# Trail Camera
# Instruction Manual

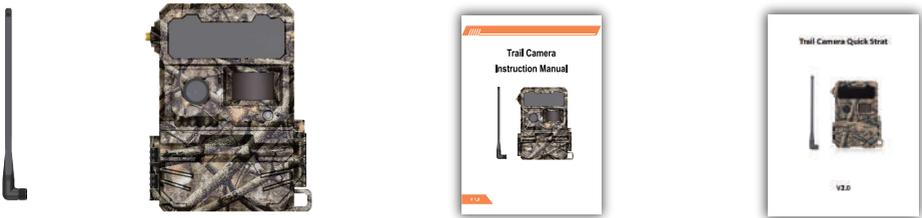# Contents

# 1. Quick Start

## 1.1 What's in the Box?

### Camera Status Light Guide

| SD Card Status Light | | ON | 1s/Flash | 0.5s/Flash | OFF |
|---|---|---|---|---|---|
| | ● | SD Card Working Well | Debug Mode is ON | FW Upgrade in Progress | / |
| | ● | SD Card Abnormal/Full | / | / | / |
| | ● | No SD Card | / | FW Upgrade Failed | Format in Progress |

| Battery Status Light | | ON | 0.5s/Flash |
|---|---|---|---|
| | ● | >80% Power Left/with DC Power | / |
| | ● | 20%-80% Power Left | / |
| | ● | <20% Power Left | Lower Power/Alert |

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# 1.2 Camera Overview



1  Antenna
2  IR LENS
3  Camera Status Light & Light Sensor
4  Control Panel Cover
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6  PIR Sensor
7  Built-in Mic
8  Latch
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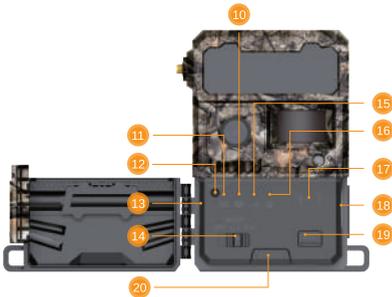
10  Battery Status Light
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13  SIM Card Slot
14  Power Switch
15  Signal Status Light
16  Account Status Light
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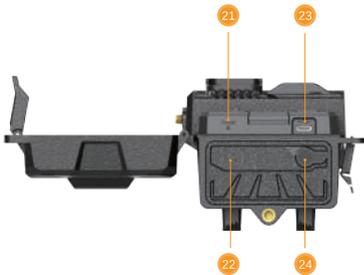
21  Reset Button
22  Battery Tray
23  Type C Port
24  DC IN

# 1.3 How to Get Camera Ready?

## 1.3.1 Insert the batteries

Press the **Battery Tray Eject Button** to open the camera's battery holder and insert the batteries with the polarities (+) and (-) in the direction as marked in the battery holder, then place the battery holder back into the battery compartment with arrows facing up. (See Photo)

Note: 12AA Alkaline or Ni-MH batteries are recommended. For optimal performance, input the type of batteries you are using in the **Battery Type** section of the **Trailcam Ace** APP. (See section 3.1 for more information.)
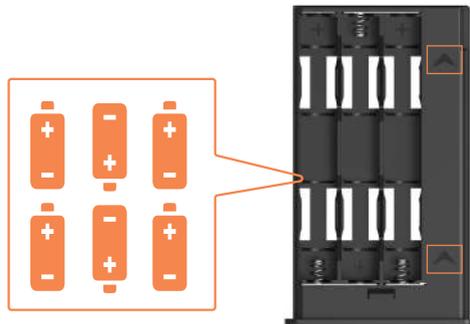
## 1.3.2 Insert the SD card

Insert an SD card into the SD card slot with the metal contacts facing down.

Note: This camera supports an 8~32GB SD card. (See section 3.2 for more information.)

### 1.3.3 Insert the SIM card

Insert a SIM card into the SIM card slot with the metal contacts facing down.

Note: Make sure that the camera is turned off before inserting the SIM card. (See section 3.3 for more information.)
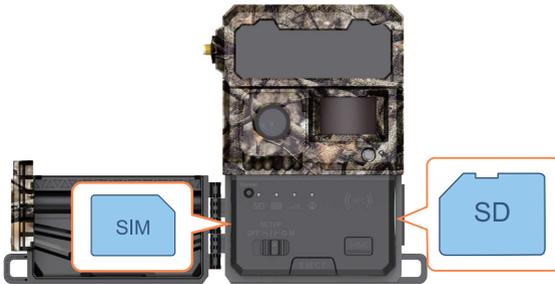


### 1.3.4 Install antenna

The antenna doesn't come installed. Please insert it as shown in the photo.

# 1.4 Setup Your Camera

## 1.4.1 Get the APP ready

You can download and install the APP on your phone by scanning the APP QR code below or searching for **Trailcam Ace** in the APP Store/Google Play.



## 1.4.2 Register and login APP

Please use a valid email to register an account by clicking **Create account** on APP, then activate the account by clicking the email you receive (remember to check your Spam) and login to the **Trailcam Ace** app using your email address and password.
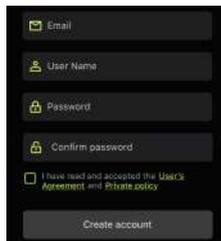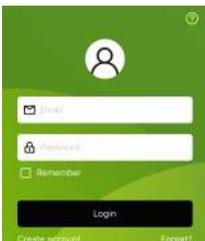
## 1.4.3 Add the camera to the APP

Before adding the camera to the APP, please press the camera button to the **SETUP** position and the camera will automatically enter the network search, then you can enter the next step.

1. Click Step: **Add a camera→Continue with NFC**→Turn on NFC on your phone (**Settings General NFC**)→Move the iPhone NFC detector (on the top of the back of your phone) around the camera NFC area to add it to your app account, then you can name your camera.



2. If your phone does not support NFC, please click **Continue with QR Code** and scan the QR code attached to the camera flip to add the camera.

3. Please click **OK** and then turn the camera's power button to **ON** to start the test!

Note: If the status of the signal light and the account light is weak, please test it in a place with better signal.

4.To make further settings, you can click on **General settings** and the new settings will take effect after the next PIR trigger is completed.

Note: a. If you want to synchronize the new settings in setup mode, press the **SYNC** button;

b. If you are using an other brand SIM card, see section 2.2 first.
(Please choose an "Other Brand SIM Cloud Service" plan for your camera to start using on https://ace.wuyuantech.com/#/data_plan)

## 1.4.4 Verify network connectivity

### 1) Check the status of the account indicator light.

After buying a data plan (section 2.2), ensure the account indicator light stays green. If not, reboot the camera by turning power button to SETUP to check indicator status. If it's green, device-server communication is normal and camera works fine.

### 2) Check the Cloud page on the APP. Cloud

When the account indicator is green, click SYNC to take a picture. After 30 seconds, refresh the **Cloud** page on the APP for a thumbnail album. If it appears, device-server communication is normal and the picture can be uploaded.

### 3) Check all the indicator lights. SD

If the above steps are normal, press the power switch into the **ON**. All indicator lights will turn off, indicating PIR trigger mode. Wait 30 seconds to 1 minute, move an object in front of the device, and refresh the **Cloud** page on the APP after 30 seconds to check for a thumbnail album. If it appears, the camera is in PIR trigger mode. After settings, place the camera in the appropriate position (section 3.7) for normal working.

Note: If the indicator light does not display as expected, please refer to sections 3.4 and 5.

# 2. Operation List

## 2.1 Configure Camera Settings

The function setting of the device can only be set on the APP, and the general setting list is as follows:

| Item | Specification | Explanation |
|---|---|---|
| Camera Mode | Photo/Video/ Photo+Video | Set the mode of capturing. Photo: Take a photo. Video: Take a 10s video. Photo+Video: Take a photo and a 10s video. |
| Image Size | 12MP/8MP/5MP | Set the pixel size for SD card saving photos. 12M: 4800x2560  8M: 3840x2112  5M: 3072x2178 |
| Remote Control | Real Time/Delay 0.5H(1/2/3/4/6/ 12/24H) | Set the time interval for camera active response. Real Time: instantly response. Delay 0.5H(1/2/3/4/6/12/24H): regular response. |
| Multi Shot | 1P/2P/3P | Set the number of consecutive pictures to take when triggered. |
| PIR Sensitivity | 0 ~ 9 | Set PIR detection range and distance. 0: OFF  1~9: ON |
| Flash Power | High/Low | Set the power consumption of IR LED in night vision environment. |
| Time Lapse | OFF/ON | Set time interval for timed capture. |
| Delay | OFF/ON | Set the duration of the interval between two consecutive PIR triggers. |

| | | |
|---|---|---|
| Working Timer 1 | OFF/ON | Set the working interval to allow the device to work regularly. |
| Working Timer 2 | OFF/ON | Set the working interval to allow the device to work regularly. |
| Max Num/Day | Unlimited/1~99 | Set daily maximum sending limit. |
| Battery Type | Alkaline/NI-MH/ Lithium | Set different battery types for optimal performance. |
| Camera Time Zone | | Set the camera time zone. |
| Date Style | MM-DD-YYYY DD-MM-YYYY | Set camera date display format. |
| GPS | OFF/ON | Set the positioning function. |
| GPS Alert | OFF/ON | Set the positioning warning function to receive push notifications when the camera position changes. |
| SD Cycle | OFF/ON | Set the SD card cycle coverage. |
| SD Format | | Perform SD card formatting operation, SD card file cleared. |
| Factory Reset | | Perform the Factory reset operation. |

## 2.2 Manage Plans

1. Open the internal purchase website on the Trailcam Ace APP (**APP > Camera > Setting List**), or copy the following website directly and open it on a mobile phone or computer. (https://ace.wuyuantech.com)
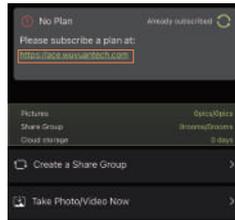


2. Enter your email and password on the website to log in.

3. Confirm the plan. Click the **Change** or **Purchase** button below, select Camera > select Plan > select Payment Method > Place Order. (Please check the auto-renewal to subscribe.)
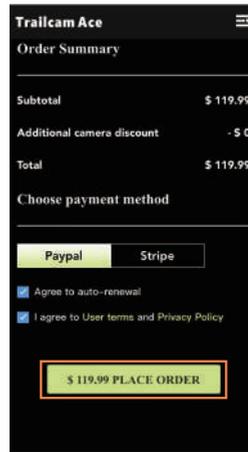
# 2.3 Manage Devices

This part introduces key device functions like entering live view, requesting instant photo, requesting HD photo/video, creating and joining share groups, resetting and deleting the camera etc.
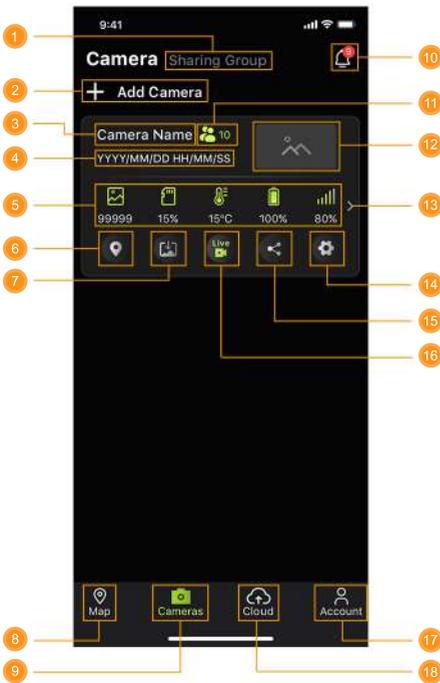


1. Access to join share groups
2. Add camera
3. Camera name
4. Time for last sending photo
5. Camera status preview
6. View camera location
7. Request instant photo
8. View all camera locations
9. Enter all camera list
10. Notification from share groups
11. Number of share groups
12. Last sending photo & access for all photos
13. Enter camera status details
14. Enter setting list
15. Create share groups
16. Enter live view
17. Enter account page
18. Photos by all cameras

## 2.3.1 Enter Live View

To use this function, set "**Remote Control**" to "**Real Time**" mode in "**Setting List**" > "**General Setting**" (The Real Time request will take effect after the next photo or the interval previously set for Remote Control.), and have a "**Live Stream**" package available on the account. (If not, please visit https://ace.wuyuantech.com/#/data_live to choose one.)

Once conditions met and network connection stable, click the **Live** icon for live view to see what's happening in front of the camera lively.

Note: In **Real Time** mode, the camera **4G module** is standby (on power) all the time to react to your remote control commands instantly while this consumes power very fast, thus only suggest to set to this mode when camera is connected with external power supply.

## 2.3.2 Request Instant Photo/Video

To request instant photo, set "**Remote Control**" to "**Real Time**" mode in "**Setting List**">"**General Setting**" . (The Real Time request will take effect after the next photo or the interval previously set for Remote Control.)

Once in Real Time mode, click "**Instant Photo**" or "**Take Photo/Video Now**" under "**Setting List**" to send request. Please do set "**Camera Mode**" under "**General Setting**" to "**Video**" or "**Photo+Video**" for video requests.

### 2.3.3 Request HD Photo/Video

To get HD photo/video based on the standard size photos and videos you received on your App account, you will need to have "HD Photo" and "HD Video" packages available on your account. (If not please visit https://ace.wuyuantech. com/#/data_hd to choose one.) After that, click single photo/video under "**Cloud**", or click the "**Edit**" icon on the top right of Cloud page, and then click "**HD**" icon at the bottom to request for higher resolution version of the selected photo(s)/video(s).

### 2.3.4 Create Share Group

To view camera content with a group, click "**Create a Share Group**" under "**Setting List**" to create groups (allowed quantity according to your transmission plan) and then click "**Invite**" to invite guests to your group either by scanning your created QR Code or by clicking your invitation to their email.

### 2.3.5 Join Share Group

This is for situations that you are invited or you request to join the specific share group of the host camera, click "**Share Group**" on "**Cameras**" page, then click "**Join Share Group**" to scan the invitation QR code to join, or click the invitation email sent to your mailbox to follow steps to join.

Note: Share group members only have view permission and limited setting permission shared by the Host.

## 2.3.6 Reset Camera

To reset the camera back to the original factory settings, go to the bottom of the "**General Setting**" page under "**Setting List**", and then click "**Factory Reset**" to restore the factory settings. The Real Time request will take effect after the next photo or the interval previously set for Remote Control.

Note: A reset of the camera will remove all personal settings you made for the camera.

## 2.3.7 Delete Camera

When you want to add the camera to another account, you will need to delete it from the previous account first. Please click the "**...**" icon on the top right of "**Setting List**" page, then click "**Delete Camera**" at the bottom, click "**OK**", then enter your account login password, and the camera will be deleted successfully.

Note: Deleting a camera means deleting all its contents on your account including photos, videos, and plans.

# 3. Full Function Introduction

## 3.1 Power Supply Selection

### 3.1.1 Battery specification

Support DC9V~12V, 12 AA Alkaline batteries, NIMH batteries and Lithium batteries for power supply; also support DC7.4V, 18650 Lithium batteries for power supply.

Note: 1. Please use high quality AA batteries to prevent battery corrosion and leakage.
2. Do not reverse the electrodes when inserting in batteries.
3. Do not interrupt the power supply during system upgrades.
4. Do not remove the batteries or the power adapter when the camera is ON.

**Battery life as shown:**

| 4G OFF_12AA Alkaline Batteries | | | | |
|---|---|---|---|---|
| Photos shot per day | Working time | | Video clips shot per day | Working time |
| Night | | | | |
| Photo | 100 pcs | 67 days | Video—10s | 10 clips | 71 days |
| Day | | | | |
| Photo | 100 pcs | 116 days | Video—10s | 10 clips | 148 days |

## 3.1.2 Adapter specification

Support DC12V/2A adapter for power supply, and the power cord of the adapter is 4.0 mm * 1.7 mm.

# 3.2 SD Card Selection

The SD card must be inserted in the camera for normal use, and supports storage from 8GB to 32GB. The SD slot has a storage capacity of 32 GB. If the camera is set to **SETUP** and the SD card is not in use, the SD card indicator will turn red to indicate that there is no SD card inserted. Before inserting or removing the SD card, make sure the camera is in **OFF**. Failing to do so may result in loss of pictures or damage to the SD card.

Note: When the status of the SD card is abnormal (including the SD card is full), the SD card indicator will turn yellow.

The following data shows the number of pictures and videos that can be stored, depending on the camera settings and memory card capacity.

| SD Size / Capacity | 8GB | 16GB | 32GB |
|---|---|---|---|
| Photo (pictures) | | | |
| 5MP | 9216 | 19328 | 38016 |
| 8MP | 7372 | 15462 | 30515 |
| 12MP | 3019 | 6325 | 12438 |
| Video (hours) | | | |
| FHD | 10:21:48 | 19:45:39 | 38:07:57 |

## 3.3 SIM Card Usage

A SIM card is usually included in the package and when you insert the battery, SD card, SIM card, install the antenna and press the button to **SETUP** mode, the camera will automatically search for the network.

After the SIM card is successfully activated, the camera can transfer pictures and videos to the mobile phone, and camera related parameters can be set on the mobile phone.



If you use an other brand SIM card that can't be automatically matched to operator, you should set it manually as follows:

a: Please call the local operator of the SIM card to get the 4G APN information.
b: Please create a SIM Auto Match txt file in the root directory of the SD card. The contents of the SIM Auto Match txt file are as follows:

Value:1
4G APN: <Fill in 4G APN of the SIM you consulted from its operator>
4G User Name: <Fill it if the 4G APN has user name, if not leave it empty>

4G Password: <Fill it if the 4G APN has password, if not leave it empty>
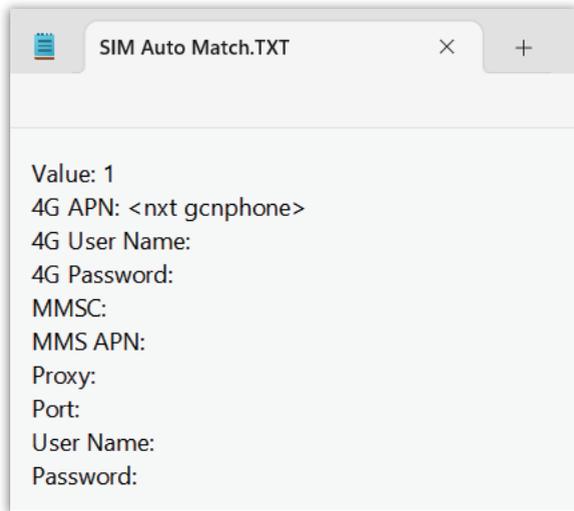MMSC: <Leave it empty>
MMS APN: <Leave it empty>
Proxy: <Leave it empty>
Port: <Leave it empty>
User Name: <Leave it empty>
Password: <Leave it empty>

# 3.4 Status Lights

| Account Status Light Situations | |
|---|---|
| Green light flashes slowly. | The camera enters the setup state, executing the net injection process and parameter synchronization process. |
| Green light stays on. | The camera is associated with the account and the server communication connection is successful. |
| Red light flashes slowly. | 1) The camera is associated with the account, but the server communication connection fails. 2) In Setup mode, the camera detects that the number of available thumbnail data plan is 0. |
| Red light stays on. | The account is not tied to the camera. |
| **Battery Status Light Situations** | |
| Green light stays on. | Battery charge is above 80% (or DC power is connected). |
| Yellow light stays on. | Battery charge is between 20%~80%. |
| Red light stays on. | Battery charge is less than 20%. |
| Red light flashes rapidly. | Camera is on low battery, lasts 5s, then shuts down. |
| **Signal Status Light Situations** | |
| Green light flashes slowly. | The camera enters the setup state, executing the net injection process and parameter synchronization process. |
| Green light stays on. | SIM card available, excellent signal. |
| Yellow light stays on. | SIM card available, good signal. |
| Red light stays on. | SIM card available, poor signal or failed network injection. |
| Red light flashes slowly. | Camera without SIM card or non Mega SIM. |
| Red light flashes rapidly. | Abnormal communication between DSP and module. |
| **SD Card Status Light Situations** | |
| Green light stays on. | The SD card is inserted in the camera, and the SD card status is normal. |

| | |
|---|---|
| Green light flashes slowly. | The SD card is inserted in the camera and the SD card status is normal. Debug Mode is enabled (Qlog is not enabled). |
| Green light flashes rapidly. | The camera is in the process of a firmware upgrade (including SD card, OTA execution of camera software, module software, or MCU software). |
| Yellow light stays on. | The SD card is inserted in the camera, but the SD card status is abnormal (including SD card is full). |
| Yellow light flashes slowly. | SD card is available and Qlog is enabled. |
| Yellow light flashes rapidly. | SD card is available and USB cable is connected to computer, the camera is in MSDC mode. |
| Red light stays on. | No SD card. |
| Red light flashes rapidly. | If the camera firmware fails to be upgraded (including the battery is insufficient and the upgrade file does not meet the conditions), the current SD card detection status and display will be restored after 5s duration or button operation. |
| Light off | During the execution of SD Format, the SD card indicator will be displayed according to the detection status when the SD card is remounted after the execution. |
| **Camera Status Light & Light Sensor Situations** | |
| The light stays on. | When entering the setup state, the status indicator light stays on. |
| Flashing | PIR Test: In the setup state, if the device is not in the process of photographing or recording, and there is a PIR trigger, the indicator light will flash. |
| Light off | In the setup state, if the device is in the process of manual |

| Light off | photographing or video recording, the indicator light will remain off until the photographing or video recording is completed. |
|---|---|
| 5s countdown flashing. | When the equipment enters the ON state, the 5s countdown flashing is executed. |

# 3.5 Operation Keys

| Function | Operation | Specification |
|---|---|---|
| Key Switch | OFF | Enter the shutdown state. |
| | Setup | Enter the setup state. |
| | ON | Enter the standby state. |
| SYNC Key | In Setup state, short press. | Perform a single snap job. |
| Reset Key | In Setup state, press and hold for 5s. (use an ejection pin) | Perform a reset operation and remove all personal settings you made on the camera. |
| SD Format Key | In Setup state, press and hold for 5s. | Perform the SD card format operation. |
| Combined Operation | In OFF state, press and hold SYNC button + turn the button to SETUP. | Perform camera software upgrade. |
| | In the Setup state, press and hold the SYNC button + click the Reset button. | Generate CAM _ INFO. TXT file and add Cam. bmp QR code image to SD card. |
| | In the Setup state, press and hold the SYNC button and click the SD Format button. | Turn on/off the Debug Mode. |

| | In the Setup state, if Debug Mode is on, then click the Reset button. | Turn on the Qlog function. |
|---|---|---|
| Combined Operation | In the Setup state, press and hold the SYNC button + press and hold the Reset button for 5s. | Perform SD card 4G module software upgrade. |
| | In the Setup state, press and hold the SYNC button + press and hold the SD Format button for 5s. | Perform SD card MCU software upgrade. |

## 3.6 USB Connection

The camera can be connected to the computer via USB cable, you can find and view photos and videos captured by the camera and stored on the SD card in the computer→ DCIM folder (default).

Note: Please note that the USB cannot charge the camera after it is connected to a computer or other electronic device.

# 3.7 Mounting Strap

The camera can be attached to a tree using the installation strap through the intended slots on the back of the camera to prevent the camera from falling.

1. Choose a tree that will not move in the wind, as movement will cause false detection.

2. Make sure the area immediately in front of your camera is free of branches or twigs that could be blown away by the wind.

3. To produce brighter photos and videos at night, there should be items reflecting the camera's flash in the background.
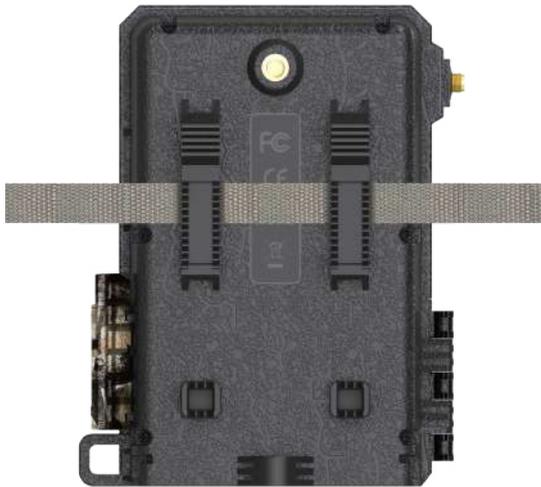
# 4. Specification

| Item | Specification |
|------|---------------|
| Effective Pixels | 2304 X 1296 |
| Aspect Ratio | 16:9 |
| Lens | DFOV=60°, F=2.0 |
| Day/Night Mode | Yes |
| IR LED | 54pcs, 940nm |
| PIR Range | Maximum support of 20m |
| PIR Angle | 60° |
| Trigger Speed | 0.5s |
| Image Resolution | 12MP (4800x2560)<br>8MP (3840x2112)<br>5MP (3072x1728)<br>Thumbnail (640x360) for transmission to the smartphone |
| Photo Format | JPG |
| Multi shot | 1P/2P/3P |
| Video Resolution | 1080P (1920x1080)<br>GVGA (512x288) for transmission to the smartphone |
| Video Length | 3~10s |
| Encoding | H.265 |
| Video Format | MP4 |
| Microphone | Yes (one way voice) |
| Live Stream | Support 720P (1280x720) video resolution |
| DC Supply | DC 12V2A adapter |
| Battery Supply | 12pcs, Alkaline/NI-MH/Lithium AA battery |
| SD Card | Standard SD card slot, support 8~32GB |

| | |
|---|---|
| SIM Card | Standard SIM card slot, support ACESIM Card and Other SIM Card |
| USB | Type C |
| DC Port | 4.4mm*1.6mm, Adapt to 4.0mm*1.7mm power supply cord |
| Indicator Light | Status/SD Card/Battery/Signal/Account Status Light |
| Operating Keys | Key Switch/Format/Reset/SYNC Key |
| Operating Temperature | - 20°C ~ 55°C |
| Storage Temperature | - 25°C ~ 60°C |
| Operation Humidity | 5% ~ 90% |
| Storage Humidity | 40% ~ 60% |
| Waterproof spec | IP66 |
| Camera Dimension | 141mm*114mm*94mm |
| Camera Weight | 470g (with antenna) |
| Certification | FCC; CE; RoHS; REACH; IP66 |

# 5. Trouble Shooting

**1) The camera takes a photo or video without any target objects in it (false trigger):**

1. The PIR sensitivity is set too high: the camera detects object movement and triggers, e.g., light movement, unstable camera mounting position, and slight shaking will cause triggering. You should reduce the PIR sensitivity.
2. There are leaves or branches in front of the lens. False triggers can be caused by windblown grass, fallen leaves, or branches in front of the camera lens. You should remove as much grass, leaves, and branches from the target area as possible to avoid false triggers.

**2) Night vision range is limited:**

1. The battery is low. Replace the battery with a new set or connect it to a solar panel.
2. There is light source near the camera. Avoid placing the camera near a strong light source as this will interfere with the camera's night vision function.
3. The target area is too open. There are few objects that reflect infrared light, the less reflected light the camera receives, the darker the night vision image will appear. You can point the camera at an area where there are objects such as trees, bushes, walls and so on.

**3) The camera stops working:**

1. If the camera is in non Real Time mode, it can't respond immediately to APP commands. The default setting of the camera is once every 24 hours.

2. The camera is set to Num/Day, which limits the number of pictures sent per day. You should set it to unlimited.

3. The camera does not respond to APP commands in **SETUP** mode. You should switch to **ON** mode.

4. The camera does not have Cloud Service or Data Plan, and an other brand SIM card does not have 4G service.

5. The SD card is full. You should use a new SD card, open SD cycle mode, or format the SD card.

6. The SD card is damaged. You should format the SD card to FAT32 or replace it with a new C10 SD card.

7. The battery is low. You should replace the battery with a new set or connect it to a solar panel.

# 6. Warranty

Based on a strict QC system, we initially offer all our customers one year long time limited warranty, come along with selectable chargeable renewal policy of warranty as one, two, three, or four years.

Our products are warranted against defects in materials and workmanship for a period of one year from the date of original purchase. If a defect exists, we will, at our option and to extent permitted by law will (1) repair the product at no charge using new or refurbished parts; (2) exchange the product with a functionally equivalent product that is new or refurbished.

Provided the product is returned freight charge paid. This warranty excludes damage resulting from abuse, accident, modifications or other causes that are not defects in materials and workmanship, or by someone other than our authorized technicians. This warranty only covers failures due to defects in materials or workmanship under normal usage.

To obtain warranty service, please contact us to determine the nature of the problem before returning the product under this warranty (with a written description of the problem and print samples) for repairing or exchanging.