Hunting Camera

BG962 Series/ BG960 Series

Contents

1.Basic

1.1 General Description

This automatic surveillance camera can be triggered by any human or animal movement by use of a highly sensitive Passive Infra-Red (PIR) motion sensor. The camera captures high quality pictures (up to 36 mega pixels) or video clips. It can take clear black and white pictures or videos in the night as well.

BG962-X36W: This camera integrates 40 940nm LEDs and a xenon flash. The xenon flash acts supplement light at night, which turns to infrared light after filtering and can reduce time of exposure. This function leads to a no motion blur in video recordings.

BG962-K36W/BG960-K24W: This is a digital infrared surveillance camera with 50 940nm LEDs. There is a 2" color LCD display screen on the camera. The device is designed for outdoor use and is 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. Maximum pixel of BG960-K24 is 24MP.

BG960-I24W: This is a digital infrared surveillance camera with 50 850nm LEDs. High quality pictures with long distance light range can be captured.

1.2 Camera at a Glance
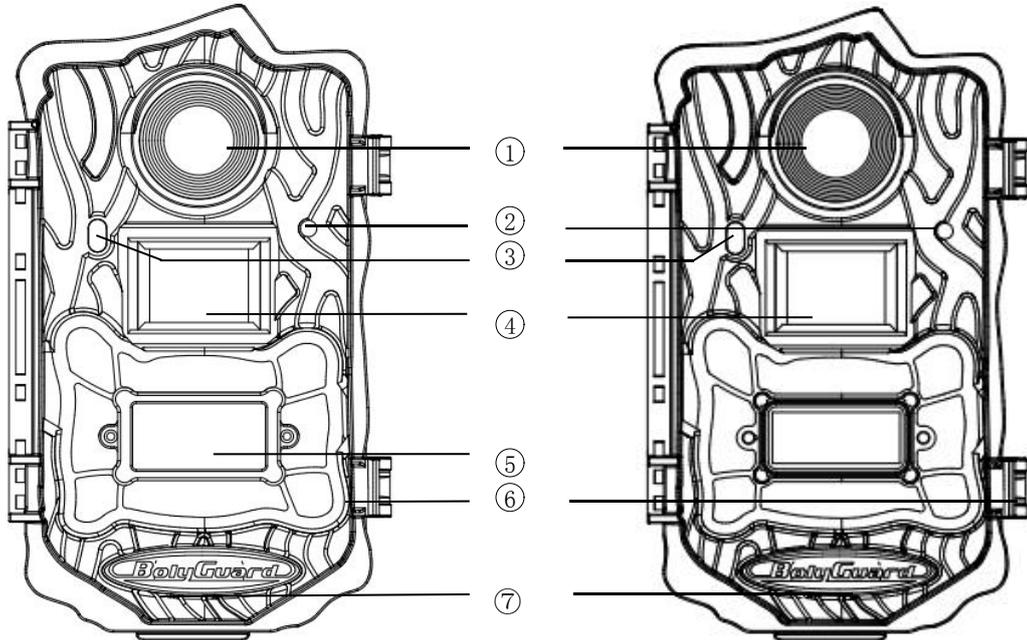
Fig. 1: Front view of BG962-X36W   Fig. 2: Front view of BG962-K36W/BG960 Series
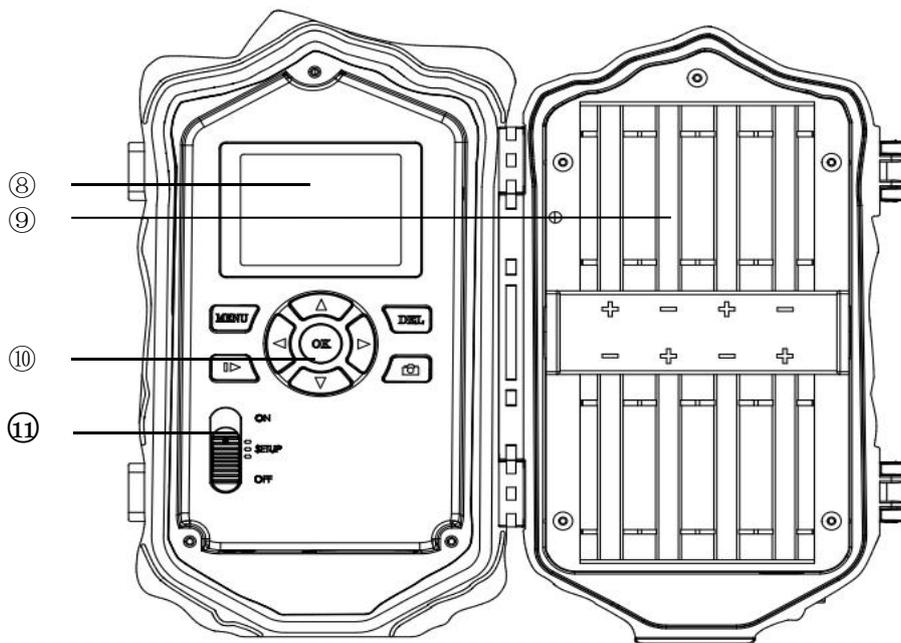

Fig. 3: Inner panel view
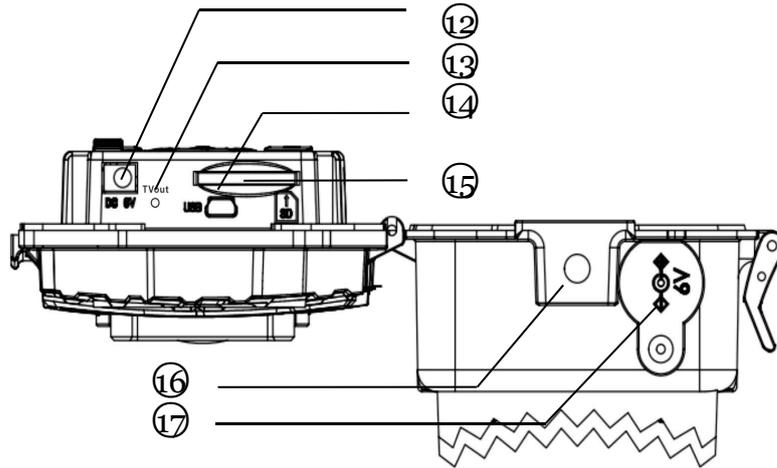
Fig. 4: Bottom view

①	Lens	②	Microphone	③	Indication LED
④	PIR	⑤	Flash	⑥	Lock
⑦	Speaker	⑧	LCD display	⑨	Battery bays
⑩	Operation panel	⑪	Power Switch	⑫	DC 6V
⑬	TV out	⑭	USB port	⑮	SD card slot
⑯	Bottom Screw	⑰	DC hole and stopper		

MENU	Enter/Exit the menu	DEL	Delete photos or videos
▣	Exchange between preview and playback state	◀▶	Select option (left, right) Change the photo size
▲	Select Item (UP), Increase value	▼	Select Item (DOWN), Decrease value
OK	Make selection (OK)	📷	Capture photos or videos
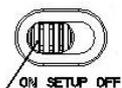
OFF: turn off the power.

SET UP: change camera settings.

ON: enter into hunting mode or security mode

1.3 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.
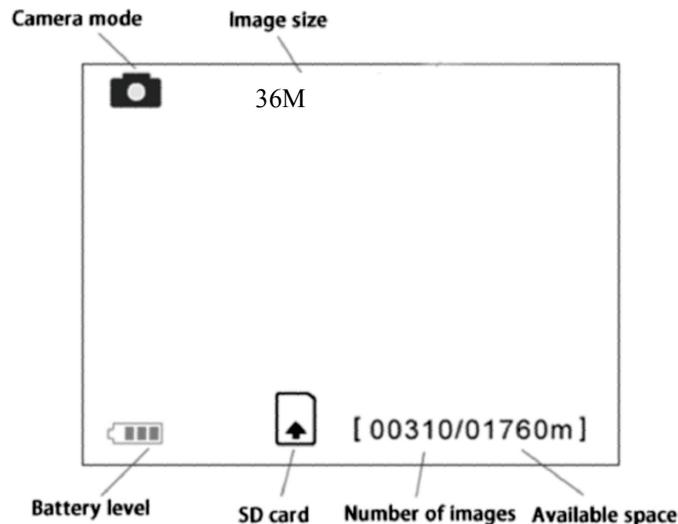
Fig. 5: LCD Display

1.4 Cautions

★The camera is powered by 8 AA batteries or DC power adapter with output of 6V (recommended) between the ranges of 5-12V.   Please insert batteries correctly by matching the polarity. (The voltage of a single battery should be higher than 1.5V)

★Insert the SD card when the power switch is in the OFF position before testing the camera. The camera has no internal memory for saving images or videos. If a SD card is not 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 using the camera when used for the first time.

★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 left idle. Please turn on the power again if you want to continue to work with the camera.

2.Quick Start Guide

What You Need

To use camera, you need:
- An unlocked SD card;
- 4 or 8 AA batteries (high-density and high-performance alkaline batteries are recommended)
- A PC with a USB 2.0 port and internet access

2.1Power Supply

★1) Battery Power: Insert 4 or 8 AA batteries according to shown polarity. (The voltage of a single battery should be higher than 1.5V)

2)External Power: Insert 6V DC external power adapter.

When battery is extremely low, the camera will automatically shut down after indication sounds. Please change the batteries if this happensz.

NOTE:
- The battery can be used as a backup for emergency when using external power or solar charging.
- There will be risk of explosion if battery is replaced by an incorrect type.

2.2 Insert SD Card

Insert a new SD card into the card slot. Please ensure SD card is on the "write" (not locked) position, otherwise the camera will not function properly.

2.3 Common Camera Operations

To	Do This
Preview state	Move the power switch to SETUP to access the home screen.
Setting state	Move the power switch to SETUP. Press MENU to access settings page.
Playback state	Move the power switch to SETUP. Press [▶] to access playback state.
Switch photo and video mode	When on the homes creen, press▲▼to change between the photo, video and Pic+video modes.
Manual capture a photo	When on the home screen (photo mode), press [📷] to capture a photo.
View photos and videos	When in playback mode, press▲▼ to view photos and videos.
Delete photos or videos	When in playback mode, press ▲▼ to select DELETE Item. Press DEL to delete a photo or all.

3.Advanced Operation

3.1 Work Mode

SETUP mode: Switch the camera to the SETUP position to set camera, do a manual capture, play back photos and video clips, or send MMS manually.

Hunting mode: Switch the camera to the ON position to capture photos or videos. When the camera senses movement in its monitoring region, it will capture photos or videos automatically according to the previously programmed settings. After switching the camera to the ON position, the motion indication LED (red) will blink for about 10 seconds. This time interval allows you to position the camera for automatic surveillance operations (e.g. to close the camera and lock it, to fix the camera on a tree and walk away).

Off mode：Switch the camera to the OFF position to power off the camera.

3.2 Trigger Mode

PIR Triggering: PIR triggering is the default setting. The camera works only when motions are detected. If PIR sensitivity is set as PIR OFF, the camera stops PIR triggering.

Timer Triggering: If the Timer Triggering is OFF, then it is disabled. When changing the timer triggering interval to a non-zero value, the camera

will start to work at the preset interval.

PIR & Timer Triggering: For both PIR triggering and Timer triggering, the user needs to go to PIR sensitivity to set "normal, high or low" sensitivities according to the external environments, and set the Timer interval to a desired non-zero value. The camera will capture pictures or videos in a preset time interval even when there is no motions detected. The camera will also capture pictures and videos if motions are detected.

3.3 Item Settings

Move the power switch to the SETUP positions and press MENU to enter SETUP Mode. You can adjust settings to your desired needs. The following table shows the camera setting items.

Camera Setting Items

Setting Items	Description
Camera Mode	Captures photos, records videos, or does both
Photo Size	Choose the photo size.
Video Size	Choose the video size.
Photo Burst	Choose the number of photos taken after each triggering.
Video Length	Choose duration of video recording. This parameter can only be adjusted when the device in the video mode while in the ON mode. Its value extends from 5 to 180 seconds. The default value is 10 seconds. Press **LEFT** or **RIGHT** to decrease or

	increase the value by 10 seconds.
Set Clock	Set camera date and time. You can change the date and time of the device by setting this parameter when necessary, e.g., after every battery change. The date format is **month**/**day**/**year**, the time format is **hour**: **minute**: **second**.
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 the given time interval. **NOTE: 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 or Off. The default value is "Normal". The higher sensitivity indicates that the camera is more easily triggered by motion, thereby taking capturing more pictures or video recordings. It is recommended to use high sensitivity in a room or environment with little interference, and to use lower sensitivity for outdoor or environments with lots of interference (e.g. wind, smoke, near window, etc). Furthermore,

	the sensitivity of the PIR is strongly related to the temperature. Higher temperature leads to lower sensitivity. **NOTE: if Time Lapse is set to Off, then PIR Trigger can't be set to Off.**
PIR Interval	This parameter indicates how long the PIR (Passive Infrared motion sensor) will be disabled after each triggering while in the ON mode. During this time, the PIR of the device will not react to any movements. The minimum interval is 0 second, meaning the PIR will work all the time. The maximum interval is 1 hour. This means the PIR will be disabled for 1 hour after each triggering. Press LEFT or RIGHT to decrease or increase the value.
Work Hour	This parameter defines a certain time in a day when the camera can be triggered, whereas the device will shut off during non-working hours. The effective value ranges from 00:00 to 23:59. The default set is Off, which means the camera will continue to keep working. Timer switch On means the camera only works during the time according to the preset settings.
Work Day	Choose the days of the week the camera is functional.
Game Call	The camera can play audio files at a preset time of the day. The audio file must be saved in the directory of

	\DCIM\100BMCIM\ with a name of AUDIxxxx(from 0000 to 9999).WAV. after SD card has been formatted and game call mode is on. An audio file of less than 2 minutes is recommended, otherwise it will consume much more power. (Only for BG962 Series)
Language	Choose the desired language
Beep Sound	Enable or disable the beeping sound
Camera Position	Camera position can be set from A-Z to help 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 replaced with newly captured pictures or videos in order to prevent having to retrieve the memory card manually. NOTE: in SETUP mode, SD card can't recycle storage.
Format SD	All images and videos in the SD card will be deleted, so make sure important data have been backed up.
Default Set	Restores all customer settings to default values.
Version	Version information.

*After changing each setting in SETUP mode, you must press "OK" otherwise the camera will not accept new changes.

3.4Default Setting

Setting Items	Default	Options
Camera Mode	Photo	Video, Pic+Video
Photo Size	36MP (BG962 Series) 24(D)/18(N)MP (BG960 Series)	25MP/14MP (BG962 Series) 16(D)/12(N)MP 10(D)/8(N)MP (BG960 Series)
Video Size	1920x1080	1280x720/640x480
Photo Burst	1 Photo	1-5photos(BG962Series) 1-3photos(BG960Series)
Video Length	10 Sec	5–180 sec
Set Clock	Enter	
Time Lapse	Off	5-55Min / 1-8H
PIR Trigger	Normal	High /Low
PIR Interval	10Sec	0–55 Sec / 1–60 Min
Work Hour	Off	On
Work Day	All	Monday, Tuesday,Wednesday,Thursday,Friday,Saturday, Sunday
Game Call	Off	On (Only for BG962 Series)
Language	English	Deutsch / Suomi Svenska / Norsk Dansk/Italiano/Russian /Cestina
Beep Sound	On	Off
Camera Posit	Off	A-Z Position

Recycle Storage	On	Off
Format SD	Enter	
Default Set	Save	
Version	Enter	

3.5 Power Off

Switch the camera to the OFF position to power off the camera. Please note that even in OFF mode, the camera still consumes certain power at µA levels. Therefore, please remove batteries from camera when not in use.

4.Mounting The Camera

When using the camera in outdoor environments, such as hunting or monitoring the living habits of wild animals, properly mount the device on something stable. We recommend mounting the camera on a tree to get optimal picture quality. 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 angle properly (view angle of this camera is 110°).

There are three ways to mount the camera: using a band shaped belt, python lock or mounting bracket.
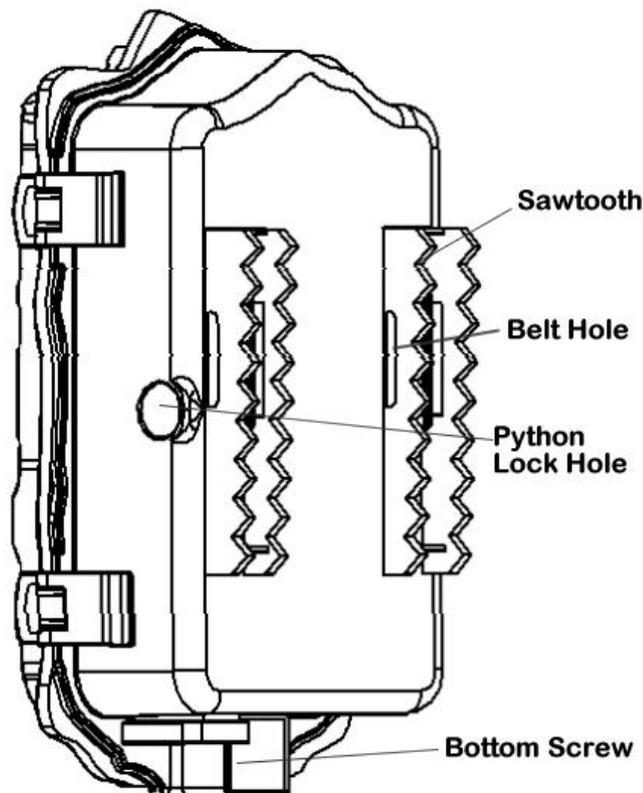
Fig. 6: The back panel of the camera

5.PIR Detection Zone

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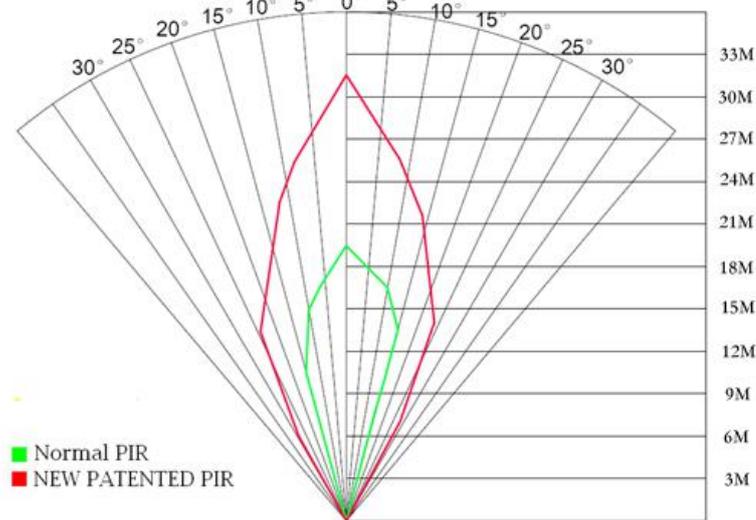

Fig. 7: PIR Detection Zone

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 rates and capture most, if not all, motions.
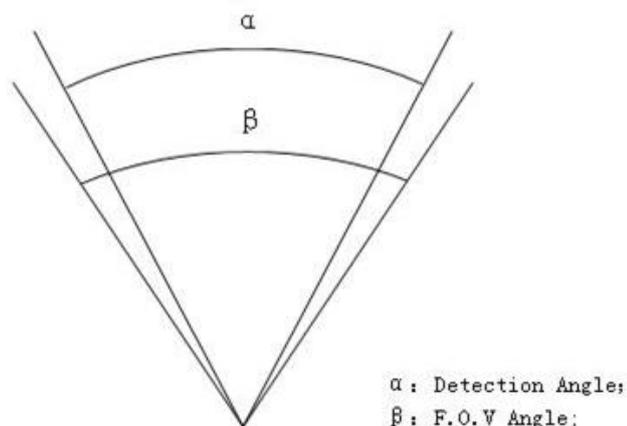

Fig.8: Detection angle vs. FOV angle

6.Technical Specifications

Image Sensor	14MP Color CMOS（962-K/X） 5MP Color CMOS (960-K/I）
Lens	F/NO=2.4 FOV(Field of View)=110°
PIR detection range	100ft
Display Screen	2.0″ LCD
Memory Card	From 8MB to 32GB
Picture Resolution	962-K/X: 36MP/25MP /14MP 960-K/I: 24(Day)/18(Night) MP 16(Day)/12(Night) MP 10(Day)/8(Night) MP
Video Resolution	1920x1080 1280x720 640x480
PIR Sensitivity	Adjustable (High/Normal/Low)
Trigger Time	<1s（962-K/X） <0.7s（960-K/I）
Weight	0.35 kg(without battery)
Operation/Storage Temperature	-20 - +60°C
Photo Burst	1-5photos (BG962 Series) 1-3photos (BG960 Series)
Video Length	5–180s
Power Supply	8×AA or 4×AA External DC 6V,2A
Stand-by Current	<300uA

Technical Specifications

Low Battery Alert	LED Indicator
Sound Recording	Available
Mounting	Rope/Belt/Python lock
Dimensions	160 x 90 x 75 mm
Operation Humidity	5% - 90%
Security Authentication	FCC, CE, RoHS

7.Parts List

Part Name	Quantity
Digital Camera	1
USB Cable	1
Belt	1
Mounting Bracket	1
User Manual	1
Warranty Card	1

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