RANGER
8MP Digital Trail Camera
Instructions for use
Model BN061 / BN062

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 BN061 / BN062 is 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 AA batteries.

2. SPECIFICATIONS

Product Name	RANGER Trail Camera
Model Number	BN061 / BN062
Image Sensor Type	1/2.5 Inch CMOS
Effective Pixels	5.0-Megapixel interpolate to 8.0MP
Effective Focal Length	7.45 mm
Lens Aperture	f/3.0
Camera field of view	55 Degrees
IR Filter	Fully automatic
Display	6.5mm TFT LCD
PIR sensor	Yes
PIR distance adjustor	Yes (2m ~ 20m)
PIR sensor field of view	42 Degrees
Trigger Speed	±1 second

Number of IR LEDs	30
Maximum illumination distance for night shots	15 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	8.0MP or 5.0MP
Multiple frames per PIR sensor trigger event	1 to 99 still images or 15 to 60 seconds of AVI video
Video resolution	640 x 480 pixels @ 30 fps or HD 1280 x 720 @ 30 fps
File formats	JPEG for still images AVI for videos
Date & time imprint	Yes
Moon phase imprint	Yes
Temperature imprint	Yes
Exposure	Auto
White balance	Auto
Menu language	English
TV output	Yes. NTSC and PAL
Power supply	8 x AA batteries
Battery life	230 days assuming average 15 day & 15 night pictures per day
Tripod socket	Yes
Water resistant	Yes

3. PARTS IDENTIFICATION

Front housing image with major parts indication

Front Housing
Lighting Sensor
Infrared Illuminator
Camera Lens

PIR Motion Sensor
Infrared Illuminator
Lock Hole
Working Indicator

Open view with major parts indication

2.5 Inch Color TFT Screen
USB Port
TV Out Port
SD Card Slot
Mode Button
Sleep/Wake Button

5-Dimension Button Group
PIR Sensitivity Controller
Power Switch
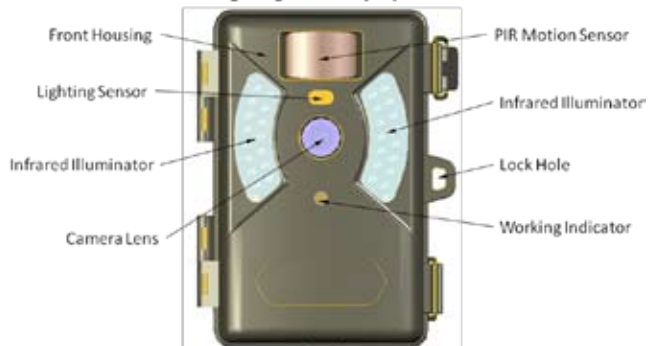
Top view with major parts indication

SNAP Button

Bottom view with major parts indication

Camera Tripod Socket
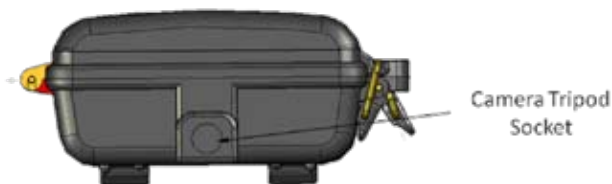
4. PACKAGE CONTENTS

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

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 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.
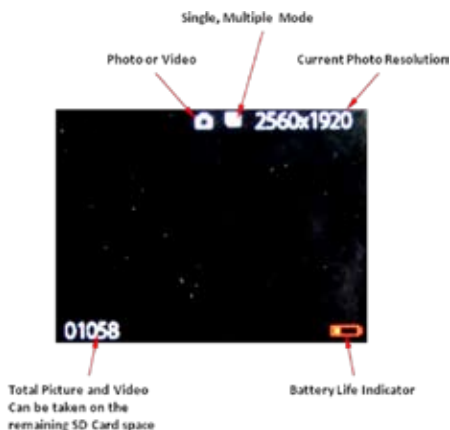• To remove the SD memory card, depress it so it pops out and pull gently.

▲ SD cards must be clean and contain no data or images from other sources. If you are using the SD card from other devices, make sure you format the SD card prior to use in the camera. New cards may be used straight from the package.

6. SCREEN SYMBOLS AND OPERATION MODES

If you switch on the camera but don't press any of the buttons for about ten seconds it will automatically enter sleep mode and the screen will go blank. Press the Wake/Sleep button to enter or exit sleep mode.

6.1 GENERAL MODE

Two modes of operation are selectable via the MODE button (see 3. Parts identification). Upon activation the camera defaults to *General Mode*, which looks like this:

Single, Multiple Mode

Photo or Video

Current Photo Resolution

2560x1920

01058

Total Picture and Video
Can be taken on the
remaining SD Card space

Battery Life Indicator

Pressing OK in *General Mode* will bring up this menu:
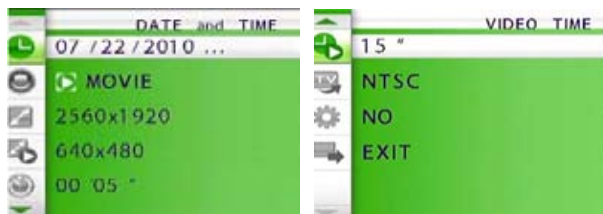
GENERAL MODE MENU ITEMS	
Date and time	mm/dd/yyyy hh:mm
Capture mode	Single
	Multiple (from 2 to 99)
	Video
Image size	5.0MP (2560 x 1920)
	8.0MP (3264 x 2448)
Video size	640 x 480 (VGA)
	1280 x 720 (HD)
Camera standby delay	5 seconds to 60 minutes
Video time	15 to 60 seconds
TV OUT signal	NTSC 60Hz
	PAL 50Hz
Reset to factory default	Yes
	No
Exit	

Press the MODE button to switch between *Playback* and *General* modes.

6.2 PLAYBACK MODE

Use *Playback Mode* to review photos and videos, to delete pictures or format the SD card. *Playback Mode* looks like this:

Pressing OK in *Playback Mode* will bring up this menu that looks like this:

PLAYBACK MODE MENU ITEMS	
Delete one	Yes
	No (default)
Format	Yes
	No (default)
Unlock	Lock
	Unlock (default)
Exit	

7. SETTING UP YOUR CAMERA
7.1 SETTING THE DATE AND TIME
If the camera is off, turn it on. If it is already on but in sleep mode press the Wake/Sleep button to enter *General Mode*.

Press OK to enter the *General Mode* menu, use the UP and DOWN buttons to highlight the currently set date and time and then press OK. Use the LEFT and RIGHT buttons to select month, day, year, hour and minute and use UP and DOWN to change each value. When you have entered the correct date and time values press OK to return to the previous menu and Exit to exit the menu.

Press Wake/Sleep to enter sleep mode. The PIR sensor will arm 60 seconds later and the camera will be ready to start taking pictures.

7.2 SETTING CAPTURE MODE
If the camera is off, turn it on. If it is already on but in sleep mode press the Wake/Sleep button. The screen will come on.

If necessary enter *General Mode* by pressing the MODE button. Use the UP and DOWN buttons to move the cursor to *Capture Mode* and then press OK. Use the UP and DOWN buttons to select **Single**, **Multiple** or **Movie**. Single means a single photograph will be taken per trigger event, **Multiple** means the camera will take a sequence of several photographs per trigger event, use the LEFT and RIGHT button to specify how many photos you want per sequence. **Movie** means the camera will take one video clip per trigger event. You can specify the length of the clip using the Video Time menu option.

When you have set all the values correctly press OK, then highlight *Exit* and press OK.

Press Wake/Sleep to enter sleep mode. The PIR sensor will arm 60 seconds later and the camera will be ready to start taking pictures.

7.3 SETTING IMAGE SIZE
Enter *General Mode* as explained above and use the UP and DOWN buttons to highlight *Image Size.* Press OK and use the UP and DOWN buttons to select the size you want your images to be, 8PM (3264x2448 pixels) or 5MP (2560 x 1920 pixels). Press OK to

return to the main menu and highlight *Exit* and press OK to exit.

Press Wake/Sleep to enter sleep mode. The PIR sensor will arm 60 seconds later and the camera will be ready to start taking pictures.

7.4 SETTING VIDEO SIZE
In *General Mode* highlight *Video Size* and press OK. Use the UP and DOWN buttons to select hi video (HD / 1280x720 pixels) or low video (VGA / 640x480 pixels). Press OK, then highlight *Exit* and press OK.

Press Wake/Sleep to enter sleep mode. The PIR sensor will arm 60 seconds later and the camera will be ready to start taking pictures.

7.5 SETTING CAMERA DELAY
Camera delay is the time the camera will remain inactive between each trigger event.

In *General Mode* highlight *Camera Delay* and press OK. Use the LEFT and RIGHT buttons to select minutes and seconds and the UP and DOWN buttons to change the value. Once you have set the delay as desired press OK, then highlight *Exit* and press OK.

Press Wake/Sleep to enter sleep mode. The PIR sensor will arm 60 seconds later and the camera will be ready to start taking pictures.

7.6 Set Video Time
Video time is the length of time a video clip will record when a trigger event occurs.

In *General Mode* highlight *Video Time* and press OK. Use the UP and DOWN buttons to change the value Press OK, then highlight *Exit* and press OK.

Press Wake/Sleep to enter sleep mode. The PIR sensor will arm 60 seconds later and the camera will be ready to start taking pictures.

7.7 Setting The TV Out System
In *General Mode* highlight *TV Out* and press OK. Use the UP and DOWN buttons to select NTSC or PAL. Press OK, then highlight *Exit* and press OK.

Press Wake/Sleep to enter sleep mode. The PIR sensor will arm 60 seconds later and the camera will be ready to start taking pictures.

7.8 Resetting The Camera to Default
To reset the camera to factory default settings go into *General Mode*, highlight *Default* and press OK. Use the UP and DOWN buttons to select YES or NO and press OK, then highlight *Exit* and press OK.

Press Wake/Sleep to enter sleep mode. The PIR sensor will arm 60 seconds later and the camera will be ready to start taking pictures.

8. USING THE CAMERA

8.1 MOUNTING THE CAMERA

Mount the camera 1.2 to 1.5 metres off the ground, pointing at a slight downward angle. Avoid mounting it facing east or west as the rising or setting sun could produce false triggers and overexposed images. Clear branches and other debris away from the area in front of the camera so as not to block the camera lens or PIR sensor.
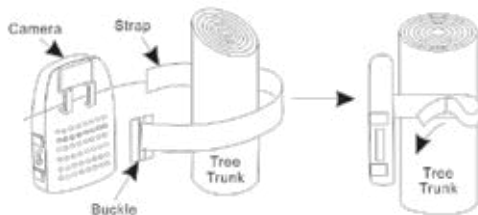
Insert the strap through the strap slots on the rear housing and wrap the strap around the mounting surface. Secure the strap and tighten the buckle in order to secure the camera.

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

8.2 SWITCHING ON

When you turn on the camera it automatically enters *Sleep Mode* and will start taking photographs or video after the delay time (see 6.6 Setting Camera Delay).

8.3 ADJUSTING PIR SENSITIVITY

Adjust the PIR sensitivity range from 2 metres to 20 metres by using the PIR sensitivity adjustment dial. At setting 1 the PIR is most sensitive; at 6 it is least sensitive. Note that the actual distance at which the sensor will detect movement can vary due to environment temperature, object size etc.
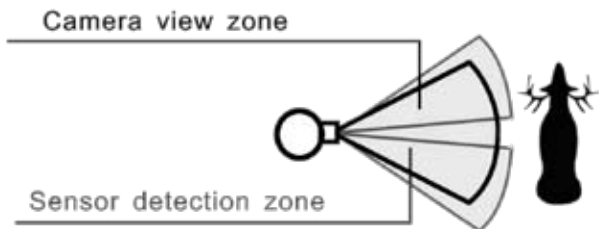
8.4 TESTING THE CAMERA COVERAGE AREA

After mounting the camera enter *Setup Mode*: open the front housing and slide the power switch to ON, press the OK button to enter *General Mode* and then close the front housing.

A red indicator light on the front (the Working Indicator) will blink as you intrude the PIR coverage area.

Adjust the camera position and PIR sensitivity as needed and repeat testing until you're happy with the PIR coverage area.

Camera view zone

Sensor detection zone

▲ Press the SETUP button again when you've finished testing the PIR coverage area to enter sleep mode. The camera will now be ready to take photographs.

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

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

8.7 PREVIEWING AND DELETING IMAGES OR VIDEOS
1. Slide the toggle switch to ON.
2. Press MODE button to enter *Playback Mode*.
3. Use the LEFT and RIGHT button to preview images and videos stored on the SD card.
4. To delete the currently displayed image or video press the OK button, then highlight and press OK on the "Delete one" menu item.
5. Use the UP and DOWN buttons to highlight YES or NO to confirm or cancel deletion.

Press Wake/Sleep to enter sleep mode. The PIR sensor will arm 60 seconds later and the camera will be ready to start taking pictures.

8.8 FORMAT SD CARD
1. Slide the toggle switch to ON.
2. Press MODE to enter *Playback Mode*.
3. Press OK to enter the menu.
4. Press UP or DOWN to select "Format" and press OK.
5. Use the UP and DOWN buttons to highlight YES or NO to confirm or cancel formatting.

Press Wake/Sleep to enter *Sleep Mode*. The PIR sensor will arm 60 seconds later and the camera will

be ready to start taking pictures.

8.9 *Lock / Unlock a file*
Locking a file prevents accidental deletion of an image or video

1. Slide the toggle switch to ON.
2. Press MODE to enter *Playback Mode*.
3. Use the LEFT and RIGHT button to preview images and videos on the SD card.
4. To lock or unlock the currently displayed image or video press the OK button, then highlight and press OK on the "File Lock" menu item.
5. Use the UP and DOWN buttons to highlight LOCK or UNLOCK and press OK.

Press Wake/Sleep to enter *Sleep Mode*. The PIR sensor will arm 60 seconds later and the camera will be ready to start taking pictures.

8.10 *Take an Instantaneous Photo or Video with the Snap Button*

SNAP Button

1. Slide the toggle switch to ON.
2. In *General Mode* point at the scene you wish to photograph and press the SNAP button.

8.11 CAMERA NO RESPONSE RECOVERY
If the camera freezes, turn it off and remove the batteries for twenty seconds. Reinsert the batteries and slide the toggle switch to ON.

9. VIEWING IMAGES AND MOVIES
9.1 TO VIEW DIRECTLY ON THE LCD SCREEN
1. Slide the toggle switch to ON.
2. Press MODE to enter *Playback Mode*.
3. Us the LEFT and RIGHT buttons to view images and videos stored on the SD card.
4. If a video is selected press the SNAP button to start playback.

9.2 TO CONNECT THE CAMERA TO A PC
1. Slide the toggle switch to ON.
2. Connect your camera to the PC using the USB cable provided. The PC will recognize the new device and display a new disc icon. The LCD will display "MASS STORAGE".
3. Images and videos on the SD card can now be viewed, copied, moved and deleted.

9.3 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.

9.4 PLAYING HD VIDEO ON A COMPUTER

Videos are stored on the SD using MPEG4 codec. If your Windows Media Player cannot play these videos download the "ffdshow" codec set at:
http://www.free-codecs.com/download/FFDShow.htm

Download the latest Windows Media Player at:
http://windows.microsoft.com/en-US/windows/products/windows-media-player

9.5 PLAY VIDEO AND IMAGES ON A TV

You can connect the camera directly to a TV to preview images and videos.

1. Slide the toggle switch to ON.
2. Press MODE to enter *Playback Mode*.
3. Connect the camera to the TV with the supplied cable. Images will be transferred live from the camera to the TV.
4. Press the LEFT and RIGHT button to view images or videos stored on the SD card.
5. If a video is selected press the SNAP button to start playback.

10. GLOSSARY

HD: High definition. This is an international standard. Ranger HD camera supports 1280 x 720 widescreen video resolution.

Codec: A codec is a device or computer program capable of encoding and/or decoding a digital data stream or signal.

MPEG-4: MPEG-4 is a collection of methods defining compression of audio and visual (AV) digital data.

PIR: Passive Infrared Sensor. Senses motion like a typical security motion detector. Requires infrared energy (heat) in addition to motion to trip sensor to detect live animals.

Camera Delay: Time elapsed between photos while events are sensed and recorded. This is user-set based on wildlife activity in area.

Moon Phase: Imprints a moon phase stamp on each image.

IR Flash: Also called IR LED Array. Infrared LED Night Vision feature. Emits a burst of infrared light which is invisible to the human eye. Especially useful for night photos when a visible flash is undesirable.

Battery Life: Time that camera will function in the field. Dependent on temperature, number of images and number of flashes during that time. When battery voltage is below 4.5v, the camera stops working in dark environment. When battery voltage is below 3.5v, the camera stops working entirely.

Multiple: To set the number of pictures the camera will take per PIR trigger event.
1P: single image capturing per PIR trigger event.
2P~99P: 2 to 99 images continuous capturing per PIR trigger event.

FULL: When memory capacity is full, this front LCD screen will show "FULL".

RANGER One Year Warranty

The RANGER Digital Trail Cameras is 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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