Collector Camera

User Manual

Contents

Instruction MANUAL

1. Quick Start

1.1 Items in Box

| Trail Camera	1pc
Instruction Manual	1pc
Type C Data Cable	1pc
Mounting Strap	1pc

1.2 Get the Camera Ready

1)Load the batteries

Open camera buckle to insert the batteries based on electrodes marked in battery case.

Note: support to work with either 8AA 1.5V Alkaline, or 4pcs electric circuit protected 18650/18700 batteries. For longer working time, we'd highly recommend to use 4pcs same
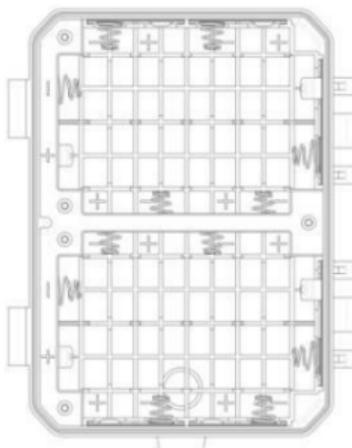
brand&model18650 batteries.

2)Mount the Antenna, SD, and SIM cards.

8-128GB SD card is supported. Please insert the cards with correct directions as marked on housing.

SIMCardSlot

GoldenPartFacesFrontHousing

SDCardGoldenPartFacesDown
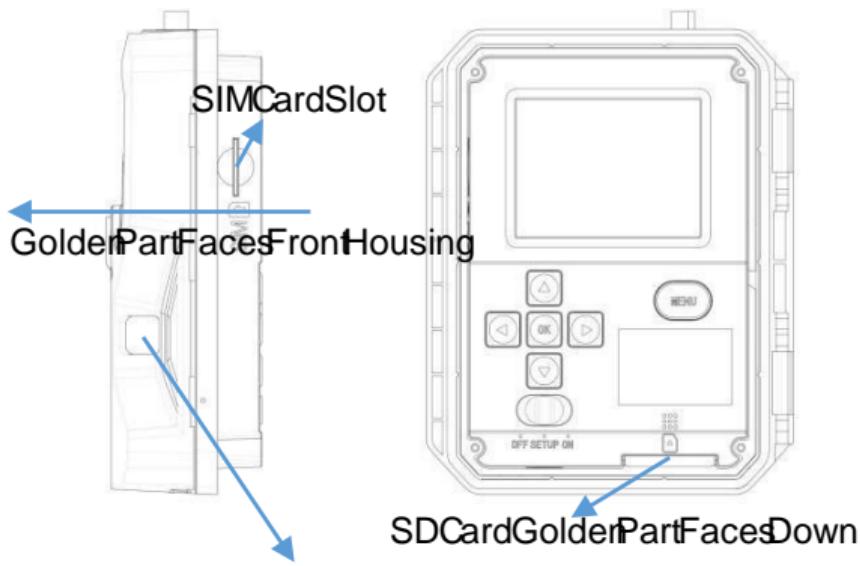
10mm Diameter Lock Cable Slot

(2 Meters Long Lock Cable is Available for Sale)

3) Get Camera Ready to Work

Switch to ON

Camera will take photos or videos upon motion triggers (screen will not light up in "ON" mode). You can mount it out to work directly with offered UV-proof

strap or standard 1/4-20 inches thread tree mount if default settings are preferred.

1/4 inches thread Slot

Strap
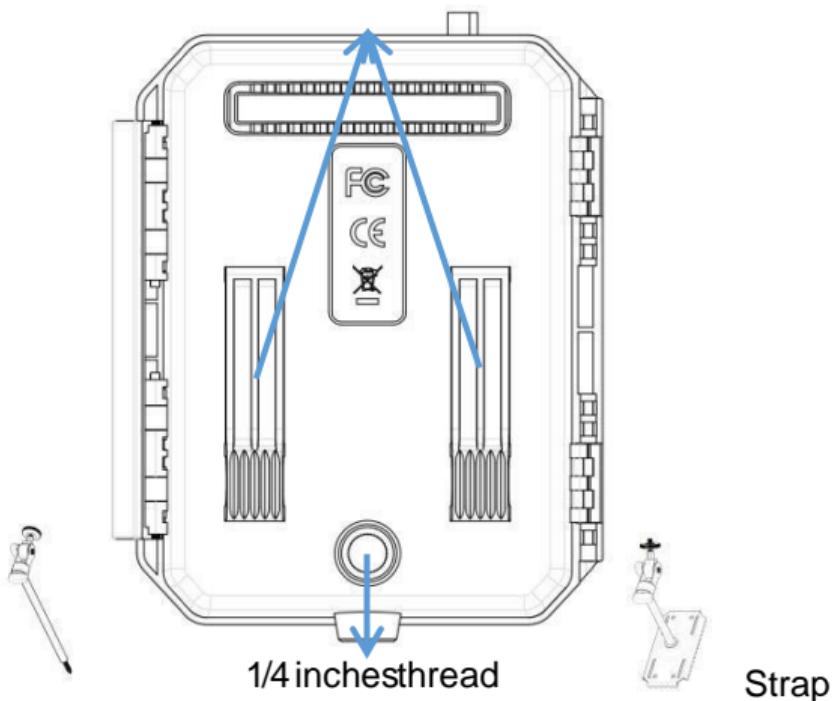
(304 Stainless 1.4" Thread Wall/Tree Mount is Available for Sale.)

1.3 Configure Camera Settings

Switch to SETUP, screen will light up. Press Menu key, you will enter the menu to view & change settings. Please press arrow keys for navigation and OK key to confirm settings.

LCD Colorful Screen

MENU/Return Key

Arrow Keys OK Key
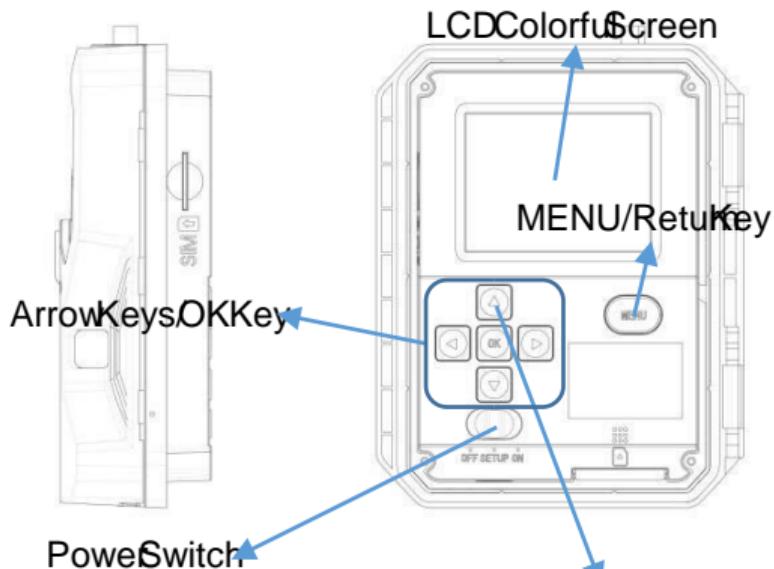
Power Switch

(OFF/ SETUP-Test/ON Mode)   Playback

Note: please switch to ON to enable the camera to work after setups. Camera will count down 5 seconds before entering into auto work mode.

1.4 Video/Photo Review, Deletion, Transfer Test

Turn "Power Switch" to SETUP position to enter test mode, press arrow key "↑" to enter Playback; press "←" and "→" for selection, "OK" to play photo/video.

1) Press key "↑" again to exit.

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2) In Playback mode, press "Menu" key to delete file(s), test transfer current photo manually, or auto play all files ; press "OK" or "Menu" again to exit.

Deletion

a. Delete one: delete selected photo/video;
b. Delete All.

In Playback mode, press "MENU" to delete, press "OK" to enter, press"↑" and "↓" to select, "Yes" to confirm, "No" to exit to previous page.

Format Memory Card

General→Format Memory Card

a. No
b. Yes: to format SD card via camera.

Press "←" and "→" to select, "Yes" to confirm, "No" to exit to previous page.

1.5 Auto Power Off

In Test mode, camera will automatically power off if there is no keypad touching in 2 minutes. Please

press any key to wake up screen as if you want to do some further configurations.

Note: camera stay in "Setup" mode if camera is in Menu configuration pages.

1.6 Camera Default Settings in Red Letter

Camera			
Record Mode	Photo	Video	Photo & Video
Photo Size	8/16/24/30MP		
Multiple Shoot	1/2/3/10 Photos per Trigger		
Night mode	Bright/Medium/Clearest But Dimmer		
Video Resolution	1080P	720P	480P
Video Length	3~59 seconds		
Video sound	ON/OFF		
Endless Shoot	On	OFF	
Shoot Lag	00:00:05~17:59:59	OFF	
Time Lapse	Normal	TL Video	OFF

TL Video Resolution	4K/2K/1080P/720	
Timer 1	On	OFF
Timer 2	On	OFF
PIR Sensitivity	Low/Middle/High	
General		
Language	English,Deutsch,Dansk,Suomi,Svenska, Espanonl,Francais,Italiano,Nederlands,Portugues...	

Time Stamp	ON	OFF
Camera ID	ON	OFF
Battery Warning	ON	OFF
Password Protection	ON	OFF
Beep Sound	ON	OFF
Format Memory Card	OFF	On→Are you sure? Yes/No
Reset	OFF	On→Are you sure? Yes/No
About	IMEI/ Version	

FW Update	YES	NO

2. Details of the Camera

2.1 Figure 1: Front View of Camera

78 IR LEDs

MIC

Status Indicator

Lens

PIRSensor
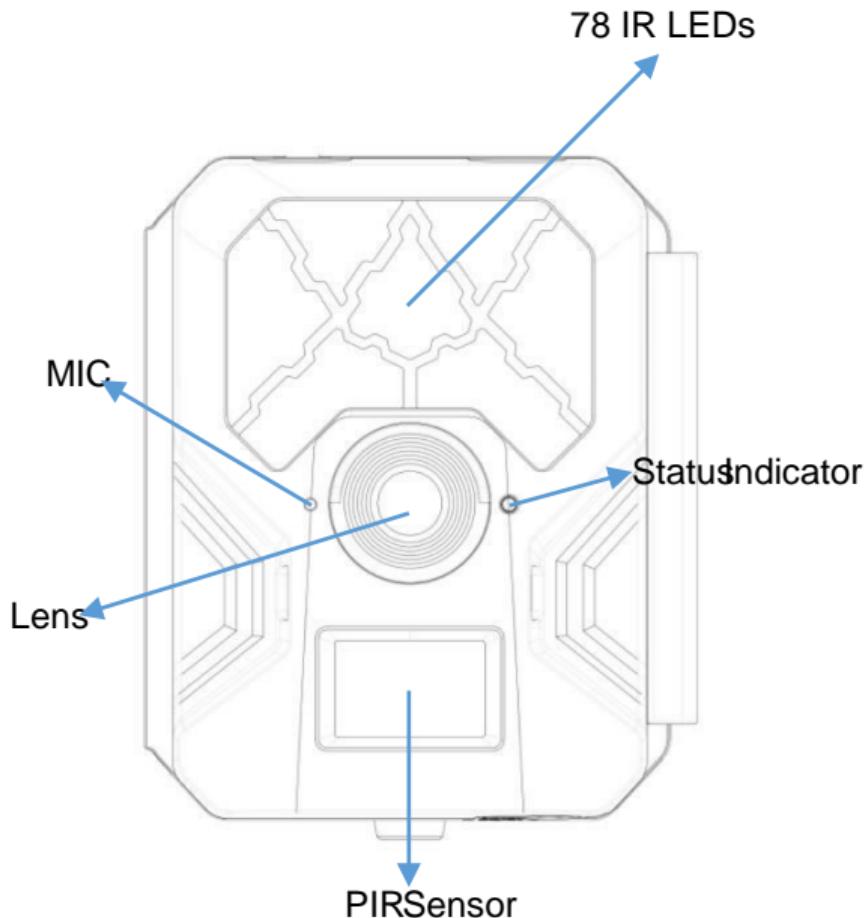
2.2 Figure 2: Bottom View of Camera;

SD Card Slot

DC in

DC 12V

Type-C Port
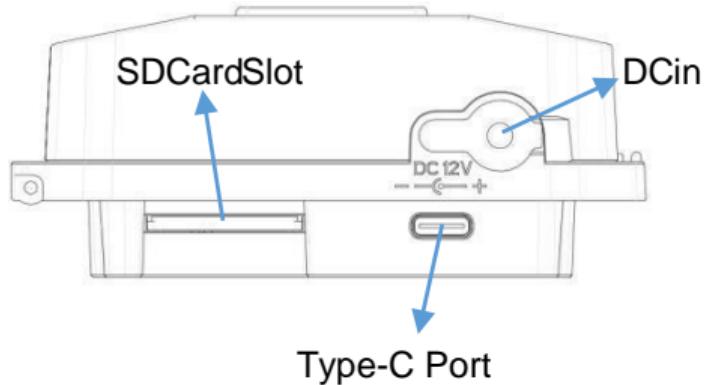
2.3 Figure 3: Internal and Side View of Camera

LCD Colorful Screen

MENU/Return key

Navigation keys/OK key

Power Switch
(ON/ OFF/ SETUP-Test Mode)

Playback
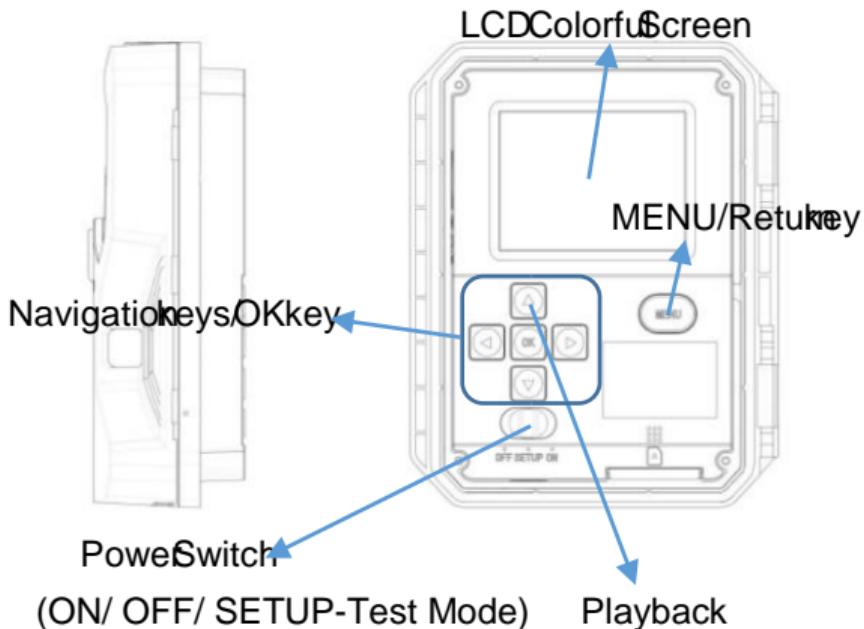
3. Introduction

Thank you for choosing one of our easy operation high quality products. Believe our camera can capture you all those extraordinary moments and targets. This 30MP HD digital camera were totally built by our diligent and smart engineers based on feedback and requirements from clients all over the world. May you enjoy much more fun with it. And we're always open-minded with willing to build new products with creative ideas from you. So please feel free to contact us for any expectations on future products.

3.1 Fully Functionality Introduction

Besides all the functions you may experience from any other similar cameras. This one is aimed to offer you stable quality product using experience with many extraordinary features, like 20 meters (65ft) invisible real night vision ability, 0.1 seconds trigger time, and up to 10 photos multiple-shot, user friendly operational menu, etc.

Key Features

1. 0.1secs trigger speed;

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2. 53° FOV lens; 60° PIR angle;
3. 30MP/1080P@30FPS;
4. 4K time lapse video;
5. Programmable 8/16/24/30 Megapixel high-quality image;
6. <u>78pcs invisible IR LEDs</u>, offer 20 meters (65 feet) real night vision distance;
7. Crystal clear day & night photo/video quality;
8. Support multiple functions: adjustable PIR sensitivity, Time Lapse, Timer, stamp of (camera ID, date/time, temperature, moon phase) on every single photo;
9. Available operation temperature: -25℃ to 60℃;
10. Built-in 2.4" TFT color screen;

3.2 Power Supply

12V power supply to ensure camera well performance of all functions

A. Batteries

Camera runs on 8AA size 1.5V batteries or 4pcs 18650 batteries.

Batteries should be inserted with correct electrodes as marked in battery case. Upside down batteries electrodes may cause device malfunction. Also, we strongly recommend changing the batteries when power icon on camera screen or photo stamp is empty.

Note: Don't mix batteries types! Different batteries to be used in camera may cause permanent damage which also violates warranty policy!

Due to different settings, objects activities within camera detection zone, different brands and quality of batteries, and using environment, etc; we're not able to list out exact number of photos and videos that camera can achieve. So given table below only shows approximate number of photos or videos camera can take with 2 different types of batteries; better performance can be given by 4pcs 18650 batteries, especially together with our solar.

i.e.: 18650: 3300mA, 3.7V; AA: 2600mA, 1.5V

Standby Time	
8pcs AA	2 years
4pcs 18650	3 years
Photo or (10Secs/Video) Mode	
Batteries Type	Record Number
IR LEDs On	
8pcs AA	8600 photos
	1500 videos
4pcs 18650	13,000 photos
	2300 videos
IR LEDs Off (Daytime)	
8pcs AA	10,000 photos
	4000 videos
4pcs 18650	15,800 photos
	6000 videos

B. Solar Panel

This camera is able to work with most standard 12V output solar panels. Solar panel can also charge the 18650 batteries installed in batteries compartment.

C. Power Adaptor——Better for Security Surveillance Purpose

This camera can also be powered by an external 12V/2A DC adapter. Recommend to remove the AA size batteries when power adapter is connected for long time using in case of acid leakage. Power adapter is recommended for security purposes.

3.3 SD Card Selection

A memory card is required to operate the camera. When the camera is "ON" and no memory card is used, the screen displays "No card". The SD slot of the camera has a 32 GB memory capacity. Before inserting or removing the memory card, the camera must be turned OFF. Failing to do so may cause loss of or damage to the pictures/videos which are recorded in the memory card. When the SD card is full, the viewing screen shows "Memory Full". The following data shows an approximate quantity of photos or videos which can be recorded by the camera depending on the memory card capacity.

SD Size	16 GB	32 GB	64 GB	128 GB
Photos				
8MP	4950	9900	19800	39600
16MP	3400	6800	13600	27200
24MP	2280	4580	9160	18320
30MP	2000	4000	8000	16000
Videos（10 Secs per Video）				
VGA	3250	6500	13000	26000
720P	650	1300	2600	5200
1080P	500	1000	2000	4000

Chart below will show you the approximate capacity of different size SD cards. Pls check to see which size card can fit your needs best.

3.4 USB Connection

When camera is connected via type-C cable; screen display "MSDC", press "OK" once, "MSDC" turns to "PC Cam", camera now can be used as a PC camera; press "Menu" again, camera exits PC camera mode.

Note: pls download a software "Ecap" or similar to view.

3.5 Attention

1. Please insert the SD card correctly, camera does not support SD card hot swap (insertion).
2. Please use high-quality AA or 18650 batteries to prevent battery cells from corrosion of leaked acid.
3. Please use compatible adaptor (12V/2A output) for external power supply, and do not invert the electrode when putting in batteries.
4. In Test mode, camera will automatically power off if with no keypad touching in 2 minute.
5. Do not interrupt power supply during firmware upgrade. Such interruption may lead you to more complicated PC software upgrade.
6. Do not frequently plug in/out SD card, batteries and DC adaptor when the camera is on.
7. Moving objects such as bushes, branches etc. in the 3M motion detection zone of cameras might cause false triggers of photos and videos.

8. Do not keep camera next to hot irrelevant objects such as air conditioner exhaust vents, and light, etc. to avoid false triggers of photos or videos.

9．Please use high quality AA batteries so as to enable camera to deliver enough amperage to IR LEDs consistently in dark environments.

10. Programmed Date/Time can be saved in camera for 12 hours after power failure as long as camera was powered 1 hour above.

4. Operation List

Setup mode, Press "Menu" once to enter camera settings page; to navigate setting interface by pressing "←", "↑", "→", or "↓", press "OK" for selection, "Menu" to exit to previous page. Note: For some settings, user needs to press " Menu" to save & exit the configuration after pressing " OK" to confirm; (Cam ID, Delay, Time Lapse, Timer, Password)

Camera

Record Mode	Photo, Video, Photo+Video
	1) Photo: camera shoots photos only based on configured Multi-shot & Image Size;
	2) Video: camera shoots videos only based on configured Video Length/Size;
	3) Photo+Video, camera shoots photo(s) first, then video upon same trigger event based on Video Length/Size and Multi-shot/ Image Size user configured;
Photo Size	8MP (3264x2448); 16MP (4608x3456);
	24MP (5632x4224); 30MP (7296*4104)
Multiple Shoot	Programmable 1, 2, 3, 10 photos per trigger

The 2 options below can only be programmable when video is ON.	
Video Size	FHL-1080P (1920*1080), HD-720P (1280*720), WVGA (640x480)
Video length	3s~59seconds, 1~10minutes

Endless Shoot	Select "ON", press "OK", camera will continue to record photos/videos by deleting earliest photos or video clips.
Shoot Lag	Select "ON", press "OK", to set a time interval between photos or videos upon motion. This option can avoid camera taking too many photos or videos. Example: Camera will wait 1 minute between photo/video recordings with

	motion if pre-set time interval is 00:01:00
	Configurable delay time: 00:00:05~17:59:59.
Time Lapse	Normal
	Choose "Normal", to set the interval; camera will shoot pics and store in SD card automatically upon the interval user set.
	TL Video
	Choose "TL Video", to set the interval; camera will shoot pics automatically upon the interval user sets and create a video with all these

	pictures & save it in SD card.
	Configurable interval: 00:00:00~23:59:59.
	OFF
TL Video Resolution	4K (4096*2160), 2K (2560x1440), 1080P (1920*1080), 720P (1280*720)
Timer 1	Select "ON", press "OK", to set the beginning time and end time (hour/minute); camera will only work during the time period user set. i.e.: 15:00 – 18:00; camera only works during 15:00 – 18:00
Timer 2	Select "ON", press "OK", to set the beginning time and end time (hour/minute); camera will only work during the time period user set. i.e.: 15:00 – 18:00; camera only works during 15:00 – 18:00

PIR Sensitivity	High, Middle, Low Higher sensitivity is 1) more sensitive to movements by smaller subjects; 2) longer detection distance; 3) easier for sensor to

	detect difference between body heat and outdoor temperature; 4) easier to trigger camera to record. In high temperature environment, body heat of subjects and environment temperature is hard to tell by camera, suggest setting High.
General	
Language	English,Deutsch,Dansk,Suomi, Portugues, 中文, 繁体中文, polski, 日本语 , Cestina, 한국어 공부 해요 ., Norge, Slovenská,русский язык, Swi

Time& Date	Set Time & Date
	Time Format: 12h or
	24h Date Format:
	dd/mm/yyyy, yyyy/mm/dd, mm/dd/yyyy
Stamp	Symbols of programmed camera ID, moon phase, temperature, date, and time on photo

Camera ID	Select "ON", press "OK", to set 4 digits/alphabets for each camera. Such function can help user to identify photos are from where and which camera.
Battery Warning	Select "ON" to enable camera to send low battery warning.
Password Protection	Select "ON", press "OK", to enable password protection for your camera; support totally 6 digits/ alphabets long password access.
Beep Sound	Select "ON" to enable camera keyboard sound.

Format Memory Card	ON→Are you sure?→Yes/No. OFF
Reset	Yes→Are you sure?→Yes/No. OFF
About	Version
FW Update	Yes/No

5. Specification

Image Sensor	5 Mega Pixels Color CMOS
Effective Pixels	2560x1920
Day/Night Mode	Yes
IR range	20m
IR Setting	78pcs LED, No glow IR LEDs
Memory	SD Card (4GB – 32GB)

Operating keys	7
Lens	F=3.0; FOV=53°; Auto IR-Cut-Remove (at night)
PIR Angle	60°
LCD Screen	2.4" TFT, RGB, 262k
PIR distance	20m (65feet)
Photo size	8MP/16MP/24MP/30MP
Picture Format	JPEG
Video resolution	FHD (1920x1080), HD (1280x720), WVGA(640x360)
Video Format	AVI
Video Length	03-10sec. programmable for wireless transmission;

	05-59sec,1~10mins programmable for local storage;
Multiple Shoot	1, 2, 3, 10 photos per trigger
Trigger Time	0.1s

Trigger Interval	5s
Photo + Video	Yes
Time Lapse	Yes
Endless Shoot	ON/OFF (SD Auto Cycle)
Operation Power	Battery: 12V; DC: 12V/1~2A
Battery Type	8AA/ 4pcs 18650 optional Please don't mix both into camera.
External DC	12V/1~2A
Stand-by Time	2~3 years
Auto Power Off	In Setup mode, camera will automatically power off in 2 mins if there is no keypad touching.
Interface	Type-C/SD Card/SIM Card/DC Port
Mounting	Strap; 1/4-20 Trip Mount

Operating Temperature	-25°C to 60°C
Storage temperature	-30°C to 70°C
Operation Humidity	5%-90%
Waterproof spec	IP66
Dimensions	127.5x103x78.9mm
Weight	310 g
Certification	CE FCC RoHs

6. Trouble Shooting

6.1 Photos Do Not Capture Subject of Interest

1. Check PIR sensitivity parameter setting. For warm environmental conditions, set PIR sensitivity to "High" and for cold weather use, set the PIR sensitivity to "Low".

2. Mount your camera in areas where no heat resources are in the camera's field of view.

3．In some cases, set the camera near water will make the camera take images with no subject in them. Try to aim the camera over ground.

4．Try to set camera on stable and immovable objects, i.e.: large trees.

5．At night, motion detector may detect beyond range of the IR illumination. Reduce distance setting by adjusting sensor sensitivity.

6．Rising sun or sunset can trigger sensor. Camera must be reoriented.

7．If person/animal moves quickly, it may move out of the camera's field of view before photo is taken. Move camera further back or redirect camera.

6.2 Camera Stops Taking Images or Won't Take Images

1．Please make sure that the SD card is not full. If the card is full, camera will stop taking images. Recommend users to turn on Endless Shoot to avoid such situation.

2．Check batteries to make sure that camera has enough power to work.

3．Make sure that camera power switch is at "On" position and not at "OFF" or "Setup" positions.

4. Please format camera SD card before using or when camera stops taking images.

6.3 Night Vision Flash Range Doesn't Meet Expectation

1.　　Please check to make sure that batteries are fully charged or left power is enough;

2.　　Recommend to use High-quality 8AA batteries or 4pc 18650 batteries to deliver enough amperage to IR LEDs consistently for better flash range in dark environments;

3.　　To ensure accuracy and quality of night time image, please mount camera to dark environment without any obvious light sources;

4.　　A certain surroundings (like trees, walls, ground, etc.) within flash range can get you better night time images; please do not aim camera to total open field where there is nothing within IR flash range to reflect flash back; it's like shinning a regular flashlight into sky in night, you just can't see anything; same does camera.