RSPB Nature Camera

USER MANUAL

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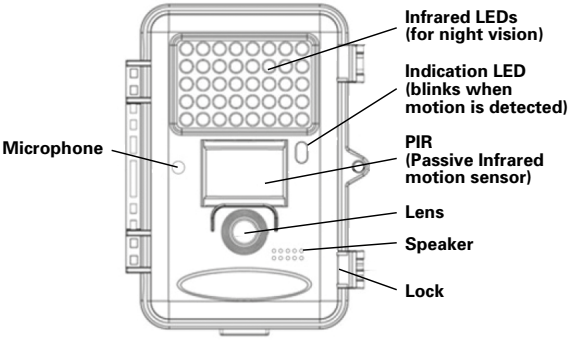
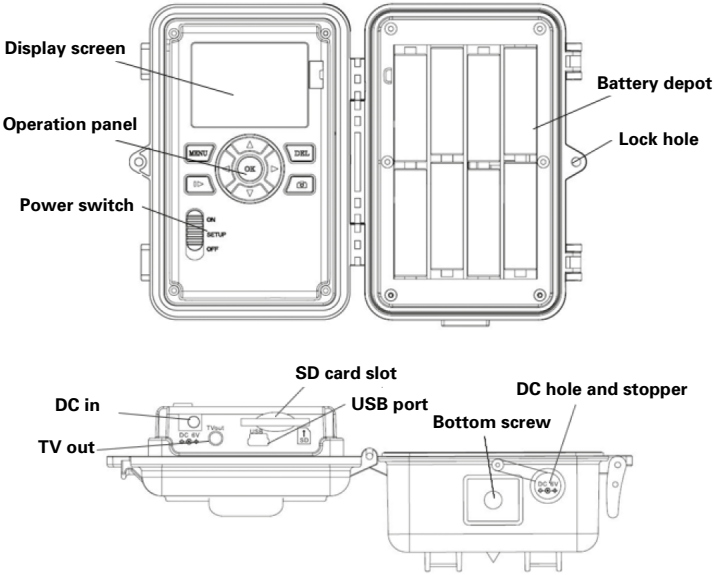
1 Getting Started



2 Camera Operation



2.1 Batteries/ Power Supply

The camera is powered by eight AA batteries. High-density, high-performance, rechargeable alkaline or NiMH batteries are recommended. When the batteries are low, the camera will beep twice and automatically shut down.

A DC 6V/2A external power supply adapter (not included) can also be used to power the camera.

2.2 SD Card Information

Insert the SD card into the camera before turning on the camera.

This camera supports up to a 32GB capacity SD card and has no built-in internal memory. The camera will not function without the SD card properly inserted into the camera.

Make sure the SD card is unlocked before inserting it into the camera.

The camera will operate properly with a locked SD card inserted, but the card will not be able to store captured images or videos taken by the camera.

Do not remove the SD card while the camera is on.

Removing the SD card while the camera is on risks damaging the internal components of the camera.

If you experience any problems with an inserted SD card, try reformatting the SD card using the camera's main settings option.

2.3 Camera Mode

ON Mode

The camera will capture pictures or videos when motion is detected and/or at specific time intervals, according to the programmed settings. After switching the camera to the **ON** position, the motion indicator LED (red) will blink for about 10 seconds and then turn off. This delay time allows you to adjust the camera position if needed, before the camera becomes active.

SETUP Mode

Customize the camera settings, or playback pictures and videos the camera has taken on the LCD display.

OFF Mode

Turns off the camera. The camera will still consume a small amount of battery power while in the OFF mode. It is recommended to remove the batteries if the camera will not be used for a long period of time.

2.4 Trigger Mode

PIR Triggering: The default setting is on. If PIR Triggering is on, the camera is only active when motion is detected. If PIR sensitivity is set to **OFF**, the camera stops responding to motion.

Time Lapse: The default setting is **OFF**, which means time lapse is disabled. When the time lapse interval is set to a non-zero value, the camera starts to work at a pre-set interval. Users need to set the PIR sensitivity to **OFF** if they want the camera to work only at pre-set intervals.

PIR and time lapse: For both PIR triggering and time lapse, users need to set PIR sensitivity to low, normal, or high according to the external environment, and set the Timer interval to a desired non-zero value. The camera will capture pictures or videos in a pre-set time interval even if there is no motion detected. The camera will also capture pictures and videos if motion is detected.

3 Camera Setup Settings and Display

3.1 Settings Interface & Display

To update the camera settings, move the power switch to the **SETUP** position.

" MENU " : Enter the program menu in preview mode

" ▶ ": Exchange between playback and preview mode

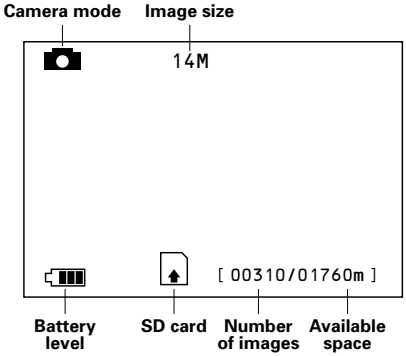
" DEL ": Delete a photo or video

" 📷 ": Capture a photo or record a video manually

"▲" "▼" "▶" "◀" : Navigate parameter settings

" OK ": Save parameter settings and play videos

When the camera is in **SETUP** mode, the screen will activate and display the following:



3.2 Manual Image / Video Capturing

Place the camera in **SETUP** mode and press 📷 to manually capture photos or record video. Press 📷 again to stop capturing.

3.3 Manage Images and/or Videos

Place the camera in **TEST**/**SETUP** mode and press ▶ button to view images or videos. The latest image or video will be shown on the LCD screen.

To view: Press "▲" or "▼" to view the previous or next image/video, press OK to play a video

To delete: Press DEL to delete images or videos in the playback state. If you are in the preview state, press ▶ to enter into playback state first.

3.4 Camera Setup Operation

To view the camera settings menu, slide the power switch to the setup position. Use the "▲" or "▼" buttons to select sub-menus; use "◀" or "▶" to select different options. Press OK to save the settings. After changing EACH setting in the **SETUP** menu, press OK or the camera will not keep new settings

MENU OPTIONS	DESCRIPTION
Camera Mode	There are three camera modes: **Photo**: to take photos. **Video**: to capture video. **Pic+Video**: to take a picture with a video clip. This mode disables the photo burst function. Default: **Photo**
Photo Size	Choose the image size, e.g.18MP
Video Size	Choose the video size: 1920x1080,1280x720 or 640x480. Default: **1920x1080**
Photo Burst	Choose the number of continuous photos taken after each trigger. When the Camera Mode is set to Pic + Video, the Photo Burst option is automatically disabled, resulting in only one picture captured with the video. When the Camera Mode is set to Photo, the Photo burst option will operate normally as specified. Default: **1**

MENU OPTIONS	DESCRIPTION
Video Length	Choose the duration of video recordings. This parameter is only active and adjustable when the device is in video mode and ON. Press ▲▼ to decrease or increase the value. Its value extends from 5 to 180 seconds.
Set Clock	To set camera's clock. The clock format is YY/MM/DD hour:minute:second. Press ▲▼ to change the value. Press ▶◀ to select the date or field.
Time Lapse	If time lapse is on, the camera can capture images or videos at a preset time interval regardless of whether motion is detected. The default setting is off, which means the timer function is disabled. Changing this parameter to a non-zero value turns on the Time Lapse mode, and the camera will take photos at the given time interval. NOTE: If the PIR Trigger is set to off, then Time Lapse can't be set to off. Default: **OFF**
PIR Trigger	This parameter defines the sensitivity of the PIR **High**: indicates that the camera is more responsive to motion. It is recommended to use high sensitivity in a room or environment with little interference. **Normal**: The default value is normal. **Low**: means the camera is not very responsive to motion. It is recommended to use this setting in outdoor environments or environments with a lot of interference like wind, smoke, near a window, etc. **OFF**: the camera is not triggered by motion to capture pictures or videos. NOTE: The sensitivity of the PIR is strongly related to the temperature. A higher temperature leads to a lower sensitivity. Therefore, it is suggested to use higher sensitivities for high temperature environments. Default: **Normal**

MENU OPTIONS	DESCRIPTION
PIR Interval	This setting indicates how long the PIR sensor will be disabled after it is triggered. During this time the PIR sensor will not react to any detected motion or scheduled timer functions. The PIR Interval can be set between zero seconds to a maximum of 1 hour. Press LEFT or RIGHT to decrease or increase the desired PIR Interval time. Default: **5 sec**
Working Hour	This setting controls when the camera is active each day. If activated, the camera will NOT take pictures or videos outside of the specified working hour, regardless of any other setup option settings. The values are set to military time which ranges from 00:00 to 23:59. Default: **OFF**
Language	Choose the language for the menu.
Beep Sound	Enable or disable the beep sound. Default: **ON**
Camera Posit	You can set an A-Z indicator for each of your cameras in order to distinguish which photos are from a specific camera position.
Recycle Storage	The first images or videos captured will be replaced by new pictures or videos. This allows you to capture more without the need to retrieve your memory card manually. In **SETUP** mode, the SD card can't recycle storage. Default: **ON**
Format SD	Deletes all images and videos in the SD card. Make sure to make a backup of important data before selecting this option.
Default Settings	Restore all camera settings to default values.
Version	Contains version information.

APPENDIX

Mounting the camera

When mounting a camera to a tree, use either the mounting bracket or the strap provided.

Tips: Try not to mount the camera when the sun is rising or setting. If mounting to a feeder or in a dusty environment, be sure to clean the camera lens and PIR sensor regularly. Periodically check the mounting of the camera to make sure it hasn't come loose.

Glossary

PIR : Passive Infrared motion sensor

FOV : Field of view

Trouble Shooting

Q1: There is something in front of the camera lens. Is the camera broken?

A: The camera is not broken. What's in front of the lens is an IR-Cut filter. When the camera is powered on, the IR-Cut will reset and cover the lens. When the camera is powered off, the IR-Cut will be at a random place

Q2: The camera controller is not working anymore?

A: Most likely, no SD card was inserted in the camera when it was turned on. Please make sure a working SD card has been inserted in the camera before it is turned on.

Q3: Why did the display screen suddenly turn black?

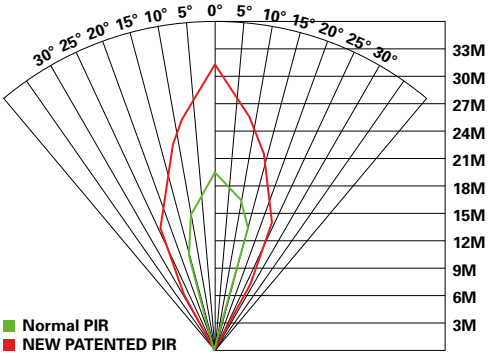
A: To reduce power consumption, the camera will shut down automatically after 3 minutes if left idle. Please turn the power on again if you want to continue.

Technical Specifications

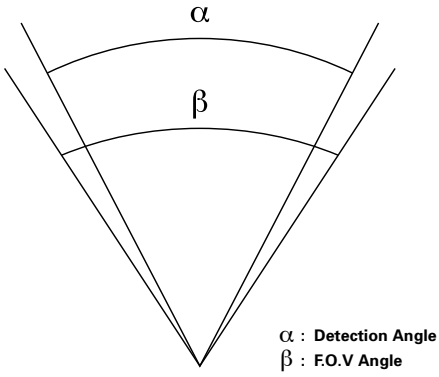
Image Sensor	14MP
Lens	F/NO=2.4 FOV=57°
Detection Range	30m
Display Screen	2"LCD
Video Resolution	1080P/720P/VGA
Video Length	5–180s
Weight	0.25kg (without battery)
Operation/Storage Temp.	-20° ~ +60°/-30° ~ +70°
Power Supply	8AA
Memory Card	8MB-32GB
Sound Recording	Available
Mounting	Rope / Belt / Python lock
Dimensions	140x80x50 mm
Operation Humidity	5% – 90%
Security Authentication	FCC, CE, RoHS

PIR Detection Zone

This camera has a new PIR, which is patented. The new PIR's detection range can reach 30m in good environments. The following picture compares the detection zone between the normal and new PIR.



The PIR detection angle (α) is 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.



Parts List

Part Name	Quantity
Digital Camera	1
USB Cable	1
Mounting Bracket	1
Belt	1
User's Manual	1

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