

BOAVISION®



User Guide (V2.3)

Wireless Pan/Tilt Home Security
HD22M102M

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Declaration


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This guide provides a brief introduction to the Pan/Tilt home security Wi-Fi Camera and the CamHipro app, as well as regulatory information. Please note that the product specifications, appearance pictures and related information mentioned in this manual are for reference only and may not reflect your actual Boavision camera experience.

Conventions

In this guide, the following convention is used:

Convention	Description
Blue	Key information appears in teal, including management page text such as menus, items, buttons and so on.
<u>Underline</u>	Hyperlinks are in teal and underlined. You can click to redirect to a website.
 Note:	Ignoring this type of note might result in a malfunction or damage to the device.

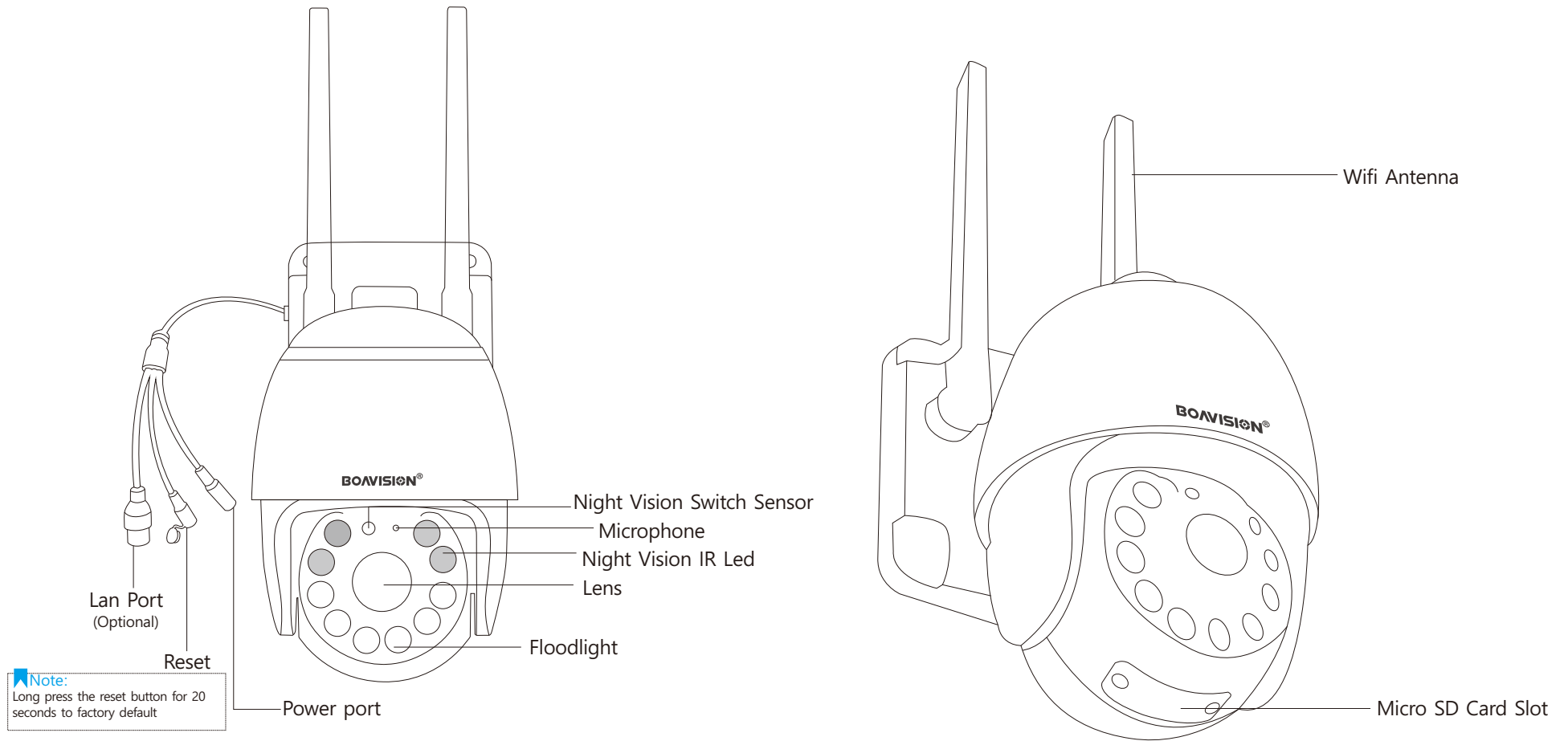
Introduction

When you are away home, there are always something you care about. This is where the smart camera functions. No matter your child is climbing the kitchen cabinet, or the pet is stealing snacks, the Pan/Tilt Home Security Wi-Fi Camera helps you stay with them anytime, anywhere. Receive a notification whenever your camera detects motion and see a video clip of this motion to check everything.

- **Smooth Pan and Tilt** – 355° horizontal range and 90° vertical range.
- **1080p High -Definition** – Capture every detail in crystal-clear Full HD definition.
- **Advanced Night View** – Even at night, the camera can provide a visual distance of up to 100 ft.
- **Live View** – Always stay with that matters most to you from anywhere, anytime.
- **Two-Way Audio** – Communicate with others with the built-in microphone and speaker.
- **Sound and Light Alarm** – Trigger light and sound effects to frighten away unwanted visitors.
- **Privacy Mode** - Shut down the surveillance to protect your privacy.
- **Sharing** - Share the memorable moments with your family and friends.
- **Safe Storage** – Store up to 128 GB on a micro SD card.

*The micro SD card is not included in the package.

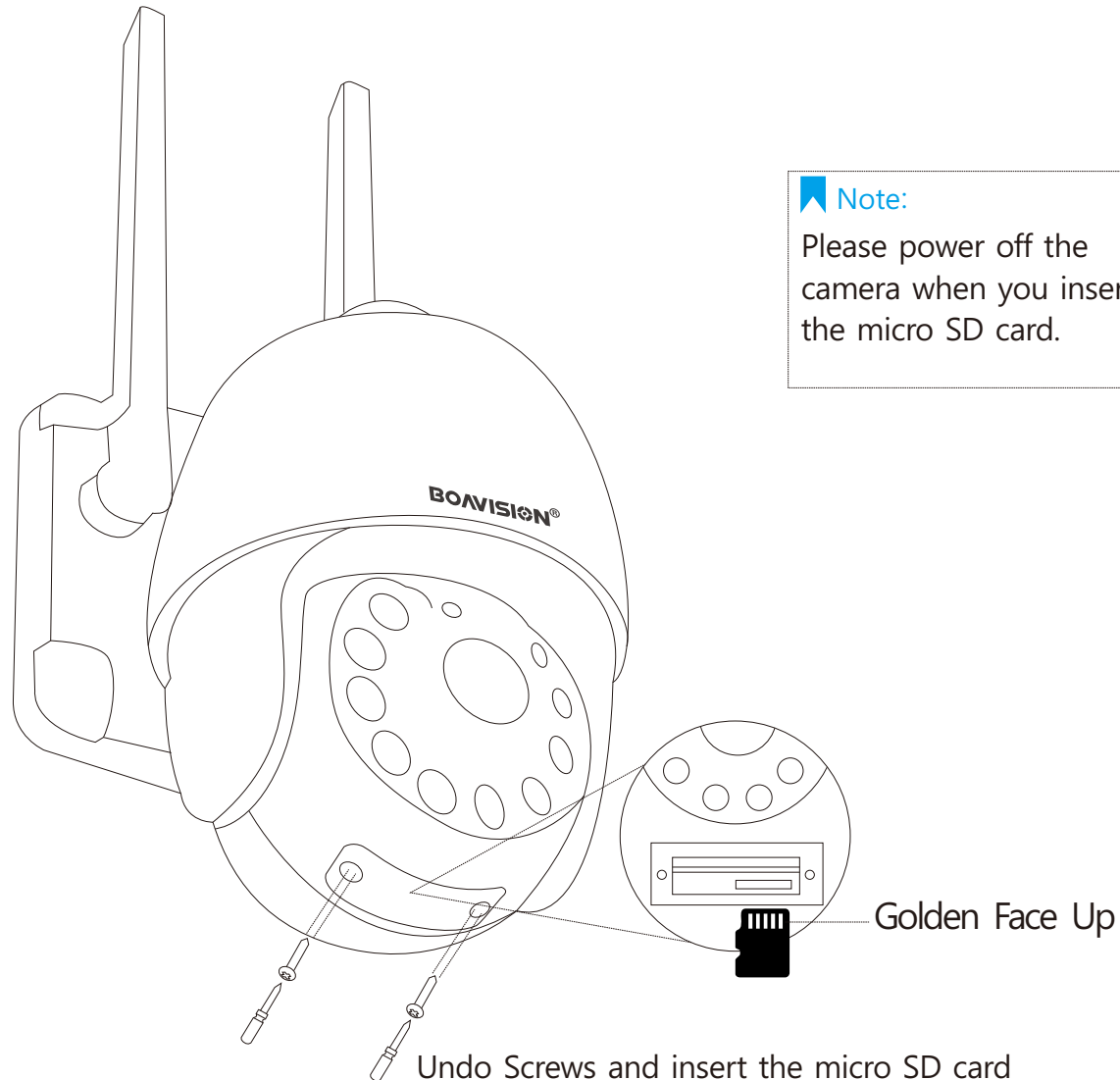
Product Detail



Insert Micro SD Card

Open the bottom micro SD Card slot cover with a small screw driver

Insert a micro SD card (Support Class 10, 8Gb~128Gb, micro SD Card Not Included ,Sold Separate)



Set Up Your Camera

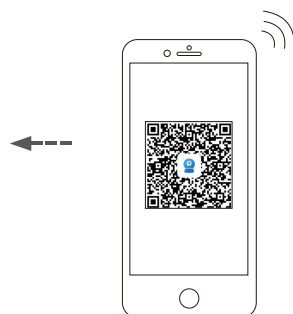
Note: For Android Phones, Please Select "Agree" To The Tips Pop-Up :

1. Allow Camhipro To Access Mobile Cellular Data And Wireless Lan, Otherwise It Can not Add Camera.
2. Allow Camhipro To Receive Pushed Messages, Otherwise The Phone Will Not Receive an Alarm Push Message.
3. Allow Camhipro To Use The Microphone When You Want To Use 2 Way Audio Function.



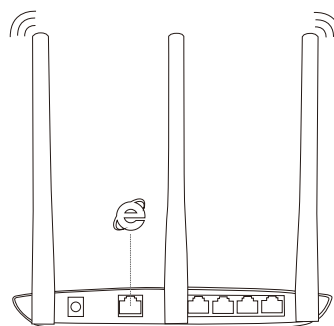
CamHipro

Download The "Camhipro" App From The Apple App Store Or From The Google Play Store.



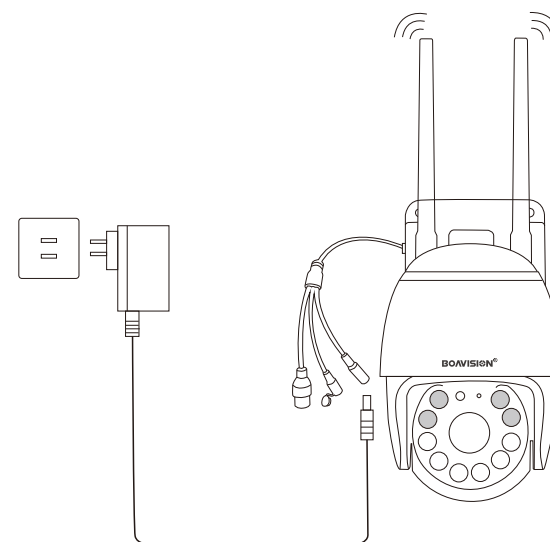
Note:

Please Keep Your Phone and Camera Close to WiFi Router



Note:

Please use Supplied Power Adapter Don't use extension cable from other brand between camera and adapter, or will cause malfunction and damage.



Note:

Please Make Sure Your Router Is Working Properly , And The Wifi Signal Is 2.4Ghz, Camera Only Support 2.4Ghz Wifi, Not 5Ghz. If Your 2.4Ghz Wifi And 5Ghz Wifi Are Same Ssid, You Need To Separate The Ssid, By Login To Your Wifi Router.

Add Camera

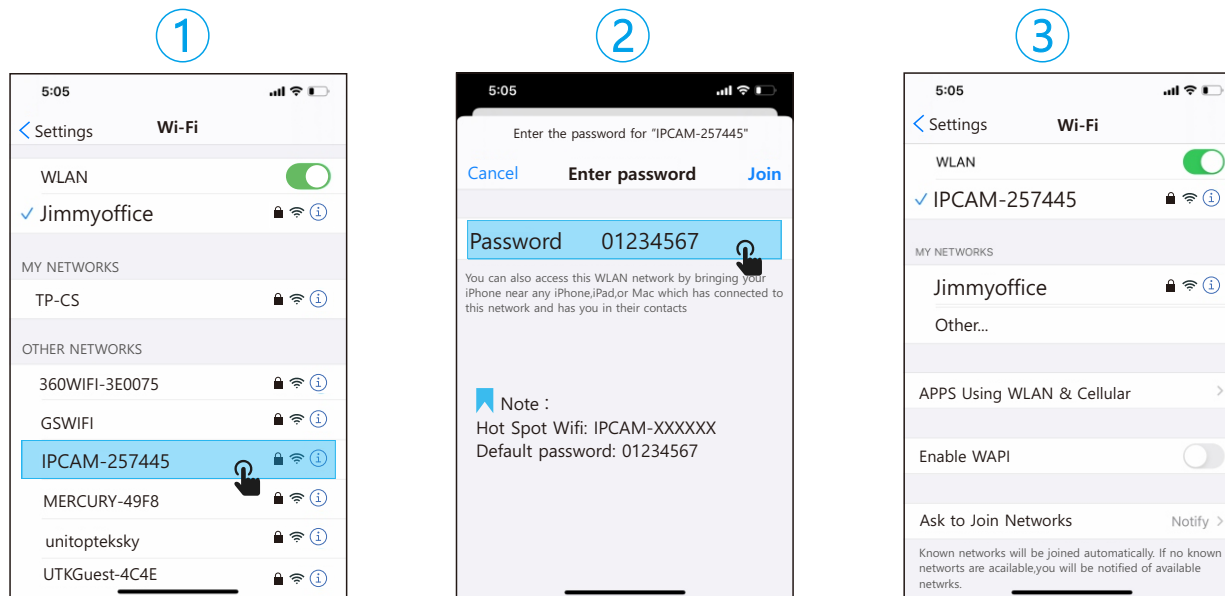
Please follow the steps below to find the hotspot AP of the camera and connect to it, set up the camera's WiFi, and let it connect to the WiFi router in your home wirelessly.

Step1: Download the mobile app (CamHiPro)

Search "Camhipro" in App Store /Google Play Store or Visit www.boavision.com

Step2:Connect AP Wifi "IPCAM-XXXXX"

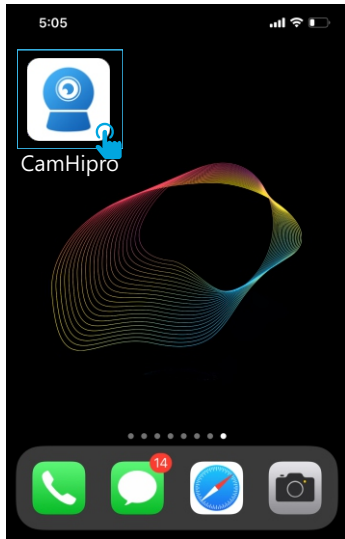
Turn On The Mobile Wlan And Connect the Hotspot Wifi "IPCAM-XXXXX" ,Default Password "01234567"



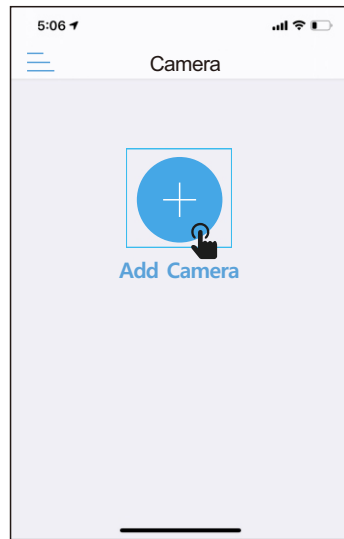
Step3:Add New Device in App

Open The Camhipro App, Select --->"+"---> "IP camera"--->"New device"--->You will see a new device UID name as "xxxxx-xxxx-xxxx "--->Click "Yes,I want to add this device"--->"Add to"

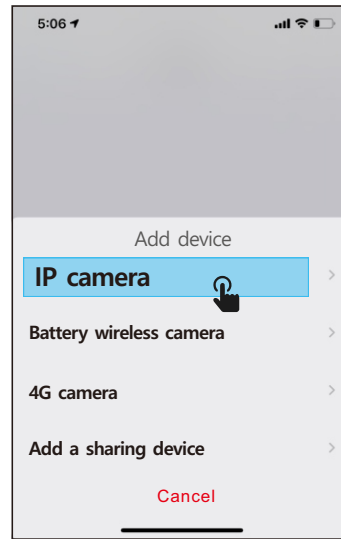
4



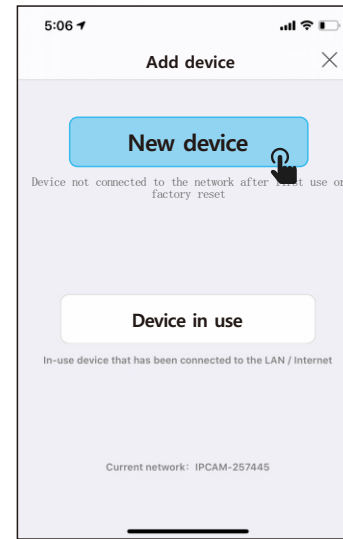
5



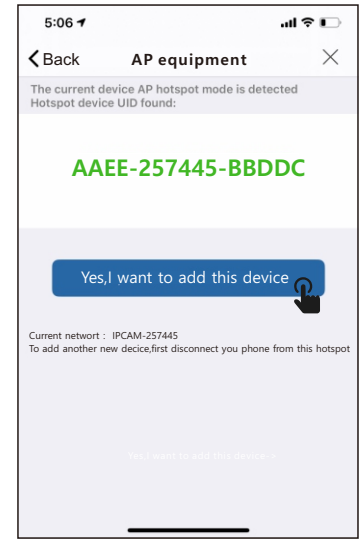
6



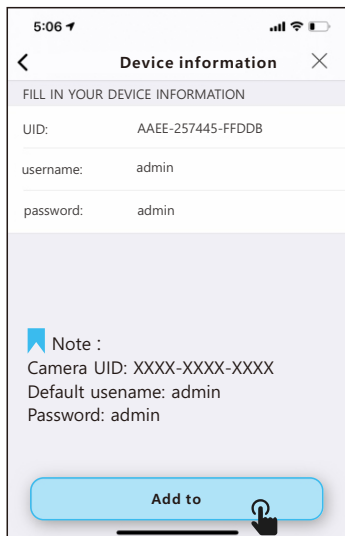
7



8



9



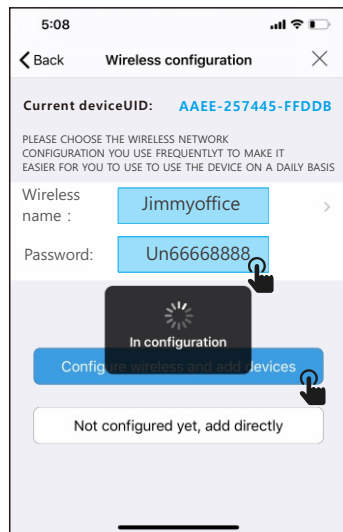
Step4:Configure the WiFi connection

Select your home Internet WiFi and enter your WiFi password,Click"Configure wireless and add device" to finish the setting.(You will hear a tone from camera once it connected to your WiFi network.)

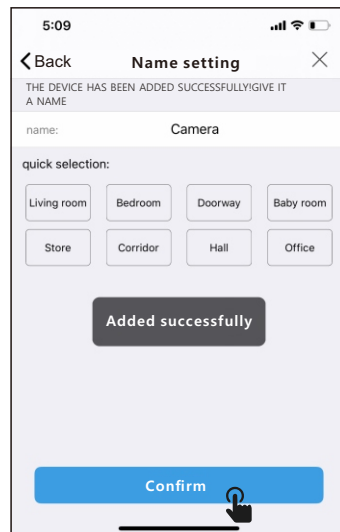
Tips:

- 1.the camera will be sending One Big voice out when connected successfully.
- 2.if not success, the camera gives you 4 small tones, that will be WIFI Password error.

10



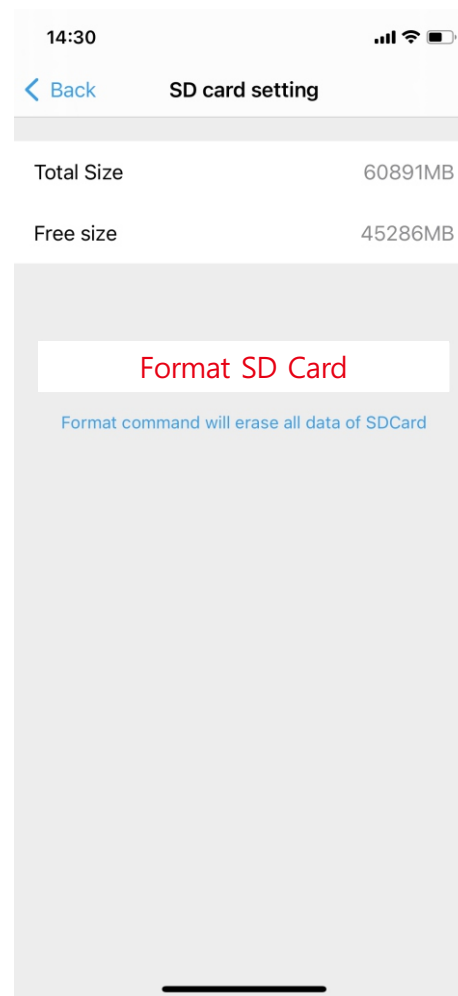
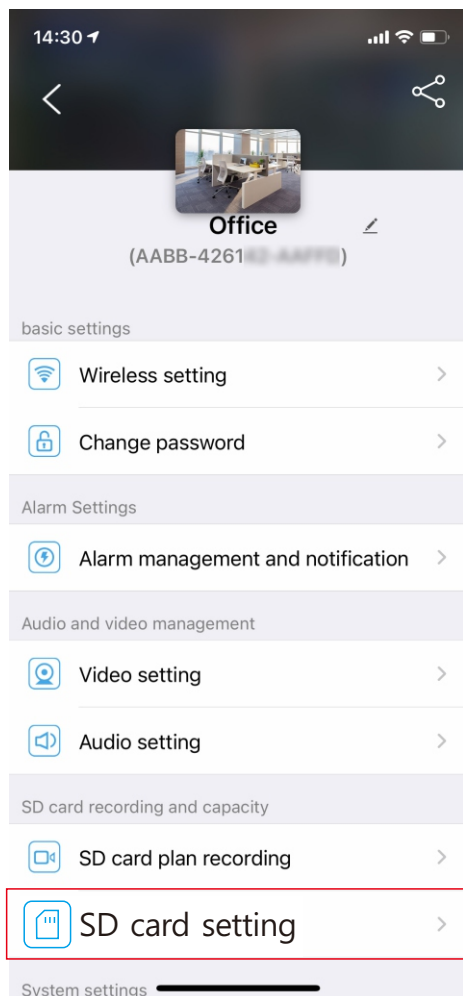
11



Format Micro SD Card

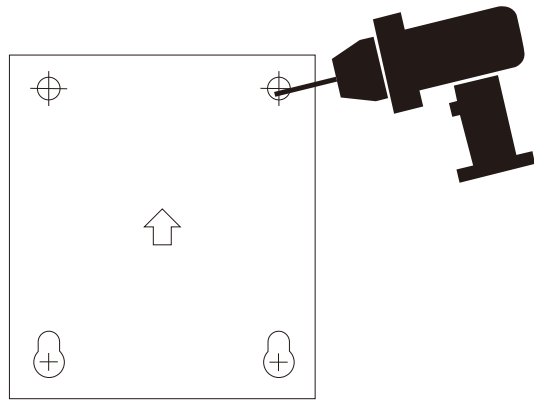
Open Camhipro app, Tap on the Gear Wheel Icon "⚙️" --> SD card setting --> format SD card.

Note: The camera will start loop recording once installed micro sd card, 10min per video, the latest video will cover the oldest video.



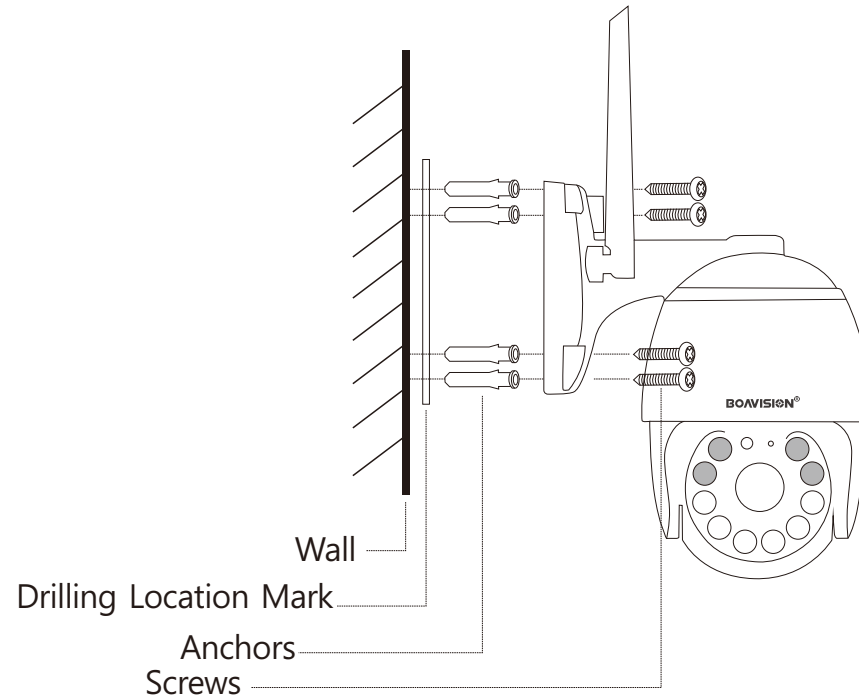
Wall Mount

Paste the drilling location mark on the wall, then drill the hole according to the mark and Insert the anchors, pass the screw through the back of the bracket, and fix the top of the bracket on the wall.




1. Mark Position

Place the mounting template where you want the camera. For wall mounting, drill four holes through four circles.




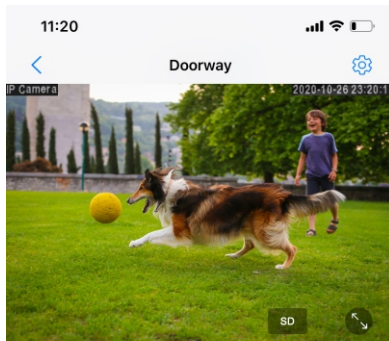
2. Mount Camera

Affix the camera base using the screws. For wall mounting, insert four anchors into the holes and use the screws to affix the camera base over the anchors.

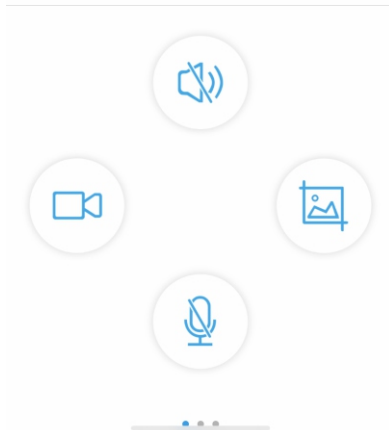
 **Note:** After installation, please properly insert the rubber plug to Lan Port and Enclose the reset button cover.

Intelligent Tracking

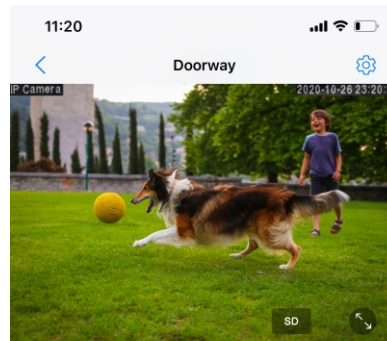
1. Slide the menu to 3
2. Click the icon "  "
3. Tap on Intelligent tracking



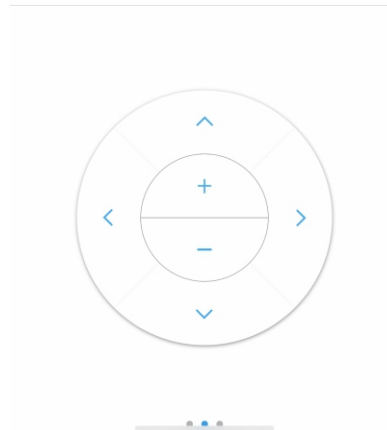
AABB-215225-EAEEC



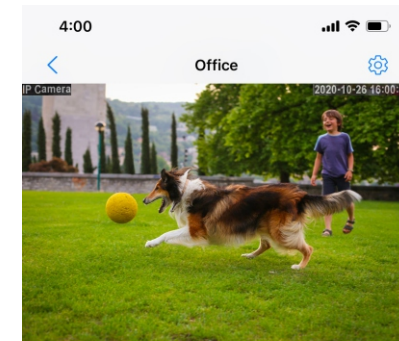
1



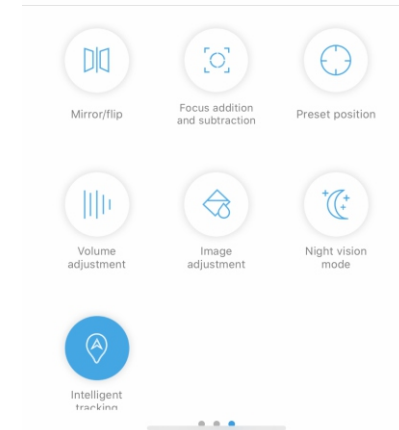
AABB-215225-EAEEC



2



AABB-215225-EAEEC



3

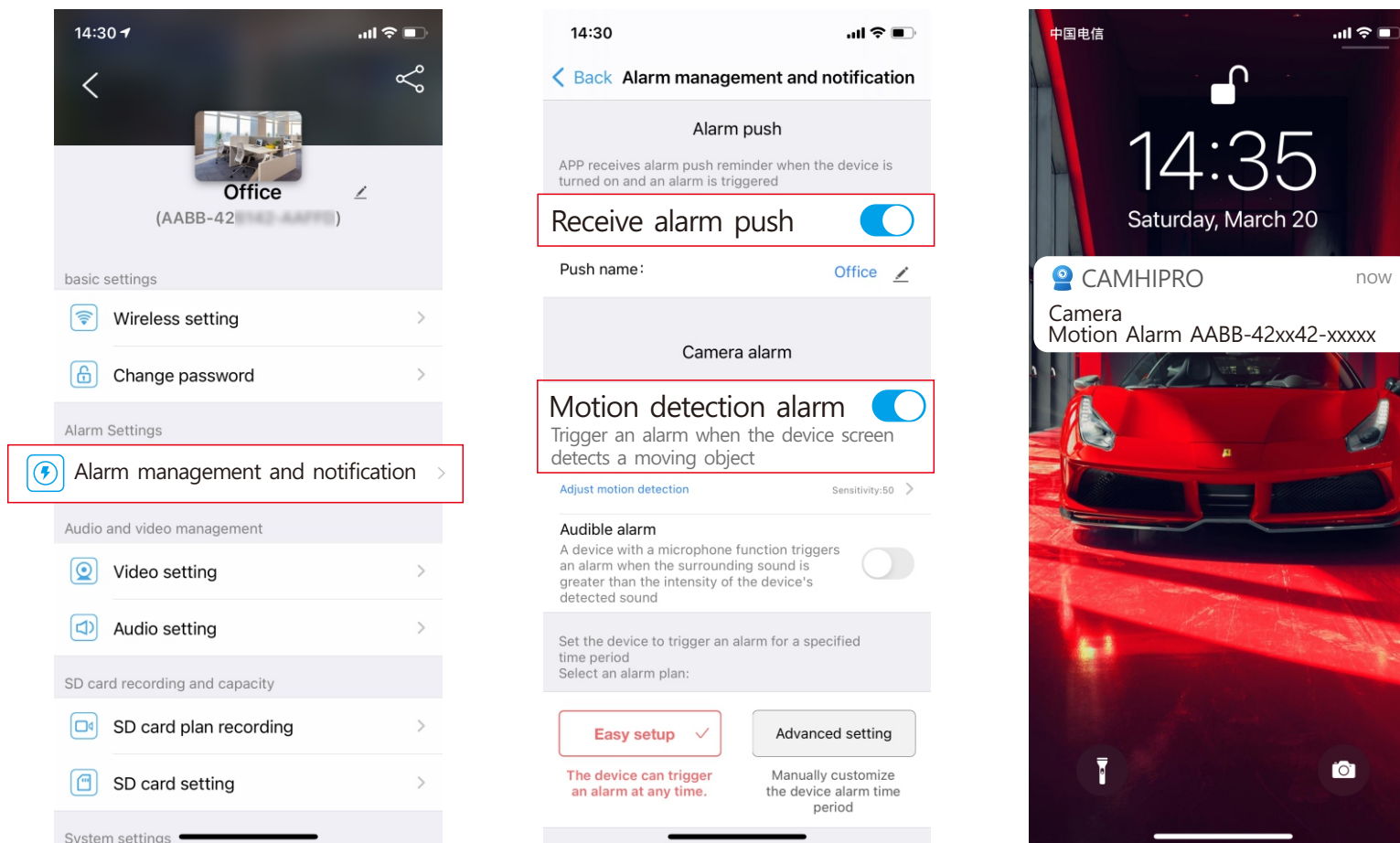
Motion Detection and Push Alert Message

Open Camhipro app, Tap on the Gear Wheel Icon" ⚙️ "

--> Alarm management and notification-->Turn on both "Receive alarm push" and "Motion detection alarm".

📌 **Note:** 1. If you want the camera also detects a sound, please turn on "Audible alarm".

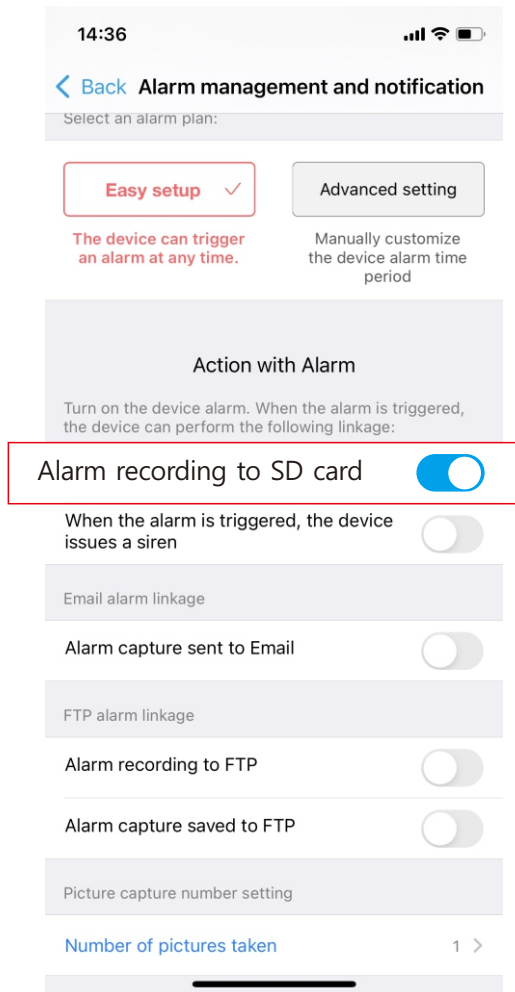
2. If you only want the camera detect motion at night or any special time, you can go to "Advanced Setting" to set up the time range.



Actions When Detect a Motion

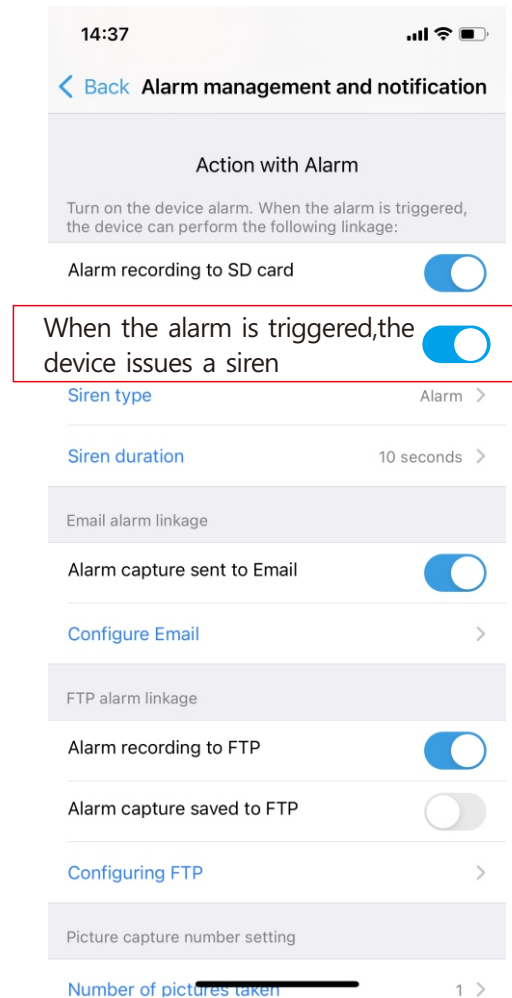
Save Motion Videos to micro SD Card

If you have inserted a micro SD card to camera, you will be able to turn on the switch "Alarm recording to SD card" (can not turn on if no sd card).



Sound Warning

If you want the camera warning with a sound when detect the motion, please turn on "When the alarm is triggered, the device issues a siren".

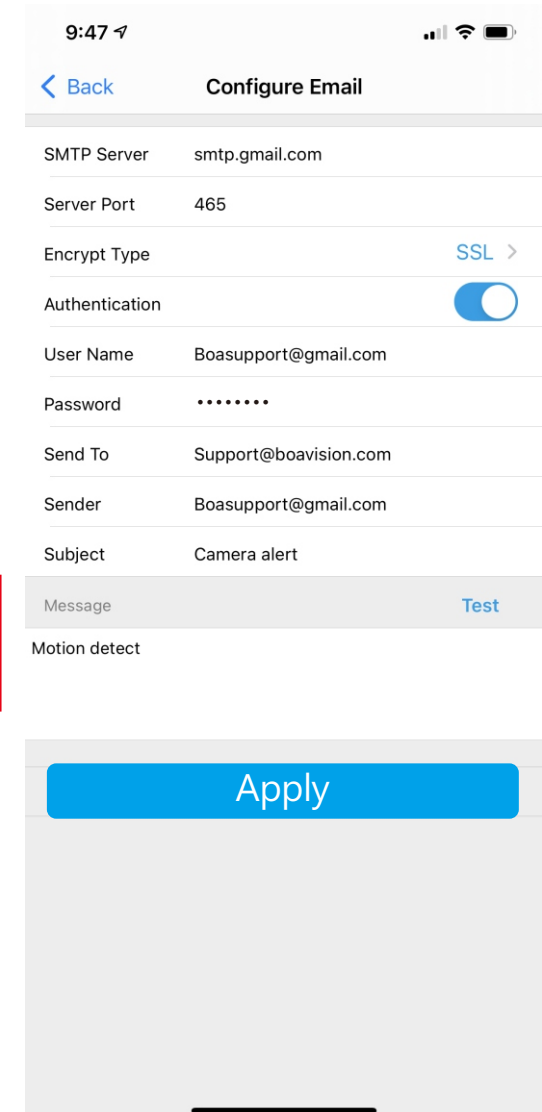
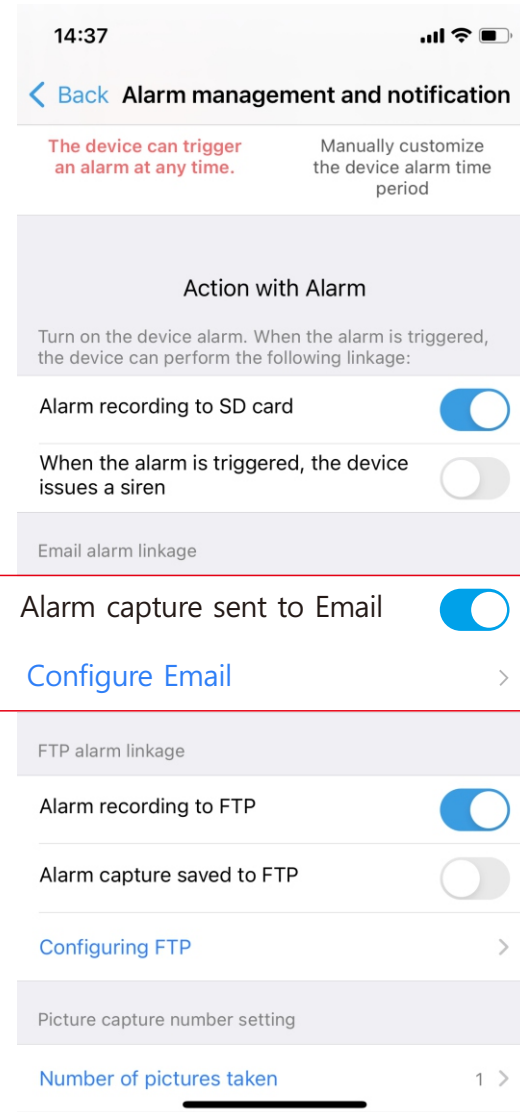


Email Alert (Gmail setting reference)


1. If you want camera send an Email Alert with picture, you can turn on "Alarm Capture sent to Email", and configure Email, see below photos for your reference.
2. Tap "Apply" before Test


📌**Note:** Please turn on Gmail 2-factor Authentication

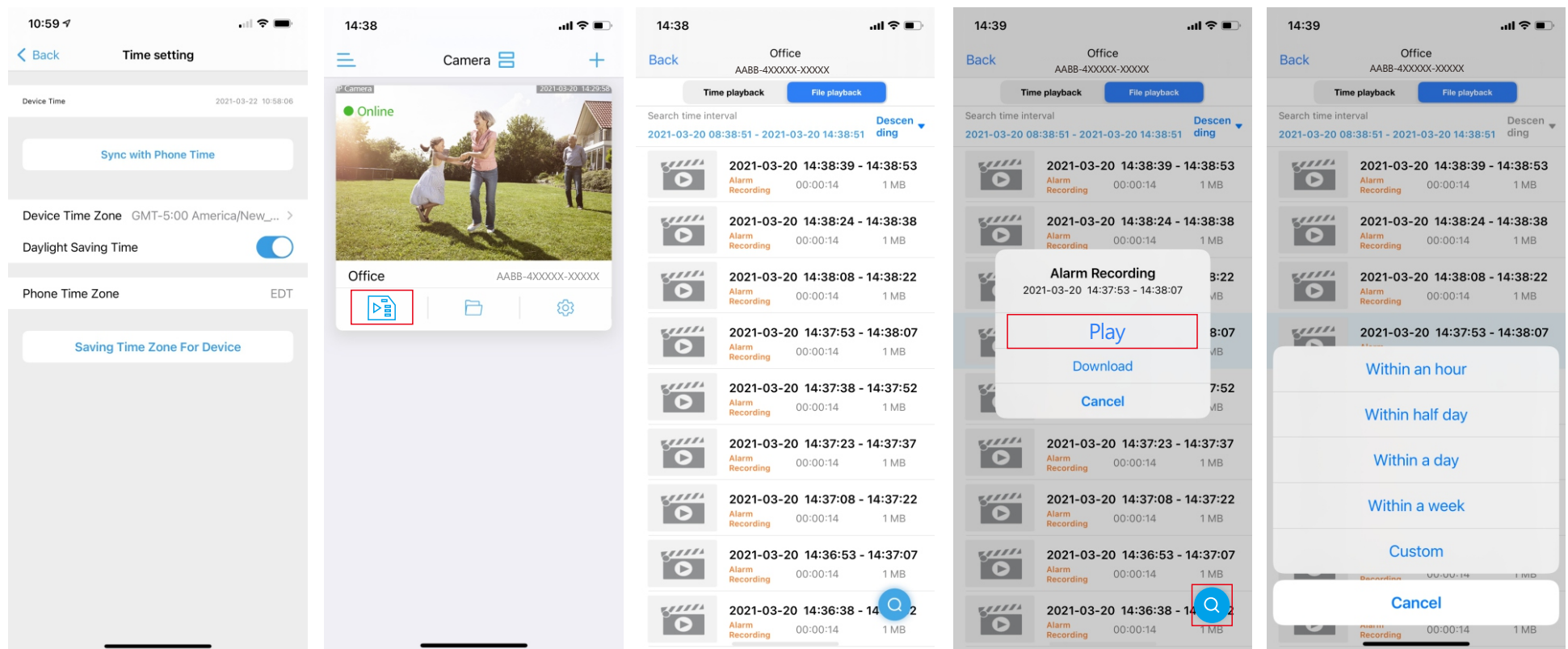
1. If your gmail has not turned on 2-factor authentication
 - a. Login gmail account and go to Google apps --> Account --> Security page.
 - b. Scroll the page down to Less secure app access and click to turn it on (only personal gmail account has this option)
2. If you gmail has turned on 2-factor authentication
 - a. Please login gmail account and go to Google apps-->Account-->Security page, find 2-step verification and turn on.
 - b. Setup an APP password, select windows mail type, and use this unique password instead your original gmail password in email alert setting page.



Playback and Download Videos From Micro SD Card

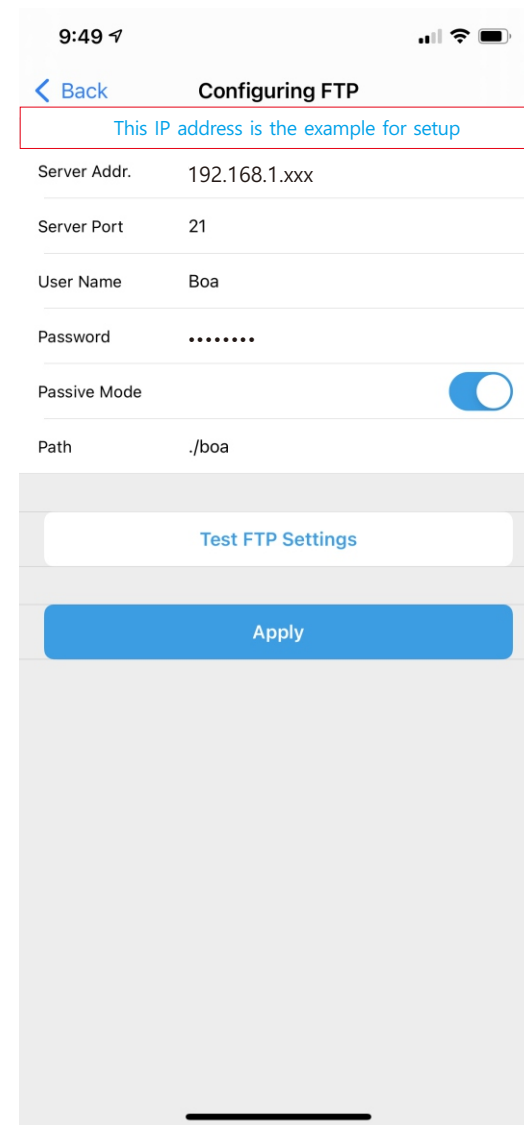
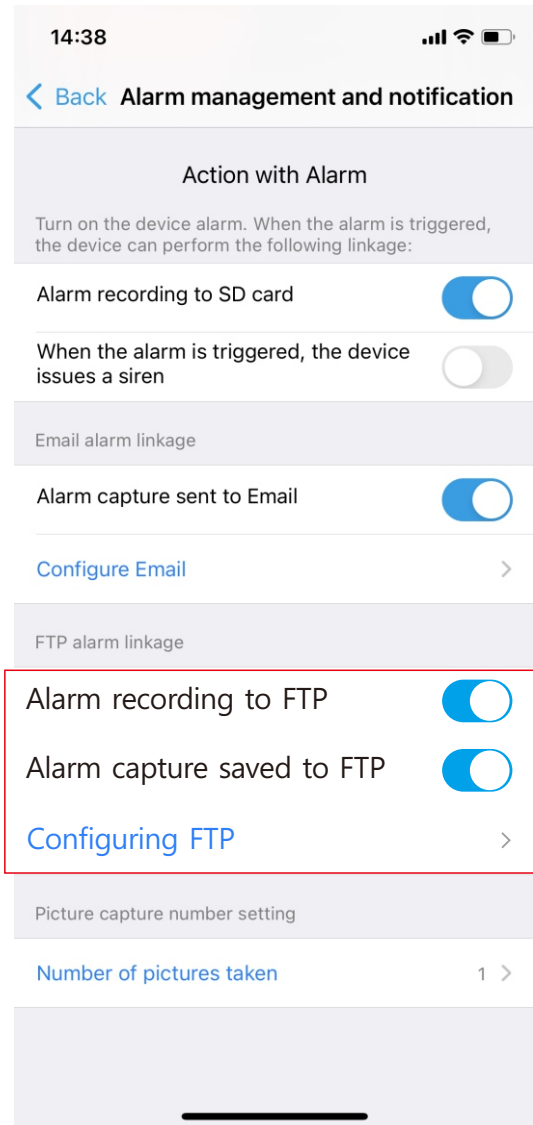
Please tap the icon  to check videos saved in micro SD card, select and tap a video to play, if you want to find older videos, tap the right down Search icon to select the date.

Note: Select your Time Zone, and enable Daylight Saving Time, then Click Saving Time Zone for Device, Open Camhipro app, Tap on the Gear Wheel Icon"  "
--> Time Setting --> Enable Daylight Saving Time --> Saving Time Zone for Device.




Upload Pictures and Videos to FTP Server

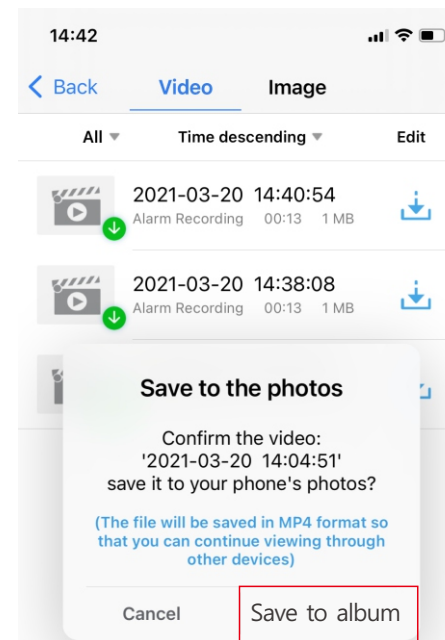
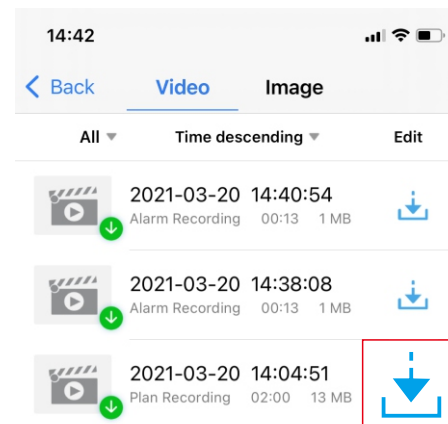
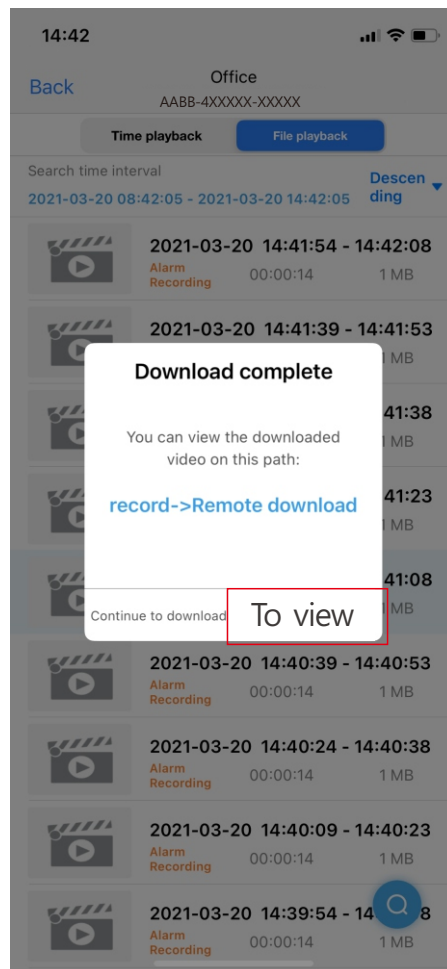
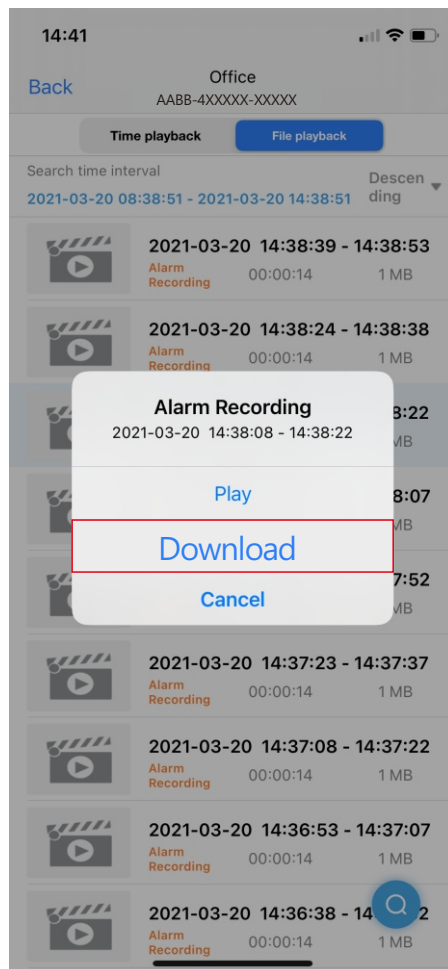
If you want to upload pictures and videos to FTP server, please turn on "Alarm recording to FTP" and "Alarm Capture saved to FTP", and configure FTP, Tap "Apply" before test.



Download Video

Select the video --> Tap the video --> Tap Download --->after Download complete, Tap "To View".

If you want to save this video to phone or share with family, you can tap download icon  to save to album, then you can find the videos in your phone photo album. right down Search icon to select the date (make sure your camera date and time were right when recorded).



Note:

1. The camera will continue loop record videos after you inserted the sd card.
2. Saved to sd card 10min per video, no matter if there is a motion, there is a blue label "plan recording" for this kind of videos.
3. If you have turned on the motion detection and action with alarm "Alarm recording to SD card", you may also find there are 14s short videos with Orange label "Alarm Recording", these videos are all recorded when the camera is triggered by a motion.
4. The Alarm recording could stop the Plan recording when there is a motion, so the plan recording maybe shorter than normal 10min per video.
5. If you just want to save the motion videos and hope the limited sd card to save videos for a longer time, please go to "SD card plan record" to turn OFF "Enable record", and also make sure "motion detection alarm" and "motion recording to sd card" are both opened.

Device Information

You can easily find camera ip address with the device information, and access the camera with its ip address on Web browser. (IE, Edge, Firefox, Chrom, Safari)

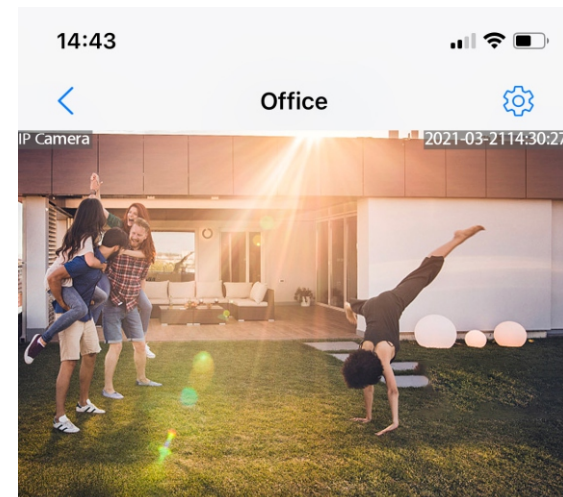
How to Use Two-way Talk Function

If you want to talk with camera, need go to live video page

Step 1: Activate the Speaker icon, you can hear from camera

Step 2: Active the Microphone icon to speak

Note: You can not hear from camera when you active microphone, and can not speak when you hear from the camera, so you need switch from the microphone and speaker.



AABB-4XXXX-XXXXX



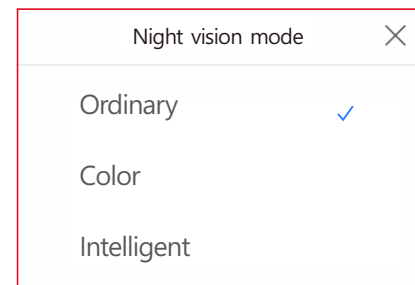
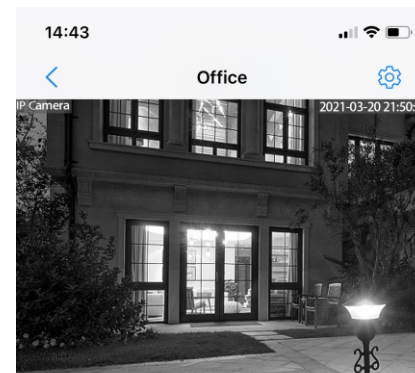
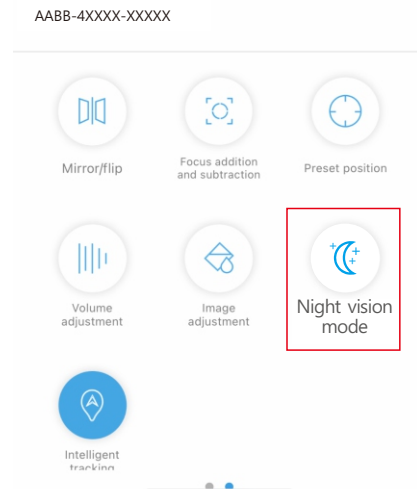
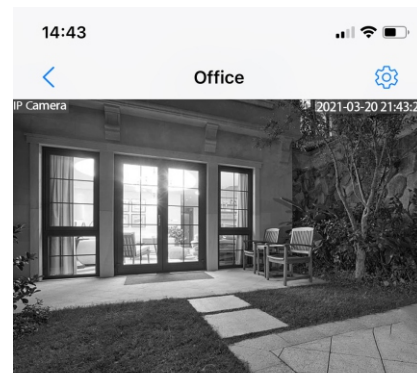
IR LED Night Vision and Floodlight

This smart camera has 3 types night vision mode:

Ordinary: IR LED works at night (light is low) automatically, picture is black/white, Floodlight does not work.

Color: IR LED does not work at night, Floodlight works at night, picture is color .

Intelligent: IR LED works at night, and when there is a motion detected, the IR LED will be off, the Floodlight will be on for 30 seconds, the it will be off if there is no motion in 30 seconds, if there are continue motions, the floodlight working time will extend until no motion detected, after floodlight off, the IR led will work again.



Share The Camera With Your Family

Each camera can be managed by several Camhipro app

1. After you setup the camera connected to your home WiFi, go to setting page;
2. Find top right share icon to get a QR code;
3. Then ask your family download Camhipro, scan the QR code to add the camera to the device list.

Camera Works On Other Devices

This small outdoor security camera not only works with phone app Camhipro, but also works on windows PC / MAC / ipad/ android pad, we offer free windows pc software which could connect camera locally and remotely.

For Mac, it can only work with Safari via local ip address.

Please check detail instructions on www.boavision.com/download.html

Support page or contact our support team via  Email Support@boavision.com

If you need help for making it work with other devices or 3rd party ONVIF software/device.

ONVIF & RTSP

ONVIF:

If you want to add the camera to 3rd party onvif software/device, please find the camera ip address from device information (settge page), usually we should use.

information below:

Protocol: ONVIF , Ip address , **Onvif port** : 8080 , **User:** admin , **Password:** admin (for some special software may need more information, please contact us for remote online help, we use Teamviewer to help you to setup remotely).

RTSP:

The camera RTSP port is 554, and there are two live H.264 rtsp stream,

main stream: http://ip_address:554/11

sub steam: http://ip_address:554/12

E.g. If camera ip address is 192.168.1.123, main steam: <http://192.168.1.123:554/11>

How to Reset The Camera

Connect camera to power adapter, press and hold camera reset button for 20 seconds, it will reset and restart in 1 min, the reset button is on the cable with a cover.

Connect to Blue Iris

Input ip address and onvif port: 8080, click Find/Inspect

The screenshot shows the 'Network IP camera configuration' dialog box. It has several sections: Address, User/Password, Make/Model, Video, Audio, and Network options. Red boxes and numbers highlight specific elements: 1. The 'Address' field with 'http://' selected. 2. The 'Discovery/ONVIF port' spinner set to 8080. 3. The 'Make' dropdown menu set to 'Generic'. 4. The 'Find/inspect...' button. 5. The 'OK' button at the bottom.

Network IP camera configuration

Address: Camera IP Address

User: Password: ☐ Show Blank address to search for cameras

Make:

Model:

Media/video/RTSP port:

Discovery/ONVIF port:

Video: Path: Params: Camera:

Audio: Path: Format: ☐ Setup RTSP back-channel for talk support (PCM-U format)

Network options: Receive buffer (MB): ☐ Use RTP/UDP ports: ☒ Send RTSP keep-alives ☒ Use RTSP/stream timecode ☐ Skip initial HTTP DNS and reachability tests ☐ Decoder compatibility mode ☐ Get events with PullPointSubscription

Note:

1. Camera IP Address
2. Discovery/ONVIF port
3. Make
4.
5.

Connect to Synology

①

Add Camera Wizard x

Setup

Select a setup mode:

☐ Quick Setup

☒ Complete Setup

Next Cancel

②

Add Camera Wizard x

Information

Name: CamhiPro Camera

IP address: 192.168.1.223

Port: 8080

Brand: [ONVIF]

Camera model: All functions

Username: admin

Password:

Load Capability

Test Connection

Previous Next Cancel

③

Add Camera Wizard x

Video

^ General

Video format: H.264

Audio format: G711

^ Stream Profile ⓘ

High quality: Stream 1

Balanced: Stream 1 ⓘ

Low bandwidth: Stream 1 ⓘ

^ Stream 1

Resolution: 2592x1944

Frame rate(FPS): 15

Bitrate control: Variable

Image quality: 5 (Highest)

Previous Next Cancel

④

Add Camera Wizard x

Complete

^ Basic Information

Name	CamhiPro Camera
IP address	192.168.1.223
Port	8080
Brand	ONVIF
Camera model	Generic_ONVIF

^ Video

	H.264
Audio format	G711
High quality	2592x1944 e 15 FPS
Balanced	2592x1944 e 15 FPS
Low bandwidth	2592x1944 e 15 FPS

Finish Cancel

Connect to QNAP

1



Surveillance Station Installed: DataVol1, Size: 223.58 MB
V5.1.3.4.1 (2018/07/23) | Surveillance | Total Installs: 1592638

[Open](#)



Resource: [Change Log](#) | [Forum](#) | [Tutorial](#) | [Download](#)

The Surveillance Station is a professional network surveillance system and VMS (video management system.) As one of the standard NAS applications, the Surveillance Station can be activated on the App Center to turn your Turbo NAS into a professional NVR (network video recorder) system. When used with compatible IP cameras, the Surveillance Station can perform the following operations: real-time monitoring, recording, playback, alarm notifications, Intelligent Video Analytics (IVA) and video management to help you secure your assets and property. Note : 1. The Surveillance Station 5.1 comes with two /four free

2

Add

Add a camera

This wizard guides you through the following settings:

- Camera Configuration
- Video Settings
- Schedule Settings

☒ Search camera(s) automatically

Step 1/6

Next Cancel

3

Search Network Camera

#	IP Address	Brand	Camera Model	Port	MAC Address
1	192.168.1.8	ONVIF	IPC-model	8899	
2	192.168.1.16	ONVIF	IPC-model	8899	
3	192.168.1.17	ONVIF	IPC-model	8899	
4	192.168.1.19	ONVIF	IPC-model	8899	
5	192.168.1.20	ONVIF	IPC-model	80	
6	192.168.1.21	ONVIF	IPC-model	8899	
7	192.168.1.24	ONVIF	ONVIF Profiles Cameras	8080	
8	192.168.1.29	ONVIF	IPC-model	8899	
9	192.168.1.36	ONVIF	ONVIF Cameras(Recording...)	80	
10	192.168.1.38	ONVIF	IPC-model	8899	
11	192.168.1.43	ONVIF	IPC-model	8899	

Search type: ONVIF

OK Cancel

4

Add

Camera Configuration

Channel: Channel 1

Camera Brand: ONVIF

Camera Model: ONVIF Profiles Cameras

Camera Name: Camera 1

IP Address: 192.168.1.24

Port: 8080

RTSP Port: 554

WAN IP Address:

Port: 80

RTSP WAN Port: 554

User Name: admin

Password:

Test

Step 2/6

Back Next Cancel

5

Add

Video Settings

Video Compression: H.264

Resolution: 1920x1080

Frame Rate: 15

Quality: Quality 3

☐ Enable audio recording on this camera

☒ Enable manual recording

☐ Minimum number of days recording files are kept 1 day(s)

☐ Enable suto snapshot

Step 3/6

Back Next Cancel

6

Add

Schedule Settings

☒ Enable schedule recording

Active: ☒ Inactive: ☐

	0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23
Sun																								
Mon																								
Tues																								
Wed																								
Thurs																								
Fri																								
Sat																								

Step 4/6

Back Next Cancel

7

Add

Confirm Settings

Please confirm the following information

Channel:	Channel 1
Camera Brand:	ONVIF
Camera Model:	ONVIF Profiles Cameras
Camera Name:	Camera 1
IP Address/Port:	192.168.1.24/8080
Recording:	Enabled
Video Compression:	H.264
Resolution:	1920x1080
Frame Rate:	15
Quality:	Quality 3
Enable manual recording:	Enabled

Step 5/6

Back Next Cancel

8

Add


Add a camera

The new camera has been added successfully.

Step 6/6

Finish

9

Channel	Camera Name	IP Address	Status	Recording Setting
 Channel 1	Camera 1	192.168.1.24	Connected	Video Compression: H.264 Resolution: 1920x1080 Frame Rate: 15/14 Bit Rate: 1.3 Mbps Quality: Quality 3 Recording Status: Recording

10

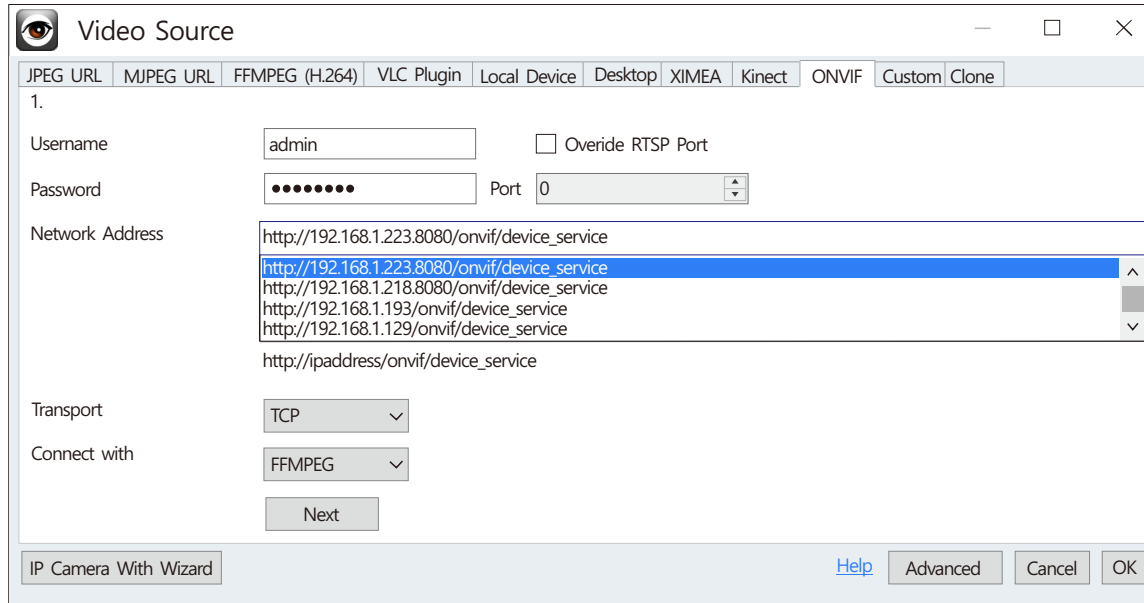


11



Connect to iSpy

①



The 'Video Source' dialog box is shown with the 'ONVIF' tab selected. It contains fields for Username (admin), Password (masked), and Network Address. A list of ONVIF device service URLs is displayed, with the first one selected. The Transport is set to TCP and Connect with is set to FFmpeg. A 'Next' button is at the bottom.

1.

Username: admin

Password:

Port: 0

Network Address:

- http://192.168.1.223.8080/onvif/device_service
- http://192.168.1.223.8080/onvif/device_service
- http://192.168.1.218.8080/onvif/device_service
- http://192.168.1.193/onvif/device_service
- http://192.168.1.129/onvif/device_service
- http://ipaddress/onvif/device_service

Transport: TCP

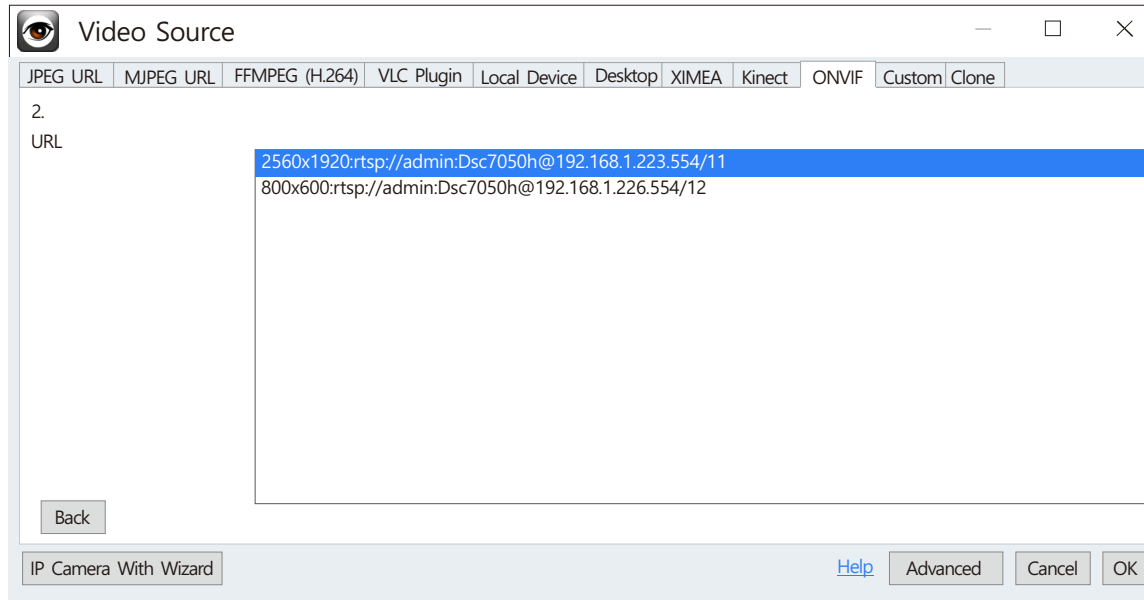
Connect with: FFmpeg

Next

IP Camera With Wizard

Help Advanced Cancel OK

②



The 'Video Source' dialog box is shown with the 'ONVIF' tab selected. It contains a 'URL' field with two entries: '2560x1920:rtsp://admin:Dsc7050h@192.168.1.223.554/11' and '800x600:rtsp://admin:Dsc7050h@192.168.1.226.554/12'. A 'Back' button is at the bottom left.

2.

URL:


- 2560x1920:rtsp://admin:Dsc7050h@192.168.1.223.554/11
- 800x600:rtsp://admin:Dsc7050h@192.168.1.226.554/12

Back

IP Camera With Wizard

Help Advanced Cancel OK

3

 Edit Camera(ID:2, DIR: KWARX)

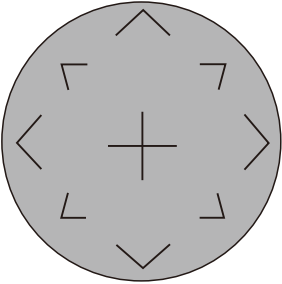
CameraMontion DetectionAlertsRecordingPTZImagesFTPCloud StorageSchedulingStorage


Camera Model


ONVIF

...

[Get Latest ListTo](#) [Edit](#) [Reload](#)







Preset 001

Preset 002

Preset 003

Preset 004

Preset 005

Preset 006

Preset 007

Preset 008

Preset 009

Preset 010

Preset 011

Preset 012

Preset 013

+ preset

- preset

Note: You can control PTZ on the live camera view by holding down the middle mouse button.

Track Objects

Scheduler

Exit this to enable alerts and recording

[Copy To](#) [Help](#)

BackNextFinish

Warranty & Support

Dear Users:

Thank You For Purchasing Boavision Products. In Order To Protect Your Rights, Please Read The Following Carefully After Purchasing:

1. The Following Situations Do Not Belong To The Scope Of Free Maintenance

Please Note:

- * Disassemble And Repair The Product Without Permission.
- * Intentional Damage To The Product, Such As The Use Of Unsuitable Adapters, Mechanical Damage, Etc.
- * Product Failure Or Damage Caused By Force Majeure Such As Earthquake, Fire, Flood, Lightning, Etc.

2. Technical Support&Software Upgrade Service:

Before You Return The Product, Please Contact Our After-Sales Team To Confirm Whether The Product Is Faulty. We Suggest That You Provide Us With Photos Or Videos Related To The Problem By Email, And We Will Reply To You Within 24 Hours.

✉ E-Mail: Support@Boavision.com.

☎ Phone: +1484-862-1346 (9AM-6PM EST Mon-Fri)

Scan The QR Code Below Or Enter The URL To Visit Download Support:

📄 www.boavision.com/download.html





Follow Our Official Youtube Channel For More Product Support Videos.



BOAVISION®

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Scan QR Code
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Trouble Shooting

No.	Lssues Description	Solutions
1	Can not see the camera's WiFi Signal in phone WLAN setting	Please make sure the camera is NOT connecting Ethernet cable, press and hold the reset button on the cable for 20 seconds, wait for 30 seconds, check in your phone WLAN setting, there should be a WiFi signal named IPCAM-xxxxx, if still can not find the wifi signal, quick press the reset button and wait for 20 seconds, there should be a wifi signal now, the format is IPCAM-XXXXX.
2	Connection can not be established	<ol style="list-style-type: none"> 1) Check your Wi-Fi name and password, if there is any special character. 2) Make sure your WiFi is 2.4G, it does not support 5G. 3) Make sure your camera and mobile phone are near the router. 4) Email contact customer service staff to solve your problem within 24 hours
3	Reset to default	<ol style="list-style-type: none"> 1) Press and hold the reset button for 20 seconds. 2) Hear "Dong" sound, and wait for reboot
4	How to connect the camera to a NEW WIFI	<ol style="list-style-type: none"> 1) Reset camera 2) Delete the camera from Camhipro device list 3) Setup the camera as a new one

5	Alarm captures without a person	<p>1) Please try to adjust the camera position or direction, make the camera further from the monitor area.</p> <p>2) Some objects (Fly, Leaves, Dust) trigger the motion sensor, please reduce the motion sensitivity, and adjust the monitor area to avoid the false alarm area.</p>
6	Alarm too frequent	Please reduce the motion sensitivity, adjust the monitor area, setup schedule alarm time in advanced setting
7	Cannot get alarm push	Enable notification of the Camhipro app in the mobile settings.
8	No alarm video recorded	Please insert the micro SD card, make sure the sd card is readable in sd card setting page (you can see the memory size)
9	Device offline	Check if the network works well, maybe the camera location is too far from the router, move to a closer place and try
10	Video delay	Check the WIFI network, the distance between the camera and the router should not be too far
11	The camera keep rebooting or crashing	Please check if your SD card is installed correctly, or replace with another brand new memory card (Class 10) and go through the whole set up again.
12	Why I can not find recorded video on my play back	<p>Setup the correct time zone for your device</p> <p>Select your Time Zone, and enable Daylight Saving Time, then Click Saving Time Zone for Device.</p>