.test.com</p> <p>SMTP port: Enter the SMTP port here. e.g. 465</p> <p>Username: Enter the sender e-mail address here. e.g. xxx@test.com</p> <p>Password: Enter the password of the sender e-mail here.</p> <p>Receiver: Enter the recipient's e-mail address here. e.g. xxx123@test.com</p> <p>Press OK to save the settings. When leaving the advanced settings, press "Confirm". Only then will the e-mail settings be accepted.</p> <p></p> <p>We recommend the use of "googlemail" to send e-mails.</p> <p>Activate the e-mail notification afterwards.</p> <p>Please contact your e-mail provider to find out whether certain authorizations need to be activated.</p>
<p>Activate voice commands</p>		<p>You have the possibility to deactivate the voice commands of the base station.</p>

Schedule Settings

Schedule settings

Press the plus sign to  add a schedule. Separate activations are created for the start time and the end time.

Select the start time and give it a name. Select the days for the repetition and the action (Enable / Disable) for the start time. Save by clicking on "Done".

Press the plus symbol  again for the end time.

Now enter the end time, the name and the reaction. Please select the contrast to the previous one and save it by clicking on "Done".

e.g.

Start time 21.00 hrs from Mon-Fri, action activation

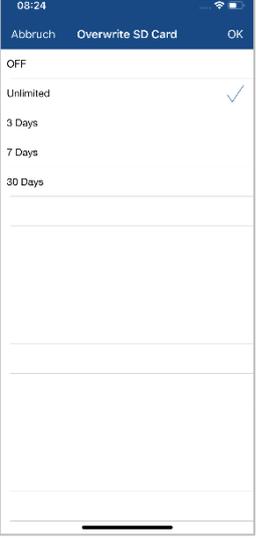
End time 06:00 from Mon-Fri, action deactivation

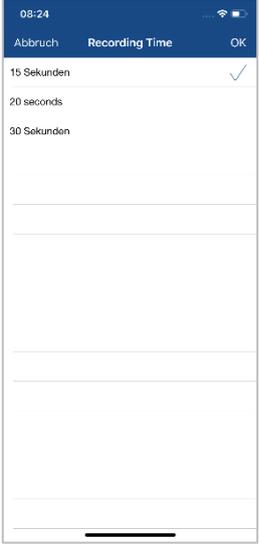
The camera records only between 9 p.m. and 6 a.m. when motion is detected

time zone

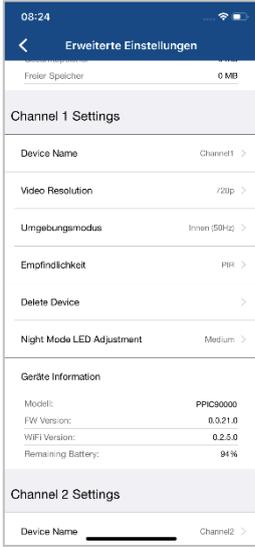
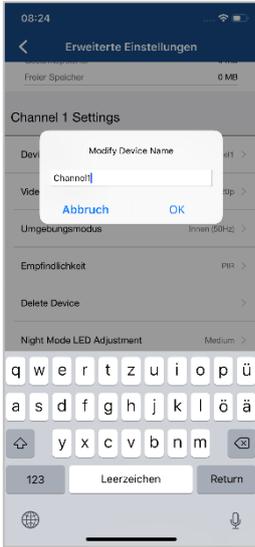
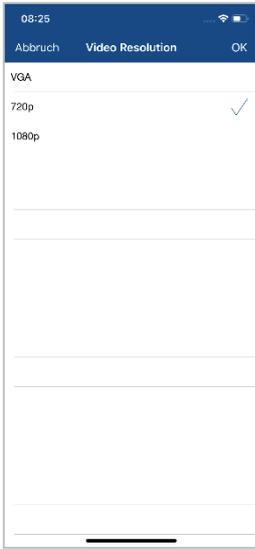
The world time zones are listed in the selection list. Select the time zone in which the camera will be installed.

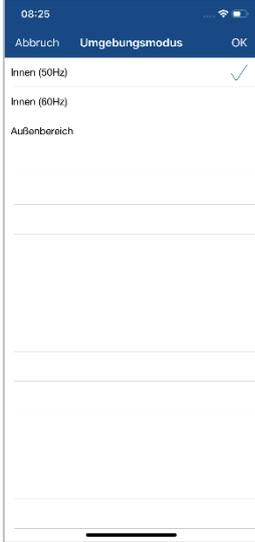
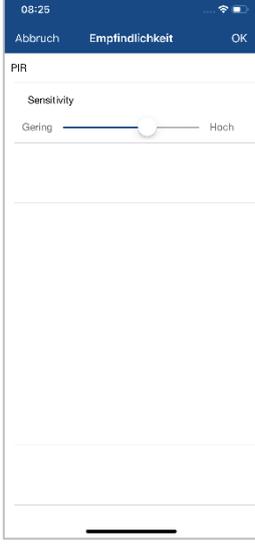
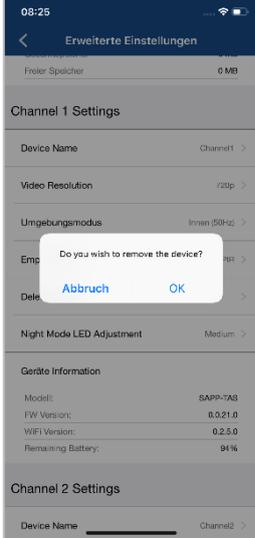
If the world time zone uses daylight saving time, activate daylight saving time.

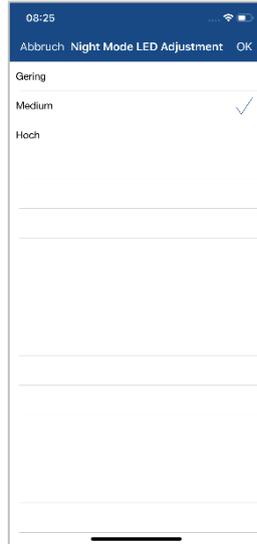
<p>Format SD Card</p>		<p>Formatting the SD card. For permanent use of an SD card, please use an SD card of class 10.</p> <p></p> <p>Formatting the SD card deletes all data. Please save the data before formatting.</p>
<p>Ring memory SD card</p>		<p>There are several ways to overwrite the events on the SD card.</p> <p>OFF Once the SD card is full, no more recordings will be saved.</p> <p>Unlimited When this function is enabled, the oldest recordings will be overwritten with newer ones as soon as the SD card is full.</p> <p>3 / 7 / 30 days The data on the SD card are deleted or overwritten after the selected number of days.</p>
<p>Recording without audio</p>		<p>Activate the function to save the recordings without audio.</p> <p>During live viewing it is possible to activate audio.</p>

<p>Recording time</p>		<p>Here you can set the recording time for events, you can choose between 15 / 20 / 25 seconds.</p> <p>As soon as two cameras have been paired with the base station, the events are recorded with 15 seconds by default.</p> <p>Please note that a longer recording time reduces the battery life!</p>
<p>Live view Camera selection</p>		<p>If two cameras are connected to the device, you can decide here which camera should be displayed first in the live view by default.</p> <p>Auto The base station automatically displays the camera that has been programmed as camera 1.</p> <p>Camera 1/ 2 Select the camera to be displayed first for the live view.</p>

4.8.5. Advanced Settings Camera

<p>Camera Settings</p>		<p>Make the settings for the cameras here. The changes in the settings are only accepted after leaving the menu.</p>
<p>Camera Name</p>		<p>Change the camera name of the paired cameras here. The name is displayed in the live view as well as in the push notifications.</p>
<p>Video Resolution</p>		<p>Here you have the possibility to change the resolution for the live view. At a lower resolution, you can get a smoother image with external access, but less image detail is available.</p> <p>The value set here has no effect on the recording, which is always stored in Full HD.</p>

<p>Environment mode</p>		<p>Here you have the possibility to select the mains frequency for your camera.</p> <p>The following options are available: Indoor (50Hz), Indoor (60Hz) and Outdoor.</p> <p>Standard value Germany: 50 Hz</p>
<p>PIR Sensitivity</p>		<p>Here you can set the sensitivity of the PIR sensor.</p> <p>With a high sensitivity setting, the camera triggers at low heat movement. This can lead to false alarms.</p>  <p>Heat sources such as heaters or fan heaters can cause false alarms, so do not point the camera at them.</p>
<p>Delete device</p>		<p>You can delete a camera from the base station. Confirm the deleting process by clicking OK.</p> <p>To pair a camera in a base station, press the pairing button on the base station and wait for the voice command "Ready for camera connection". Now press the power button on the camera three times. As soon as the camera connection has been established, the voice command "Camera connection successfully completed" is issued.</p>

White light LED settings

Here you can adjust the intensity of the white light LED.

Adjust the LED intensity according to the environmental conditions. As soon as objects are in the near of the camera, it is recommended to set the intensity to low to avoid reflections in the image, but the range of the LED will be reduced.

5. Firmware update

You can update the firmware of your base station in two different ways. Please note that with both methods, the base station settings are retained, so you do not have to reset them.

	Please note that a MicroSD card is required for both versions.
	Updating the base station takes about 3-5 minutes. Do not disconnect the base station from the power supply during this time!

5.1. Update via server

The base station checks in a 6-hour interval whether a new firmware is available on the firmware server for the camera and base station. Insert a MicroSD card into your base station so that it can automatically download the firmware. After the base station has downloaded the firmware, the next time you enter the advanced settings, a message appears so that you can start updating. The first step is a firmware update of the base station, which then updates the firmware of the camera automatically.

5.2. Manual update

Alternatively, you can download the latest firmware from the "Downloads" tab on the product website: www.abus.com/product/Artikelnummer . (Example: www.abus.com/product/PPIC90000)

Copy the two files (rootfs-SMH-T1R.img, rootfs-SMH-T1R.md5) to an empty MicroSD card.

Now disconnect the base station from the socket and insert this MicroSD card into it. Now plug the base station back into the power socket, the update will now start and can last up to 5 minutes.

The battery cam itself is automatically updated by the base station as soon as the firmware of the base station has been updated and the base station contains a firmware update for the camera.

	If you want to update more base stations, delete the files on the MicroSD card and copy them to the card again.
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5.3. Current firmware version

Some functions for the base station and cameras are only available with the latest firmware version. Therefore, make sure that your devices are always up to date.

The latest firmware versions can be found on the respective product page: <http://www.abus.com/product/PPIC90000>

6. Overview voice commands

Thanks to the voice commands of the base station, installation and operation are simplified. In the advanced settings, you can disable the voice commands after the initial installation.

Below you will find help for the various voice commands.

Voice command	Assistance
Ready for network setup.	During the initial installation, the base station is ready for use after approx. 45 seconds. Do not start the installation until this voice command is issued.
Receive network setup information.	During the installation of the base station, the Wi-Fi data is transmitted to the base station via sound information. The transmission was successful after this voice command was issued.
Network setup successful.	The Wi-Fi data has been transferred and the base station has successfully connected to the network.
Network disconnected.	The base station issues this voice command as soon as the connection to the network has been disconnected. In this case, please check the status of your router.
Waiting for camera pairing.	To add a second camera to your base station, press the pairing button and wait for the voice command to output. Then press the power button 3 times on the back of the camera.
Camera pairing successful	The camera connection was successful and the camera is now taught-in in the base station.
Camera pairing failed.	The pairing process of the camera into the base station was not successful. Repeat the process.
Maximum amount of cameras reached. Remove camera in the APP and try again.	Two cameras have already been programmed in the base station. To teach in a new camera, delete one of the existing cameras in the advanced settings and then start the teach-in process.
Unable to find network in the APP.	In this case please check the status of your router, the base station cannot establish a connection to the network.
Firmware update successfully	This voice command is issued after a successful automatic or manual firmware update.
Firmware update failed, please try again.	The automatic firmware update could not be executed successfully. Please check if there is enough memory on the SD card. With the "Off" ring buffer setting, there may not be enough memory available.
Connection to the network failed, please try again.	The connection setup during the installation was not successful, please restart the installation and check your entered Wi-Fi password.

7. Battery FAQs

The battery life of the Battery Cam depends on various factors such as trigger frequency, environmental influences and environmental factors. To increase the battery lifetime you will find some tips here.

When should I charge the battery?

As soon as the battery capacity drops below 15%, you will receive a push message, live viewing and recording will continue.

Below 5% you will receive another push message that the battery should be charged. The live view and recording are no longer available.

Charging the battery

Remove the camera from the bracket and plug in the microUSB cable.

For charging, use either the plug-in power supply of the base station or another plug-in power supply with 5 VDC / 2A. The battery is fully charged again in approx. 4 hours as soon as the LED on the rear panel lights up red permanently. When using a power supply with a lower power output, the charging time is extended.

Battery life

Thanks to stand-by mode and intelligent motion detection, up to 13 months of operation are possible. However, this is influenced by environmental circumstances. With frequent releases, the battery life decreases many times over, and you can improve this by reorienting the camera.

Outdoor installation

Low outdoor temperatures can adversely affect the battery life of the camera. In this case, you will see a faster drop in capacity, please check the status in the camera settings and reload the camera early enough.

Can other Wi-Fi networks influence the runtime?

Wi-Fi overlays in the next surroundings of the camera can have a negative effect on the runtime. Check the Wi-Fi interference signals with suitable programs and try to reposition the camera.

Different battery life for two cameras

If you have paired two cameras with your base station, the cameras may run for different times. Depending on where and at what distance the cameras were installed, the batteries can be subjected to different loads.

The following factors can influence this:

- Triggering Frequency
- Wi-Fi Interference signals
- Temperature differences, outdoor installations
- Distance of the cameras to the base station, the closer the cameras are to the base station, the less battery is used.
- Recording at night, as the LED requires more power.
- Permanent or longer live view / camera activation

8. Troubleshooting tips

Installation distances between the base station and the cameras

The distance between two cameras should be at least 2m. Please install the cameras at a minimum distance of approx. 1m from the base station to avoid interference.

If you install it outside the range of the base station, you will get a stagnant image or no image at all. Please check if the signal strength symbol in the live image is sufficient, at least 2 dashes should be displayed.

Place the base station closer to the camera for a smoother image. The following factors can negatively influence the transmission: thick brick walls, exterior walls, glass, water pipes and metal.

Camera image is not displayed

Check the signal strength in the live view

Check the battery charge in the advanced settings.

Is the camera connected to the base station?

Is there an internet connection?

Push messages are not received

Is the camera deactivated? Also check the schedules.

Are the push messages deactivated?

Is there an internet connection?

Is the base station unplugged?

How can I set my base station to factory settings?

Press the reset button on the base station for at least 5 seconds. The LED on the front will start flashing red. Once the factory settings are loaded and the base station is ready for setup, the voice command "Ready to connect to the network" is issued.

Manual update of the base station not possible.

Please load the update files onto an empty microSD card, take the base station off the power and insert the microSD card. Wait at least 5 seconds before plugging in the base station again.

The base station is not found

Please check the following points:

1. Make sure your network supports DHCP.
2. Are the mobile device and the base station in the same network? Make sure that both devices are in the same network during the initial configuration.
3. The router has no power supply.
4. The base station has no power supply.
5. Try adding the camera by manually entering the data.

Your Wi-Fi is not displayed in the selection list in the camera app.

If your personal Wi-Fi network is not displayed 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.
3. Is the 5 GHz frequency enabled in your router?

Low network signal or poor picture quality

Possible causes could be:

1. Wi-Fi network devices can interfere with signal transmission, ensure enough distance between the base station, camera and other Wi-Fi devices.
Possible disturbance factors can be: thick brick walls, exterior walls, glass, water pipes and metal.
2. Remove dirt from the camera. These can have a negative effect on the image quality.

What could be the reasons why the device does not record when it moves?

Possible causes could be:

1. Is the SD card inserted correctly?
2. Is the camera activated?
3. Are the schedules set correctly?
4. Format the SD card before initial operation.
5. Make sure you are using a Class 10 SD card.
6. In the camera settings, check the sensitivity of the PIR, which may be set too low.

The camera image is superimposed (white areas in the image).

The camera has a white LED for night operation. The light is reflected on reflecting surfaces such as glass or white surfaces. Do not place the camera in front of glass surfaces and be sure to install it in protected outdoor areas.

What could be the cause of an SD card error.

Please check the following:

1. Make sure that the SD card is properly inserted and formatted. Please save important data before formatting, they will not be available afterwards.
2. Be sure to use only a Class 10 SD card.

The time and date display is incorrect.

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?
3. Restart the base station by plugging it in again after about 5 seconds.

Base station repeatedly issues voice command "Successfully connected to network".

If the base station repeatedly issues the voice command, please check the connection quality of the base station to your router. If the connection is bad, the base station tries to reconnect to the router if the connection is interrupted, so the voice command is issued repeatedly.