RANGER
Digital Trail Camera
Instructions for use:
Models BN055 and BN056
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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 cameras BN055 and BN056 are compact (147mm x 94mm x 46mm) 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 one year on a single set of 8 x AA batteries.

2. **SPECIFICATIONS**

<table>
<thead>
<tr>
<th>Product Name</th>
<th>RANGER Trail Camera</th>
</tr>
</thead>
<tbody>
<tr>
<td>Model Number</td>
<td>BN055 / BN056</td>
</tr>
<tr>
<td>Image Sensor Type</td>
<td>1/2.5 Inch CMOS</td>
</tr>
<tr>
<td>Effective Pixels</td>
<td>5.0-Megapixel</td>
</tr>
<tr>
<td>Effective Focal Length</td>
<td>7.6 mm</td>
</tr>
<tr>
<td>Lens Aperture</td>
<td>f/3.0</td>
</tr>
<tr>
<td>Camera field of view</td>
<td>55 Degrees</td>
</tr>
<tr>
<td>IR Filter</td>
<td>Fully automatic</td>
</tr>
<tr>
<td>Display</td>
<td>LCD</td>
</tr>
<tr>
<td>PIR sensor</td>
<td>Yes</td>
</tr>
<tr>
<td>PIR distance adjustor</td>
<td>Yes (2m ~ 20m)</td>
</tr>
<tr>
<td>PIR sensor field of view</td>
<td>55 Degrees</td>
</tr>
<tr>
<td>Trigger Speed</td>
<td>1 second</td>
</tr>
<tr>
<td>Feature</td>
<td>Specification</td>
</tr>
<tr>
<td>----------------------------------------------</td>
<td>--------------------------------------------------</td>
</tr>
<tr>
<td>Number of IR LEDs</td>
<td>30</td>
</tr>
<tr>
<td>Maximum illumination distance for night shots</td>
<td>15 metres</td>
</tr>
<tr>
<td>Image storage</td>
<td>1 x SD Card up to 32 GB capacity</td>
</tr>
<tr>
<td>Low Battery Indicator</td>
<td>Yes</td>
</tr>
<tr>
<td>Time delay between shots</td>
<td>1 second to 60 minutes (default 1 minute)</td>
</tr>
<tr>
<td>Image resolution</td>
<td>5.0MP or 3.1MP</td>
</tr>
<tr>
<td>Multiple frames per PIR sensor trigger event</td>
<td>Yes. 1, 3 or video</td>
</tr>
<tr>
<td>Video resolution</td>
<td>Video: AVI 640 x 480 pixels at 30 fps for 15 seconds</td>
</tr>
<tr>
<td>File formats</td>
<td>JPEG for still images, AVI for videos</td>
</tr>
<tr>
<td>Date &amp; time imprint</td>
<td>Yes</td>
</tr>
<tr>
<td>Moon phase imprint</td>
<td>Yes</td>
</tr>
<tr>
<td>Temperature imprint</td>
<td>Yes</td>
</tr>
<tr>
<td>Exposure</td>
<td>Auto</td>
</tr>
<tr>
<td>White balance</td>
<td>Auto</td>
</tr>
<tr>
<td>User password</td>
<td>Yes. Four digits</td>
</tr>
<tr>
<td>Menu language</td>
<td>English</td>
</tr>
<tr>
<td>TV output</td>
<td>Yes</td>
</tr>
<tr>
<td>Power supply</td>
<td>8 x AA batteries</td>
</tr>
<tr>
<td>Tripod socket</td>
<td>Yes</td>
</tr>
<tr>
<td>Water resistant</td>
<td>Yes</td>
</tr>
</tbody>
</table>
3. **Parts Identification**

![Diagram of parts identification](image)

- Front Housing
- PIR Motion Sensor
- Lighting Sensor
- Infrared Illuminator
- Infrared Illuminator
- Camera Lens
- Lock Hole
- Working Indicator
- Open view with major parts indication

- USB Port
- LCD Screen
- TV Output
- PIR Sensitivity Adjustor
- Up Button
- Down Button
- OK Button
- Power Switch
- SD Card Slot
- 8" AA Cell Battery Container
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 8 x AA Alkaline batteries.

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

**MEMORY**
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**

<table>
<thead>
<tr>
<th>Date</th>
<th>MM/DD</th>
<th>YYYY</th>
</tr>
</thead>
<tbody>
<tr>
<td>Time</td>
<td>HH:MM (24 hour clock)</td>
<td></td>
</tr>
<tr>
<td>Image / Video Mode</td>
<td>Photo</td>
<td></td>
</tr>
<tr>
<td></td>
<td>1P</td>
<td>3.1MP(Lo)</td>
</tr>
<tr>
<td></td>
<td></td>
<td>5.0MP(Hi)</td>
</tr>
<tr>
<td></td>
<td>3P</td>
<td>3.1MP(Li)</td>
</tr>
<tr>
<td></td>
<td></td>
<td>5.0MP(Hi)</td>
</tr>
<tr>
<td></td>
<td>Video</td>
<td>640x480</td>
</tr>
<tr>
<td>Camera delay</td>
<td>0 seconds to 60 minutes</td>
<td></td>
</tr>
<tr>
<td>Password</td>
<td>0000 to 9999</td>
<td></td>
</tr>
<tr>
<td>Number of photos on card</td>
<td>Display only</td>
<td></td>
</tr>
</tbody>
</table>
1. Date
2. Time
3. Four digit display
4. Still image resolution selection
5. Video recording
6. Camera delay
7. Password
8. SD Card

**Setup Mode**

If the camera is off, turn it on and enter your four digit password (the default is 0000), when the correct password has been entered the camera automatically enters sleep mode.
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 1 second to 60 minutes 59 seconds. Default is 1 minute.

1. Enter setup mode as described on page 9. The LCD will flash “DATE”.
2. Press the UP or DOWN button until icon #6 “Camera delay” is blinking then press OK.
3. By default the LCD will display “0100”, the first two digits represent minutes and last two digits represent seconds.
4. When the cursor flashes on minutes, press UP or DOWN to change the value (from 00-60), press OK to confirm.
5. The cursor will now be flashing seconds. Press UP or DOWN to change the value (from 00-59) 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 described on page 9. 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.
5. 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 3.1MP and “Hi” represents 5.0MP. Press UP or DOWN to select and press OK to confirm. Default is “Hi”.
   ▲ Lo = 2048x1536 pixels (3.1MP)  
   Hi = 2560x1920 pixels (5.0MP)  
   ▲ 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**

1. Enter setup mode as described on page 9. The LCD will flash “DATE”.
2. Press OK.
3. The first two digits on the LCD represent the month (MM) and last two digits represent day (DD).
4. 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.
7. Press SETUP to save and exit.

**TIME**

1. Enter setup mode as described on page 9. The LCD will flash “DATE”.
2. Press UP or DOWN until #2 “TIME” is blinking and press OK.
3. 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 01-24 and press OK to confirm.
5. Press UP or DOWN to select minutes between 01-60 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.

Remove batteries if the camera is to remain unused for a long period of time.

6.4 Changing the Password
The system will always require you to input a password to activate the camera or to access setup. The default password is “0000”. The first time you turn on the camera just press OK five times to go through the security check.

1. Enter setup mode as described on page 9. The LCD will flash “DATE”.
2. Press UP or DOWN until #7 “PASSWORD” is blinking, and press OK.
3. Press UP or DOWN to select 0 to 9 and press OK to proceed through to the next digit.
4. When all four digits are set press SETUP to save and exit.

▲ Note: If you forget the password, contact your dealer with details of your purchase receipt and they will help you to reset it.

6.5 Display Number of Images / Videos Stored
1. Enter setup mode as described on page 9. The LCD will flash “DATE”.
2. Press UP or DOWN until #8 “SD card” is blinking.
3. The LCD will display the total number of pictures and videos stored on the SD card.
4. 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.

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

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.
7.2 Turn on the Camera
If the camera is off, turn it on and enter your four digit password (the default is 0000), when the correct password has been entered 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 10).

7.3 Adjusting PIR Sensitivity
Adjust the PIR sensitivity range from 2 metres to 20 metres by using the PIR sensitivity adjustment dial as shown in the parts identification diagram on page 5. Setting the dial to a higher number increases sensitivity for longer distances, and setting the dial to a smaller number decreases sensitivity for shorter distances. Note that actual distance can vary due to environment temperature, object size etc.

7.4 Testing the Camera Coverage Area
After mounting the camera enter setup mode as described on page 9. 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.

7.5 **SECURE YOUR CAMERA**
A small padlock can be used to lock the camera cover.

7.6 **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.
3. 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.
3. Read images and videos from the card reader as normal.

9. **PC Camera and TV Out**

*Using the Camera as a PC Webcam*

1. Slide the toggle switch to “ON”.
2. Press SETUP button.
3. 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”.

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**TV Out**
The camera can be connected to a TV and be used for video surveillance:
1. Slide the toggle switch to “ON”.
2. Press SETUP button.
3. Connect the TV cable provided to the camera and the TV.
4. The LCD will display “TV” and real time video will display on the TV.

**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 user-set based on wildlife activity in area.

**Resolution:**
The resolution selection that you choose.
- **MP = Mega Pixels = 1 million pixels.**
  - **Hi (2560 x 1920):** 5.0M pixels image (high image quality, large file size)
  - **Lo (2048 x 1536):** 3.1M pixels image (medium image quality, medium file size)
- **Video resolution (640 x 480 @ 30fps):** 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.

Password:
Controls access to the camera. Password length is four digits.

Moon Phase Imprint:
The moon phase is imprinted on each image.

Temperature Imprint:
The current temperature will be imprinted on each photo.

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 one year 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.

Purchase date: ............................................................

Dealer name and signature or dealer stamp

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