

WingHome 4G Trail Camera



Model: 480Ace

Please scan QR codes below to download WingHome Cam app.



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1. Introduction

We would like to take this opportunity to thank you for choosing to purchase the WingHome cellular trail camera. It is our confident belief that you will thoroughly enjoy using this trail camera with its many state-of-the-art features, and get many years of reliable service from it.

At WingHome, all of our products are developed in-house by our team of skilled and experienced R&D engineers, based on the feedback and requirements of our global customer base. We are thrilled to have you as our latest customer.

Please contact us with any suggestions via channels below, to see all our latest deals and engage directly with our customer service team.

Customer service:

support@winghomeview.com

Official website:

www.winghomeview.com

Facebook:

www.facebook.com/winghomecamera

1.1 Overview of Features

This trail camera has been designed to offer the most stable product quality as well as superior product features, including 4G photo transmission via the WingHome app with a WingHome plan, camera configuration remotely via the free app, camera GPS location, 24MP photo & 1080p video, and a lightning-fast 0.4-sec trigger speed.

1.2 List of Key Specifications/Features

- **Trigger speed:** 0.4 seconds
- **FOV:** 58 degrees
- **PIR angle:** 52 degrees
- **Image resolutions:** 8/12/24 MP
- **Highest video resolution:** 1080p
- **IR LEDs:** 60pcs 940nm
- **IR range:** 65 feet (20 meters)
- **Adjustable PIR sensitivity:**
high/medium/low
- **Multi-shot:** 1~5 photos per trigger
- **Programmable Delay, Time Lapse and Timer modes**
- **Image/video Stamping:** camera ID, state of charge, date/time, temperature, moon phase
- **Operating temperature range:** -25°C to 60°C/-13°F to 140°F
- **Built-in 2.31" TFT color screen**

2. Quick Start

2.1 What's in the Box?



- Trail Camera X 1
- Antenna X 1
- Sim Card X 1
- Usb Cable x 1
- Mounting Strap x 1
- Instruction Manual X 1
- Quick Start Guide x 1

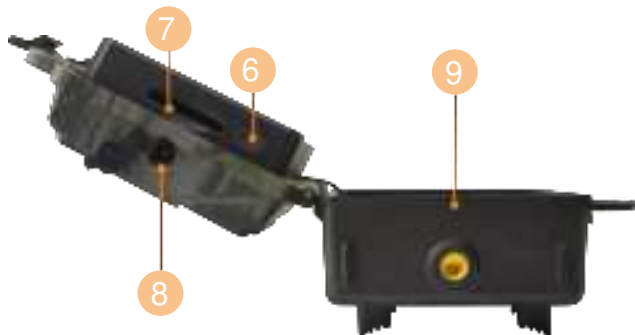
2.2 Parts of the Camera

Figure 1: Front View of Camera



- | | |
|-----------|-----------------|
| ① Antenna | ④ Indicator LED |
| ② PIR | ⑤ IR LEDs |
| ③ Lens | |

Figure 2: Bottom View of Camera



*Ensure the SIM card's chip is facing the front housing of the camera.

- ⑥ Mini USB Port
- ⑦ SD Card Slot (Supports 4~32GB)
- ⑧ DC-in (12V/1~2A)
- ⑨ Battery

Figure 3: Internal View of Camera



- ⑩ LCD Color Screen
- ⑪ Navigation (Up/Down/Left/Right) Buttons/OK Button
- ⑫ Power Switch
(ON/OFF/SETUP(Test) Modes)
- ⑬ Battery Compartment
- ⑭ MENU Button

2.3 How to Set up the Camera

1. Insert the batteries

Open the camera's housing and insert the batteries with the polarities in the direction as marked in the battery compartment.

Note: 8 Alkaline or Ni-MH AA batteries are recommended. For optimal performance, input the type of batteries you are using in the "Battery Type" section of the camera menu.



2. Install antenna



3. Insert the SD card:

Before insert the SD card, please make sure the write-protect switch on the “UNLOCK” side of the SD card.

4. Insert the SIM Ace

(included in the package):



5. Get the APP ready

- 1 Download and install APP on your phone by scanning APP QR code on right side, or searching "WingHome Cam" in APP Store/ Google Play.




- 2 Please use a valid email to register, then activate the account through the email you received from:
trailcam@wuyuantech.net, and log in.
- 3 Switch power button to "SETUP" position, wait about 10-15 seconds, the camera QR code will show in screen.



- 4 Click "Add Camera>Next" in APP, scan the camera QR code to add camera to your APP account.
- 5 Modify camera position.



- 6 Exit to APP homepage screen, click icon  to enter camera setting list page.
- 7 Choose "Refill" to top up \$10 USD/EUR, then exit to camera setting list page.
- * You will receive a top-up notification by email.



- 8 Click "Activate SIM Card" to choose preferred data plan.



5. Start Using

- 1 Turn off the camera, then switch Power button to "SETUP" again, wait about 10~15 seconds until screen shows 4G signal bar(s).

- 2 Press "OK" button to take a photo, wait about 30 seconds, this photo will be sent to your APP directly.
- 3 Switch Power button to "ON", camera indicator light will flash 5 times before it enters auto work mode.



2.3.1 Points of Attention

1. Insert the SD memory card correctly (SD card hot swaps are not supported).
2. Please use high-quality AA batteries in order to prevent battery corrosion and/or leakage.
3. If using a power adapter, ensure that it is of the correct type (12V/2A).
4. Do not invert the electrodes when putting in batteries.
5. Do not interrupt the power supply during system upgrades. Please return to the vendor for a replacement/refund if the device does not work after upgrading.
6. Do not remove the batteries or the power adapter when the camera is ON mode.

3. Details of Use

3.1 Power Supply

A. Batteries

The camera runs on 8 AA batteries (9-12V power supply is required to ensure proper performance of all functions); alkaline and high-quality NiMH rechargeable batteries are both compatible, though we recommend using alkaline batteries for best performance. For improved performance also select the battery type you are using in the menu option “Battery Type”.

You can also use lithium batteries in the device. However, since there is no international standard of voltage for lithium batteries, the power bar may not accurately indicate the amount of battery power left.

The batteries should be inserted with the

electrodes in the right direction, as marked in the battery compartment. Placing batteries in the wrong direction may cause the device to malfunction. Batteries should be replaced/recharged when the power icon on the camera's screen or photo stamp is empty/very low.

Note: do not mix battery types/brands, or old and new batteries. Doing so violates the warranty policy and may cause permanent damage to the device.

3.1.1 Battery life

Please refer to the table below to see the camera's battery life using 8 AA alkaline batteries.

Note: due to varying conditions of use, and different brands/quality of batteries being used, the figures provided are approximations only and you may achieve longer or shorter battery life according to your own method of usage.

Note: for NiMH battery life double the use time.

Testing conditions:
4G OFF_8AAAlkaline Batteries

Photos

Mode	No. (/day)	Use Time (days)
-------------	----------------------	------------------------

IR LEDs On (“Night Mode”)

Max. Range	100	45
Balanced		43
Min. Blur		41

IR LEDs Off (Daytime)

	100	56
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Video

Time (secs)	No. (/day)	Use Time (days)
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IR LEDs On (“Night Mode”)

10	10	44
----	----	----

IR LEDs Off (Daytime)

10	10	81
----	----	----

B. Power Adapter

The applicable power adapter is 12V /2A with 4.0mm*1.7mm male plug. We recommend this option if you are using your trail camera for home surveillance purposes.

C. Solar Panel

This camera is designed to work with most standard 12V/2A built-in lithium battery solar panels.

Note: solar panels charge at a relatively low voltage so cannot be used to recharge NiMH batteries in camera.

3.2 SD Card

A memory card must be inserted into the camera before it can be operated. If the camera is in ON mode and no memory card has been inserted, the screen will display "No card".

The SD slot of the camera has a 32GB memory capacity. Before inserting or removing the memory card, the camera must be in OFF Mode. Failing to do so may cause loss of or damage to the photos/videos already recorded on the memory card. When the SD card is full, the viewing screen will show "Memory Full".

The following data shows an approximate quantity of photos that can be recorded by the camera depending on the memory card's capacity.

The chart below displays the approximate capacity of different sized SD cards. Please check to see which size of card best suits your requirements.

3.2.1 SD Card Storage

Capacity Resolution	4 GB	8 GB	16 GB	32 GB
Photos (no.)				
8 MP	2104	4238	8476	16952
12 MP	1445	2910	5816	11632
24 MP	735	1480	2957	5914
Video (hours)				
WVGA	05:09:35	10:11:44	20:07:45	40:03:02
HD	02:17:42	04:30:35	08:53:43	17:28:16
FHD	01:09:31	02:14:27	04:22:21	8:37:52

3.3 USB Connection

When the camera is connected via a USB cable, the screen will display “USB is connected”. The camera now can be used as a PC camera.

4. Camera Menu

4.1 Modes and Basic Operations



Mode /Operation	Instructions
Left Button	<ol style="list-style-type: none"> 1. Press the left button once to view the Cam Info 2. Press the left button again to return to the main interface.
Right Button	<ol style="list-style-type: none"> 1. Press the right button once to view the Cam Status 2. Press the right button again to return to the main interface.
Up Button	<ol style="list-style-type: none"> 1. Press the up button once to play back 2. Press the right and left button to check photos/videos one by one 2. Press the up button again to return to the main interface.

Down Button	<ol style="list-style-type: none"> 1. Press the down button once to view the QR code 2. Press the down button again to return to the main interface.
Test Mode	<p>In Test Mode you can see the camera's live view on the screen and take test photos or videos, depending on the Cam Mode</p> <ol style="list-style-type: none"> 1. Open the camera 2. Move the Power Switch to SETUP 3. You will enter Test Mode 4. Press the OK button to take a test photo or video. <p>Note: in Test Mode, the camera will automatically power off after 3 mins. If no</p>

	<p>buttons are pressed. To open Test Mode again, move the Power Switch to OFF and then move to SETUP again.</p>
View Mode	<p>In View Mode you can view all the photos/video stored on the SD card.</p> <ol style="list-style-type: none"> 1. In Test Mode, press the Up button to enter View Mode. 2. Use the Left/Right buttons to scroll between photos/videos. 3. Press the OK button to play videos. 4. Press the Up button again to return to Test Mode.

**Deleting
photos
/videos
stored on
the SD
card**

You can choose to delete individual photos/videos or all the photos/videos stored on the camera's SD card.

Note: once files are deleted from the SD card they cannot be reclaimed.

1. In View Mode scroll to find the photo/video you wish to delete
2. Press the MENU button
3. You will see the "Delete File, YES, NO" screen.
4. Select "Yes"
5. Press the Up button to return to Test Mode.


4.2 Settings

Default (in red) and Optional (in black)

* Camera default settings:	
Camera Mode	Photo/Video
Image Size	8M/12M/24M
Send Pic Size	Thumbnail/Original 5MP
Remote control	<p>OFF/Real Time/Delay 0.5H/1H/2H/3H/4H/6H/1 2H/24H</p> <p>* In Delay 24H, camera will respond to your APP command after 24 hours; If you would like camera respond to your APP commands in no time, pls let camera in Real Time mode(will consumes more power)</p>
Multi-shot	1P-5P

	* multi-shot photos will be saved in SD card, could not be send to APP
Video Size	FHD/HD/WVGA
PIR Sensitivity	High/Middle/Low/OFF
Night Mode	Max.Range/Balanced /Min.Blur/No.Blur
Flash Power	High/Low
Time Lapse	ON/OFF
Delay	ON/OFF
Work Time1	ON/OFF
Work Time2	ON/OFF
Max Num/Day	Unlimited/01-99
Sync server time	
Date Style	MM-DD-YY HH:MM DD-MM-YY HH:MM
SD Cycle	ON/OFF

4.3 Changing Settings

*Open “WingHomeCam” app, go to:
“Cameras – Setting  – General Setting”

* The setting will be saved as long as you click the “Save” button in the top right corner.

* The settings will take effect after the camera's new trigger.

Setting	Explanation
Cam Mode	There are 2 camera modes: a) “Photo”: the camera will only capture photos b) “Video”: the camera will only capture videos

Image Size	<p>You can set the camera to capture 3 different photo resolutions:</p> <p>8MP 12MP 24MP</p> <ol style="list-style-type: none"> 1. Select “Image Size” 2. Select the desired option: “8M” “12M” or “24M”
Send Picture Size	<p>You can choose the camera to send you pictures in Thumbnail or Original 5MP size.</p>
Remote Control	<p>There are different options for you to choose.</p> <p>Delay off Real Time</p> <ul style="list-style-type: none"> ➤ Delay 0.5H ➤ Delay 1H ➤ Delay 2H

	<ul style="list-style-type: none"> ➤ Delay 3H ➤ Delay 4H ➤ Delay 6H ➤ Delay 12H ➤ Delay 24H <p>New settings will be available upon next photo.</p>
Multi Shot	<p>In Photo modes, you can select how many photos are captured each time the camera's motion detection sensors are triggered: 1 ("1P") through 5 ("5P").</p>
Video Size	<p>In Video Modes, there are 3 video resolutions you can choose from:</p> <ul style="list-style-type: none"> a) FHD-1080P (10s) b) HD-720P (10s) c) WVGA (10s).

	<ol style="list-style-type: none"> 1. Select “Video Size” 2. Select the desired option: “FHD-1080P”, “HD-720P” or “WVGA” 3. New settings will be available upon next photo.
PIR Sensitivity	<p>You can choose to set the camera’s PIR (motion detection sensor) to one of 4 sensitivity modes:</p> <p>a) High: the camera is triggered by the movement of objects that are smaller and further away – false triggers more likely (recommended in high-temperature conditions)</p> <p>b) Middle: mid-way (recommended in normal-temperature conditions)</p>

	<p>c) Low: the camera is triggered by the movement of objects that are larger and closer – false triggers less likely (recommended in low temperature conditions).</p> <p>d) OFF: By turning this setting off you can program the camera to disable its motion detection sensor.</p>
Night Mode	<p>The camera has 3 night vision modes:</p> <p>a) Maximum Range (“Max.Range”): large range; possible blur</p> <p>b) Minimum Blur (“Min.Blur”): small range;</p> <p>c) Balanced: medium range; medium blur.</p>

Flash Power	<p>The intensity of the light in night vision mode.</p> <p>High: Brighter night mode photos/ videos</p> <p>Low: Darker night mode photos/ videos</p>
Time Lapse	<p>This setting allows you to program the camera to automatically take a photo/video after a specific period of time, i.e. without needing to be triggered by an object. This is useful for creating a time-lapse video, in which time appears to be speeded up.</p> <ol style="list-style-type: none"> 1. Select "Time Lapse" 2. Select the desired option: "OFF" or "ON" 3. a) "OFF": the setting will

be saved and you will automatically return to the Cam Menu

b) **“ON”**: you will go to a screen with the current setting (units of time: Hours, Minute, Second)

4. Set a new time:

a) **“Hours”**: scrolling up (0-23), or down (23-0)

b) **“Minute”**: scrolling up (0-59), or down (59-0)

c) **“Second”**: scrolling up (0-59), or down (59-0)

5. Once you have inputted a time, press Save button.

Note: you should not use the Time Lapse setting and the Delay settings simultaneously.

Delay

By turning this setting on you can program the camera to temporarily disable its motion detection sensor after capturing a photo/video for the duration of the delay you set. Setting longer delay times will reduce the number of photos/videos captured, so is helpful in extending battery life.

1. Select "Delay"
2. Select the desired option: "OFF" or "ON"
3. a) **"OFF"**: the setting will be saved and you will automatically return to the Cam Menu
b) **"ON"**: you will go to a screen with the current

	<p>setting (units of time: Hours, Minute, Second)</p> <p>4. Set a new time:</p> <p>a) "Hours": scrolling up (0-23), or down (23-0)</p> <p>b) "Minute": scrolling up (0-59), or down (59-0)</p> <p>c) "Second": scrolling up (0-59), or down (59-0)</p> <p>5. Once you have inputted a time, press Save</p> <p>Note: you should not use the Delay setting and the Time Lapse settings simultaneously.</p>
<p>Working Timer</p>	<p>This setting shuts off the camera's motion detection sensor except the start and end time set. This setting is useful if you want</p>

the camera to capture photos/videos only at specific times.

1. Select “Working Timer”
2. Select the desired option: “OFF” or “ON”

3. a) “**OFF**”: the setting will be saved and you will automatically return to the Cam Menu

b) “**ON**”: you will go to a screen showing start time and end time (Hour, Minute, set to 00:00 – 00:00 by default.)

4. Set a new start and end time, scrolling up and down to switch between the values:

a) “**Hours**”: scrolling up

	<p>(0-23), or down (23-0)</p> <p>b) “Minute”: scrolling up (0-59), or down (59-0)</p> <p>5. Once you have inputted a start and end time, press Confirm to save it.</p> <p>6. Press the Save button to return to the Cam Menu.</p>
Max Num/Day	<p>You can set a limit on the number of photos taken per day (0-99).</p> <p>Alternatively, you can set it to "Unlimited" so that the camera can take as many photos as possible.</p>
Date Style	<p>So that you get accurate stamps on your photos/videos, and to ensure all of the camera's functions work optimally,</p>

	<p>please set the Date/Time before operating your camera for the first time.</p> <ol style="list-style-type: none"> 1. Select “Date Style” 2. You will go to a screen showing the current date and time settings: You can choose different data format: dd-mm-yy or mm-dd-yy.
SD Cycle	<p>When the SD card is full and this setting is turned off, no more photos/videos will be captured. If this setting is turned on, then the camera will continue to capture photos/videos, overwriting earlier photos/videos stored on the SD card.</p>

- | | |
|--|---|
| | <ol style="list-style-type: none">1. Select “SD Cycle”2. Select the desired option: “OFF” or “ON”3. Your setting will be saved and you will automatically return to the Setting Menu. |
|--|---|

5. Full Specifications

Image Sensor	5 Mega Pixels Color CMOS
Effective Pixels	2560x1920
Day/Night Mode	Yes
IR range	20m
IR Setting	60pcs,940nm-IR LED
Memory	SD Card (4GB – 32GB)
Operating keys	7
Lens	F=3.0; FOV=58°; Auto IR-Cut-Remove (at night)
PIR Angle	52°
LCD Screen	2.4" TFT, RGB, 262k
PIR Distance	20m
Picture Size	8MP/12MP/24MP
Picture	JPEG

Format	
Video resolution	WVGA(848x480), HD (1280x720), FHD (1920x1080)
Video Format	MOV
Video Length	10sec.
Shooting Numbers	1P-5P
Trigger Time	0.4s
Trigger Interval	4s-7s
Time Lapse	Yes
SD Card Cycle	ON/OFF
Operation Power	Battery: 12V; DC: 12V-2A
Battery Type	8AA
External DC	12V
Stand-by Current	0.165mA

Stand-by Time	6 months
Auto Power Off	In Test mode, camera will automatically power off in 3 mins if there is no keypad touching.
Wireless Module	LTE Cat.4 module; 2G & 3G networks are also supported in some countries.
Interface	USB/SD Card/SIM Card/DC Port
Mounting	Strap
Operating Temperature	-25°C to 60°C
Storage temperature	-30°C to 70°C
Operation Humidity	5%-90%

Waterproof spec	IP66
Dimensions	128x96x76mm
Weight	260g
Certification	CE FCC RoHs

6. Troubleshooting

1.The camera takes photos/videos without any target objects in them (false triggers)

The PIR sensitivity is set too high:

In addition to troubleshooting using the solutions below, you should first check the camera's PIR sensitivity level

Hot air:

The camera is triggered by detecting the movement of heat sources, so avoid mounting the camera near any equipment that emits hot air

Reflecting light:

Light can trigger the camera, so avoid targeting the camera at anything that can reflect light (e.g. mirrors or moving bodies of water).

Rising/setting sun:

So as to avoid targeting the sun as it rises or sets, mount the camera to face north or south.

Unstable mounting:

If the camera's mounting is not stable, then it may move and mistake this for the movement of objects in its field of view. When mounting the camera check that it is completely stable and avoid mounting it on anything that can move or shake, e.g. small/weak trees.

Target objects moving too quickly:

In the case of fast-moving objects, e.g. animals, if the camera is positioned too close, or perpendicular to the target trail, there is a possibility that the trigger will not go off in time.

a) Mount the camera further back from the trail

b) Mount it at a 45° angle to the trail.

Tree leaves/branches:

Grass swaying in the wind, falling leaves or falling/moving tree branches/twigs can reflect the sun's heat and potentially cause false triggers.

a) Mount the camera away from such objects, preferably slightly higher up (around 5ft from the ground) to avoid swaying grass

b) Clear the target area as much as possible of twigs, leaves and branches.

2.The camera is not capturing any photos/videos

Camera is not in ON Mode:

In addition to troubleshooting using the solutions below, you should first ensure that the Power Switch is set to ON.

Batteries have insufficient power:

Check the battery power bar directly on the camera's screen. If the battery power is very low, replace/recharge the batteries.

SD card is full:

- a) Upload the files saved on the SD card to your computer, delete them from the card and re-use the same card, or
- b) Put a new SD card into the camera, or
- c) Turn on SD Cycle mode

SD card is corrupted:

Due to physical damage, improper insertion/removal or viruses, SD cards can

become corrupted. If this happens, you will need to format/reformat the SD card.

3.Night vision range is limited

“Night Mode” is set to “Min.Blur”:

In addition to troubleshooting using the solutions below, you should first ensure that “Night Mode” is set to “Max.Range” or “Balanced”

Batteries have insufficient power:

Check the battery power bar directly on the camera’s screen. If the battery power is very low, replace/recharge the batteries.

Nearby light source:

If there is a significantly bright light source near the camera it may interfere with the functioning of the camera’s night vision.

Avoid placing your camera near a bright light source.

Target area is too open:

The camera's night vision works via infrared light that is emitted and reflected back off the objects in the target area, then captured by the camera's image sensor. Therefore, if the target area is too open, i.e. with very few objects to reflect the IR light, then the night vision image will appear very dark.

For night vision purposes, target the camera at an area that contains objects, e.g. trees, bushes, walls, etc.

7. After-Sales Service

At WingHome we have devoted many years to providing the highest quality and most complete after-sales service to our customers. Ensuring customer satisfaction is the most important part of our business. You can be confident that the quality of our products and our after-sales service is to the highest international standards.

If you encounter any problems during the use of our products or services, please contact our after-sales support team at support@winghomeview.com. In order to more efficiently solve your problem, please provide the following information:

1. A photograph that clearly shows the problem.
2. The type of batteries and SD card you are using.

3. The temperature and area conditions of installation.
4. A photograph of the camera's settings.

Using the above information, our technical team will be able to quickly ascertain the nature of the problem, and endeavor to provide the relevant solution.

If in any way you are not satisfied with a WingHome product or service, please contact our support team immediately and we will do whatever possible to satisfy your requirements.

8. Warranty

Every WingHome product purchased includes a free 12-month warranty and lifetime technical support. Our support team reply to all emails within 24 hours.

In order for the free 12-month warranty to be effective, WingHome products must have been purchased from our Amazon store or the official WingHome online store.

Thank you for choosing WingHome!

Contact address:

support@winghomeview.com

Official website:

<http://www.winghomeview.com>

Facebook page:

<https://www.facebook.com/winghomecamera>