

Without written authorization from Zhongshan Yueguang Intelligent Imaging Technology Co., Ltd., any form of complete or partial replication of this manual is strictly prohibited (except for simple quotations for article or comment evaluation purposes).

November 2023



Smart Camera Box Installation and use manual

Universal version



Zhongshan Yueguang Intelligent Imaging Technology Co., Ltd.,
Address: Room 306, C area, 3rd floor, Building 7, Zhangqi Technology
Incubator, No.70 Zhongshan Gang Road, Torch Hi-tech Industrial
Development Zone, Zhongshan City.
Official Address: NO.10 Yiwei Road, Torch Hi-tech Industrial Development
Zone, Zhongshan City, Guangdong Province
Post code: 528437
Phone No.: 0086-0760-89878172
Website: <http://www.ueleret.com.cn>
© 2023 Ueleret Smart Image Technology Co.,Ltd.



* Camouflage stickers and stone-styled shell are optional, please choose according to the usage scenario.

Content

Chapter 1 Structure Diagram of Smart camera box	
1. Structure Diagram of Smart camera box.....	1
2. Main controller box interface diagram.....	3
3. Shooting function setting screen [Pai Pai Bao].....	3
4. Light Sensing System.....	4
Chapter 2 Smart Camera Box Installation	
1. Installation method of Smart camera box.....	5
2. Connection method of Power cable.....	6
3. Installation method of digital camera.....	6
4. Installation method of cables of digital camera.....	9
5. Installation method of trail camera.....	10
6. Installation method of tripod.....	11
7. Installation method of leveling Feet.....	13
8. Installation method of lens weather plate.....	14
9. Smart camera box drawstring fastening and hoisting.....	14
10. Installation of Simulated Stone-Styled shell (Optional).....	15
Chapter 3 Trail Camera Setting Instructions	
1. Trail Camera Introduction.....	17
2. Trail Camera Setting.....	18
3. Description of trail camera trigger sensing features.....	19
Chapter 4 Power Specifications and Maintenance of Smart camera box	21
Chapter 5 Product Specifications and technical parameters	24
Chapter 6 Tips for using Smart camera box	
1. Smart Camera Box Initialization Time.....	26
2. Shooting mode of control box and Camera must be same.....	26
3. Problems when the digital camera heats up during video recording.....	26
4. Precautions of installing the device.....	27
5. Adjustment of the trail camera sensing angle.....	27
Chapter 7 Safety Precautions	27
Chapter 8 Suggestions on anti-theft measures of the product	29
Chapter 9 Product Certifications and Compliance	30

Preface

Thank you for your trust and choosing the UELERET Smart Camera Box.

The Smart Camera Box is an unprecedented shooting system, When the Trail Camera senses the animals showing up, the Smart Camera Box controller system can receive the information from the Trail Camera, and commands the digital camera to take photos or videos.

The Smart camera box can upgrade your camera, and both commonly used and infrequently used cameras in your hands can have automatic shooting functions. Multiple cameras, multi-angle arrangement, and fully automatic shooting method can be used to shoot wild animals and human activities. Create novel, colorful and touching works.

The Smart Camera Box had innovated the Trail Camera. Digital Camera can take high-definition and high-pixel images, to meet photographers' increasing demands . This can solve the problem that the photos taken by the Trail camera are not clear enough and the video pixels are too low.

The Smart Camera Box is a shooting system that works all day. During the day time, the digital camera and the Trail camera work together. But at night, the Trail camera continues to work, monitoring the animals that have appeared in front of equipment, and bring valuable information to the photographer.

The Smart Camera Box can automatically command the digital camera to start up and shutdown through the light sensing system when the day and night change, to reduce the power consumption and improve the shooting efficiency of the camera, extends the working time of camera when outdoor shooting. Connect to the shooting function setting screen[Pai Pai Bao], can set the shooting functions of Smart Camera Box, and the shutdown time and start up time of digital camera, to meet your special requirements for shooting time.

The Smart Camera Box can connect with the flash lamp, so that the digital camera can shoot photos automatically at night. If an independent light is added, video can also be recorded automatically at night.

With a sealed multi-layer coated high-transmittance glass cover, the Smart Camera Box can meet the stringent requirement for the device placed outside for a long time. Also can use the dust and rain proof cover without glass cover, for installing more types of lens, to meet the needs of shooting different pictures.

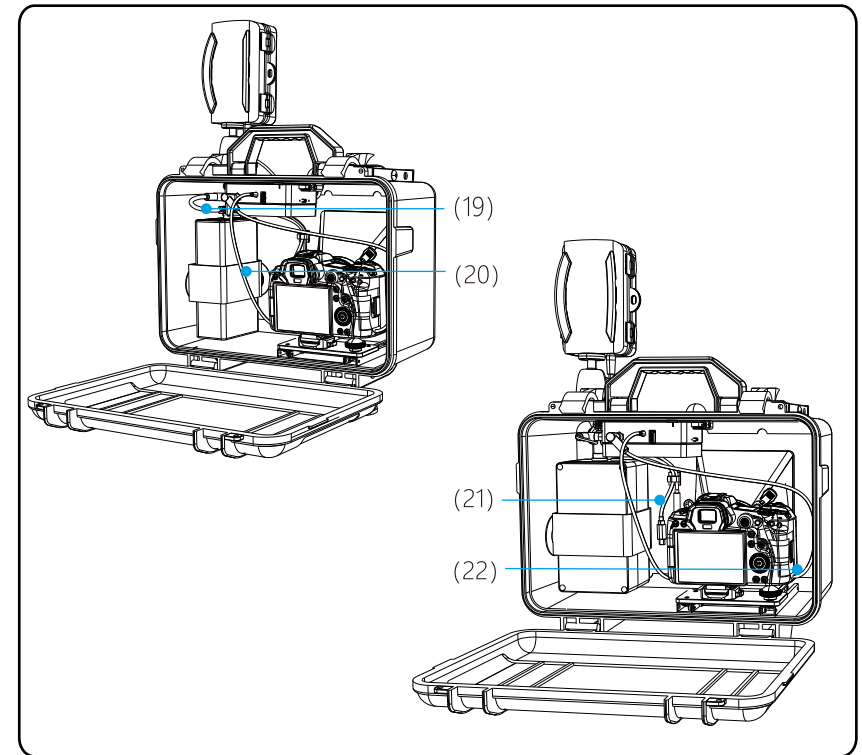
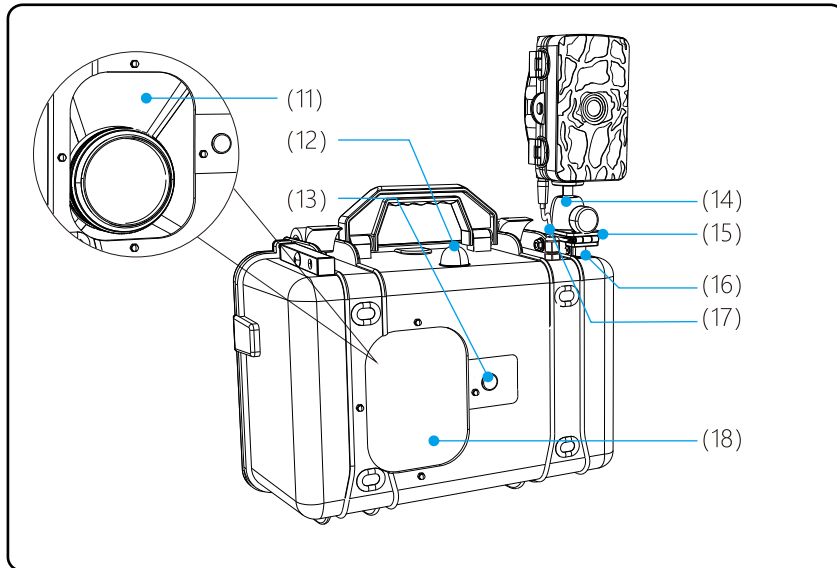
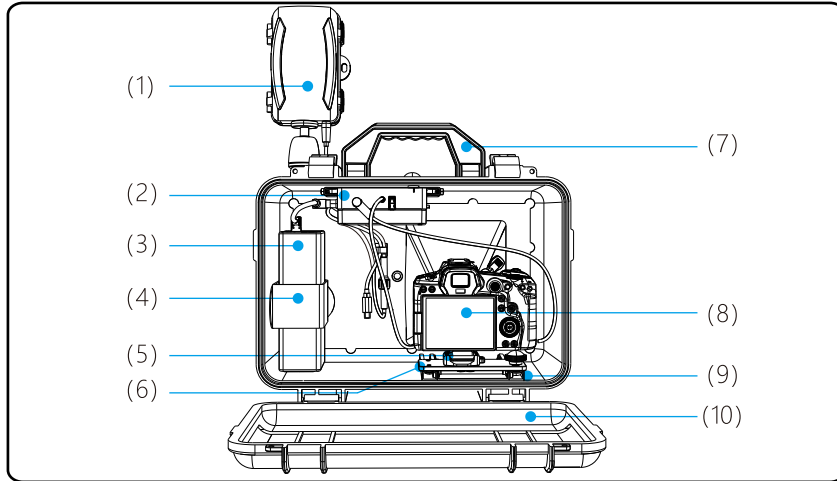
The Smart Camera Box offers various power supply solutions to meet the endurance requirements for outdoor photography.

The box is designed with a simulated stone-shaped shell, installed on the Smart Camera Box. This design allows it to blend into the environment more quickly and effectively, increasing concealment. Animals won't sense any abnormality in the surroundings, adapting rapidly.

Please read this manual carefully for detailed information.

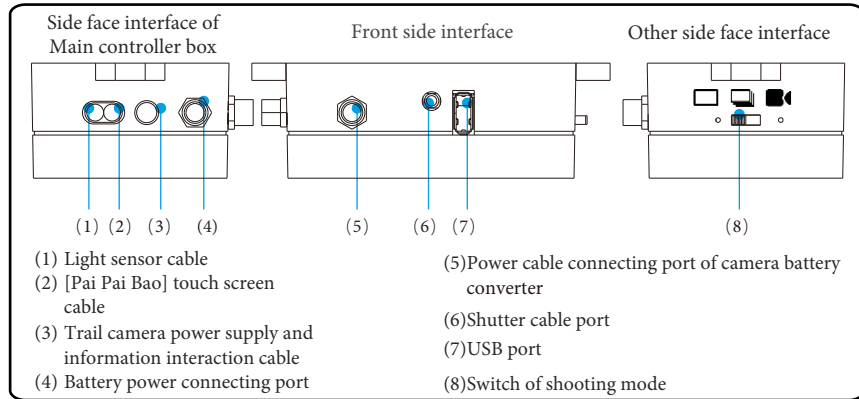
Chapter 1 Structure Diagram of Smart camera box

1. Structure Diagram of Smart camera box



- | | | |
|--|--|--|
| (1) Trail Camera | (12) Light sensor | (18) Multi-layer coated high-transmittance glass rain cover (Optional) |
| (2) Main controller box | (13) PC connecting port (Flash connecting port) | (19) Camera Power cable |
| (3) Standard Battery | (14) Small panoramic ball head | (20) Shutter cable |
| (4) Battery fixing rope | (15) Trail camera support base | (21) [Pai Pai Bao] touch screen connecting cable |
| (5) Camera quick release clip | (16) Square Mouth Sleeve supporting Tube of Trail Camera | (22) Camera battery converter(inside the camera battery compartment) |
| (6) Camera support Base | (17) Trail camera power supply and information interaction cable | |
| (7) Carrying handle | | |
| (8) Digital Camera (Not included in product sets) | | |
| (9) Slide rail | | |
| (10) Cover of Smart camera box | | |
| (11) Stray light reduction mask | | |

2. Main controller box interface diagram



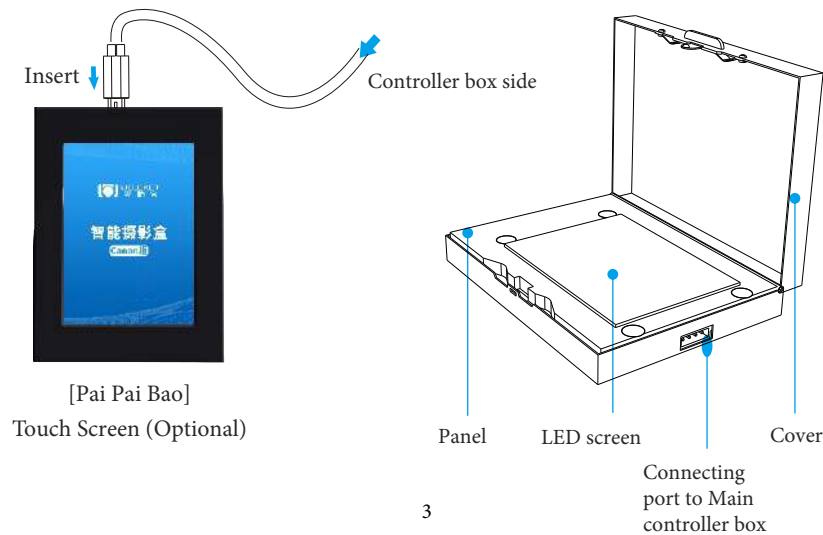
The switch has 3 options: single shot, continuous shot, video recording

Single shot: The camera set to shoot single image.

Continuous shot: The camera set to High-speed continuous shot and low speed continuous shot.

Video recording: The camera set to video mode.

3. Shooting function setting screen [Pai Pai Bao] Diagram (Optional)



Connect the Shooting function setting screen [Pai Pai Bao] touch screen to the main controller box, can set the shooting functions, and the startup time and shutdown time of digital camera.

4. Light sensing system

Light sensing system, a highly sensitive light sensor, can sense the light intensity of the shooting environment in real time.

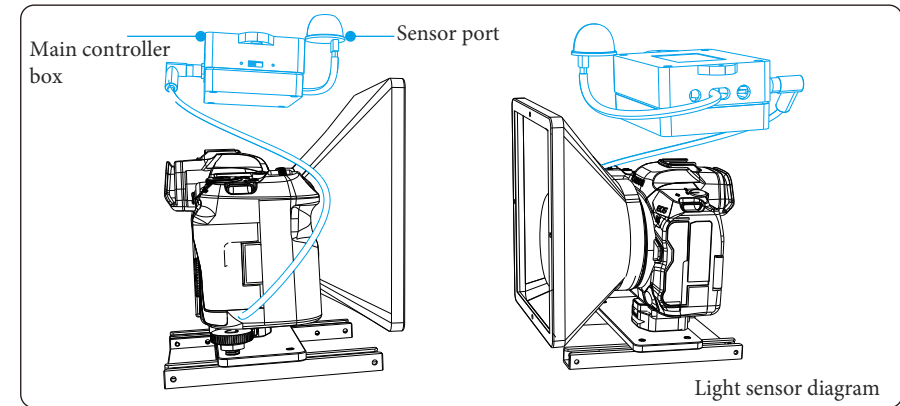
The Smart Camera Box automatically controls the shutdown and startup of the digital camera through the light sensing system when the changing of day and night cycle. The digital camera will automatically start up when the light meets the brightness required by the digital camera, and the camera will automatically shut down when the light is insufficient to meet the brightness required by the digital camera.

Special tips:

- (1) Shutdown of camera means that the Smart camera box stops supplying power to the camera, and it does not mean that the camera hibernates by the power saving function setting.
- (2) It is necessary to observe the surrounding environment when placing the Smart camera box, and avoid the light sensor being in a shading position. The position of the light sensor should be able to be well illuminated by the light source.
- (3) The shutdown time and startup time of digital camera can be set by the external [Pai Pai Bao] touch screen device.

Light Sensing System Settings

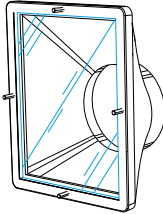
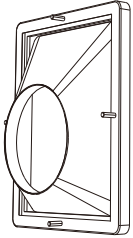
- 1, The light sensor value has been set by manufacturer and cannot be changed.
- 2, This value, is equivalent to the brightness of light about 30 minutes after sunset.



Chapter 2 Smart Camera Box Installation

1. Smart camera box installation method:

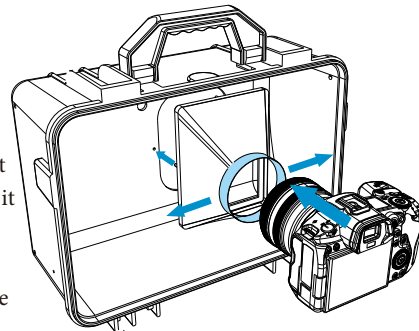
The installation method of the weather shield

Glass rain cover (Optional)	Rain cover without glass
 <p>The lens inside the Smart camera box, and the glass seals the box. Suitable for the installation of fixed focus and short lens.</p>	 <p>The lens extends out of the Smart camera box, and the weather shield can protect the lens from getting wet from the rain.</p>

These two types of products can be used separately according to the size of the lens and the needs of shooting.

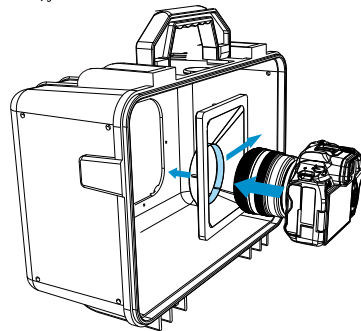
(1).The installation method of the rain cover with glass (Optional)

Align the four screws of the rain cover with glass with the four holes of the Smart camera box, insert and tighten their screw caps outside the box to fix it on the Smart camera box. Pushing the digital camera into the clip, then stretch the elastic bands of the extinction cover to the two sides to cover the lens.



(2).The installation method of the rain cover without glass.

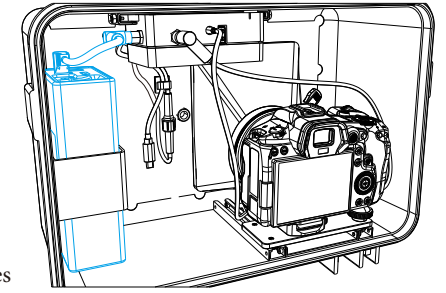
Align the four screws of the rain cover without glass cover with the four holes of the Smart camera box, insert and tighten their screw caps outside the box to fix it on the Smart camera box. Pushing the digital camera into the clip, then stretch the elastic bands of the extinction cover to the two sides to cover the lens.



2.Power cable connection method

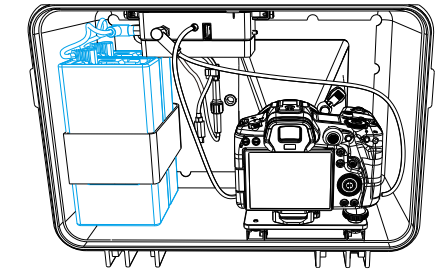
(1). Connecting method of one piece of battery

When connecting one piece of battery, insert the port with the aviation plug of the power cable into the corresponding aviation port of main controller box, and insert the port of other side into the output port of the battery.



(2). Connecting method of two pieces of batteries

Connecting two pcs of batteries , need a double-ended parallel power cable (Optional), Insert the port with the aviation plug of the power cable into the port of the aviation plug of controller box, and the other side with two ports, insert into the output ports of two batteries.



(3).Instruction of using requirement

- Both two pieces of batteries must be of same model.
- oth two pieces of batteries must be fully charged
- Both two pieces of batteries need to be roughly equally used. Cannot use at the same time if their usage times are too different (For example, one piece of battery has been used for more than one year, but the other piece is new battery)

3.Installation of digital camera

(1). Installation method of camera battery converter

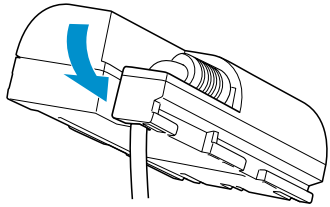
The camera battery converter, installed in the digital camera, and connected to the control box. Use the own battery of digital camera, which cannot guarantee the long-term battery life.

Use the Smart camera box power supplier to power the camera to meet the battery life requirements. Ueleret developed the camera battery converter.

One camera battery converter is included as standard. Other models are additionally ordered, you need to choose appropriate camera battery converter according to the camera model.

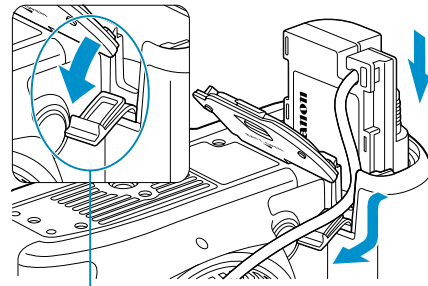
Take the installation of a small camera battery converter as an example

- a. Insert the cable of camera battery converter into the groove, and taking care not to damage the cable.



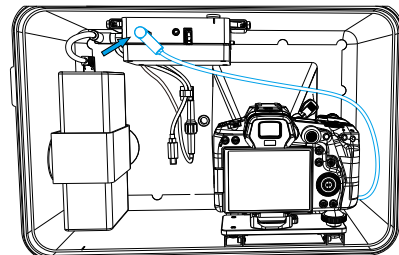
Note: The wires should be placed inside the rubber cover before closing the battery compartment.

- b. Open the battery compartment cover and open the wiring hole cover of camera battery converter, insert firmly until it can be locked, then thread the cable through the hole and close the hatch.



Cable hole for camera battery adapter

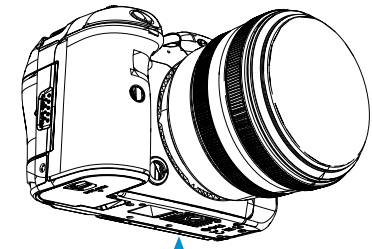
- c. Connect the digital camera battery converter to the camera power port on the main controller box



- (2). Installation of camera quick release clip.

In order to facilitate the quick disassembly and assembly of the camera, there is a quick-release clip attached in the Smart camera box.

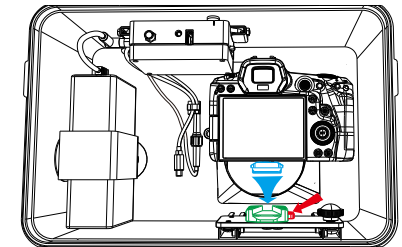
- a. Screw the connector into the screw hole at the bottom of the digital camera.



Quick release clip

- b. Align the connector with the connection base at the bottom of the Smart camera box, push it into the end, and the digital camera will be firmly locked in the Smart camera box.

- c. When disassembling the camera, just need to press the button below the clip (pointed by the red arrow) inward (in the direction of the red arrow), and the camera can be pushed out from the clip.



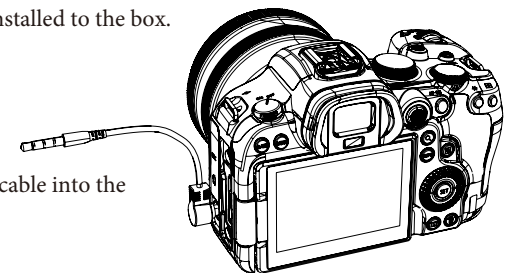
Note: when work with the glass cover, the total length of camera body + the length of the lens, cannot exceed 168 mm.

- (3). Installation method of digital camera cable

The cable needs to be installed before putting the digital camera into the Smart camera box, so as to avoid that it is not easy to observing that whether the cable is installed well or not in the limited space after the camera installed to the box.

- a. The shutter cable.

Install the shutter cable, insert the shutter cable into the corresponding port of the camera.



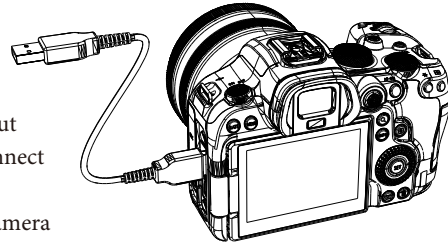
b. Installation of USB wire

Install the USB wire, insert one end of the USB cable into the USB port of the camera.

Note:

(1)The digital camera must have the function of USB power supply, and the digital camera without USB power supply function does not need to connect the USB cable.

(2) After connecting the USB cable, the digital camera will not enter the hibernation mode .Even if the power saving function is set, the digital camera will not enter the hibernation mode too.



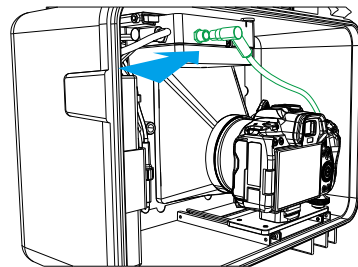
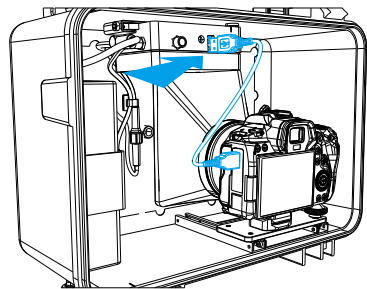
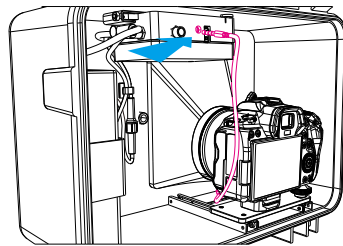
4. Connect with the main controller box

Insert the connecting wires of digital camera into the corresponding ports of the main controller box to complete the connection.

(1). Connect the shutter cable of digital camera to the corresponding port of camera and main controller box.

(2).Connect the USB cable of digital camera to the corresponding port of camera and main controller box.

(3).Connect the power cable of digital camera battery converter into the corresponding port of main controller box, so that can provide power for digital cameras through the control box.



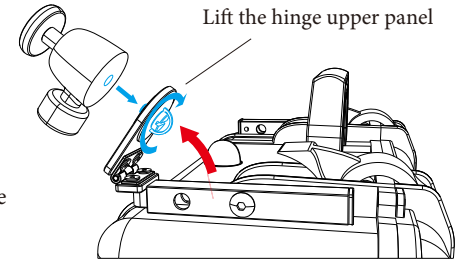
(4). After connecting the power cable of standard battery or large capacity battery and main controller box, turn on the power switch on the battery.

5.Installation method of trail camera

There are two different positions for installation of the trail camera, which can be installed in different positions according to the needs of different use environments.

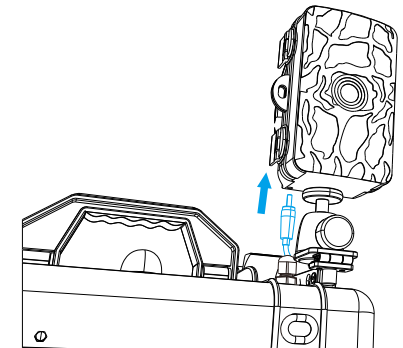
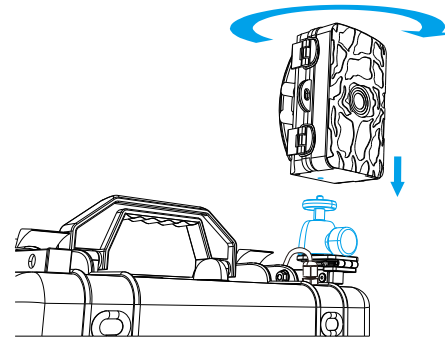
Position 1: On the top of Smart camera box

(1). Installation of small ball head gimbal Screw up the upper plate of the hinge of the trail camera installation assembly, make the screw hole at the bottom of the ball head face the thumb screw on the hinge, and tighten the screw clockwise, to fix the ball head on the installation assembly.



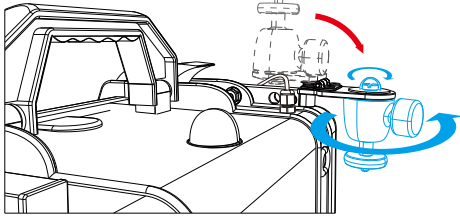
(2) Installation of trail camera Align the screw on the bottom of the trail camera with the screw on the small ball head gimbal and tighten clockwise, adjust the angle,tighten the knob on the side of the small head of the ball head to fix the direction.

(3). Installation of power supply and information interactive cable of trail camera After installing the trail camera, insert the power supply and information interactive cable into the external power supply socket at the bottom of the trail camera.



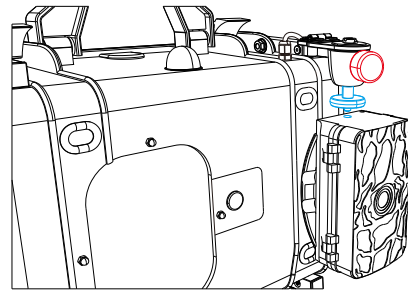
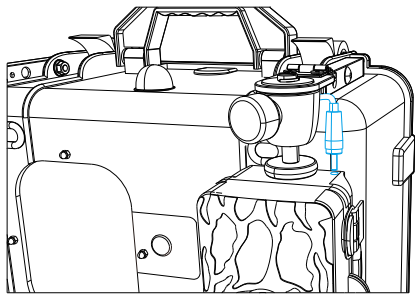
Instructions of installing on the top of the Smart camera box : The trail camera can rotate in any directions to sense animals in advance. However, when encountering animals collisions, the trail sensing may move its position and direction, resulting in inaccurate sensing of animals. Please judge whether to install it here according to shooting needs and the shooting targets.

Position 2 : The front side of the Smart camera box



(1) Adjust the position of the small ball head gimbal.

Turn the upper hinge plate of the trail camera support assembly to the horizontal state in the direction of the red arrow, the position of the small ball head gimbal is at the lower part of the hinge, loosen the thumb screw, and the ball head will turn 180 ° (the side nut faces outside), retighten the thumbscrews.



(2). Installation of Trail camera

Loosen the knob on the side of the small ball head gimbal (red), put the screw on the bottom of the trail camera against the screw on the top of the small ball head gimbal, and turn the upper hand-tightened nut (blue) counterclockwise to tighten the trail camera. After adjusting the direction, tighten the side knob of small ball head gimbal (red).

(3). Installation of Power supply and information interactive cable of Trail camera

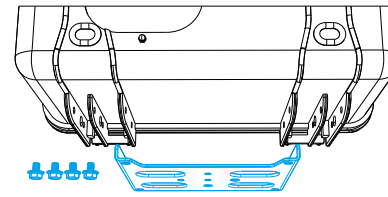
After the Trail camera is installed, insert the power supply and information interactive cable into the external power supply socket at the bottom of the Trail camera to complete the connection between the Trail camera and the controller

Instructions for installing on the front of the Smart camera box : After installing here, the Trail camera will not move its position and direction when encountering an animal collision. But the direction of the Trail camera lens cannot be adjusted. Please judge whether to install it here according to the shooting needs and the shooting targets.

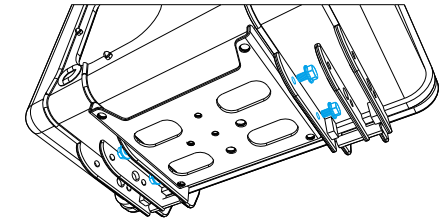
6. Installation of the tripod

The bottom of the smart camera box is designed with a tripod support plate (optional). The Smart camera box can be put on the ground directly, also can be mounted on a trip according to shooting height requirements. It can be supported by tripod, but need to be connected with the support plate.

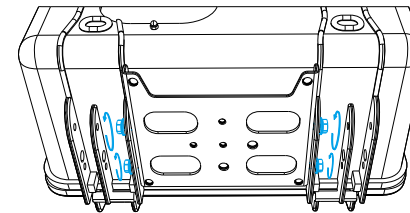
(1). Installation of tripod support plate



a, Take out the tripod support plate and the four mounting screws, and snap the support plate in between the two protruding edges at the bottom of the box body.



b. Align the four screw holes on both sides of the support plate with the corresponding holes on the protruding edge at the bottom of the camera box body. Then the screws are screwed in clockwise from the outside to the inside, and the support plate is fixed on the bottom of the camera box body.



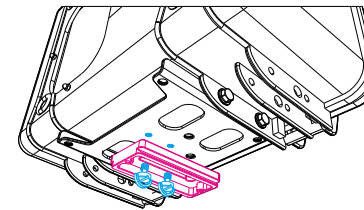
c. Fasten the tripod support assembly by tightening the four screws clockwise

(2). Installation of the tripod

There are two specifications of screw holes on the support plate: three 1/4 screw holes and two 3/8 screw holes, which can meet the screwing needs of different screws on the tripod.

Installed on a tripod with head and quick release plate.

Using a tripod with a head, after the installation, the Smart camera box can be rotated 360 degrees on the tripod, making it easy to choose a suitable shooting direction.

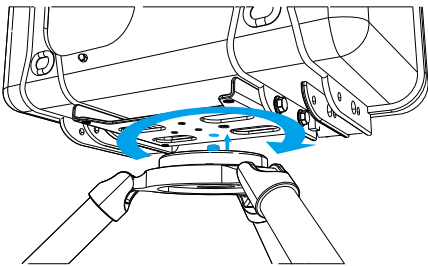
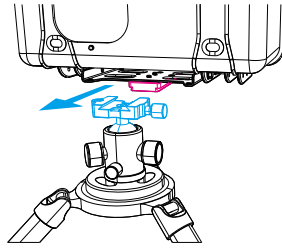


a. Take out the quick release plate on the tripod, and tighten the quick release plate on the 1/4 screw hole of the support plate through the hand screw to connect the fast release plate and the support plate.

b. To mount the Smart camera box together with the quick release plate on the head of the tripod.

Mounted on a tripod without head

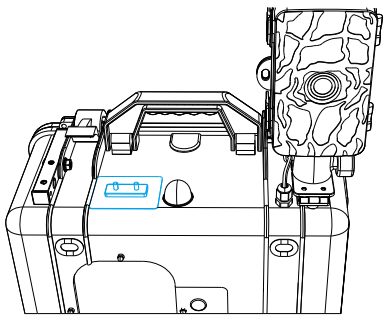
Use a tripod without a head. After the installation is complete, the Smart camera box cannot be rotated on the tripod, and the direction can only be adjusted by rotating the tripod.



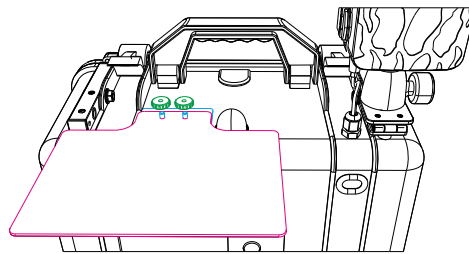
The 3/8 screw on the top of the tripod is directly screwed into the corresponding 3/8 screw hole on the support plate under the Smart camera box and tightened.

7. Installation of lens rain shield (Optional)

Installing a rain shield can effectively reduce the occurrence of rainwater getting wet on the lens and glass cover.



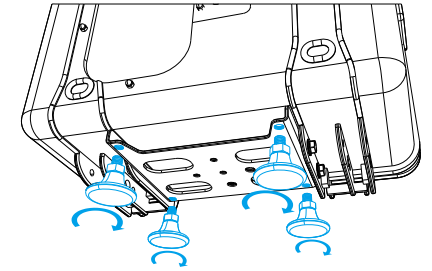
(1). Take out the non-perforating plastic adhesive sheet on the lens weather plate, tear off the back protective film, paste it on the top plane of the camera box, and press it with your fingers to expel the air bubbles inside.



(2). Insert the two holes on the metal rain shield against the screws on the adhesive sheet, and tighten the two thumb nuts respectively to complete the installation.

8. Installation of Support Feet (Optional component)

Align the screws of the four fixed support feet with the screw holes at the four corners of the support plate already installed on the bottom of the Smart camera box. Rotate them clockwise to complete the installation.

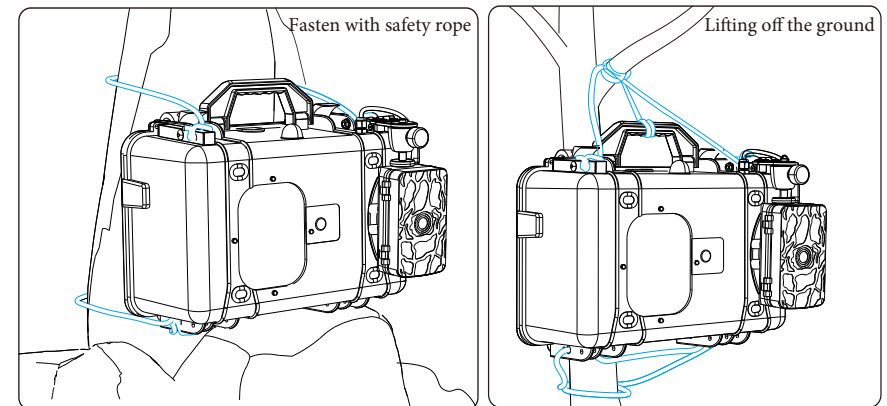


Note: Installing the support feet facilitates equipment adjustment with the box cover fully open. If you need to capture shots from an ultra-low position, simply remove the support feet.

9. Smart camera box drawstring fastening and hoisting

The Smart camera box reserves 4 safety rope installation holes (two on the top and two on the bottom). When the Smart camera box is placed on a rough place, the camera box can be fixed through the installation holes through the safety rope; When it needs to be hoisted at a position away from the ground, it is also hoisted and fastened by ropes. At the same time, the carrying handle on the top of the box is also a place where the safety rope can be installed.

The installation method is shown in the figure below:



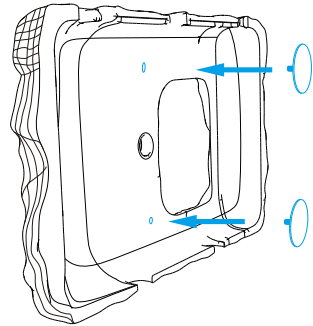
10. Installation of Simulated Stone-Styled shell (Optional)

If the Smart camera box can be blended more seamlessly into the environment, it will significantly reduce disturbance to the subjects being photographed, lowers their alertness, and allows wildlife to appear in front of the digital camera in a more natural state. We've designed a simulated stone-styled shell for the Smart camera box. The shell is easy to install and disassemble.

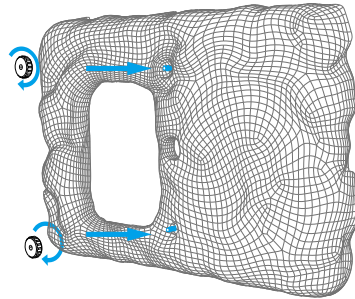
The installation process is shown in the diagram below:

(1). Installation of invisible screws (Using the front of the stone-styled shell as an example)

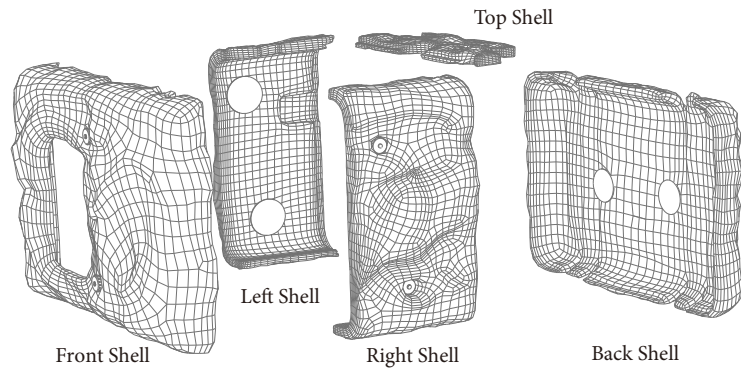
a. Insert the screw of the invisible screw sticker into the installation hole reserved on the stone-styled shell's plastic base.



b. Screw the hand-tightened nut into the screw stick to make the screw sticker base adhere to the stone-styled shell.

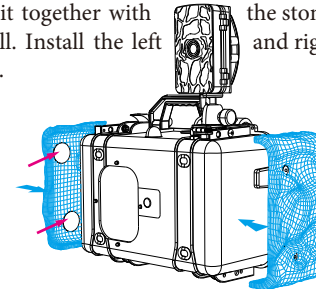


c. Using the same method, install the invisible screw stickers on all the other stone-styled shells.

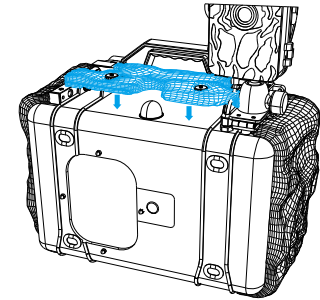


(2). Installation on the Smart camera box

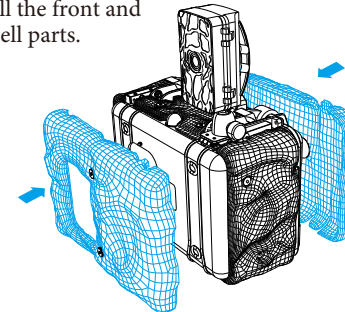
a. Peel off the protective film from the adhesive of the invisible screw sticker. Align it with the corresponding panel on the smart camera box and stick it together with the stone-styled shell. Install the left and right shells first.



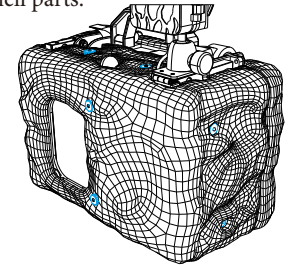
b. Install the top shell part.



c. Install the front and back shell parts.

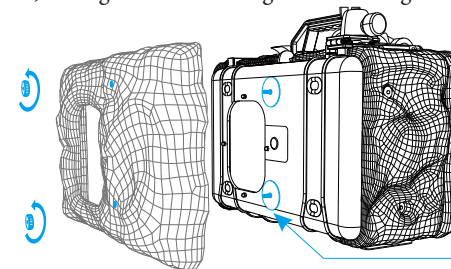


d. One by one, press the stone shell parts and adjust the hand-tightened nuts to ensure a tight fit and secure connection of the four shell parts.



(3). Disassembly and Reuse of the Stone-Styled Shell

The stone-styled shell can be easily disassembled and reused when no longer needed. The method is as follows: Unscrew the hand-tightened nuts from the screw stickers, and then pull out the stone shell along the direction of the screw (start by disassembling the front and back panels first). Keep the adhesive base of the invisible sticker attached to the smart camera box. When you need to reuse it, align the holes on the stone shell with the screw sticker's screw, insert it, and tighten the hand-tightened nuts again.



After the initial attachment, the plastic base of the invisible sticker remains on the box.

Chapter 3 Setting instruction of trail camera

1. Introduction of trail camera

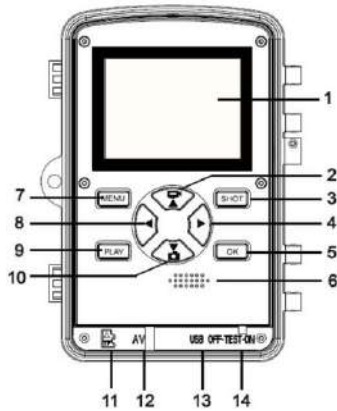
When using the Smart camera box, the main function of Trail Camera is to sense animals and transmit the information to the controller system of Smart camera box, then the controller system commands the digital camera to capture.

Therefore, in order to ensure that the digital camera can quickly enter the shooting state, The trail camera can use individually, just need to operate according to the instructions of trail camera. The using and setting of trail camera, pls read the instruction of trail camera.

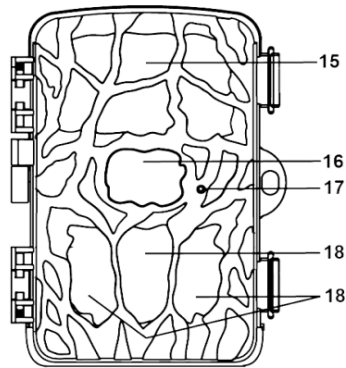
This manual only introduces the using of Trail camera briefly, and focuses on the corresponding setting requirements to meet the effective shooting of digital camera.



(1). Overview of trail cameras



- 1. Display Screen
- 2. Up/Video Button
- 3. Shot Button
- 4. Right Button
- 5. OK button
- 6. Speaker
- 7. Menu Button
- 8. Left Button
- 9. Playback Button
- 10. Down/Capture Button
- 8. Micro SD Card Slot
- 9. AV Port



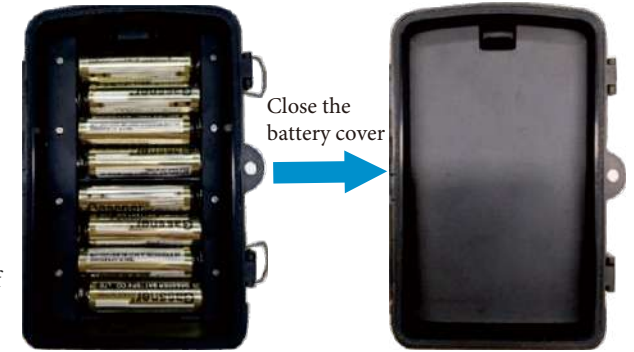
- 13. USB Port
- 14. OFF-TEST-ON Buttons
- 15. Infrared LEDs
- 16. Lens
- 17. Status Indicator
- 18. PIR Sensor

(2). Basic operation of trail camera

a. Battery installation

Please insert the batteries before using the camera (batteries are not included)

*Open the camera case and remove the battery cover, insert 4 pcs or 8 pcs of 1.5V AA batteries, and make sure the electrode is correct.



b. Insert a memory card

This product has no built-in memory, please insert a TF card before using. The camera will not save any data without a TF card.

*Support Micro SD Card, up to 512Gb, It is recommended that the capacity of the memory card is sufficient for storage during the shooting time, and users are advised to use a high-speed card of level 6 or above.

*Do not insert the memory card, please refer to the marking on the camera.

*When the capacity of memory card is full, the camera will stop recording automatically and the LED light will be off.

*Press the edge of the card gently to pop-up the memory card.

2. Settings of the trail camera

(1). The trail camera must be used after inserting the batteries, 4 or 8 pieces of batteries are acceptable.

Operation steps for Trail camera to work:

Every time turning on the Trail camera, you need to toggle the mode switch o the Trail camera.



Switch mode button from OFF to TEST , the picture taken by the lens will appear on the LCD screen (Press the Menu button to open the setup menu). Switch mode Button to ON, the number “15” will appear on the LCD screen, until the “0”, the LCD screen will be black, then close the cover of trail camera, it starts to work.

If the switch mode button from OFF to ON directly, the number “15” will appear on the LCD screen, until the “0”, the LCD screen will be black, then close the cover of trail camera, it starts to work.

(2). The trail camera must be used with memory card

The trail camera will not start work without the memory card, and the digital camera will continuously shoot.

(3). Setting requirements of trail camera.

- a. Working mode setting can only be set to photo mode.
- b. [photos in series] Options: 1 photo, 2 photos in series, 3 photos in series(up to 3 photos in series)
- c. [Shot lag] set to 5 seconds , to make sure the trigger frequency of trail camera is the fastest.
- d. [Side motion sensor switch] set to ON.
- e. [Target recording time]/ [Time Lapse]/ [Endless Capture] all set to OFF, (must set as this)

(4). Test rule description of trail camera trigger induction frequency.

There is a time interval between the trail camera sensing the animal for the first time to enter the working mode to the second sensing trigger, during this interval the Trail camera will not preform a second sensing even if it is always within the sensing range of the Trail camera.

3. Description of the trail camera trigger sensing features

(1). The trail camera trigger sensing features

- a. The trail camera triggers by sensing the difference in temperature changes.
- b. It is sensitive to the temperature difference of objects moving laterally, but not sensitive to the temperature difference of objects moving vertically. It can be understood that when moving laterally, the temperature difference reaction area is large and it is easy to be sensed. When moving vertically, objects with temperature have almost no difference in surface temperature, so they are not sensed. Only at close range can it be sensed.
- c. The hotter the weather, the smaller the temperature difference and the shorter the sensing distance. At this time, the sensitivity of the infrared camera should be set to medium
- d. When the temperature is high, it may be sensed when there is wind blowing, because the heat flow moves at this moment, resulting in a temperature difference with the environment. When there is no wind, it is difficult to be sensed because there is no temperature difference with the environment. This is what photographers often call false triggers when using the trail cameras.

e. When the weather is colder, objects with temperature appear, and the temperature difference changes greatly, which is easy to be sensed. At this time, the sensing distance is relatively far. Of course, there are also low temperature limits.

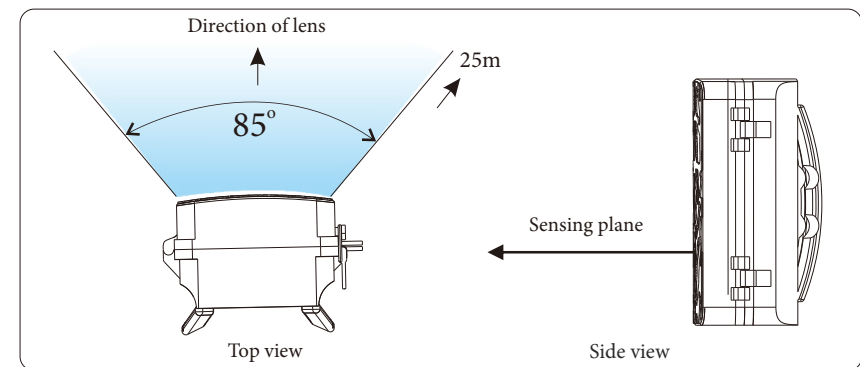
f. Trail cameras typically cannot detect cold-blooded animals (such as snakes, lizards, amphibians, and fish). However, during midday with an intense sunlight, the elevated temperature of these cold-blooded animals may trigger the trail camera. Another possibility is that when cold-blooded animals pass by, the presence of small animals in the vicinity may also trigger the trail camera to capture images.

(2). The detection standard of the trail camera is to test in a 22℃ environment

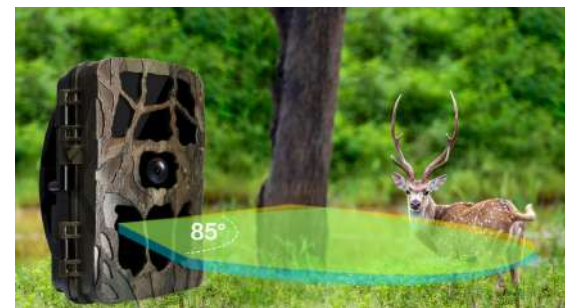
The sensing distance of the trail camera used in the Smart camera box is 25 meters, which is the result of the test with the trail camera at a height of 1.1 meters in a 22℃ environment. However, in a high-temperature environment, the sensing distance may be shorter, and the higher the ambient temperature, the shorter the sensing distance.

(3). Description of trail camera sensing angle

The PIR sensing angle of the trail camera is 85°, which refers to the fan-shaped area of 42.5° to the left and 42.5° to the right perpendicular to the lens axis in the horizontal direction, a total of 85°, as shown in the figure below:



The sensing area :



Please determine the height and angle of the trail camera erection according to the direction of the camera, the height of the animal and the way it appears. According to the needs of shooting, purchase an extended trail camera data cable, and the trail camera can be erected at a position away from the Smart camera box. There are 2m, 5m, and 10m trail camera data cables for purchase.

Chapter 4 Power Specifications and Maintenance

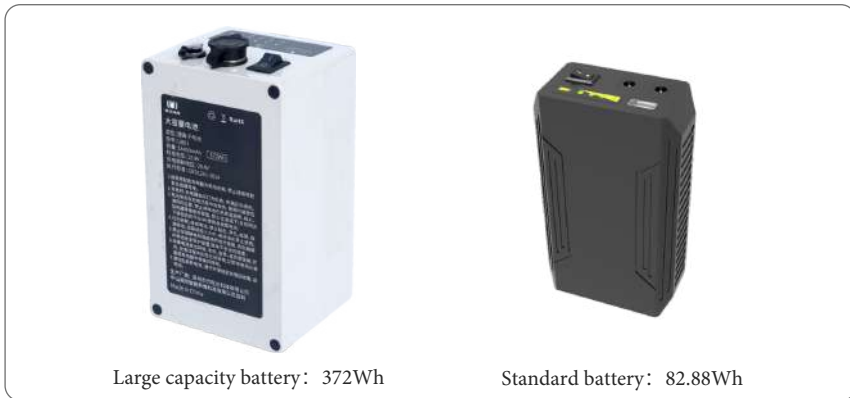
1. Battery specification parameter list

UB01 Large capacity battery

Type : Rechargeable Lithium-ion Battery	Capacity: 372Wh
Nominal voltage: 25.9 V	Charging Voltage: 29.4 V
Charging current: Standard charging 0.2C	Charging Time: Standard charging 6 hours.
Fast charging 0.5C	Fasting Charge : 4.5 hours
Working Temperature: Charging: 0°C~45°C	Battery Dimension : 155X88X76mm
Discharge: -20 C~60°C	Battery Weight: 1720g

UB04 Standard battery of Smart camera box

Type: Rechargeable Lithium-ion Battery	Capacity: 82.88Wh
Nominal voltage: 25.9V	Charging Voltage: 29.4V
Charging current: Standard charging 0.2C	Charging Time: Standard charging 4 hours.
Fast charging 0.5C	Fasting Charge : 2 hours
Temperature: Charging: 0°C~45°C	Battery Dimension : 138X80X39mm
Discharge: -20°C ~60°C	Battery Weight: 418g

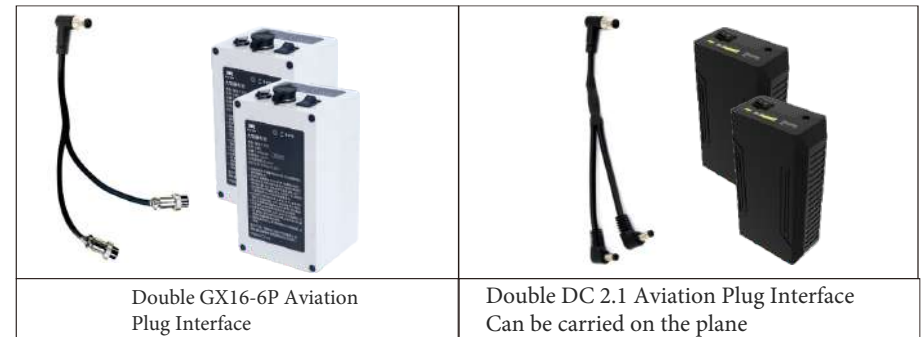


2. Using of Smart camera box batteries

(1). Two models of batteries for Smart camera box

Model No.	Capacity	Remark
UB01	372Wh	Cannot be carried on the plane
UB04	82.88Wh	Can be carried on the plane

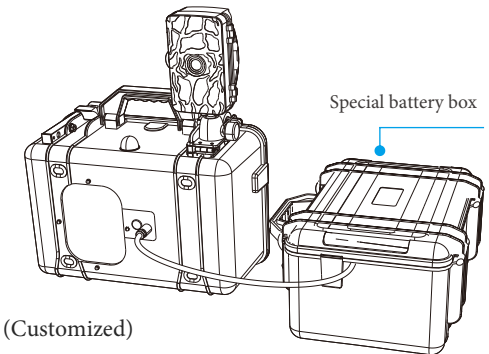
- (2). The Smart camera box can hold one or two pieces of batteries at the same time.
- (3). The Smart camera box can use two batteries of same model at the same time, which doubles the battery life.
- (4). There are two types of Power cable for powering two batteries.



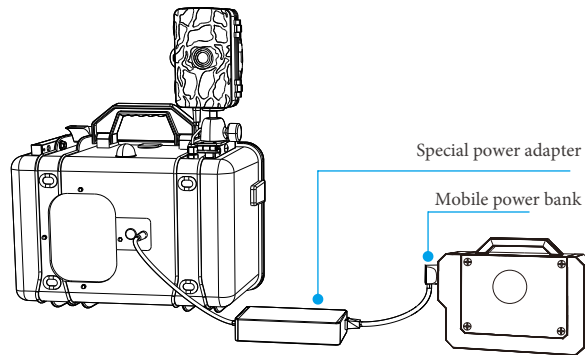
3. Battery life plan

In order to meet the long-term outdoor shooting, there are a variety of battery life solutions for the Smart camera box.

- (1) Introduction of Battery life in the box. For the specific battery life, please check [Chapter 1] Point 7 content.
- (2). Connect to an outdoor power bank (Customized)
Connect to special battery box of Smart camera box.

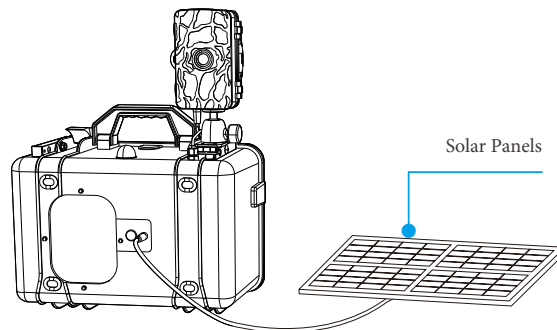


(3). Connect to an outdoor power bank (Customized). Outdoor mobile power supply can be connected too, and the battery life is determined by the capacity of the power supply.



(4). Connect AC, and Solar panels, to be sustainable standby.

Note: Ueleret company does not produce solar power supply panels. You can customize it from other manufacturer according to the specification requests of Smart camera box power supply, and the box body can be customized to meet these needs.



4、Precautions of battery use

(1). Charging

- Use the matching adapter to charge the battery, the adapter indicator light is red.
- The switch must be turned to discharge state "-" to charge.
- During the charging process, please keep the battery placed stably, and pay attention to ventilation and heat dissipation.
- The indicator light will turn green after the battery is fully charged, it can be unplugged and used now. Do not continue charging for a long time after it is fully charged.
- Please charge it in time when the power is less than 25%.

(2). Discharge

- Use the factory-configured flight plug cable, one end connected to the battery discharge port, one end connected to the Smart Camera Box power interface. Turn on the battery switch, you can discharge.
- Discharge will generate heat, if used outdoors in strong light, please put the battery in the shade, and pay attention to ventilation and heat dissipation.
- When it displays a low battery alert signal, please try to turn off the power to avoid over-discharge.

(3). Battery maintenance

To prolong the life of the battery, please maintain it as follows:

- The lithium battery needs to be placed at a suitable temperature, 25°C is appropriate.
- The charging method of lithium battery is the most important among the correct usage of lithium battery. Incorrect charging method can cause safety problems; correct discharge and daily maintenance can extend the life of the battery.
- Use the matching adapter for charging. Too high charging voltage will overcharge the battery, and vice versa, undercharge will occur.
- If the battery has not been used for a long time (e.g. 30 days), the owner must remember to complete a deep charge and discharge cycle for the lithium battery once a month.

Chapter 5 Product Specifications and Parameters

Main specification and parameter of Smart camera box

(The net weight is not include the battery and trail camera)

Product Dimension	360X190X270mm	Packing Dimension	400X250X300mm
Net Weight	2.44 kg	Gross weight	4.26 kg
Working voltage	24V	Rated power	36W
Digital camera working temperature	0° C~45° C Announced by camera manufacturers	Battery life	One piece of UB 01 battery for about 2 months,(Refer to Chapter 1 of dedicated part)

Specification and parameter of trail camera

(Announced by trail camera manufacturer)

Dimension	136x90x72mm	Standby	16 months
Gross Weight	277g	Trail light	40 trail lights
Battery Type	8 pieces of No.5 battery	Storage	Micro SD (TF) card, up to 512GB
Working Temperature	-20°C ~60°C	Function	Can capture at night
Sensing Distance	Max 25m Test in 22°C enviroment	Sensing angle	85°
File Format	JPG/AVI	Photo resolution	MAX 20MP 5200x3900 (interpolated)
Lens	f=3.3mm; F/NO 2.0	Video analysis	Max 3840x2160/10fps

Instructions of water-proof, moisture-proof and dust-proof for the Smart camera box

- 1.The Smart camera box is water-proof and dust-proof in its original state, and it can prevent heavy rain. But do not immerse in water for a long time.
- 2.The Smart camera box cannot be immersed in water. As there are three holes in the Smart camera box, the square hole for the lens to protrude, the trail camera data cable hole, and the flash light PC terminal connection hole.
- 3.The data line hole of the infrared camera has been specially treated, with the ability to prevent heavy rain.
- 4.The PC terminal connection hole of the flash is connected by a rubber piston, which can be easily taken out. But moisture will invade after a long time outdoors using.
- 5.The protruding square hole of the camera lens can be installed with a glass weather shield, which is fixed by four screws, so it cannot prevent rainwater from washing and moisture will invade after a long time outdoors using.
- 6.Customization is required if need the function of water-proof and moisture-proof.

Smart Camera Box's Pressure and Impact Resistance Instructions

1. The box is made of ABS material, which is corrosion-resistant and durable. The box can withstand temperature differences from -40 °C to 95 °C.
2. To test its pressure and impact resistance, a heavy load of 1.6 tons was applied to the box for 30 minutes, and the box remained intact.

Chapter 6 Tips for using Smart camera box

1.Smart camera box initialization time

The initialization time is about 6 seconds after turning on the switch.

The initialization time is about 4 seconds when switching the shooting mode .

The initialization time is about 5 seconds when connecting to the working Trail camera.

2.Shooting mode of Smart camera box and camera must be same

When switching the shooting mode, please switch the shooting mode of digital camera first .Then switch the shooting mode on Smart camera box .

The shooting mode of the Smart camera box must be consistent with the shooting mode of the digital camera, so that the Smart camera box can be used normally.

3.The problems that may occur when the camera heats up during digital camera video recording.

Overheating of a digital camera can seriously affect shooting.

When Trail camera sensing the animal and the animal is always in the sensing area.

Overheating after the digital camera shoots continuously, and the digital camera stops shooting. After overheating of the digital camera, the animal had left.

After the camera gradually cools down and returns to normal working status, the digital camera will continue to shoot in conjunction if the animal appears again.

When the digital camera overheats, the Trail camera will continue to sense under its own interval sensing time rules if the animals continues appearing in the sensing area, and the Smart camera box will continue to send shooting instructions to the digital camera. Before the digital camera returns to normal working status, it will not return to normal working status. If receiving shooting commands continuously , it cannot shoot and may even crash. Even the animal left and after the camera gradually cools down, the digital camera cannot return to normal working status,

When the trail camera and digital camera start to work, the shooting functions of controller system had been set. For the third-party equipment, the controller system of Smart camera box cannot adjust the shooting setting again. Unless the owner shut down or adjust the digital camera manually to solve these problems.

Therefore, when using the Smart camera box, please consider the frequency of occurrence and activity habits of shooting target, and set the suitable shooting settings and file format through[Pai Pai Bao], so that the digital camera will not overheat, or choose a camera with better thermal performance.

4. Precautions of installing equipment.

When the digital camera is in the photo mode, and you prepare to switch the shooting mode, Firstly switch the mode on the camera to the video mode, but the switch on main controller box hadn't been switched to video mode, or the [Pai Pai Bao] hadn't finished the switching of shooting mode, but at this time the trail camera is sensing, and the Smart camera box will send a photo shooting commands to the digital camera according to the previous photo mode, which may cause the digital camera to crash. Similarly, when the video shooting mode is switched to the photo shooting mode, the Trail camera is triggered, and the Smart camera box sends a video shooting command to the digital camera, but the digital camera may not turn to the photo shooting mode, and the digital camera may crash. This is a phenomenon that the digital camera crashes when it receives too many commands that cannot be executed under the computer controlling mode.

In this case, turning off the digital camera may not restore the camera. Need to take out the camera battery from the digital camera, reinstall it, then restart the Smart camera box, so that the digital camera can return to normal working status.

Therefore, when installing the Smart camera box, the Trail camera should face no-man's area, avoid triggering from time to time, the digital camera may crash due to receiving too many shooting commands.

Or, after the installation and debugging of the Smart camera box is completed, the data cable of the trail camera is finally inserted to debug the trail camera induction trigger function.

5. Adjustment of the trail camera sensing angle

For the characteristics of the sensing angle of the PIR sensor of the trail camera, please refer to page P20 of the manual.

Mastering this skill is of great help to the height and angle of the trail camera erection, and the accuracy and success rate of digital camera shooting.

If the animal is short and the trail camera is erected high, and the erection is in a vertical direction, the presence of the animal cannot be sensed. If it is a grassy environment, the trail camera is set low, it may be blocked by the grass, and animals pass by, and they cannot be sensed. For example: Photographers like to shoot at low angles, what should they do when encountering grass? It is necessary to mount the trail camera high and in an oblique direction. The standard configuration of the Smart camera box is a 30cm trail camera data cable. We provide 2m/5m/10m data cables (optional) for the separation of the trail cameras and digital cameras.

Chapter 7 Safety precautions of the Smart camera box

For safe use of the product, be sure to read these precautions. Please follow these precautions to prevent damage or injury to user or others.

Warning: Indicates a risk of serious injury or dead.

1. Please keep the product out of the reach of children. Power cords, cords and straps wrapped around a person's neck may cause suffocation.
2. It is dangerous to swallow the product parts or accompanying items or accessories. If swallowed, please seek medical attention immediately.
3. Swallowing batteries is dangerous. If swallowed accidentally, seek medical attention immediately.
4. Use only the power source specified in these instructions for use with the product.
5. Do not disassemble or modify the product.
6. Do not subject the product to strong impact or vibration.
7. Do not use of the product if there is any abnormality such as smoke or odor.
8. Do not use organic solvents (alcohol, gasoline or paint thinner) to clean the product.
9. Do not get the product wet. Do not insert foreign objects into the product or pour liquid into the product.
12. Do not immerse the battery in water.
11. Do not use the product in an environment where flammable gases may be present. Failure to do so may result in electric shock, explosion or fire.
12. Do not touch the product when it is connected to an electrical outlet during a thunderstorm. Failure to do so may result in electric shock.
13. When using the battery charger or AC adapter, follow the precautions below :
 - a. Use the battery only for the specified product.
 - b. Do not heat the battery or expose it to ignition sources.
 - c. Do not use a battery charger other than the specified one to charge the battery.
 - d. Do not expose the terminals to dust or contact with metal nails or other metal objects.
 - e. Do not use leaking batteries.
 - f. When handling the battery, isolate the terminals with tape or by other means.
 - g. Do not touch the battery charger or AC adapter connected to the power outlet during a thunderstorm. Failure to do so may result in electric shock, explosion or fire.
 - h. If the battery leaks and the leaking material comes in contact with skin or clothing, rinse the contact area thoroughly with running water.
 - i. In case of contact with eyes, rinse thoroughly with plenty of clean running water and seek immediate medical attention.
 - j. Use a dry cloth to regularly clean all dust accumulated on the power plug and power outlet.
 - k. Do not plug or unplug the power plug with wet hands.
 - l. Do not use the product without the power plug fully inserted into the power outlet.
 - m. Do not expose the power plug and terminals to dust or allow them to come into contact with metal nails or other metal objects.
14. Do not place heavy objects on the power cord. Do not damage, break or modify the power cord.

15. Do not wrap the product in cloth or other material while the product is in use or when it has just been used and is still hot.
16. Do not unplug the power supply by pulling on the power cord.
17. Do not leave the product connected to the power supply for long periods of time when not in use.
18. Do not charge the battery at temperatures outside the 0-40° C range. Otherwise, it may cause electric shock, explosion or fire.
19. Do not leave the product in contact with skin in same position for a long time during use.
20. In places where the use of the product is prohibited, please follow the signs to turn off the product. Otherwise, other equipment may malfunction due to the influence of electromagnetic waves, and accidents may even occur.

△ Attention: Please observe the following precautions. Failure to do so may result in personal injury or property damage.

1. Do not place the product in a high or low temperature environment. The temperature of the product may become high or low and may cause burns or injuries when touched.
2. In addition, do not shake the product or subject it to strong impact.
3. Do not squeeze the product by force or cause it to collide with objects. Doing so may cause injury or damage to the product.
4. Please mount the product only on a tripod or fixture that is sufficiently stable.
5. Do not touch any parts inside the product. Failure to do so may result in injury.
6. If an abnormal reaction or inflammation of the skin occurs during or after the use of this product, please stop further use and seek medical attention promptly.

Note:

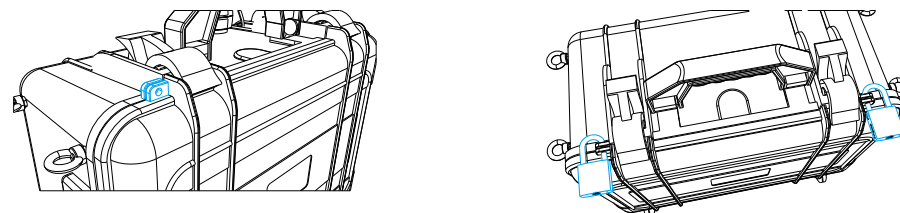
More functions of the Smart camera box are being improved: real-time photo transmission, remote control shooting under the condition of network signal and other functions will be unlocked soon, please pay close attention to the information release on the company's official website for details.

Chapter 8 Suggestions on anti-theft measures

There is a concern for the user when the Smart Camera Box is placed outdoor for a long time. For anti-theft measures we have the following suggestions:

1. Install an anti-theft lock on the Smart camera box.

The outer shell of the Smart camera box has installation holes for anti-theft lock at the junction of the box and the box cover, and a suitable size of anti-theft lock can be purchased and installed to prevent the box cover from being opened. As shown below:



2. Install a trail camera in a hidden place near the Smart camera box

Use a trail camera to monitor the Smart camera box. If someone takes the Smart camera box, track it according to the images captured by the Trail camera.

3. Purchase a 4G GPS locator tracker and install it inside the Smart camera box

The BeiDou satellite locator or GPS locator tracker is a popular product with an affordable price. It is easy to operate, and the safety of the Smart camera box can be checked anytime via a mobile app. It will automatically sound an alarm and record audio and track the change of location movement when it is stolen. It's not easy to find the GPS locator after opening the Smart camera box cover.

The installation method is to use a thick double-side tape to stick the locator on the inner wall of the Smart camera box. If the battery life of GPS locator is not sufficient, it can be connected with the USB interface on the control box, and the Smart camera box can supply power to the GPS locator.

Note: The recommended products are only for used within China. Similar methods can be used in other countries but must comply the local regulatory requirements.

Chapter 9 Product Certification and Compliance

1. Certification

The batteries used in this device are GB certified, and their chargers are also CCC certified(please check the relevant certification on the official website of Yueguang Intelligent Company at www.ueleret.cn)

2. The name and content of harmful substances in the product.

Name of parts	Harmful substances					
	Lead (Pb)	Mercury (Hg)	Cadmium (Cd)	Hexavalent Chromium (Cr(VI))	(PBB)	(PBDE)
Plastic parts	O	O	O	O	O	O
Metal parts	O	O	O	O	O	O
Circuit board components	X	O	O	O	O	O
Touchpad	O	O	O	O	O	O
Internal wires	O	O	O	O	O	O
External wires	O	O	O	O	O	O
Package material	O	O	O	O	O	O
Accessories	O	O	O	O	O	O
Battery	X	O	O	O	O	O
Print	O	O	O	O	O	O

This table is prepared in accordance with the provisions of SJ/T 11364

O : Means the content of the hazardous substance in all homogeneous materials of the part is below the limit requirement specified in GB/T 26572

X : It means that the content of the hazardous substance in at least one homogeneous material of the part exceeds the limit specified in GB/T 26572



People's Republic of China Restricted Use Mark for Hazardous Substances in Electrical and Electronic Products

This mark applies to electrical and electronic products sold in the People's Republic of China, and the number in the center of the mark represents the environmental use period of the product. As long as you observe the safety and usage precautions related to this product, there will be no environmental pollution or serious impact on human body and property within the above mentioned period of time from the date of manufacture.

Disclaimer: As this product is an original patented product, there may be changes in its features or specifications in the future. In the event of any changes, please refer to the official website of our company. Yueguang Intelligent reserves the right to interpret any changes.