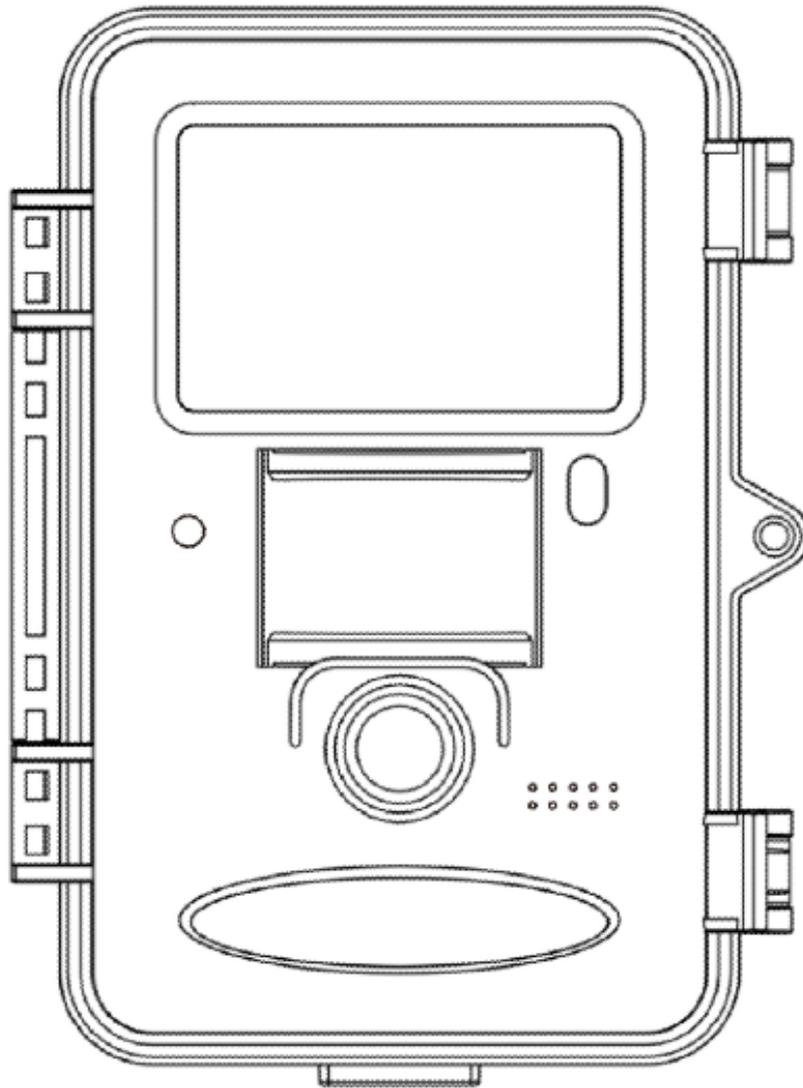


Infrared Digital Scouting Camera
User Manual
SG2060 Series

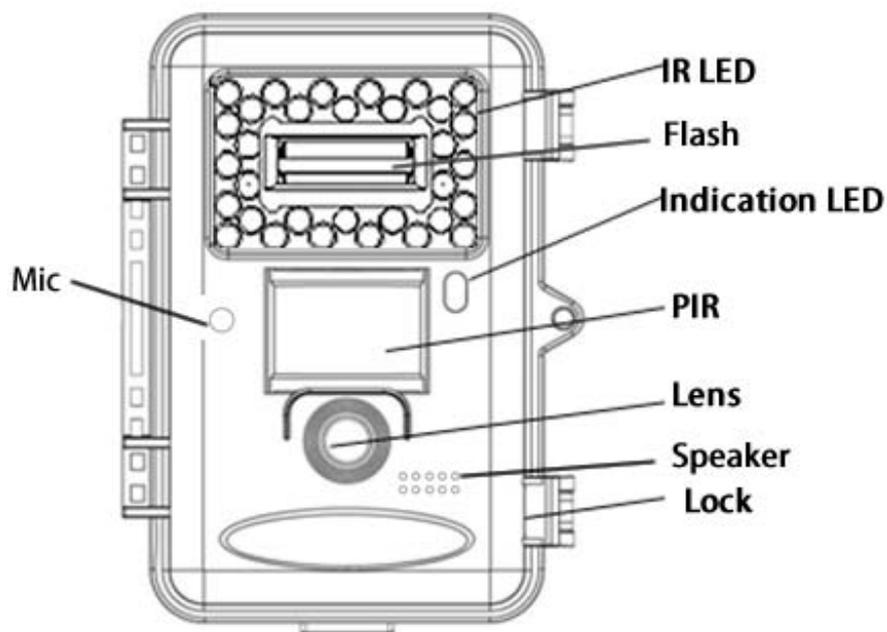


Content

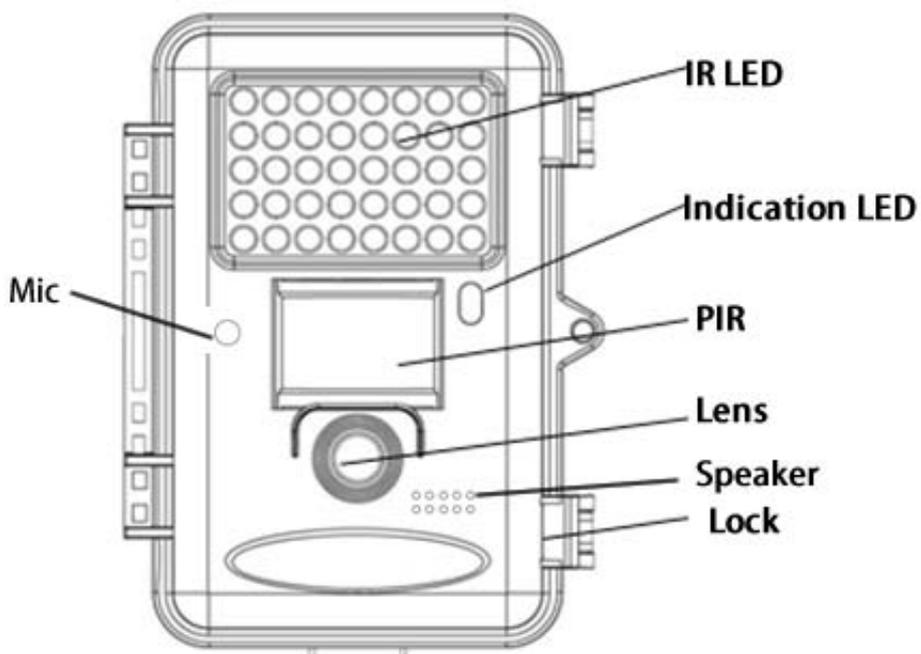
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1 Instruction

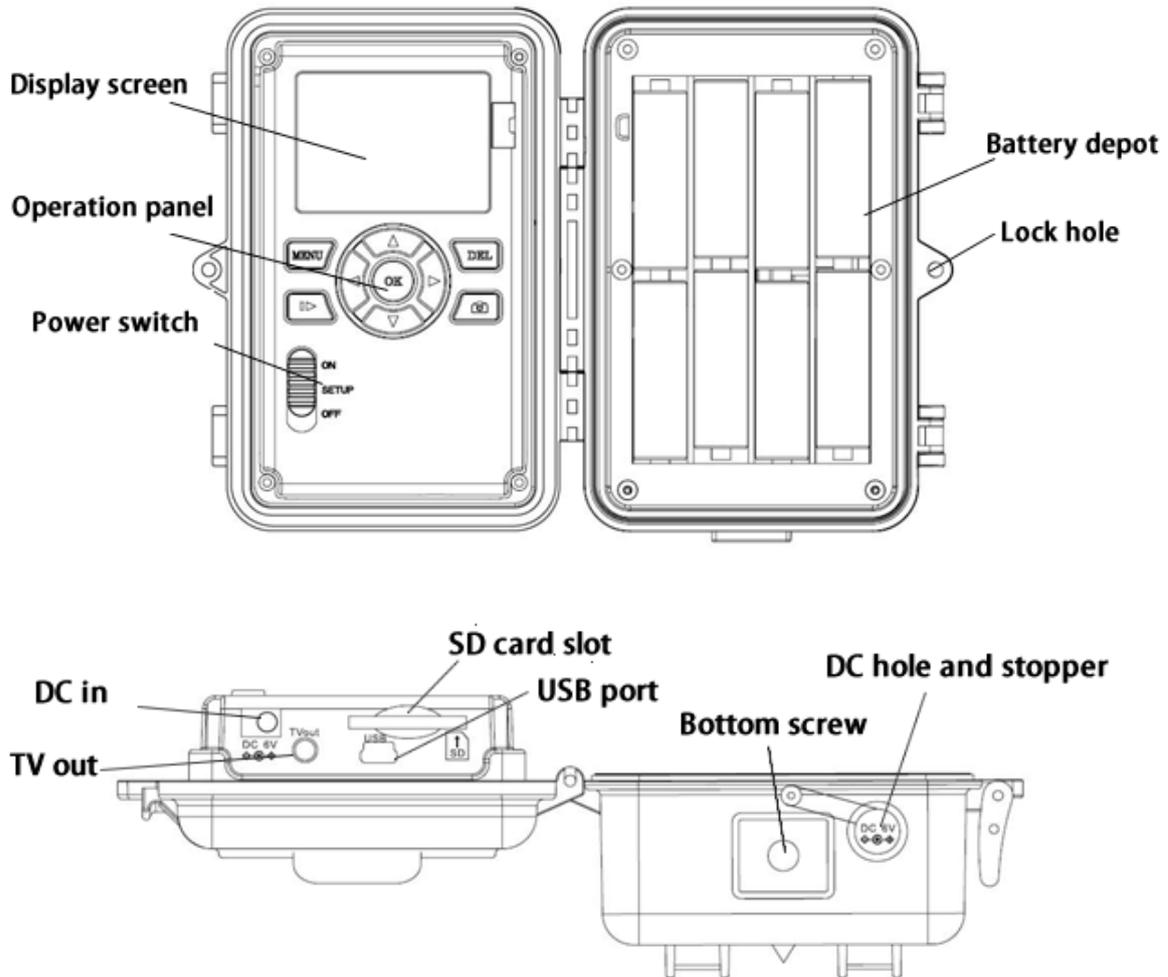
1.1 Camera Body Interface



SG2060-X



SG2060-K SG2060-U



1.2 General Description

This camera is a surveillance device working automatically. It can be triggered by any movement of human or animal in a certain region of interested monitored by a highly sensitive Passive Infra-Red (PIR) motion sensor, and then take high quality pictures (up to 20 mega pixels) or video clips.

This series of cameras contain three models. K model is with 40 940nm LEDs. U model is known as the auto focus with Boly's own technique. X model integrates LEDs and xenon flash. The xenon flash as supplement light at night turns to infrared

light after filter as a result of which it can reduce time of exposure. This own function leads to no motion blur in the video clips. The camera will clearly take black and white pictures or video clips without disturbing animals at night.

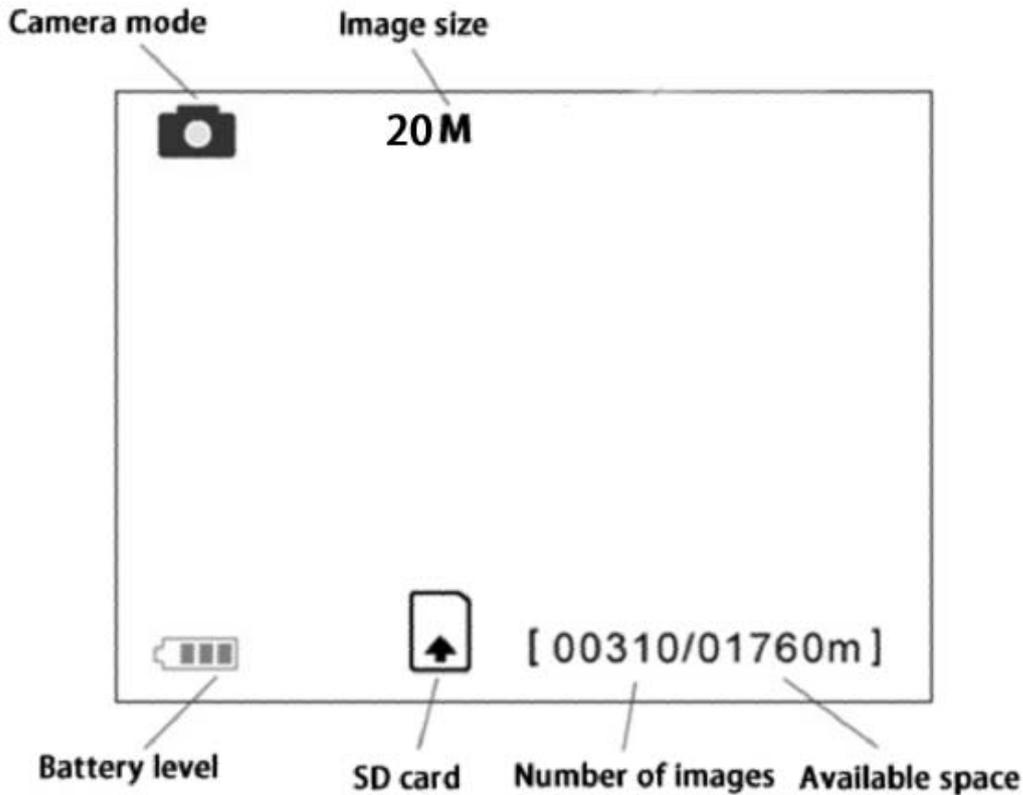
There is a 2" color LCD display screen on the camera. The device is designed for outdoor use and resistant against water and snow. Furthermore, the camera can be used as a portable digital camera. Pictures or videos can be taken manually by pressing  on the operation panel.

1.3 Application

This camera can be used as an automatic surveillance device for guarding and recording unexpected intrusions to homes, shops, schools, depots, offices, taxies, worksites etc. It can also be used as trail camera for hunting or monitoring animals by recording the traces of wild animals. It can be left alone for weeks and months and it will save event records automatically in digital format.

1.4 Shooting Information Display

When the camera is turned on (power switch is slid to SETUP position), the current settings will be displayed on the screen.



Key notes:

“MENU” : to enter the program menu in preview mode;

“▲” “▼” “▶” “◀”: for parameter settings ;

“OK”: to save parameter settings and play videos;

“▶”: to exchange between playback mode and preview mode;

“DEL”: to delete an image or video;

“📷”: to capture a photo or record a video manually.

1.5 Cautions

★The camera is supplied by 8 AA batteries or DC power adapter with output of 6V (recommended) though the range of voltage can be 5V to 12V.

Please install batteries according to shown polarity.

- ★ Please insert the SD card when the power switch is in OFF position before testing the camera. The camera has no internal memory for saving images or videos. If no SD card is inserted, the camera will shut down automatically after an indication beep.
- ★ Please do not insert or take out the SD card when the power switch is in the ON position.
- ★ It is recommended to format the SD card by the camera when used for the first time.
- ★ Storage recycling when SD card is full in hunting mode.
- ★ The camera will be in USB mode when connected to a USB port of a computer. In this case, the SD card functions as a removable disk.
- ★ In SETUP mode, the camera will shut down automatically after 3 minutes if no operation is done. Please turn on the power again if you want to continue to work with the camera.

2 Quick Start Guide

2.1 Power Supply

To supply power for the camera, four or eight size AA batteries are needed.

1. High-density and high-performance alkaline batteries (Recommended)
2. Rechargeable alkaline batteries
3. Rechargeable NiMH batteries

When in a low-battery state, the camera will be automatically shut down. Please change the batteries at this time.

Caution: Risk of explosion if battery is replaced by an incorrect type. Also dispose of used batteries according to the instructions.

 Correct Disposal of this product. This marking indicates that this product should not be disposed with other household wastes throughout the EU. To prevent possible harm to the environment or human health from uncontrolled waste disposal, recycle it responsibly to promote the sustainable reuse of material resources. To return your used device, please use the return and collection systems or contact the retailer where the product was purchased. They can take this product for environmental safe recycling.

2.2 Insert the SD Card

Insert a new SD card into the card slot. Please note that the SD card is on the “write” (not locked) position otherwise the camera will not function correctly.

2.3 Enter into Setup Mode

There are 3 states in SETUP Mode: preview state (preview the scene in the front of the camera), setting state (do customer settings), and playback state (view photos or videos via 2.0” LCD display).

2.3.1 Preview and Playback

After switching the camera to SETUP Mode, it enters into the preview state.

Press  to exchange between playback mode and preview mode;

2.3.2 Customer Settings

Press MENU to manually customize the camera settings which displayed on the screen. The detailed operations will be described in “Advanced Operations” chapter.

2.3.3 Manual Capturing

Press  to manually capture photos or record videos, again to stop the manual capturing of a video in preview mode.

2.3.4 View Images or Videos

Press  to enter playback mode viewing images or videos, the latest image or video icon will be shown on the LCD screen, click  to play a video .Press “▲” or “▼” to view the previous or next one.

2.3.5 Delete Images or Videos

Press **DEL** to delete images or videos. Note the **DEL** button just works in Playback state. So if it's in Preview state, you should press  to enter into Playback state first.

2.4 Enter into On Mode

After switching the camera to ON position, the motion indication LED (red) will blink for about 10s. This time interval is for you to make the camera ready for automatic surveillance operation, e.g., to close the camera and to lock it, to fix the camera on a tree and to walk away. After entering into the ON mode, no manual controls are needed and possible. Camera will take pictures or videos automatically according to the previous programmed settings when human or animals enter into the monitoring region.

3 Item Settings

3.1 Camera Menu

To view the camera settings menu, press **MENU** in **SETUP** mode. Use “▲” or “▼” key to select the sub-menu, use “◀” or “□” key to select the different options. Press “OK” to save the settings.

After changing EACH setting in SETUP mode you must press “OK”, otherwise the camera will stay at the default setting.

Setting Items	Description
Camera Mode	Choose capturing photos, recording videos or photo with a video clip.
Photo Size	Choose the photo size, e.g. 20MP, 14MP or 8MP.
Video Size	Choose the video size: 1920x1080 or 1280x720.
Photo Burst	Choose the continuous shooting numbers after each triggering.
Video Length	Choose duration of recording video. This parameter is effective and can be adjusted only when the device in the video mode under ON mode. Its value extends from 5 to 180 seconds. The default value is 10 seconds. Press LEFT and RIGHT to decrease or increase the value by 10 seconds.
	Set camera date and time. You can change the date and time of the

Set Clock	device by setting this parameter when necessary, e.g., after every battery change. The date format is year/month/day , the time format is hour: minute: second . The valid value for year is between 2016 and 2050.
Time Lapse	Time lapse means the camera can capture images or videos at a preset time interval regardless of whether motions are detected. The default parameter is Off, which means the timer function is disabled. Changing this parameter to a non-zero value turns on the Time Lapse mode, and camera will take photos at given time interval. Please note that if PIR Trigger is set to Off, then Time Lapse can't be set to Off.
PIR Trigger	Choose sensitivity of the PIR sensor. This parameter defines the sensitivity of the PIR: High, Normal, Low and Off. The default value is "Normal". The higher sensitivity indicates that the camera is more easily to be triggered by motion, taking more pictures or recording more videos. It is recommended to use high sensitivity in room or environment with little interference,

	<p>and to use lower sensitivity for outdoor or environment with lots of interference like hot wind, smoke, near window etc. Furthermore, the sensitivity of the PIR is strongly related to the temperature. Higher temperature leads to lower sensitivity.</p> <p>Please note that if Time Lapse is set to Off, then PIR Trigger can't be set to Off.</p>
PIR Interval	<p>This parameter indicates how long the PIR (Passive Infrared motion sensor) will be disabled after each triggering in ON mode. During this time the PIR of the device will not react to the motion of human (or animals). The minimum interval is 0 second, it means the PIR works all the time. The maximum interval is 1 hour. It means the PIR will be disabled for 1 hour after each triggering. Press LEFT or RIGHT to decrease or increase the value.</p>
Work Hour	<p>This parameter defines a certain time in a day when the camera can be triggered, while in the rest of the time the device is shut off. The effective value ranges from 00:00 to 23:59.</p> <p>The default set is Off which means</p>

	the camera works all along. Timer switch On means the camera works only during the time according to the preset settings.
Game Call	It means this camera can play audio file at a preset time clock of a day. The audio file must be saved in the directory of \DCIM\100BMCIM\ with a name of AUDIxxxx(from 0000 to 9999).WAV after format the SD card and setting the game call as on mode. It is better that the length of the audio file less than 2 minutes, otherwise it will consume much more power.
Language	Choose the menu language you need.
Beep Sound	Enable or disable the beep sound.
Distance	This camera supports two focus capturing: far and near. "Near" means camera focuses at 0.8m. "Far" means 3.3m.
Camera Posit	It means camera position. You can set A-Z position for your camera, so that you can distinguish which photo is taken by which camera.
Recycle Storage	In hunting mode, when the SD card is full, the first images or videos will be covered by new getting pictures or videos. So that you don't need to retrieve your memory card

	manually. But in SETUP mode, SD can't recycle storage.
Format SD	All images and videos in the SD card will be deleted, so make sure that you have made a backup of important data.
Default Set	Restore all customer settings to default values.
Version	Version information.

3.2 Default Setting

Setting Items	Default	Options	Submenu
Camera Mode	Photo	Video Pic+Video	
Photo Size	20M	14M 8M	
Video Size	1920x1080	1280x720	
Photo Burst	1 Photo	2 Photos 3 Photos	
Video Length	10 Sec	5–180 sec	
Set Clock	Enter		Adjust Clock
Time Lapse	Off	5-55Min 1-8H	
PIR Trigger	Normal	High Low Off	
PIR Interval	5Sec	0–55 Sec, 1–60 Min	

Work Hour	Off	On	00:00-23:59
Game Call	Off	On	Set Time and Replay times
Language	English	Finnish German Swedish Danish Norwegian Czech Russian Italian	
Beep Sound	On	Off	
Distance	Far	Near	
Camera Posit	Off	A-Z Position	
Recycle Storage	Off	On	
Format SD	Enter		Yes, No
Default Set	Save		
Version	Enter		

3.3 Power Off

Switch the camera to OFF position to power off the camera. Please note that even in OFF mode, the camera still consumes certain power at μA level. Therefore, please remove the battery if the camera

will not be used for a long time.

4 Mounting the Camera

When use the camera in outdoor environment, such as hunting or monitoring the living habits of wild animals, you need to mount the device on a certain place properly. It is recommended to mount the camera on a tree, to get the optimal picture quality, the recommended distance is 16ft from the tree to the target monitoring area and recommended height from the ground is 4.9ft~6.5ft. Adjust the viewing angel properly (view angle of this camera is 60°).

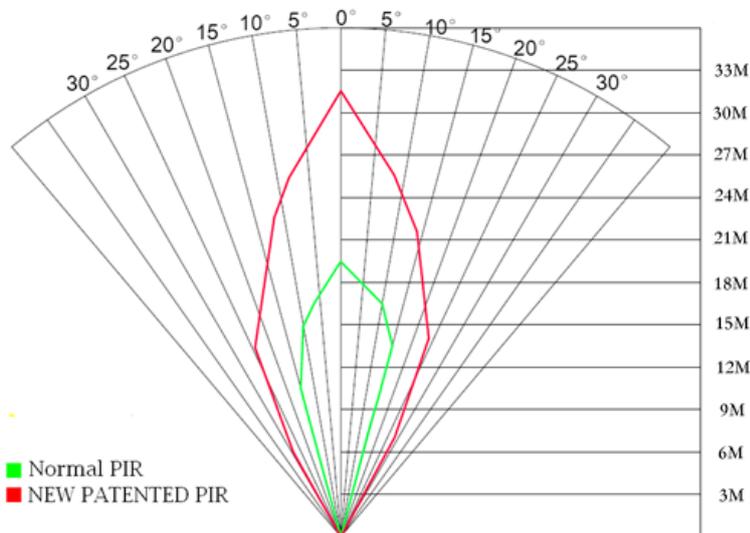
There are two ways to mount the camera: using a band shaped belt or bottom screw.

Using the belt: take the belt toes to go through the two back holes of the camera, then tie the two toes to the tree to finish fixing.

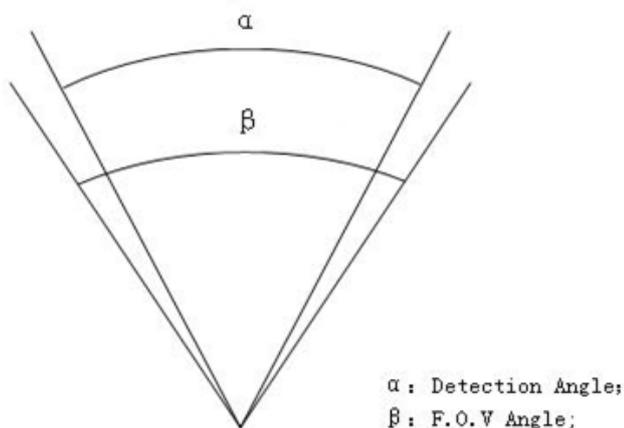


5 PIR Detection Zone

This camera has a new design of PIR and the new PIR is patented. The new patented PIR's detection range can reach to 100ft in good environments. Following picture shows the compared detection zone between normal PIR and the new patented PIR.



The PIR detection angle (α) is just smaller than the field of view (FOV) angle (β). The advantage of this design is to reduce empty picture rate and capture most, if not all, motions.



6 Technical Specifications

Image Sensor	14MP Color CMOS, 8MP and 20MP Interpolation
Lens	F/NO=2.4 FOV(Field of View)=57°
PIR detection range	100ft
Display Screen	2.0" LCD
Memory Card	From 8 MB to 32 GB
Picture Resolution	20MP=5184×3888 14MP = 4320 ×3240 8MP = 3264×2448
Video Resolution	1920×1080 1280x720
PIR Sensitivity	Adjustable (High/Normal/Low)
Trigger Time	<1.2s
Weight	0.25 kg(without battery)
Operation/Storage Tem.	-20 - +60°C / -30 - +70°C
Photo Burst	1-3
Video Length	5-180s
Power Supply	8×AA or 4×AA External DC 6V,2A
Low Battery Alert	LED Indicator
Sound Recording	Available
Mounting	Rope/Belt/Python lock
Dimensions	140 x80 x50 mm
Operation Humidity	5% - 90%
Security Authentication	FCC, CE, RoHS

7 Parts List

Part Name	Quantity
Digital Camera	One
USB Cable	One
Belt	One
User Manual	One
Warranty Card	One



Version 1.0