PPIC31020

Operating instructions

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

Version 1.0

$C\epsilon$

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

Introduction

Dear Customer,

Thank you for purchasing this product.

ABUS Security Center hereby declares that the PPIC31020 camera complies with the RED Directive 2014/53/EU. The devices also meet the requirements of the following EU Directives: EMC Directive 2014/30/EU as well as RoHS Directive 2011/65/EU. The full text of the EU Declaration of Conformity is available at the following Internet addresses:

http://www.abus.com/product/PPIC31020

In order 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 using the product, observe all operating and safety instructions!

All company names and product designations contained herein are trademarks of their respective owners. All rights reserved.

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

Note on data protection

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

⚠️

Warning:

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 unauthorized 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

These operating instructions have been prepared with the utmost care. Should you nevertheless notice any omissions or inaccuracies, please let us know in writing at the above address.

ABUS Security Center GmbH accepts no liability whatsoever 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 in connection with the equipment, performance and use of this product. No guarantee is given for the content of this document.

The Purchaser 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 or the correction of all errors. ABUS Security Center expressly does not warrant that all ABUS Security Center products will function properly on all customer systems or in conjunction with integrations, solutions, applications and (or) programs, or that integrations, solutions, applications and (or) programs will function properly with later versions of ABUS Security Center products and systems.
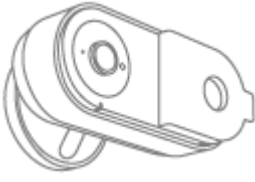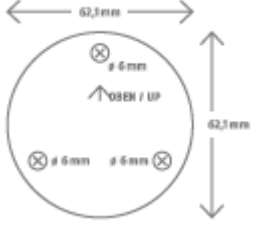
Content

1. Scope of delivery

1.1. PPIC31020

	PPIC31020		
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PPIC31020

- WiFi Privacy Indoor Camera (1)
- Power supply, 5V DC / 2A (2)
- Wall mount (3)
- Drilling template (4)
- Mounting material (5)
- Reset tool (6)
- microSD card (preinstalled) (7)
- Micro USB - RJ45 Adapter (8)
- Anti-slip pads (9)

2. Hardware description

2.1. WiFi Privacy Indoor Camera

Front

Lens

Loudspeaker

Power-LED

Light sensor

Microphone

7

Rear

microSD card ----- [micro SD card] ----- Reset button

RESET
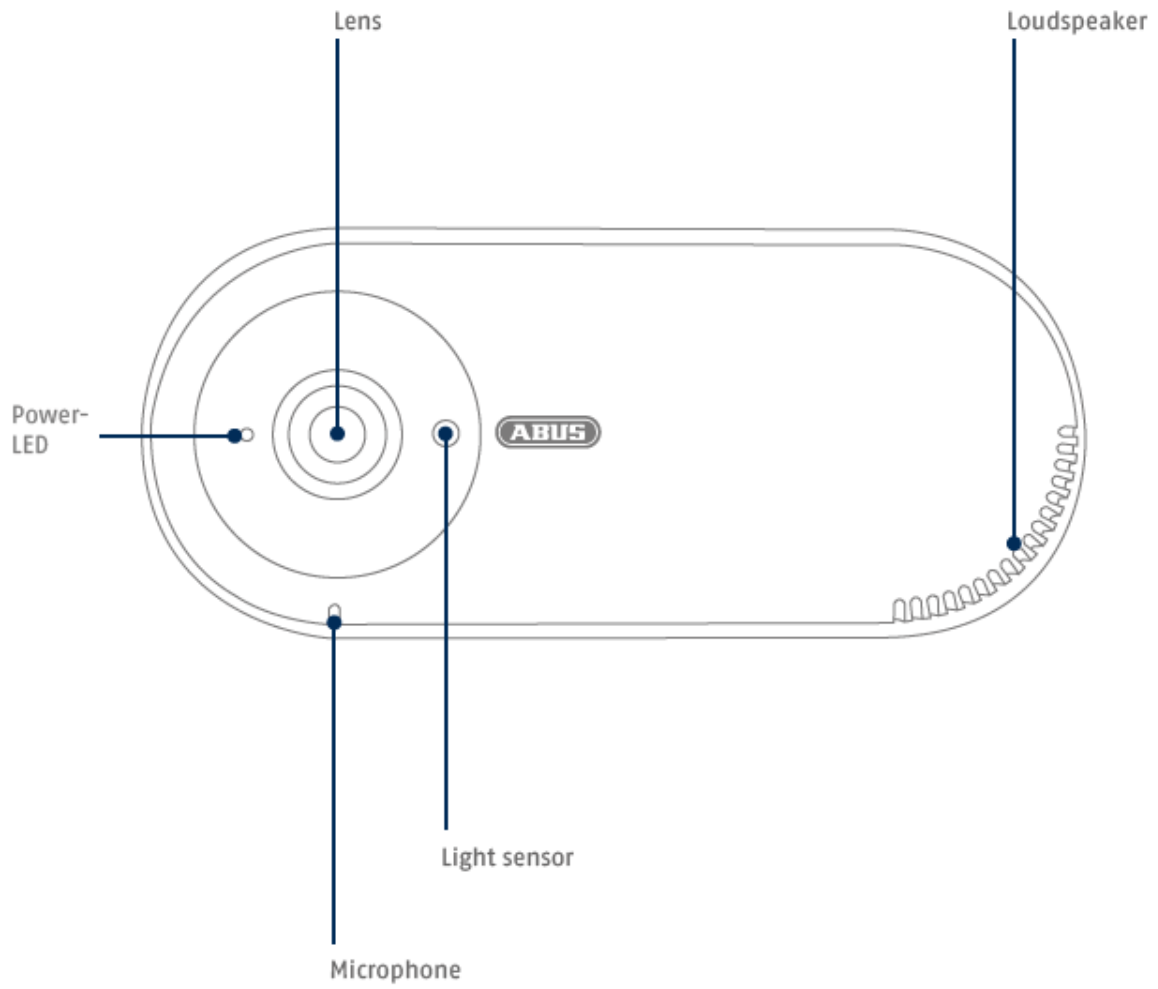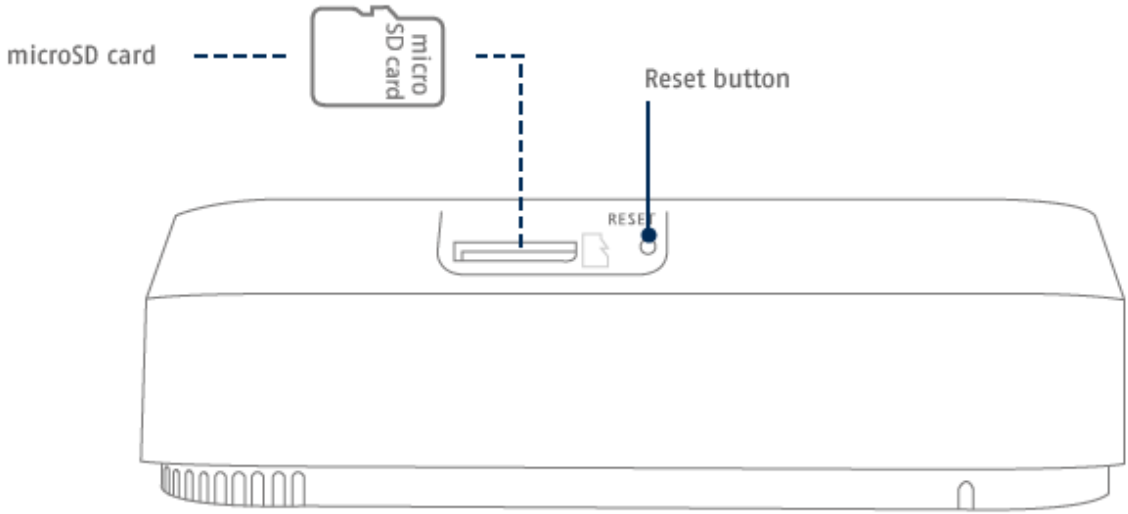
Micro-USB Interface for LAN connection

5V ⎓ 2,0A

Power supply (5V DC / 2A)   1/4" thread for the bracket
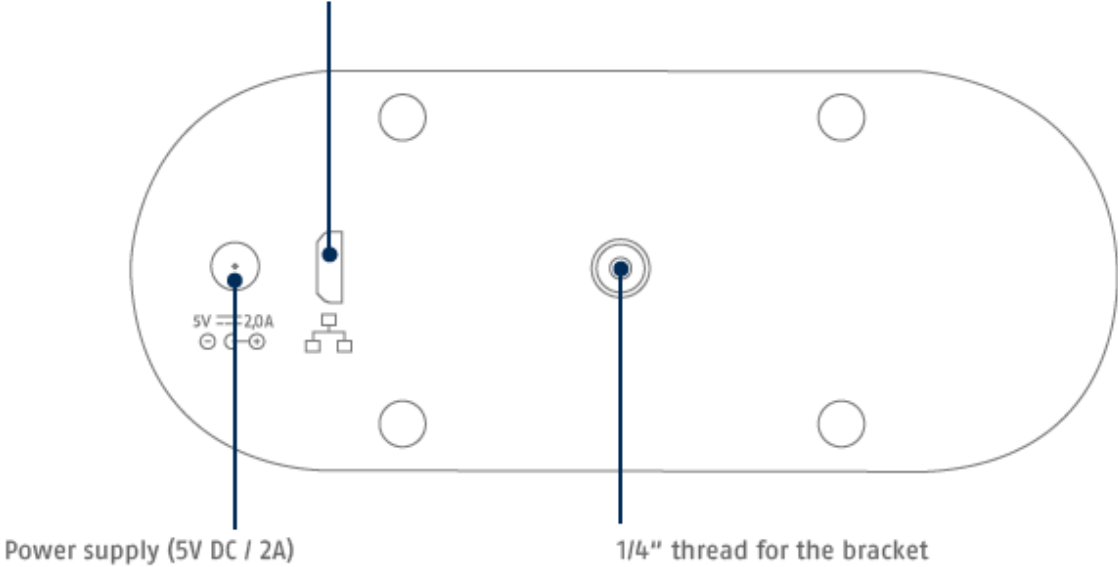
2.2. Flap positions

The camera basically consists of two parts:
the camera housing made of plastic, and a cover/flap in fabric optics.
The flap is magnetically attached to the camera housing and is completely removable if required.
Through the flap and its integrated magnets, you control the privacy mode of the camera.

Flap is completely closed; the front of the camera is completely covered by the flap:

The camera is in stand-by mode = privacy mode. No sound recording, no image recording, no access via app possible. From a technical point of view, no Peer2Peer connection is possible.

To note: The camera will not switch to privacy mode until the flap is completely closed and in contact with the camera body with its integrated magnets.
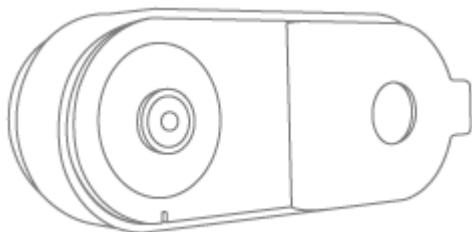
Flap is completely open on half side; the camera lens can be seen: The camera is active. The live image, the memory, all functions and settings are accessed via app.
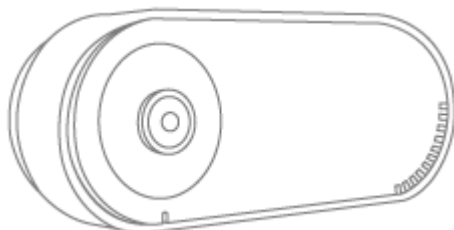
Flap is completely removed,

the complete front of the camera can be seen:

The camera is active. Access to the live image, memory, all functions and settings are via app.

⚡	**ATTENTION!** The flap must be open for the camera to be put into operation! **Please note:** When motion detection is active, a recording is started when the flap is closed; this is used to verify who has set the camera to private mode. If you do not wish to record, the camera must be deactivated before closing the flap.

3. Assembly / Installation

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

⚠	**Site** The camera is suitable for indoor use only. Do not place the camera near heaters, stoves, other heat sources or in direct sunlight. Operate only in locations with temperatures within the allowable ambient temperature range -10°~50°C.

3.1. Mounting the camera with wall bracket

During the installation of the camera, you have the option of accessing the following installation instructions via the help in the app.
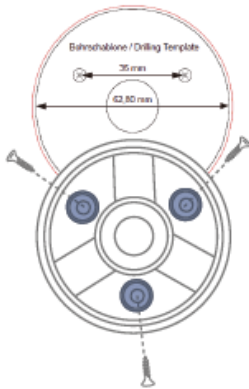
Drill mounting holes (6mm drill bit required) in the flat wall surface using the drilling template, and attach the back plate using the mounting material supplied.
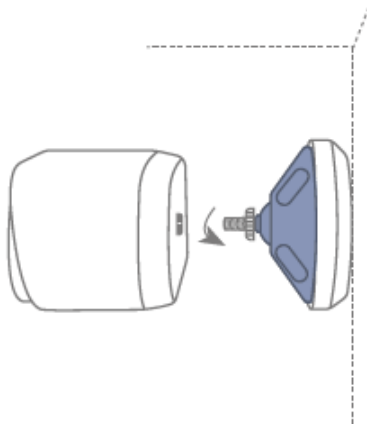
Insert the ball joint, put on the cover and tighten it. Then put on the fixing ring and tighten it slightly.
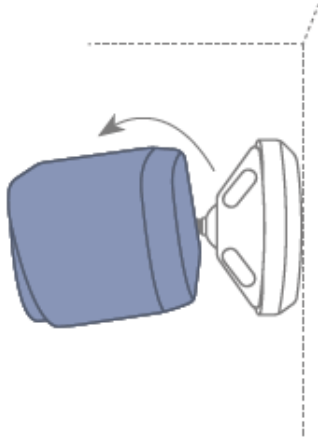
Screw on the camera and align it to the desired detection area. Tighten the fixing ring to secure the camera in this position.

⚠️	**Attention!**
	The camera should not be pointed directly at a light source or at the sun.

3.2. Mounting the camera without wall mount

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

To prevent the camera from moving, you can use the supplied non-slip pads. Place them on the straight surface of the bottom of the camera:
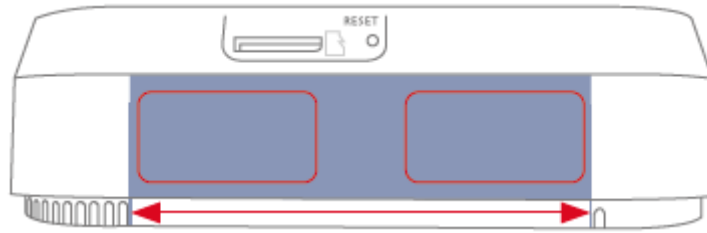
The camera can also be placed on a flat surface without a wall mount.
The following points should be noted:

- The position of the camera is not fixed when it is set up and can be moved unintentionally, thus changing the detection range.
- The camera must be positioned as freely as possible on the edge of the installation surface to avoid light reflections between the camera and the installation surface.
- Do not cover the camera's field of view with objects.
- Positioning on glass shelves can cause distracting reflections when shooting.

3.3. Restore factory settings
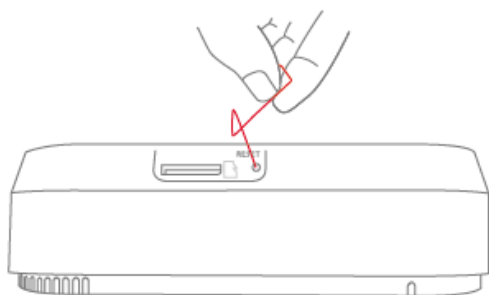
If there are any difficulties during start-up or if you have forgotten the access data (password and security code), reset the camera to factory settings:

Press the reset button for at least 5 seconds using a thin object (e.g. the microSD card removal tool or a paper clip) until the power LED flashes.

3.4. Installation instructions WiFi 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 WiFi signal to the router.

For installations in larger objects, a WiFi 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** You can obtain information about compatible WiFi repeaters from your network operator or the manufacturer of your router. ABUS Security Center GmbH & Co KG will not make any recommendations for WiFi repeaters. Pay close attention to the installation recommendations of the WiFi repeater. The positioning should ideally be between the router and the camera.

3.5. Installation location

The camera is only suitable for indoor use. The teach-in into the app is described under point 4 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 obscured by objects. Do not point the camera directly at a light source or at the sun.

4. App2Cam Plus: First access

4.1. System requirements

Please note the following points to ensure easy commissioning:

- 2.4 or 5GHz WiFi network with password and encryption .
- The WiFi password must not exceed 31 characters in length.
- The location service of the mobile devicel 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.
- When entering the WiFi password, the following special characters are <u>not</u> possible.

&	**`**	**<**	**>**

- When entering the WiFi password, only the following special characters are possible.

"	*****	**$**	**:**	**.**	**#**	**^**
,	**;**	**|**	**(**	**)**	**{**	**}**
[	**]**	**+**	**-**	**=**	**@**	**~**
	?	**/**	**%**	**_**	**!**	

4.2. Download app

Notice:

Please open the left side of the camera cover completely before initial operation. The camera lens has a clear view. (It is not necessary to remove the entire cover).
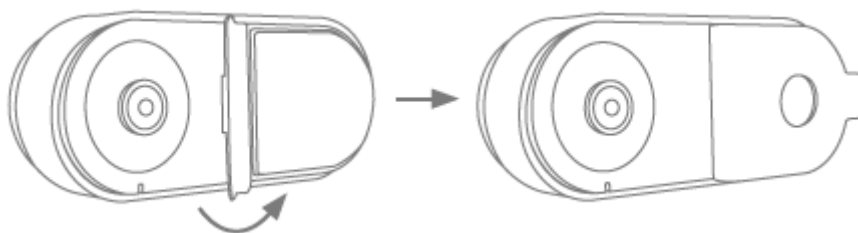
To access the app for the first time, download the "App2Cam Plus" app from the Google Playstore or Apple Appstore.
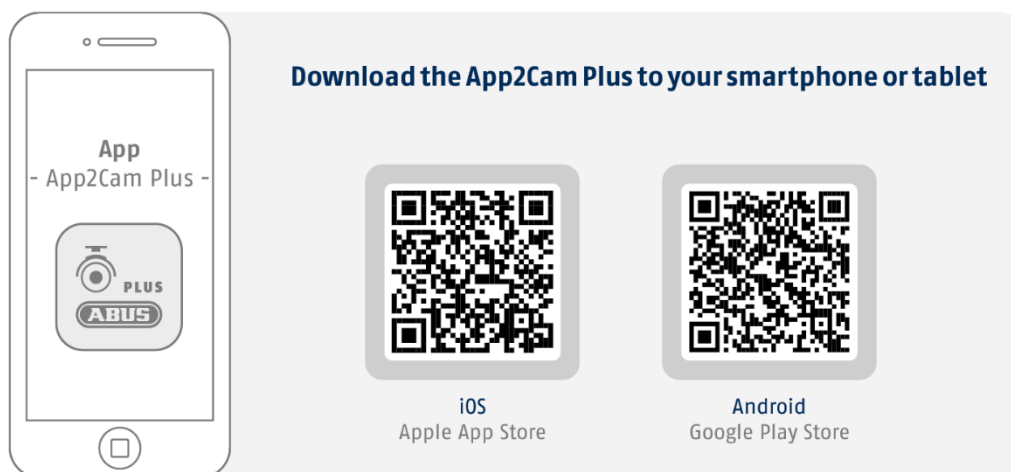
During the installation, help pages are available for the various steps. Click on the icon to ⓘ access the help pages.

4.3. Camera setup

4.3.1. Bluetooth setup
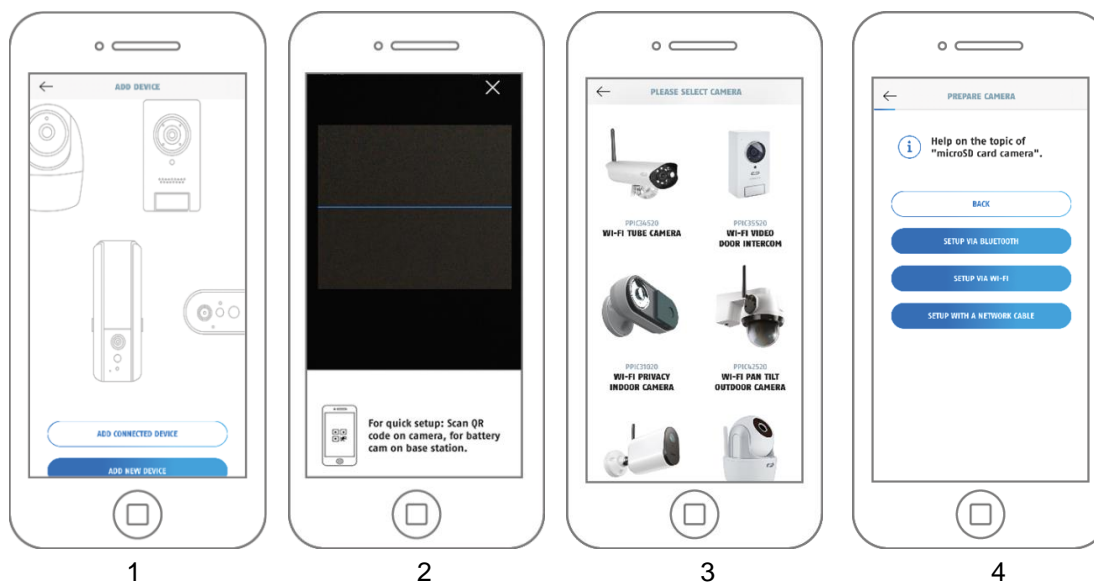
1	2	3	4

1. Launch the App2Cam Plus and select "Add new device" to start the commissioning process.
2. Option 1: Scan the QR code on the back of the camera.
3. Option 2: Select your camera model.
4. Select "Installation via Bluetooth".

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

| 5 | 6 | 7 | 8 |
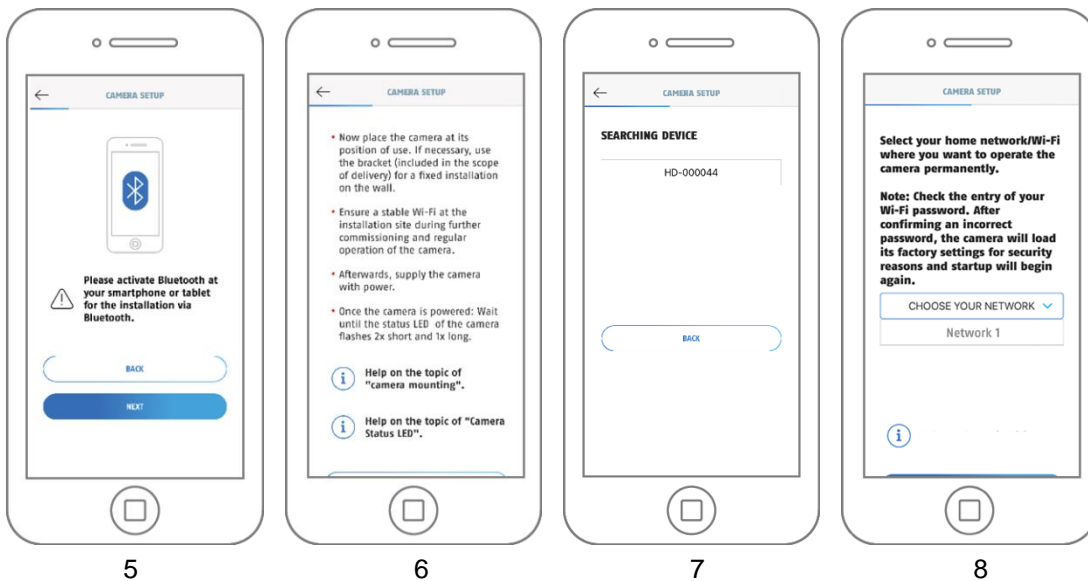
5. If you have not already done so: Activate Bluetooth in the settings of the mobile device. Then tap on "Next".

6. Now supply the camera with power and wait 2 minutes until the camera has started. Then tap on "Next".

7. Select your camera by its identification number. The identification number (DID) of your camera can be found under the QR code, which is located on your camera and is also enclosed in the packaging. Then tap on "Next".

8. Select your home network/WiFi in which you want to operate the camera permanently. Then tap on "Next".

	Note
⚠️	For optimal start-up, the location services must be activated in the settings.
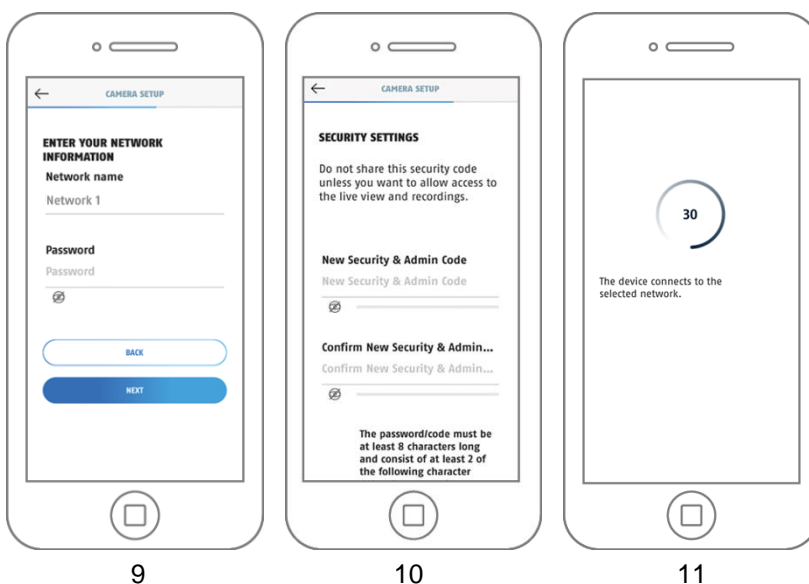
| 9 | 10 | 11 |

9. Enter the password of your network. Then tap on "Next".

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. If the start-up was successful up to this point, the app displays the camera's article number in the "Overview" screen. This can take up to 60 seconds.

12. You have successfully completed the startup. All settings and functions can be accessed via the menu bar at the bottom of the screen.

13. If the Bluetooth setup was not successful, you can alternatively use the installation via WiFi or network cable. Before using the camera again, reset it to the factory settings, see chapter 3.3.

⚠️	**Note** For the best possible camera experience, we recommend that you always operate the camera with the latest firmware. The current firmware version and available updates can be found under "Advanced Options" > "Device Settings".

4.3.2. WiFi setup

| 1 | 2 | 3 | 4 |

1. Launch the App2Cam Plus and select "Add new device" to start the commissioning process.
2. Option 1: Scan the QR code on the back of the camera.
3. Option 2: Select your camera model.
4. Select "Installation via WiFi".

| 5 | 6 | 7 | 8 |

5. Supply the camera with power and then click on "Search camera in network".

6. Click on "Switch to WiFi settings".

7. Connect to the WiFi access point of the camera. You can recognize this by the name "HD-XXXXXX". The password for the camera's WiFi access point is: "12345678".

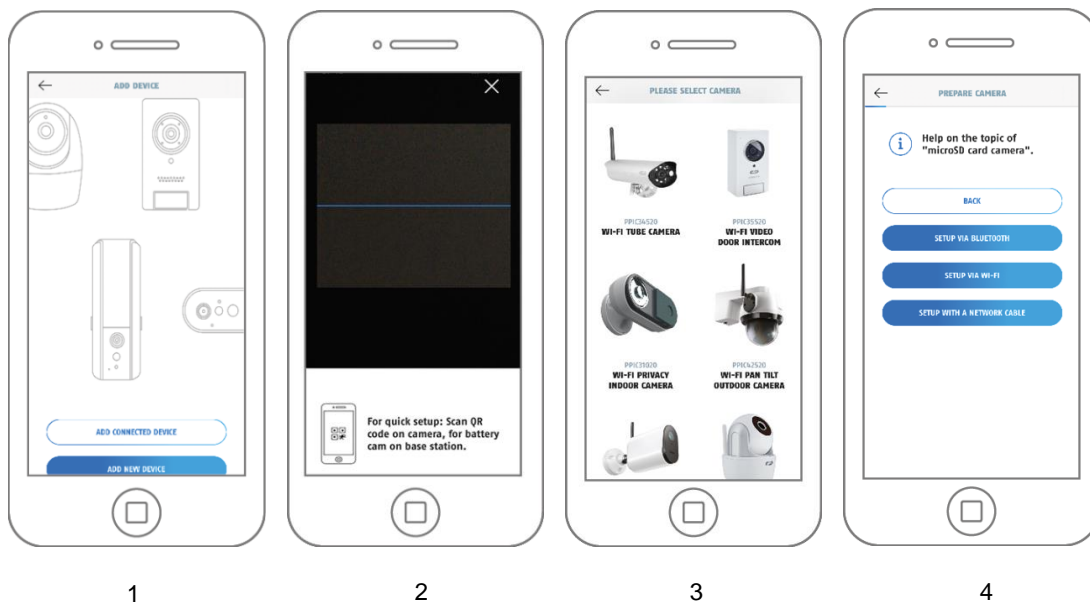8. Switch back to the App2Cam Plus app and click "Next".

| 9 | 10 | 11 |

9. Enter the password of your network. Then tap on "Next".

10. Now assign a security code or admin password. These must not be identical when setting up via WiFi. Then tap on "Next".
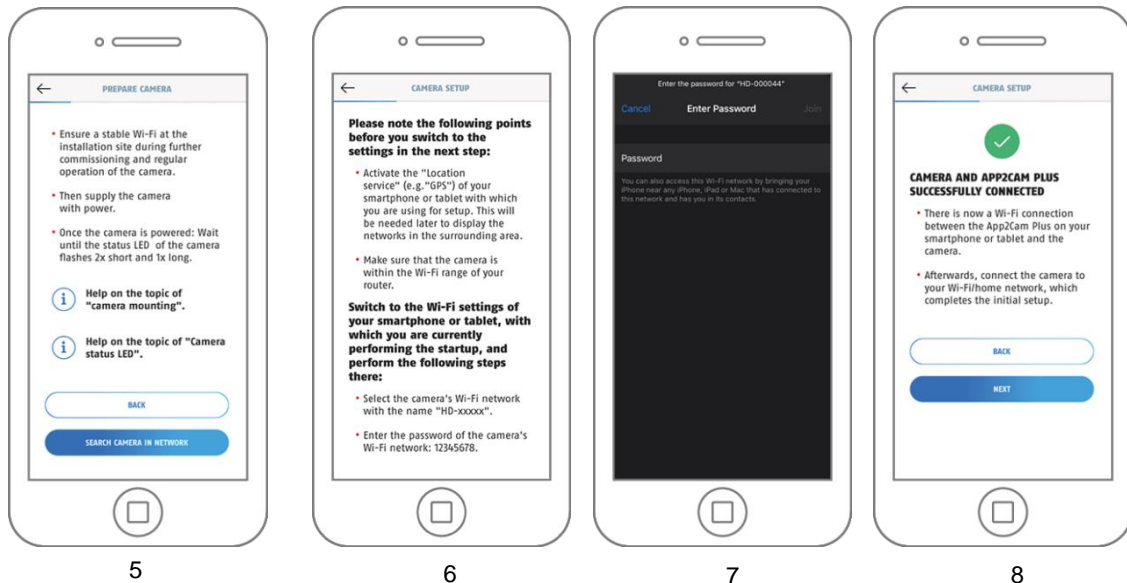
11. The camera will now restart. If the start-up was successful up to this point, the app displays the camera's article number in the "Overview" screen. This can take up to 150 seconds.

12. You have successfully completed commissioning. All settings and functions can be accessed via the menu bar at the bottom of the screen.

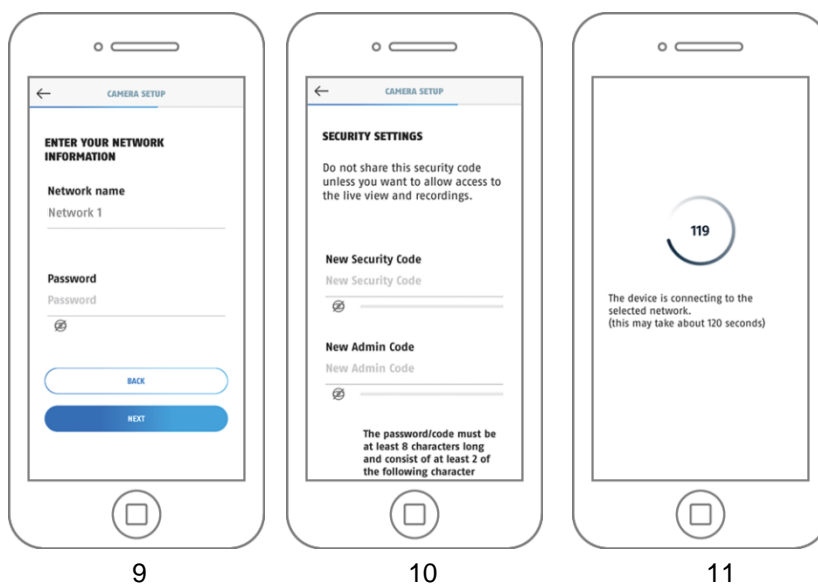| ⚠️	**Note**
	For the best possible camera experience, we recommend that you always operate the camera with the latest firmware. The current firmware version and available updates can be found under "Advanced Options" > "Device Settings".

4.3.3. Setup via network cable
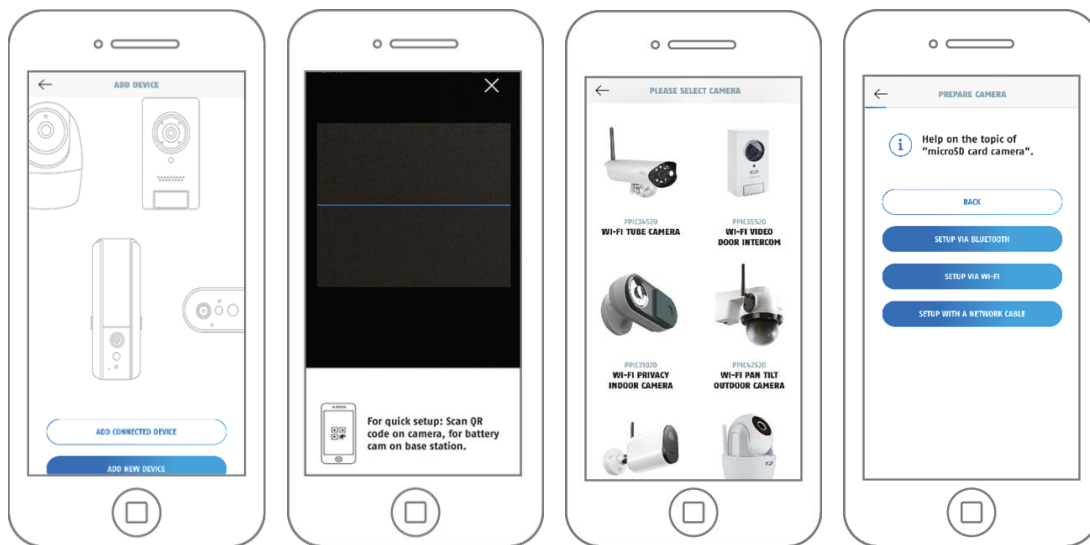
| 1 | 2 | 3 | 4 |

1. Launch the App2Cam Plus and select "Add new device" to start the startup process.
2. Option 1: Scan the QR code on the back of the camera.
3. Option 2: Select your camera model.
4. Select "Installation via network cable".
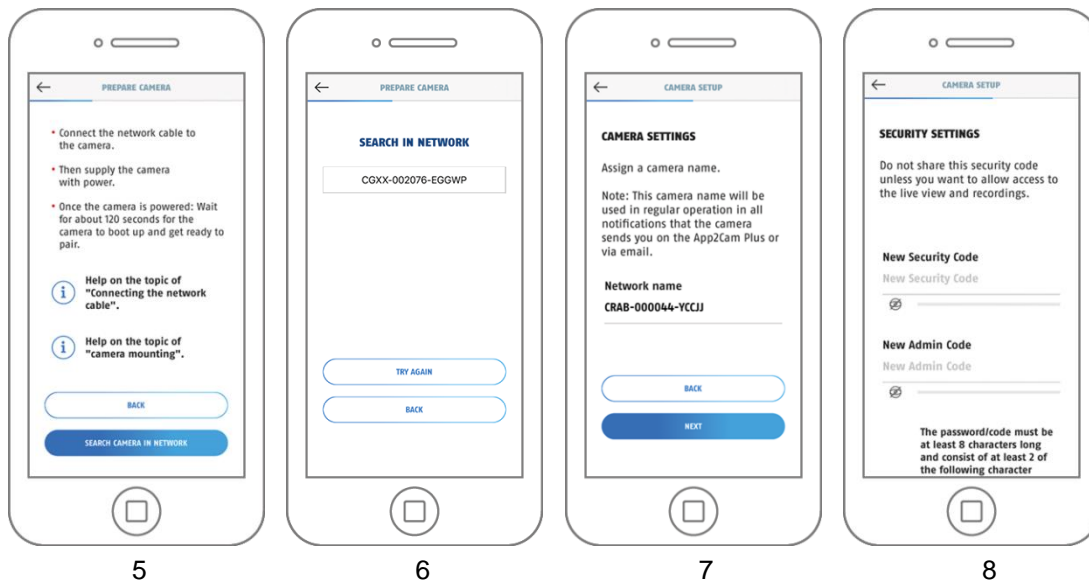
| 5 | 6 | 7 | 8 |

5. Connect the Micro USB - RJ45 adapter cable to the camera and use a RJ45 connector for the connection with a network cable. Supply the camera with power. Click on "Search camera in network".
6. Next, click on the camera identification number (DID) of your camera.
7. Assign a camera name.
8. Now assign a security code or admin password. These must not be identical. Then tap on "Next".
9. You have successfully completed startup. All settings and functions can be accessed via the menu bar at the bottom of the screen.

4.3.4. Add cameras that are already set up

To set up a camera that is already connected to the network, please follow the steps below.
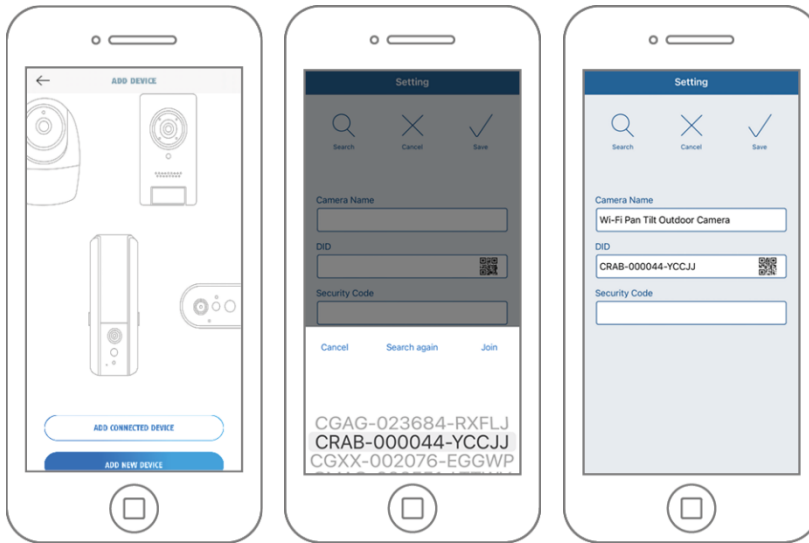
Open the app and click the "+" to add a camera, click "Add Connected Device".

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

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

Press the "Save" button to add the camera.

You have successfully completed commissioning. All settings and functions can be accessed via the menu bar at the bottom of the screen.

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

4.4. App2Cam Plus: Compatibility

The App2Cam Plus is currently compatible with the following devices:

- PPIC90000 / PPIC90010 / PPIC90200
- PPIC32020 / PPIC32520 / PPIC34520
- PPIC35520 / PPIC36520
- PPIC42520 / PPIC44520
- PPIC31020
- TVAC19000A-B / TVAC19100A-B
- TVAC16000/TVAC16001

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

4.5. App2Cam Plus: Overview

	Note
⚠️	The screenshots and icons shown were taken from the iOS app.
	There may be slight differences from the Android app in the icons, 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 thumbnails. You can use further functions in the menu bar, camera bar and in the Info / App setting.
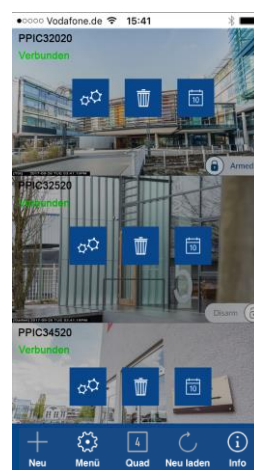
Menu bar   Camera bar   App Settings / Info

4.5.1. Menu bar

	Set up new camera / Add camera
	Enable / disable camera bar
	Activation of the 4-fold view
	Connection update Updating the connections to the cameras
	Info / Open app settings

4.5.2. Camera bar
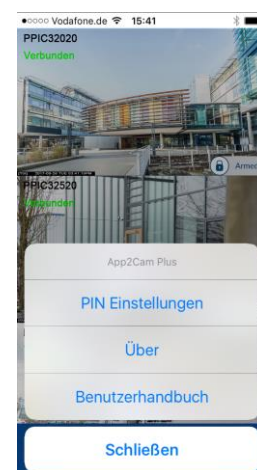
	Open camera settings
	Delete device
	Open event list

4.5.3. Info / App settings

PIN settings	**App Pin** Menu for assigning an app pin. If activated and assigned, this is requested with every app start.
Via	**Via** Check out the latest app version, privacy policy and API version here.
User manual / Instruction	**Instructions** Call up the product page of the selected camera here. Here you can download the manual in the download sector.
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 may result in degraded performance.

Notify (Android only)	**Activation / deactivation of push notifications**
Guess Me!	**App rating** Rate our app and send us your suggestions for improvement.

4.6. App2Cam Plus: Live View

Various functions are available in 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.

4.6.1. Live View Functions

,

Armed
Alarm is active
The camera records when motion is detected and sends noti ications (push and/or e-mail).

Intercom function
You can use the microphone of the mobile end device to communicate through the camera intercom. Press and hold the symbol in order to activate the intercom function. The transmission is deactivated as soon as you release the symbol.

Disarmed
Alarm is deactivated
The camera displays a live view but does not carry out any other actions when motion is detected.

Auto Zoom On
The live image is automatically zoomed in.

Create a snapshot

Enable/disable audio transmission of the camera

Start manual recording

Auto Zoom Off
The live image is displayed completely.

4.6.2. Camera indicators

WiFi indoor camera	
	Connected
	Full HD, Direkt, Gut, 134.2 KB/s
WiFi indoor camera	**Camera name** You can change the name of the camera in the advanced settings.
Connected	**Connection status of the cameras.**

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4.6.3. 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**
Directly **Relay server**	**Display of the current connection status** **Direct:** The Peer2Peer server was able to establish a direct connection between your terminal 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 of the stream.
Low **Normal** **Good**	**Display of the current assessment of the connection** This represents the connection between the base station and the router.
xxx KB/s	**Display of the currently consumed kilobit 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 whether multiple "hops" (routers) are installed between the terminal device and the Internet.

4.7. App2Cam Plus: Event list / Playback

4.7.1. Event list

In the event list, you can set a start and end time. For this filter, the app shows you all recorded events in this time.

The timeline at the top shows the frequency of triggers for the last seven days.

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.
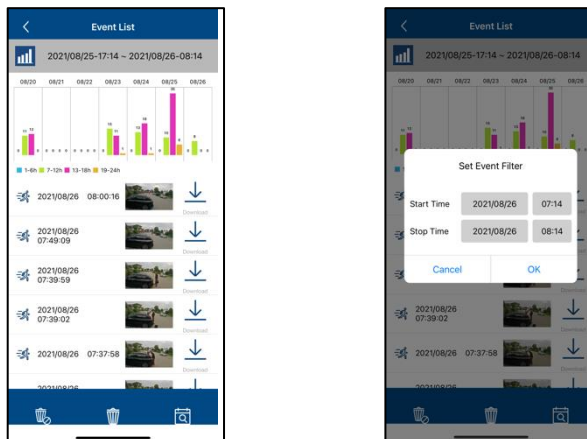
4.7.2. Event list functions

	Delete all events This selection deletes all events in the list.	
	Delete individual events Delete individual events from the list	
	Set event filter again To filter events better, you can set the period again here.	

	Note Recordings cannot be accessed during a recording.

4.8. Playback

In the playback of the events, different functions are available depending on the camera model. In landscape mode a full view is displayed, by tapping the screen the playback bar can be hidden.

Please note that the playback of the recordings is done in the 180° view.

The events usually need a short buffer time until the event can be played.
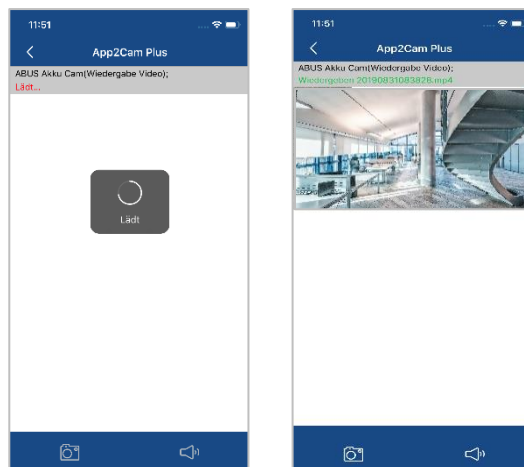
⚠️	**Note**
	When playing back events, the event is automatically downloaded to your end device. We therefore recommend that you mainly operate the playback via WiFi in order to keep the consumption of the data volume low.

4.8.1. Playback functions

	Create snapshot
	Here you have the option to take a snapshot of your playback. The picture is then saved in your photo gallery on your mobile device. The saved images are time-stamped and stored in the photo gallery.
	Enable/disable audio Here you have the option to activate or deactivate audio for playback.

4.8.2. Download & Forwarding
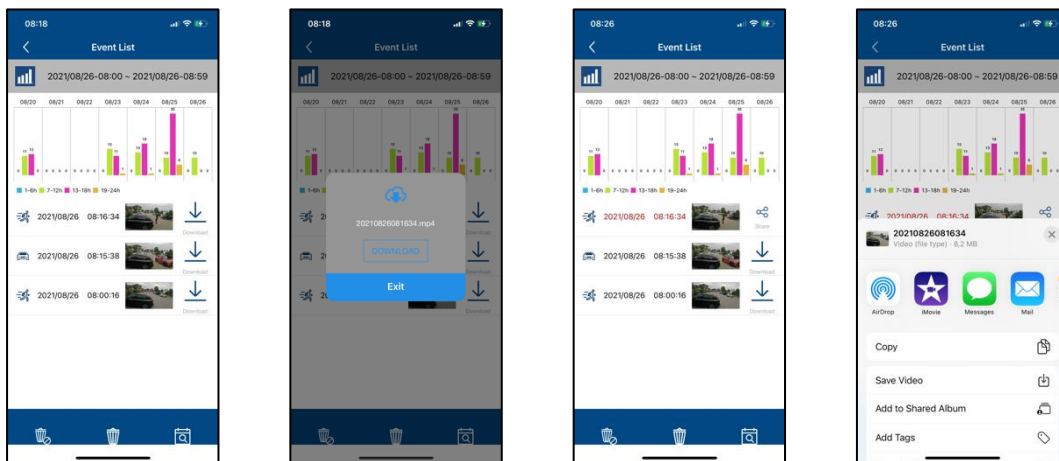
To download a file to your smartphone, click on the download icon to the right of the event. The file will now be downloaded and displayed in red in the event list.

Now you have the possibility to share the file by clicking on Share.

	Note
	The downloaded data is stored differently on the iOS and Android operating systems. **iOS: Download the** Event, then click Share and select "Save Video". The file will appear in the connection in the Photos app. **Android:** The saved data can be found in the device manager under *"internal memory/record/camera DID"*.

4.9. Advanced settings

4.9.1. Open advanced settings

To open the advanced settings, click on the 1) menu icon at the bottom and then on the 2) settings icon in the camera image.
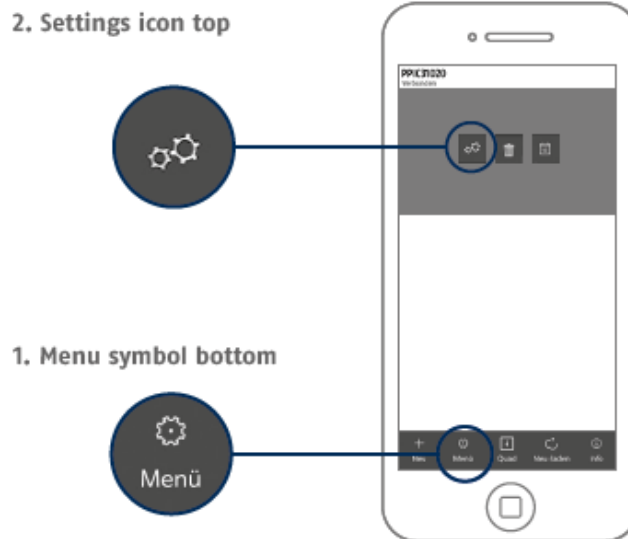
Use the admin password that you assigned during the initial installation.

	Note
⚠️	The admin password is a purpose password, not a security password, and is intended to help you allow other people to view the camera live and receive notifications, but to prevent them from accessing the advanced settings.

4.9.2. Login data

You can manually change the camera login data in the settings:
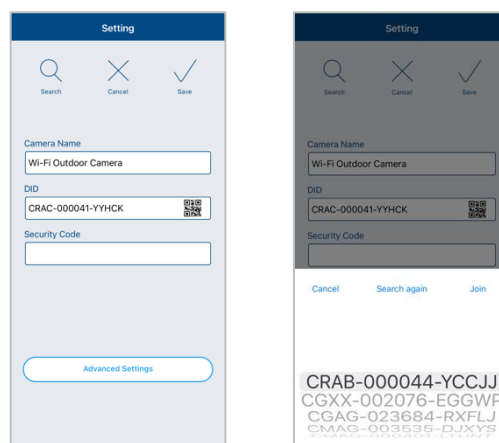
System Name:	Change the name of the camera here.
DID:	Display the camera DID , if changed, the camera can no longer be accessed.
Security code:	Enter the camera's security code here.

The "Search" button allows you to automatically replace the DID of the camera with another found camera.

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

4.9.3. 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 you do not have to enter it the next time you call up the advanced settings on your terminal device. This does not apply to access from other end devices.

4.9.4. Advanced settings
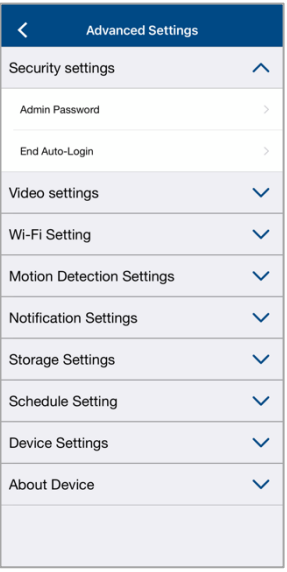
The individual menu items are grouped and can be expanded and collapsed using the arrows.
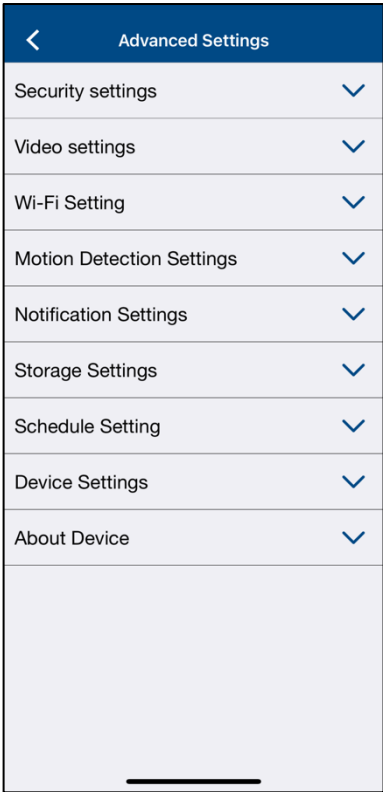
	Note
⚠️	The arrangement of the individual points differs from Android. Despite this, the functionalities are available and identical on both platforms.

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

4.9.5. Security settings

Security settings	Advanced Settings
	
	Security settings ⌃
	  Admin Password ›
	  End Auto-Login ›
	Video settings ⌄
	Wi-Fi Setting ⌄
	Motion Detection Settings ⌄
	Notification Settings ⌄
	Storage Settings ⌄
	Schedule Setting ⌄
	Device Settings ⌄
	About Device ⌄
		Make the security settings for your camera here.
		
		The changes in the settings are only applied after exiting the menu.

Reset security code		The security code is used to set up the camera in the app. During installation, replace the default security code with your own security code of choice. If you have forgotten your security code, you can reset the camera by pressing the reset button for about 3 seconds and assign a new security code. After resetting, remove the camera from App2Cam Plus and begin setup using the setup wizard. The default security code is "123456". **Attention:** All settings including the network connection are lost.
Change admin password	Cancel **Admin Password** OK Old password: New password: Confirm password	The admin password grants access to the advanced 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 3 seconds. The default admin password is "123456". **Attention:** All settings including the network connection are lost.
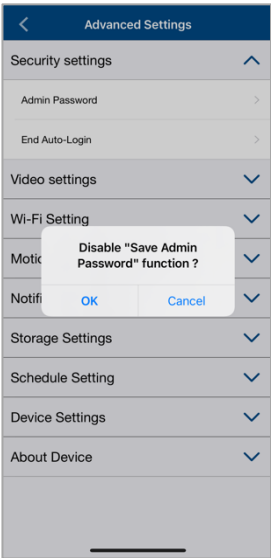
End Auto Login		If you have already activated Auto Login, you can deactivate the function here.
		This menu item is only displayed if the function has already been activated.

4.9.6. Video settings
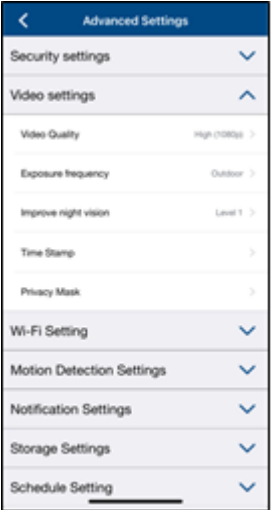
Video settings		Make the video settings for your camera here.
		The changes in the settings are only applied after exiting the menu.
Video quality		Here you have the possibility to change the resolution for the live view.
		With a lower resolution, you can get a smoother image when accessing externally, but less image detail is available.
		The value set here has no effect on the recording, which is always saved in Full HD (1080p).

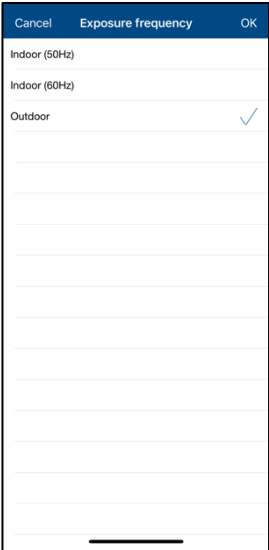|		
Exposure frequency	Cancel **Exposure frequency** OK Indoor (50Hz) Indoor (60Hz) Outdoor ✓	Here you have the possibility to select the mains frequency for your camera. The following selections are available: Indoor (50Hz), Indoor (60Hz) and Outdoor. **Standard value Germany:** 50 Hz
Improve night vision	Cancel **Improve night vision** OK Level 1 ✓ Level 2 Level 3 Level 4 Level 5	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 low to avoid reflections in the image, but this will reduce the range of the LEDs.
Timestamp	**Time Stamp** Hold down the timestamp and drag it to the desired position. Select a colour for the timestamp. Refresh Save	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. The "Reload" button refreshes the preview image.
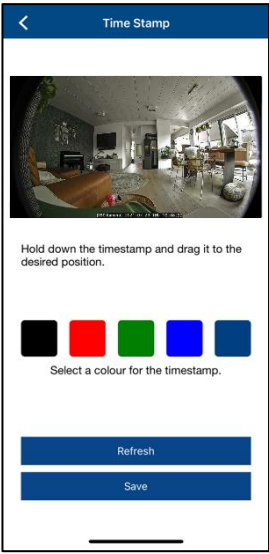
33

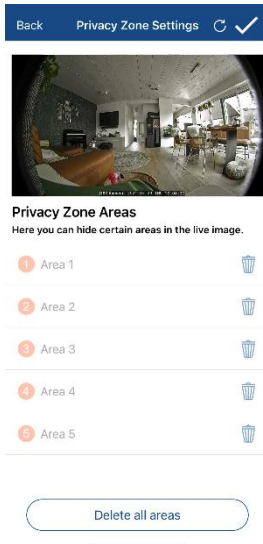| Privacy masking | Back Privacy Zone Settings ↻ ✓

Privacy Zone Areas
Here you can hide certain areas in the live image.

❶ Area 1 🗑
❷ Area 2 🗑
❸ Area 3 🗑
❹ Area 4 🗑
❺ Area 5 🗑

(Delete all areas) | 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 5 areas and place and adjust them individually by 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 Delete All Zones and then click the check mark in the upper right corner.

Deleting individual existing zones is only possible during creation, click on the recycle bin for this. |

4.9.7. WiFi settings
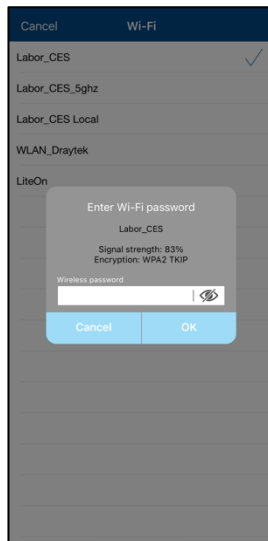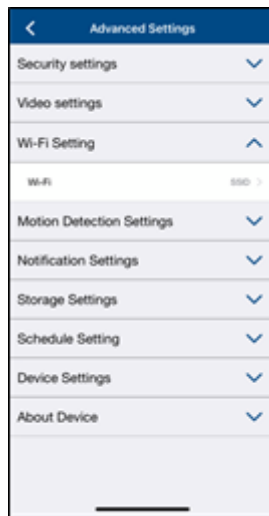
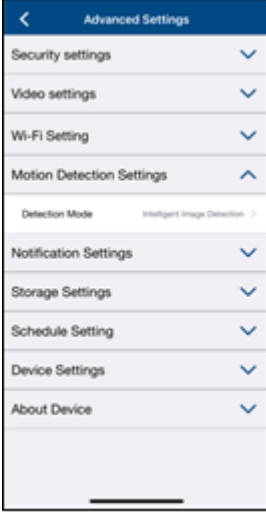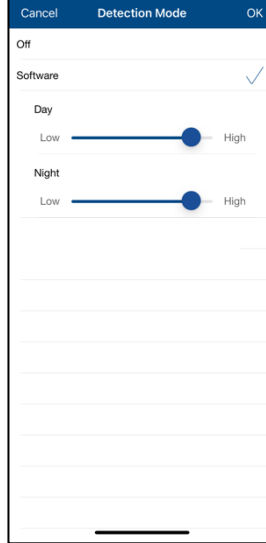| WiFi settings		Under the WiFI settings, you can select the desired network to which the camera is to be connected.
		When you select the menu item, all networks in the vicinity are displayed. Select your network and enter your in-house WiFi password.
		The password entry window will also show you the signal strength to the network, make sure you have sufficient signal strength 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 only applied after exiting the menu.
		⚠️ If the connection was unsuccessful or the wrong WiFi information was entered, press the reset button for 5 seconds to reset the camera to factory settings.

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4.9.8. Motion Detection Settings

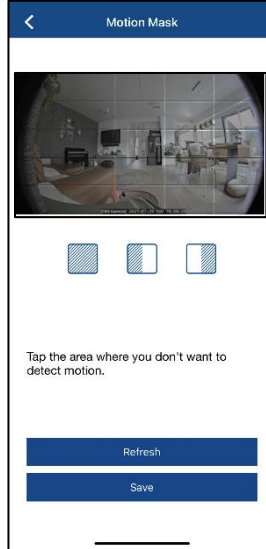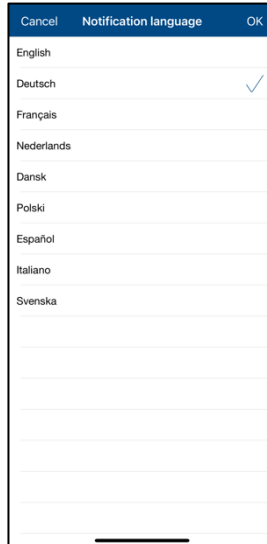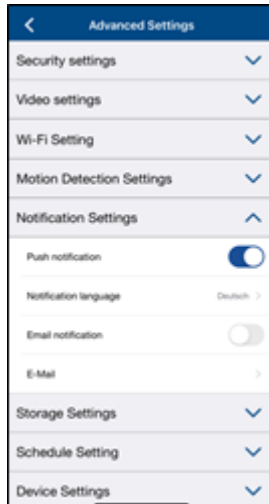| Motion Detection Settings		Make settings for motion detection here. Click Detection Mode for more settings. If "Off" is selected, there will be no motion detection.
		The changes in the settings are only applied after exiting the menu.
		Motion detection is reliable at a range of up to 4 meters. Outside the specified range, motion detection may occur, but is not guaranteed.
Software		Make the settings for motion detection here.
		There is no differentiation between objects, every moving object triggers a recording.
		Use the sliders to change the sensitivity of the motion detection for day and night.
		Click OK to apply the settings.
Motion mask		A preview of the live image and the motion mask set up is displayed here. The selection of hidden areas takes place directly in the preview area.
		If a field in the grid has been selected, motion detection no longer takes place in this area.
		Deleting the selection
		Preset selection ranges

4.9.9. Notification Settings

Enable PUSH notification / Notification language		Enable notifications to receive PUSH messages to your smartphone when motion is detected.
		You have the option to change the language of the notification under Notification language.
		Please note that only the language of the 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 e-mail 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
		Transmitter: Enter the sender e-mail address here. e.g. xxx@test.com
		Password: Enter the password of the sender e-mail here.
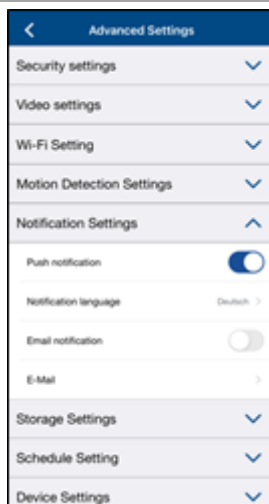
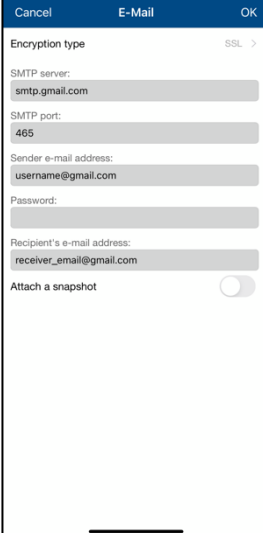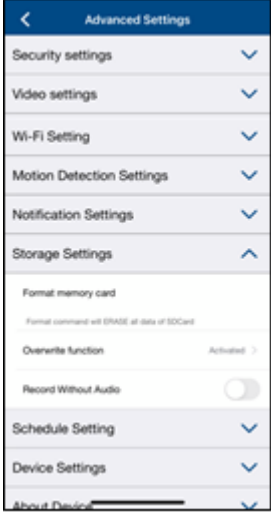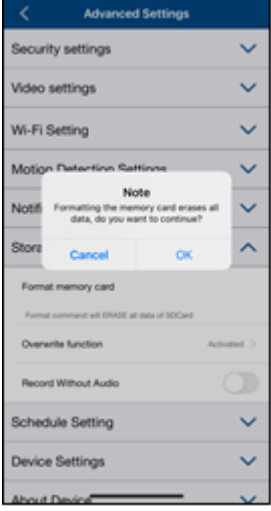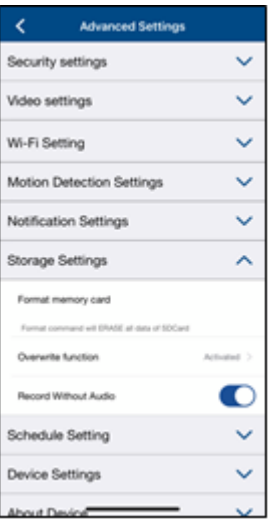|	
Cancel　　E-Mail　　OK Encryption type　　　　SSL > SMTP server: smtp.gmail.com SMTP port: 465 Sender e-mail address: username@gmail.com Password: Recipient's e-mail address: receiver_email@gmail.com Attach a snapshot	**Recipient:** Enter the recipient's e-mail address here. e.g. xxxx123@test.com Save the settings by pressing OK. When exiting the advanced settings, press "Confirm". Only then will the e-mail settings be applied. ⚠️ We recommend using "googlemail" to send e-mails. Activate the e-mail notification afterwards. Please check with your email provider if certain permissions may need to be enabled.

4.9.10. Storage settings

Storage settings		Make settings for the storage here. The changes in the settings are only applied after exiting 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.

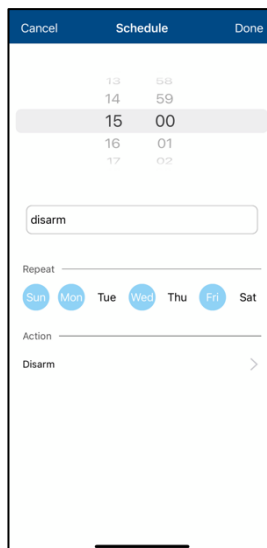| **Ring buffer function**	Cancel Overwrite function OK OFF Activated ✓ 3 day cycle 7 day cycle 30 day cycle	There are several ways to overwrite the events on the SD card.
		OFF Once the SD card is full, no more recordings will be saved.
		Enabled If this function is activated, the oldest recordings 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.
Recording without audio	Advanced Settings Security settings ⌄ Video settings ⌄ Wi-Fi Setting ⌄ Motion Detection Settings ⌄ Notification Settings ⌄ Storage Settings ⌃ Format memory card Format command will ERASE all data of SDCard Overwrite function Activated > Record Without Audio ⬤ Schedule Setting ⌄ Device Settings ⌄ About Device ⌄	Activate the function to save the recordings without audio. During the live view it is possible to activate audio.

4.9.11. Schedule settings

Activation / deactivation schedule		**Schedule Settings**
		Press the plus icon ✚ 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 recurrence 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, schedule name and repeat. Please select the contrast to the previous one at Action and save it by clicking "Done". e.g. Start time 21.00 hrs from Mon-Fri, Action Activation End time 06:00 from Mo-Fr, action deactivation The camera records only in the period between 9 pm - 6 am when there is movement.
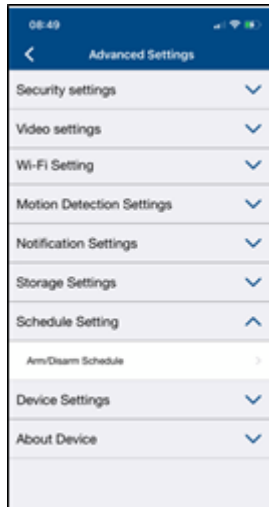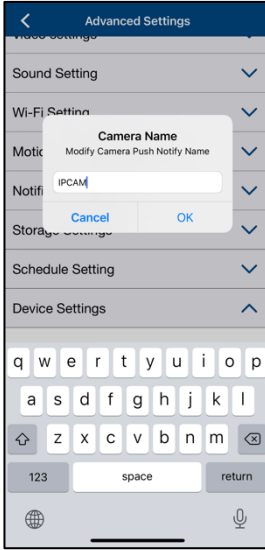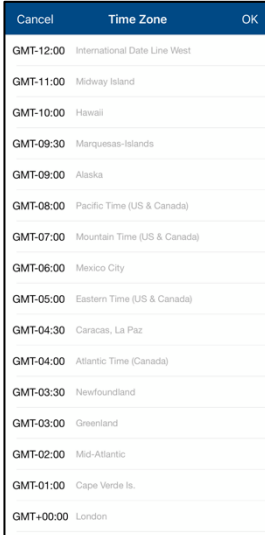
4.9.12. Device settings

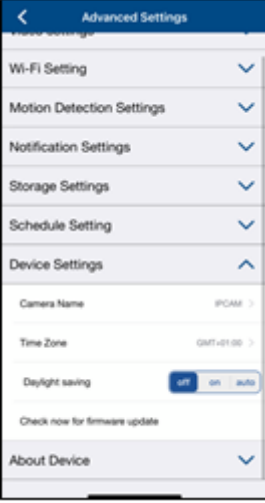|		
Device settings		Make the device settings for your camera here. The changes in the settings are only applied after exiting the menu.
Camera name		Change the camera name here. The name is displayed in the live view as well as in the push notifications.
Time Zone / Daylight Saving Time		The world time 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.
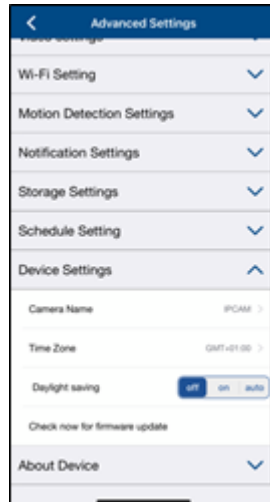
| **Check now for firmware update**		By selecting the menu item "Check now for firmware update " you can check for current firmware updates.
	Advanced Settings Wi-Fi Setting ⌄ Motion Detection Settings ⌄ Notification Settings ⌄ Storage Settings ⌄ Schedule Setting ⌄ Device Settings ⌃ Camera Name IPCAM > Time Zone GMT+01:00 > Daylight saving off on auto Check now for firmware update About Device ⌄	Please note that an SD card is required for this! The firmware update is downloaded in the background and stored 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.

4.9.13. Device information
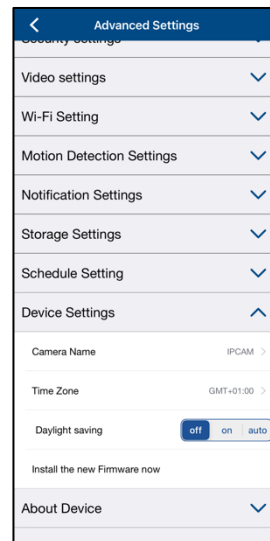
Device information		The device information tells you the current firmware version of the camera, the total available memory and the free memory on the SD card.
	Advanced Settings Video settings ⌄ Wi-Fi Setting ⌄ Motion Detection Settings ⌄ Notification Settings ⌄ Storage Settings ⌄ Schedule Setting ⌄ Device Settings ⌃ Camera Name IPCAM > Time Zone GMT+01:00 > Daylight saving off on auto Install the new Firmware now About Device ⌄	

5. Update firmware

You can update your camera's firmware in two different ways. Please note that both methods retain the camera's settings, so you do not need to set them again.

|	
⚠️	Please note that a microSD card is required for both variants.
⚠️	Updating the camera takes about 3-5 minutes. Do not disconnect the camera from the power supply during this time!

5.1. 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 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 will appear indicating that the camera is ready for the update.
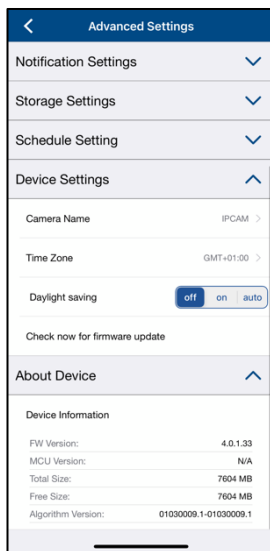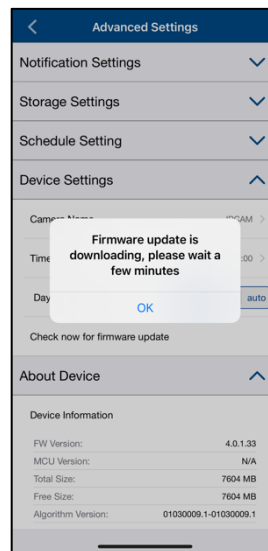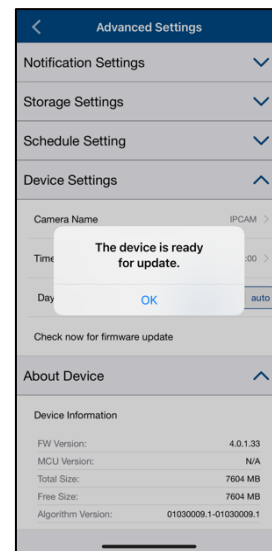
| 1 | 2 | 3 |

| 4 | 5 | 6 |

Option 2:

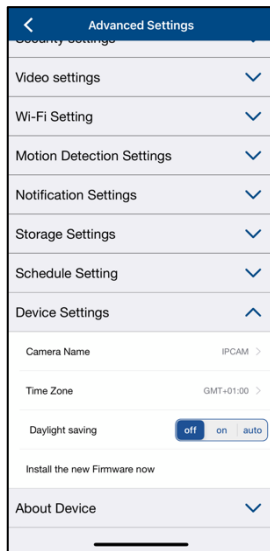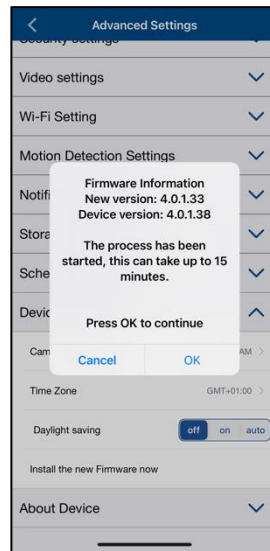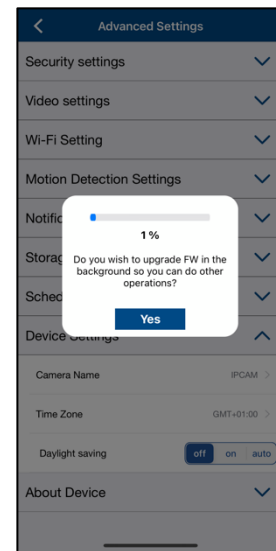If you do not want to wait for the 6-hour interval, you can also let the camera actively search for a newer firmware. To do this, press the menu item "Check for firmware updates now" in the advanced settings if a firmware has not already been downloaded, the camera will now actively search for a newer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

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",

5.2. 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.

The current firmware versions can be found on the respective product page.

6. Troubleshooting tips

Camera image is not displayed
Check the signal strength in the live view
Is the camera connected?
Is there an Internet connection?
Is the flap open ?
Is the camera powered?

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

How do I reset my camera to factory settings?
Press the reset button for at least 5 seconds with the enclosed reset tool or e.g. a paper clip. The LED starts to flash green. 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 WiFi 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 picture quality
Possible causes could be:
1. WiFi network devices can interfere with signal transmission, ensure sufficient distance between the camera and other WiFi devices.
   Possible interfering factors can be: thick brick walls, exterior walls, glass, water pipes and metal.
2. Remove any dirt from the camera. This can adversely affect the image quality.

What could be causing the device not to record on motion?
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.

The camera image is blended (white areas in the image).
The camera has IR LEDs for night operation. The light is reflected on reflective surfaces such as glass or white surfaces. Do not place the camera in front of glass surfaces.
When placing on shelves or the like, place the camera on the edge to avoid reflections.

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.

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.

7. Open Source License Notes

The product contains software components that are licensed by the rights holders as free software or open source software (hereinafter referred to as "OSS"). The corresponding licenses are enclosed with the product in printed form and/or can be accessed via a graphical user interface. You can acquire rights of use to the extent regulated therein directly from the rights holders.

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