# RANGER

# **Digital Trail Camera**

Instructions for use: Model BN057



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#### 1. INTRODUCTION

Trail cameras record the activity of wildlife unattended by taking still images or short videos of anything that intrudes the passive infrared (PIR) sensor coverage area.

RANGER digital trail camera BN057 is ultra-compact (122mm x 82mm x 41mm) and water resistant and may be mounted outdoors for long periods of time. The camera can take up to 15 photos a day and 15 photos a night for six months on a single set of four AA batteries.

# 2. Specifications

Product Name	RANGER Trail Camera	
Model Number	BN057	
Image Sensor Type	1/2 Inch CMOS	
Effective Pixels	2.0-Megapixel	
Effective Focal Length	9.3 mm	
Lens Aperture	f/2.8	
Camera field of view	52 Degrees	
IR Filter	Fully automatic	
Display	LCD	
PIR sensor	Yes	
PIR sensor field of view	52 Degrees	
Trigger Speed	1.5 second	
Trigger test mode	Yes	

Number of IR LEDs	15
Maximum illumination distance for night shots	10 metres
Image storage	1 x SD Card up to 32 GB capacity
Low Battery Indicator	Yes
Time delay between shots	5 seconds to 60 minutes (default 1 minute)
Image resolution	2.0MP or 0.8MP
Multiple frames per PIR sensor trigger event	Yes. 1, 3 or video
Video resolution	Video: AVI 640 x 480 pixels at 30 fps for 15 seconds
File formats	JPEG for still images, AVI for videos
Date & time imprint	Yes
Moon phase imprint	Yes
Exposure	Auto
White balance	Auto
Menu language	English
Power supply	4 x AA batteries
Tripod socket	Yes
Water resistant	Yes

# 3. Parts Identification

#### Front housing image with major parts indication



#### Open view with major parts indication



#### Bottom view with major parts indication



# 4. PACKAGE CONTENTS

- 1 x Digital scouting camera
- 1 x User Manual (this document)
- 1 x USB cable
- 1 x Mounting Kit

# 5. BATTERY AND SD CARD INSTALLATION

NOTE: Make sure camera is OFF whenever installing or removing batteries.

- Use 4 x AA Alkaline batteries.
- When replacing batteries please make sure battery voltage and polarity (+/-) are correct. Incorrect voltage or polarity will damage the camera.

#### **M**EMORY

The expandable media card slot is capable of accepting SD cards with capacity up to 32GB (sold separately).

#### INSERTING SD CARD

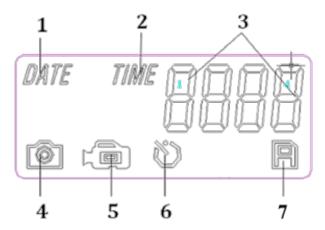
NOTE: Make sure camera is OFF whenever installing or removing the memory card.

- Insert the SD memory card into the SD card slot with the copper contacts facing up as shown on the sticker located at the side of the housing.
- To remove the SD memory card, depress it so it pops out and pull gently.
- ▲ SD cards must be clean and contain no data or images from other sources. If you are using the SD card from other devices, please make sure you format the SD card prior to use in the camera. New cards may be used straight from the package.

# 6. SETTING UP YOUR CAMERA MENU ITEMS

Date	MM/DD		
Time	HH:MM (24 hour clock)		
Image / Video	Photo	1P	0.8MP(Lo)
Mode			2.0MP(Hi)
		3P	0.8MP(Li)
			2.0MP(Hi)
	Video	640x480	
Camera delay	5 seconds to 60 minutes		
Number of photos on card	Display only		

#### LCD MENU



- 1. Date
- 2. Time
- 3. Four digit display
- 4. Still image resolution selection
- 5. Video recording
- 6. Camera delay
- 7. SD Card

## SETUP MODE

If the camera is off, turn it on.

Press SETUP to enter the setup mode, which starts by flashing the word "DATE". Press UP or DOWN to access the previous or next menu option, and OK to adjust the current setting. Once you are satisfied with the changes you have made press SETUP to accept the changes and put the camera into sleep mode.

# 6.1 SETTING CAMERA DELAY

Camera Delay specifies the amount of time in minutes and seconds between successive PIR triggered photos. This setting ranges from 5 seconds to 60 minutes 59 seconds. Default is 1 minute.

- Enter setup mode as described on page 8. The LCD will flash "DATE".
- Press the UP or DOWN button until icon #6 "Camera delay" is blinking then press OK.
- By default the LCD will display "0100", the first two digits represent minutes and last two digits represent seconds.
- When the cursor flashes on minutes, press UP or DOWN to change the value (from 01-60), press OK to confirm.
- The cursor will now be flashing seconds. Press UP or DOWN to change the value (from 05-59) and press OK to confirm.
- 6. Press SETUP to save and exit.
- **6.2 Setting Camera State and Photo Resolution**Set the number of pictures the camera will take each time the PIR detects movement. One still image, three still images or one continuous 15 second video.
- 1. Enter setup mode as descibed on page 8. The

- LCD will flash "DATE".
- 2. Press the UP or DOWN button until both icons #4 and #5 are blinking, press OK to enter.
- 3. Press the UP or DOWN button to select #4 (Picture mode) or #5 (Video mode).
- 4. To select Video mode, press OK when #5 is flashing. Videos are 15 seconds long and take up to 20MB of memory each.
- To select Picture mode, press OK when #4 is flashing. Select between "1P" to take one photo at a time or "3P" to take three photos. Press OK to confirm.
- 6. The LCD will now display "LoHi" which indicates the image resolution. "Lo" represents 0.8MP and "Hi" represents 2.0MP. Press UP or DOWN to select and press OK to confirm. Default is "Hi".
- ▲ Lo = 1024 x 768 pixels (0.8MP) Hi = 1600 x 1200 pixels (2.0MP)
- ▲ Video is 15 seconds at 640x480 pixels (20Mb)
- 7. Press SETUP to save and exit.

#### 6.3 SETTING THE DATE AND TIME

Setting the Date, Year and Time. This information is stored on each image along with the temperature and moon phase.

#### DATE

- Enter setup mode as described on page 8. The LCD will flash "DATE".
- Press OK.

- The first two digits on the LCD represent the month (MM) and last two digits represent day (DD).
- Press UP or DOWN to select month between 01-12 and press OK to confirm.
- 5. Press UP or DOWN to select day between 01-31 and press OK to confirm.
- 6. Press UP or DOWN to select year between 00-99 (2000-2099) and press OK to confirm.
- Press SETUP to save and exit.

#### TIME

- Enter setup mode as described on page 8. The LCD will flash "DATE".
- Press UP or DOWN until #2 "TIME" is blinking and press OK.
- The first two digits on the LCD represent hours (HH) and last two digits represent minutes (MM).
- 4. Press UP or DOWN to select the hour between 00-23 and press OK to confirm.
- 5. Press UP or DOWN to select minutes between 00-59 and press OK to confirm.
- 6. Press SETUP to save and exit.
- ▲ In order to conserve battery power during storage the date and time will reset to zero if the unit is switched off for more than an hour. Remember to reset the date and time whenever you set the camera up.
- A Remove batteries if the camera is to remain unused for a long period of time.

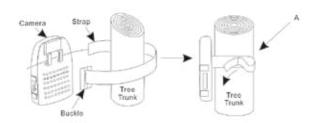
#### 6.4 DISPLAY NUMBER OF IMAGES / VIDEOS STORED

- Enter setup mode as described on page 8. The LCD will flash "DATE".
- 2. Press UP or DOWN until #8 "SD card" is blinking.
- The LCD will display the total number of pictures and videos stored on the SD card.
- Press SETUP to exit.

# 7. Using the Camera

# 7.1 MOUNTING THE CAMERA

It is recommended that you mount the camera 1.2 to 1.5 metres off the ground with the camera pointed at a slight downward angle. Be sure to avoid mounting the camera facing east or west as the rising and setting of the sun could produce false triggers and overexposed images. Clear branches and other debris away from the front of the camera so as not to block the camera lens or PIR sensor.



Insert the strap through the strap slots on the rear housing and wrap the strap around the mounting surface. Secure the strap and tighten the buckle in

order to secure the camera.

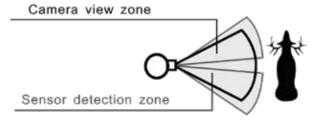
▲ In order to obtain proper weather resistance, please make sure that both door latches are securely locked in place.

#### 7.2 TURN ON THE CAMERA

If the camera is off, turn it on . The camera automatically enters sleep mode and will start taking photographs or video after the delay time (see 6.1 Setting Camera Delay on page 9).

# 7.3 TESTING THE CAMERA COVERAGE AREA

After mounting the camera enter setup mode as described on page 8. A red indicator light on the front (the Working Indicator) will blink when you have intruded the PIR coverage area. Adjust the camera position as needed and repeat testing until the desired coverage area is achieved.



Make sure you exit setup after you have finished testing the camera coverage.

#### 7.4 SECURE YOUR CAMERA

A small padlock can be used to lock the camera cover.



# 7.5 REPLACING THE BATTERY

If the battery is low, the red indicator light will flash three times and then turn off. This indicates that the battery should be replaced as soon as possible.



#### 8. VIEWING THE IMAGES AND VIDEOS

#### TO CONNECT THE CAMERA TO A PC

- 1. Slide the toggle switch to "ON".
- 2. Press SETUP button.
- Connect your camera to the PC using the USB cable provided. The PC will recognize the new device and display a new disk icon. The LCD will display "STO".
- 4. Images and videos on the SD card can now be viewed, copied, moved and deleted.

#### READ IMAGES USING A CARD READER

- 1. Depress the SD card and gently pull out the card.
- 2. Insert SD card into the card reader.
- Read images and videos from the card reader as normal.

# 9. PC CAMERA

## Using the Camera as a PC Webcam

- Slide the toggle switch to "ON".
- 2. Press SETUP button.
- Connect your camera to the PC using the USB cable provided. The PC will recognize the new device and display a new disk icon. The LCD will display "STO".
- 4. Press OK and the camera will enter the "PC camera" mode. The LCD will display "PC".

# 10. GLOSSARY

PIR: Passive Infrared Sensor. Senses motion like a typical security motion detector. Requires a moving heat source to trigger.

# Camera Delay:

Time that will elapse between photos while events are sensed and recorded. This is userset based on wildlife activity in area.

#### Resolution:

The resolution selection that you choose. MP = Mega Pixels = 1 million pixels. Hi (1600 x 1200): 2.0M pixels image (high image quality, large file size) Lo (1024 x 768): 0.8M pixels image (medium image quality, medium file size) Video resolution (640 x 480 @ 30fps for 15 seconds) 20MB file.

FPS: Frames per second. This is the measurement of the frequency (rate) at which an imaging device produces unique consecutive images. 30 fps means that the camera produces video at 30 frames per second.

# Video Length:

All videos taken with RANGER Trail Camera are 15 seconds long.

# Moon Phase Imprint:

The moon phase is imprinted on each image.

#### IR Flash:

Also called IR LED Array. Emits a burst of infrared light which is invisible to the human eye. Especially useful for night photos when a visible flash is undesirable. Although the light emitted by the LEDs is invisible, the LED array may be seen as a dull red glow if looked at directly.

#### SD Card:

Memory card used to store images and videos. The camera is compatible with up to 32GB capacity SD cards.

# Battery Life:

Time that camera will function in the field. This time is dependent on several factors including temperature, number of images and number of flashes. Based on our new advanced power system, this camera can support on average 30 pictures per day for six months of surveillance.

Burst: The number of pictures the camera will take per PIR trigger event:

1P: A single image is captured 3P: Three images are captured

FULL: When the memory capacity of the SD card is full, the LCD screen will show "FULL".

# RANGER ONE YEAR WARRANTY

RANGER Digital Trail Cameras are sold with a one year warranty against original defects in material and/ or workmanship provided that it has not been abused, taken apart or tampered with in any way whatsoever.

Should it become necessary to repair your camera, package the unit carefully and return it to your dealer, or directly to:

The Lynx Service Centre PO Box 98078 Sloane Park South Africa, 2152

Include this page or a copy of it, your name, address and telephone number, and a note with a full and accurate description of the problem. In the event that the repair is not covered by this warranty an estimate will be sent for your approval.

Lynx shall not be held liable for any consequential, incidental or contingent damage whatsoever.

Dealer name and signature or dealer stamp					

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