



USER MANUAL

Model: ORYX 4G-ZA-60 STD [60° standard FOV lens]

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Model: ORYX 4G-ZA-100 STD [100° wide-angle FOV lens]



60° standard lens model



100° wide angle lens model

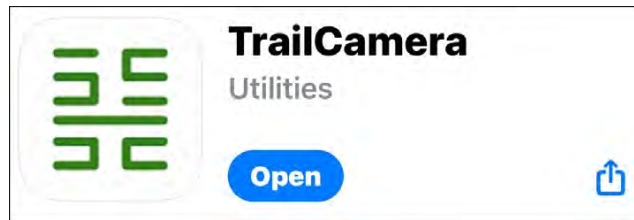
Est. 2007



YOUR PATIENT WITNESS

www.cameratraps.co.za
info@cameratraps.co.za

APP available for remote control SMS functions of ORYX 4G-ZA models...



Please scan this iOS QR code
below to download the **TrailCamera** APP.

For iOS



For Android

Currently the Android app version is being reviewed by Google. After Google reviews it, it can be downloaded normally.

In the meantime you can still get the Android **TrailCamera App** by downloading the .apk file and installing it directly on your Android phone.

- Please click [here](#) for the TrailCamera.apk file
- Please click [here](#) for installation instructions on Android devices.

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1. Quick Start

1.1 What's in the Box?

- Camera Trap x1
- Instruction manual x1
- USB cable x1
- Mounting strap x1
- Antenna x1 (4G Model Only)



1.2 Whole view and details of Camera

Figure 1: Front View

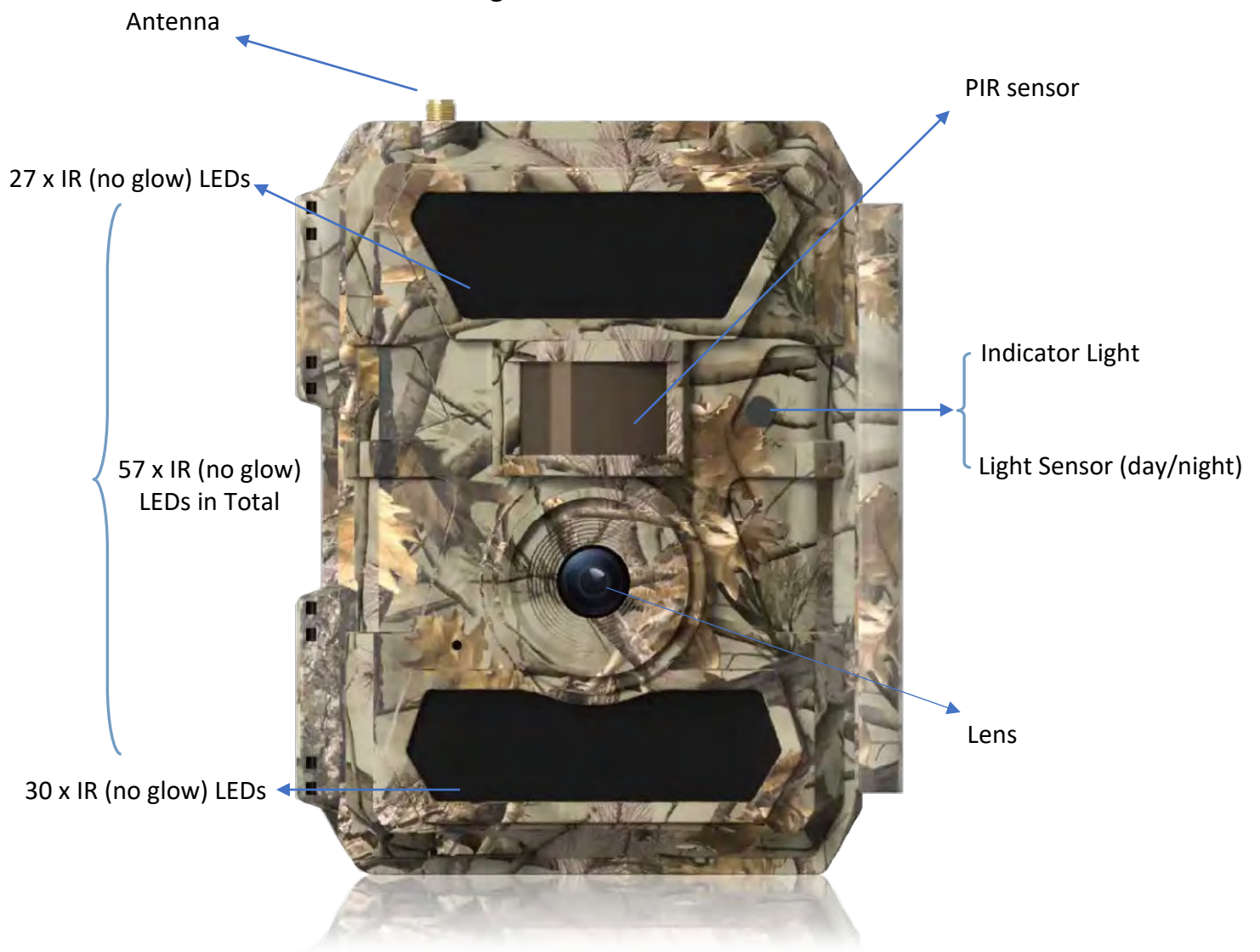


Figure 2: Bottom View

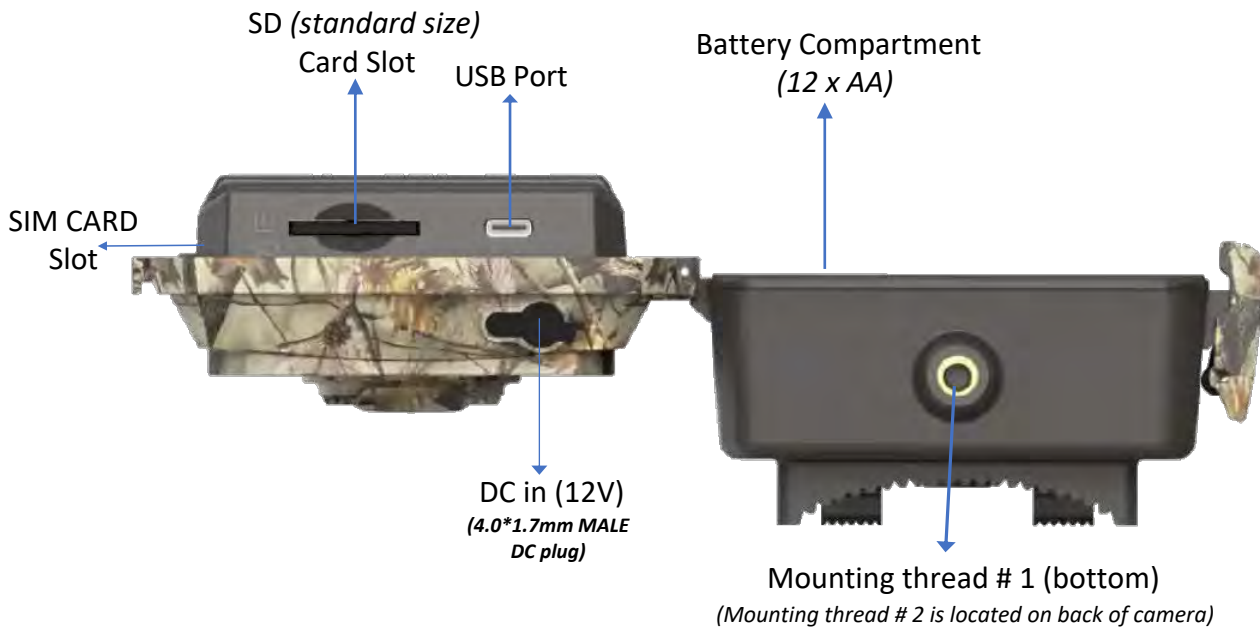
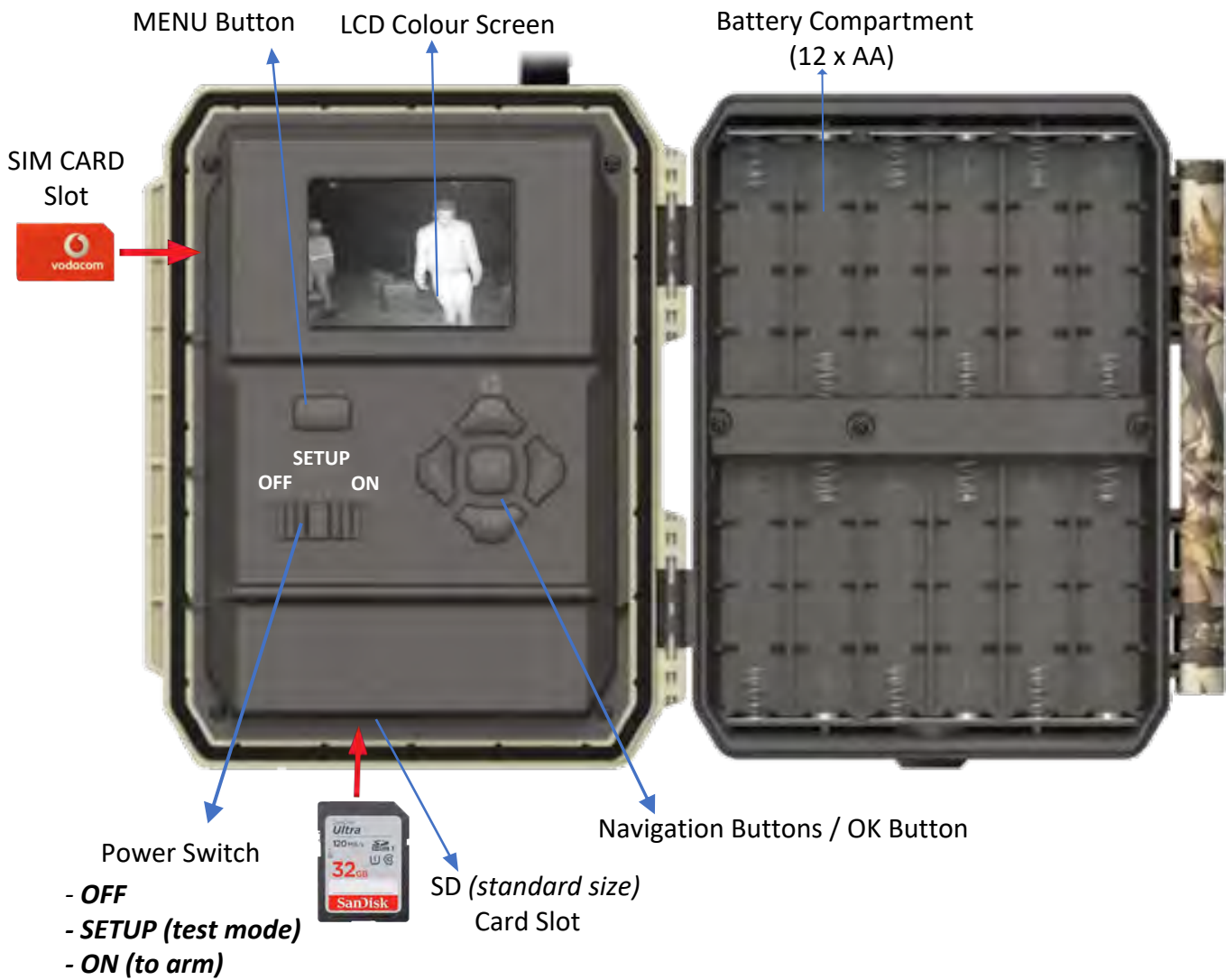


Figure 3: Internal View



1.3 Getting the camera ready

i. Inserting Batteries

Unclip the latch, open camera and insert 12 x AA batteries with the correct '+' and '-' polarities.

Note: 12 x (single use) AA Alkaline / AA Lithium or rechargeable Li-ion (1.5v) (NiMH (1.2v) rechargeable batteries can also be used).



ii. Inserting SD Card & SIM card

Insert standard size SD card in the card slot which is located on the bottom of the camera 8-128GB) **Note: PLEASE ENSURE CORRECT ORIENTATION ***



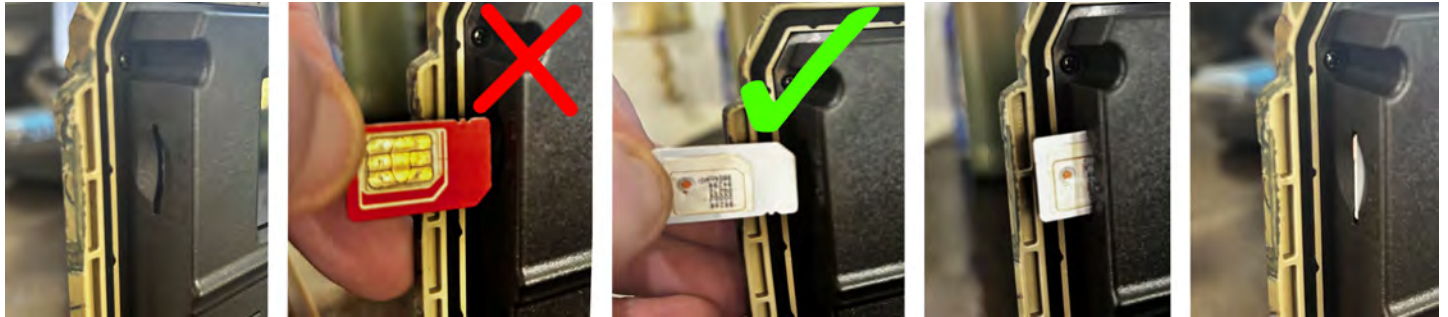
iii. Mounting Antenna

Remove the yellow cap from the antenna thread and connect the supplied antenna.



* Inserting SIM Card

Insert SIM Card into the SIM slot located on the left side of camera and push it in until it clips into place.



2. Camera Setup

2.1 How to setup the camera

Configure Camera Settings

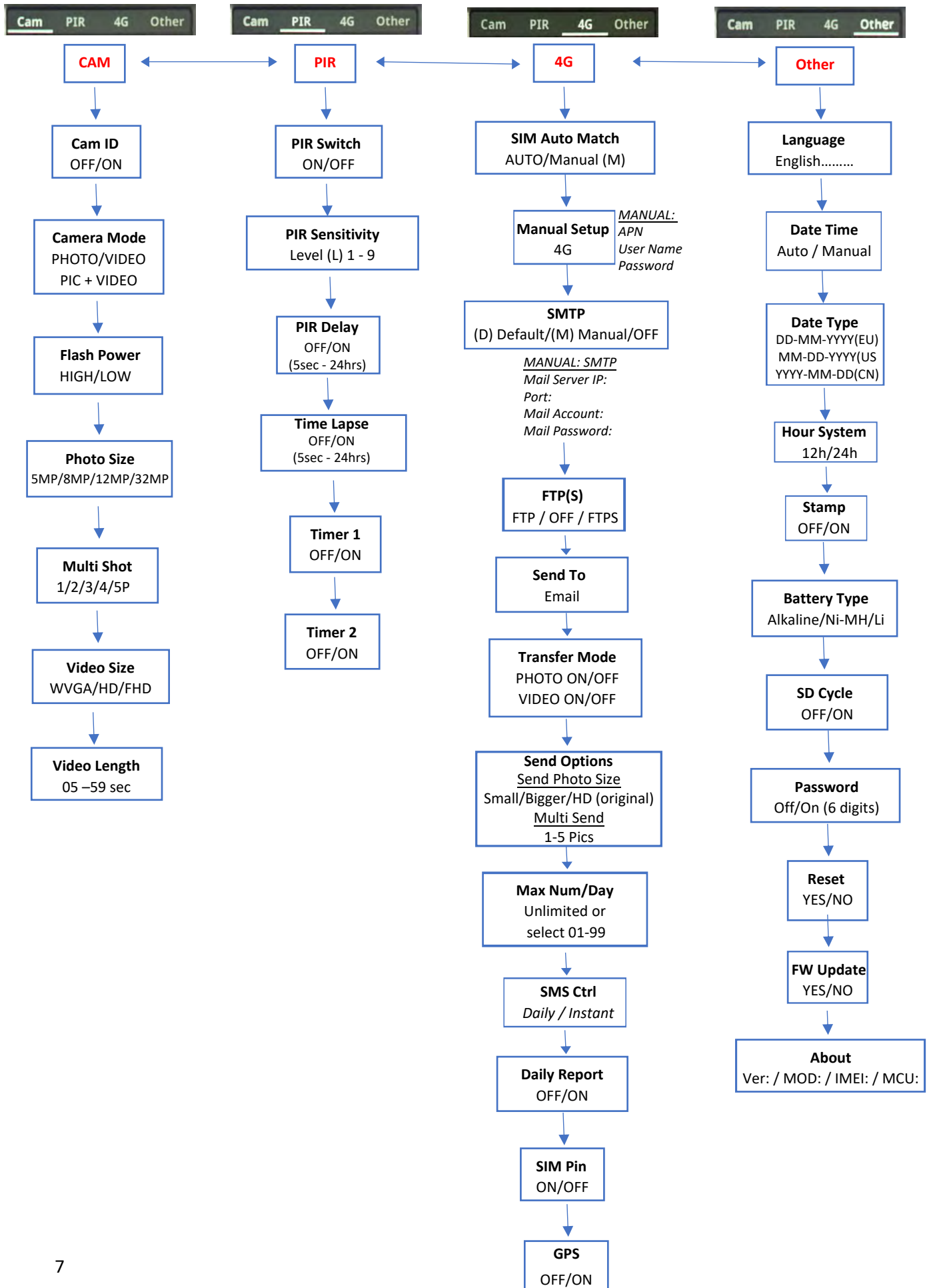
Switch to “SETUP” and the screen will light up. Press “MENU” key to enter the menu to view and change settings to your preferences. Please press the arrow keys to navigate and the “OK” key to confirm settings.

Note: Only switch to “ON” to arm / activate the camera after setup is complete.

Please refer to page 7 below for camera settings options.

2.2 Camera MENU Settings

Camera MENU tabs



2.3 How to setup 4G

How to connect the camera to Cell Network

The 4G models have a signal “Searching” process when you switch the power key to "SETUP".

Search icon will be display top right of the screen and after a few seconds if it shows signal bars it means that a network connection has been established. Now you only need to choose the send mode [Email (SMPT) Email / FTP / FTPS], fill in the receiving Email addresses in the “Send To” menu option to receive photos / video clips upon PIR triggers.

If it comes with a pop-up “SIM Auto Match Failed”, please go to 'SIM Auto Match' under “4G” and select 'Manual' (M) to manually input the applicable cellular operator network parameters (APN / Username / Password) (*see below for SA operators*). Once saved the camera will connect to the applicable network to send photos.

Note: This camera can send photos/videos to 4 x Emails addresses. Email (SMTP) / FTP / FTPS sending uses data. If you prefer a more personalized way of sending, please configure in the menu options accordingly.

VODACOM

4G (GPRS / Internet)

APN: internet
Username: guest
Password: (blank)

MTN

4G (GPRS / Internet)

APN: internet
Username: guest
Password: ()

Telkom

4G (GPRS / Internet)

APN: internet (or) TelkomInternet
Username: (blank)
Password: (blank)

Cell C

4G (GPRS / Internet)

APN: internet
Username: (blank)
Password: (blank)

Arming the Camera

Once setup is complete, switch from "SETUP" to "ON". The screen will switch off and the LED (red) in the front of the camera will flash every second until it stops (*this is a countdown to allow you to mount and close the camera*). Once it stops flashing it is ARMED and the camera is ready to be motion triggered and immediately transmit PIR triggers.

PLEASE NOTE (1): This LED (red) in the front of the camera can also be used to help position / aim the camera when switched to "SETUP". It will flash if the PIR sensor is activated to help users position / aim the camera correctly.

PLEASE NOTE (2): Always FIRST switch the camera to "SETUP" and let it obtain cellular signal. Once cell signal has been obtained it can be switched to "ON" to arm. Switching from "OFF" directly to "ON" without it obtaining cellular signal may cause it not to transmit camera triggers.

3. Introduction

3.1 Power Supply

AA size batteries

Camera runs on 12 x internal AA size batteries (*12V external DC power supply can also be used*). Single use AA size alkaline / Lithium or rechargeable AA size Li-ion (1.5v) or rechargeable AA size NiMH (1.2v) batteries can be used. *Please also choose the battery type you're using in the menu option "BATTERY TYPE" for best operating time in the field.*

Batteries must be inserted with the correct '+' and '-' polarities as marked in battery case. Incorrectly inserted batteries can cause device malfunction. We strongly recommend changing the batteries when the power icon on the transmitted photo stamp is low / empty.

NOTE: NEVER MIX BATTERIES TYPES! DIFFERENT BATTERIES MAY CAUSE PERMANENT DAMAGE WHICH WILL ALSO VOID THE WARRANTY.

Due to different settings, subjects or activities within the camera detection zone, different brands and quality of batteries and setup environments, etc; we're not able to list the precise number of photos and videos that the camera can capture. The table below show approximate number of photos or videos the camera can take with 12 x AA alkaline batteries. Better performances will be given by using 12 x single use AA size Lithium or rechargeable AA size Li-ion (1.5v) batteries.

External battery / Solar Panel

This camera can operate with external 12V rechargeable (SLA or 12.8v Lithium) batteries (*please ensure the correct connection cable is used with a 4.0*1.7mm MALE DC plug*). This camera will also work with most standard 12V solar panels that have their own built-in rechargeable batteries (*please ensure the correct connection cable is used with a 4.0*1.7mm MALE DC plug*). Please Note: Internal rechargeable AA size batteries need a higher voltage when charging thus connected solar panel will not charge internal AA batteries in the cameras' battery compartment.

Power Adapter – Security Surveillance Purposes

This camera can also be powered by an external 220V-12V (12A) mains power adapter. We recommend removing the internal AA size batteries when this power adapter is used.

3.2 SD Card Selection

Using a **standard size** SD memory card (Class 10) is recommended to best operate the camera. Micro-SD cards with adapters are NOT recommended as this can result in compatibility issues.

When the camera is “ON” and no memory card is used, the screen will display “NO CARD”. The SD slot of the camera has a max 128GB capacity. **Before inserting or removing the memory card, the camera must be turned “OFF”, failing to do so may cause loss of or damage the pictures/ videos already recorded on the memory card.** When the SD card is full, the viewing screen will show “MEMORY FULL”. The following data shows on approximate quantity of photos or videos which can be recorded by the camera depending on the memory card GB capacity.

Chart below shows you the approximate capacity of different size SD cards. Please check to see which size card can fit your needs best.

SD Size Capacity	1GB	2 GB	4 GB	8 GB	16 GB	32 GB
Photo (pictures)						
5MP	869	1631	3585	7492	15307	30936
8 MP	556	1041	2294	4798	9794	19795
12 MP	391	733	1613	3371	6887	13919
Video (hours)						
640x480	00:05:27	00:10:13	00:22:28	00:46:57	01:35:56	03:13:52
HD	00:03:56	00:07:23	00:16:13	00:33:53	01:09:14	02:19:56
FHD	00:02:04	00:03:53	00:08:31	00:17:48	00:36:20	01:13:21

3.3 USB Connection

When the camera is connected via USB cable the screen will display "MSDC". Press "MENU" once, "MSDC" turns to "PC CAM", camera now can be used as a PC camera. Press "MENU" again and the camera will exit PC camera mode.

3.4 Attention

1. Insert the SIM card and (standard size) SD memory card correctly. Failure to do this will damage the camera.
2. Please use high quality AA size Alkaline / Lithium / rechargeable Li-ion (1.5v) / NiMH (1.2v) batteries to prevent battery cells from corrosion or leaking.
3. Use the correct external DC (12V/2A) power source and connection cable (*4.0*1.7mm MALE DC plug*) / 220V-12V (12A) mains power adapter for o supply power to the camera. Do not invert polarities of the internal AA batteries or external battery terminals.
4. In "SETUP" (test) mode, the camera will automatically power off after 3 mins if no keypad touching.
5. Don't switch off or interrupt the supply during any firmware upgrades - please deliver it back if the device doesn't work after upgrading.
6. Do not insert or take out SD card / batteries or DC plug when the camera is ON.
7. Remove any floating objects (grass / branches / leaves etc.) in the motion detection zone of the camera to avoid false triggers.
8. Do not mount camera on objects that can move in the wind or next to hot objects like air conditioner exhaust vents. These will also cause false triggers.
9. Depending on your model, the camera either has a 60° standard FOV lens or a 100° (wide angle) FOV lens and 57 x IR (no glow) LEDs. To ensure these 57 x LEDs can give enough flash, high quality AA batteries must be applied according to deliver enough amperage to power the illuminator consistently in dark environments.

3.5 Key Features

1. 0.13 seconds trigger speed
2. **Standard** Lens models: **60° FOV lens; 65° PIR angles**
3. **Wide-angle** Lens models: **100° FOV lens; 100° PIR angles**
4. 24MP photos / 1080P @30FPS video clips
5. Programmable 5/8/12/24 megapixel high-quality resolution.
6. 57 x Black Flash (no glow) invisible IR LEDs offer 25 meter (75 feet) real night vision flash distance.
7. Crystal clear day (colour) & night (black & white) photo/video quality.
8. 1 photo burst per second to get full moving track of objects.
9. Supports multiple functions: Adjustable PIR sensitivity / multi-shot (1-5 photos per trigger) / programmable delay between motions, time lapse, timer, stamp of camera ID, date/time, temperature, moon phase on every single photo.
10. Operating temperature: -25°C to 60°C
11. Built-in 2.0" TFT colour viewing / programming screen.
12. With 4G(SMTP)/FTP/FTPS functions, camera can transmit photo / video to 1-4 pre-set Email addresses and FTP/FTPS account per trigger.
13. App control / remote SMS commands to control various configurations / settings.
14. SMS to enable camera to shoot a photo and send instantly.
15. Optional sending options: Small size (640*480), Bigger size (1920*1440), HD original size (2560*1920)
16. **FREE 'TrailCamera' App** available in iOS App store & for Android version please click [here](#) to download the .apk file and click [here](#) for installation instructions on Android devices.

4. Operation list

4.1 Video/Photo Playback

Turn "Power switch" to SETUP position to enter test mode. Press arrow button "↑" to enter Playback; press "←" and "→" for selecting "OK" to play photo/video.

- 1) Press button "↑" again to exit
- 2) In Playback Mode, press "MENU" button to delete files or format SD card; press "MENU" again to exit.

4.2 Delete

a. Delete one: delete selected photo/video; Press "OK" to choose, press "↑" and "↓" for selection. "YES" to confirm "NO" to exit to previous page.

b. Delete All

4.3 Format SD Card

a. No

b. YES : to format SD card via camera. Press “←” and “→” for selection, “YES” to confirm, “NO” to exit to previous page.

4.4 Auto Power Off

In test mode, camera will automatically power off in 3 mins if there is no keypad touching. Please keypad to turn back “ON” if you want to do further configurations.

Note: Camera stays in “TEST MODE” if camera is in “MENU” configuration page.

4.5 Operation Menu

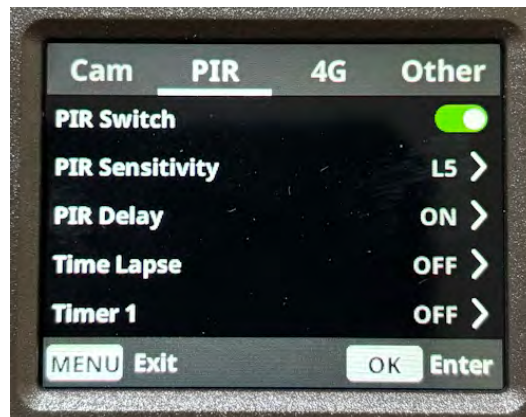
Test mode, Press “Menu” once to enter camera setting menu; to navigate setting interface by pressing “←”, “↑”, “→”, or “↓”, press “OK” for selection, “Menu” to exit to previous page, and “Menu” to switch between alpha / digits/ symbols.

Note: For some settings, user needs to press “Menu” to save & exit the configuration after pressing “OK” to confirm (Cam ID, Delay, Time Lapse, Timer, Password).



Cam	
Settings	Programmable Options
Cam ID	Select “ON” and press “OK” to give your cameras a name ID. Max 12 digits using letters & numbers for each camera. Helps to identify where photos are from and from which camera (<i>available are A-Z, 0-9, _</i>).
Camera Mode	Photo / Video / PIC+Video 1) Photo: camera shoots photos only based on configured Multi-shot & Image Size settings; 2) Video: camera shoots video clips only based on configured Video resolution / size;

<i>Camera Mode cont...</i>	3) PIC+Video: camera shoots photo(s) first, then video clip on each trigger event based on image size / multi-shot setting & video resolution / length setting.
Flash Power	High / Low High: All 57 x IR flash LEDs will work in dark environment Low: Bottom 30 x IR flash LEDs will be turned off.
Photo Size	5MP (2560*1920), 8MP (3264*2448), 12MP (4032*3024), 32MP (6528*4896)
Multi-shot	Programmable 1~5 photos can be sent per trigger (P1-P5)
Video Size	WVGA (848*480 @ 30ps) / HD (1280*720 @ 30fps) / FHD (1920*1080 @ 30fps)
Video length	05~59 Secs (Depending on Video resolution settings, the following MAX clip lengths can be transmitted) 15 sec - WVGA (848*480 @ 30ps) 15 sec - HD (1280*720 @ 30fps) 5 sec - (1920*1080 @ 30fps)



PIR	
Settings	Programmable Options
PIR Switch	OFF/ON Note: a) With PIR Switch OFF camera will not be able to take photo / video as the PIR is set to not be triggered. b) With PIR Switch ON, camera WILL take photo / video per motion event.

PIR Sensitivity	Level (L) 1 to 9 NOTE: Higher sensitivity settings (L7-L9) are more sensitive to movements by smaller subjects; have a longer detection distance and makes it easier for the PIR sensor to detect differences between body heat and outdoor temperature making it easier to trigger the camera to record. Higher sensitivity is (L7-L9) settings are more recommended for high temperature environments where body heat of subjects and environment temperature are harder to differentiate by camera.
PIR Delay	Select "ON", press "OK", to set a time interval between photos or videos upon motion. This option can avoid camera taking too many photos or videos. Example: Camera will wait 1 minute between photo/video recordings with motion if pre-set time interval is 00:01:00 Configurable delay time: 00:00:05~23:59:59. Note: Time Lapse works if Time Lapse and Delay are turned on.
Time Lapse	Select "ON", press "OK" to set the interval time for the camera to automatically shoot pics or video clips at the user pre-set interval. • Time Lapse + PIR Trigger: Camera will still be triggered by subjects if they pass in front of the camera in-between the user set interval time = Set PIR Switch to ON. • Time Lapse ONLY: Camera will only automatically shoot pics or video clips at the user pre-set interval = <u>Set PIR Switch to OFF.</u> Configurable intervals: 00:00:05~23:59:59.
Timer1	Note: Only use the Timer settings if you want the camera to only operate at specific times each day. If you want the camera to operate <u>24hrs each day & every day</u>, leave Timer1 & Timer2 settings both OFF. Select "ON", press "OK", to set the beginning time and end time (hour/minute); camera will only work during the time period user set. i.e.: 15:00 – 18:00; camera only works during 15:00 – 18:00
Timer2	Select "ON", press "OK", to set the beginning time and end time (hour/minute); camera will only work during the time period user set. i.e.: 08:00 – 13:00; camera only works during 08:00 – 13:00
	Note: If using both Timer settings ensure that the required & set operating times do not overlap.



Per this menu, main functions are marked in grey; details below each function are explanation of this function.

4G	
SIM Auto Match	
1) Camera will automatically enter network 4G parameters when the SIM card is inserted; 2) If "SIM Automatch failed, pls enter setups manually" pops up on screen, pls switch "SIM Auto Match" to "M" (Manual) mode, then manually enter the network 4G parameters.	
Manual Setup	
(Pls enter setups below manually in 'M' (Manual) mode if your local operator can't be automatically matched by the camera.)	
4G	Enter the SIM card operator's 4G APN and corresponding Username and Password settings. <i>Note: Only with 4G setups added can the SMTP and FTP functions work.</i> <i>Note: Not all cell networks have a Username and Password of the APN setting (SA networks see below).</i>

<u>VODACOM</u> <u>4G (GPRS / Internet)</u> APN: internet Username: guest Password: (blank)	<u>MTN</u> <u>4G (GPRS / Internet)</u> APN: internet Username: guest Password: ()
<u>Telkom</u> <u>4G (GPRS / Internet)</u> APN: internet (or) TelkomInternet Username: (blank) Password: (blank)	<u>Cell C</u> <u>4G (GPRS / Internet)</u> APN: internet Username: (blank) Password: (blank)

SMTP (Email) / FTP / FTPS - What can be sent / transmitted per camera trigger:

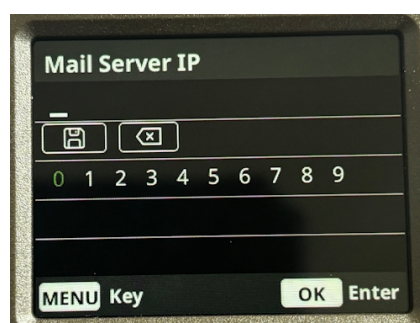
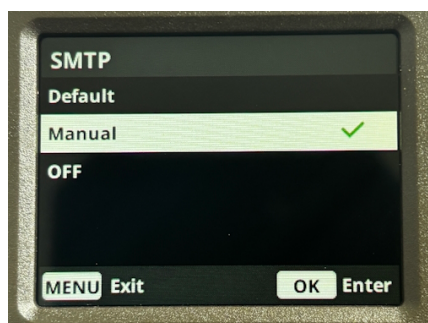
Photo Mode: 1 to (max) 5 x photo per trigger event (when multi-shot is set to ON and all 5 photos are selected)
Video Mode: (max) 15 sec video / VGA (848*480 @ 30ps)
(max) 15 sec video / HD (1280*720 @ 30fps)
(max) 5 sec video / FHD (1920*1080 @ 30fps)
PIC+Video Mode: (max) 5 x photo + 15 sec video clip (HD or WVGA)

SMTP [D] = DEFAULT - using camera's default SMTP settings (limit of 5 x transmissions / day)

The camera comes with its own default SMTP settings for sending pics / video by Email so you only need to enter receiving Email accounts in "Send to". This has a daily limit of 5 e-mails / day and for most users, this limit is not a problem, but in some cases it can be a limitation. In that case, and in case you do not want to use the manufacturer's suggested mail server for sending e-mails, here you can choose the option "Manual Setup". Pls finish setups below if you'd like to use your own SMTP server settings.

SMTP [M] = MANUAL - using your own Email SMTP settings

- **Mail Server IP:** This is the mail server SMTP setting of the SENDING e-mail account that you want to use for SENDING the e-mails to your receiving e-mail account.
PLEASE DO NOT USE Gmail / Yahoo etc. settings as these will not work due to recent security protocols issued by Google / Yahoo etc. respectively.
- **Port:** This is the communication port for the SENDING e-mail account.
- **Email Account:** This is the SENDING e-mail address you want to use as the sender account.
- **Email Password:** This is the password that belongs to the SENDING e-mail account you set above.



FTP/FTPS

FTP/FTPS: Here you can configure settings for automatically forward images to an FTP/FTPS server address. We will not go into this further in this manual as it is quite advanced and for those for whom it is relevant, it is often clear how this setting should be configured. In all other cases, this setting can simply be turned OFF.

- 1) Enter your FTP server IP
i.e.

FTP Server IP: ftp://dianwan2008.gicp.net/
Enter: dianwan2008.gicp.net
Gmail IP: smtp.gmail.com

- 2) Enter your FTP server port;
Ports of most FTP servers is 21; please enter your FTP server corresponding port.
- 3) Enter your FTP server password access.

Note: FTP/FTPS only uploads photos videos to preset FTP/FTPS accounts; if FTP/FTPS settings have the incorrect information entered then the FTP account will not be able to receive photos / videos from the camera.

Send To (4G model is able to send photos and videos to your Email/FTP/FTPS account)	
Email	Enter recipients' email receiving accounts (1~4)
Transfer mode: this function allows camera to send photos or videos, * or both on each trigger.	
Photo	ON / OFF
Video	ON / OFF
SMTP/ FTP/ FTPS Pic Options	
Pic Size: Small / Bigger / HD (original size); Pictures sent via Email (SMTP) / FTP / FTPS at 32MB will be as follows; Small (1280*960) / Bigger (1984*1488) / HD (original) (6528*4896)	
Multi-shot Send: 1st/2nd/3rd/4th/5th Pic; this function works with Multi-shot Here the user can choose how many of the multi-shot photos to send (1, 2, 3, 4 or <u>even all 5</u>) or which photo in the multi-shot sequence to send (<i>e.g. only send the 2nd & 4th photos</i>). I.e. If Multi-shot is set as 5P ; and you choose 1 st Pic and 3 rd Pic in Multi shot Send - then only the 1 st photo and 3 rd photo taken during the 5 pic multi-shot sequence will be sent to your email(s) or FTP/FTPS account.	
Max Num/Day	
Default: Unlimited; Optional: 1~99 i.e.: If user chooses 50, then the camera will only send (Photos/Videos) 50 times every day. Each time the camera will send to all entered emails / phones / FTP accounts. Once this daily limit is reached, all additional photo / video triggers will be stored in SD card & not sent.	
SMS Ctrl	
1) Daily: (<i>Suggest for longer lasting AA battery power</i>) Camera will only be able to change & save remote settings pre-sent to it when camera is triggered and it has to log on to the network to send / transmit the triggers. 2) Instant: (Uses more battery power) The camera 4G module is on stand-by all the time 'listening' for remote commands so is able to change & save remote settings as soon as user has sent the remote commands.	
Daily Report	
1) OFF; 2) ON; Choose ON to enter to set up a time when you want camera to send you the Daily Report;	
Contents contained in Daily Report: Device IMEI Number, CSQ (Signal Strength): 0~31, Camera ID, Temperature, Date & Time, Battery Left Volume, SD Card Info, Total Pics Taken by Cam, Send Times	

SIM PIN

You can ignore description below if your SIM has been activated already.

(Phase “Pls input PIN-Code” will not pop up after signal search if your SIM is activated.)

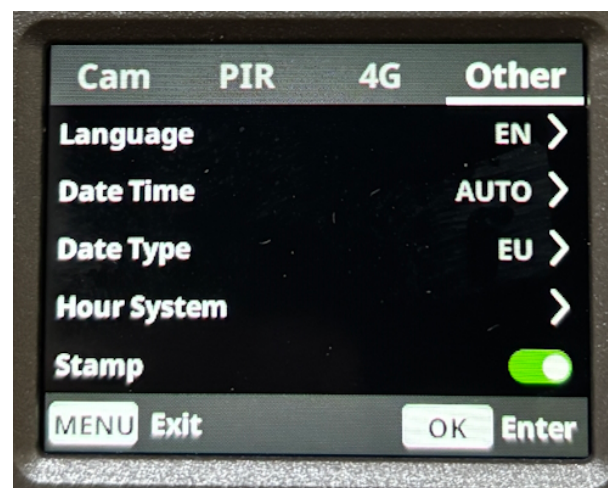
- 1) Camera will check if inserted SIM card is activated during signal search in “Test” mode;
- 2) If SIM is not activated, “Pls input PIN-Code” will pop up on screen after signal search;
- 3) Then “SIM PIN” will turn to be configurable in “4G” page of Menu;
- 4) Enter PIN code in “SIM PIN”; camera will auto power off. Camera will activate SIM card automatically during signal search when you restart the camera after you enter the PIN code.

Note:

- 1) “Pls input PIN-Code” will pop up again if wrong PIN code is entered;
- 2) Pls re-try your PIN code as if you see “Pls input PIN-Code” after signal search;
- 3) SIM is normally limited to be activated 3 times; it'll be locked if PIN code entered are all wrong during these 3 times trial. So we suggest you to double confirm your PIN code before you try again.
- 4) Pls insert SIM card into your phone to unlock it by using its PUK code after 3 times trial of activation based on steps above.

GPS

ON / OFF



Other	
Language	English...

Date / Time	Choose Auto or Maunaul to set the Date & Time (South Africa is UTC +02:00) Note: Pls adjust camera date/time to ensure some functions work as expected.
Date Type	Choose the way yoy want the date displayed; (DD-MM-YYYY(EU) / MM-DD-YYYY(US) / YYYY-MM-DD(CN))
Hour System	Choose 12hr or 24hr clock
Stamp	Imprints of programmed camera ID, moon phase, temperature, date, and time on photo
Battery Type	Choose correct battery type in camera makes camera perform better. ALK = AA size Alkaline Ni-MH = (rechargeable) AA size Ni-MH Li = AA size Lithium / (rechargeable) Li-ion (rechargeable) .
SD Cycle	Select "ON", press "OK", camera will continue to record photos/videos by deleting earliest photos or video clips.
Password	Select "ON", press "OK", to enable password protection for your camera; support totally 6 digits/ alphabets long password access.
Reset	Select "Yes" to reset camera back to factory default settings.
FW Update	With update firmware in the SD card, you can enter this menu to update camera firmware. Without firmware in
About	Firmware version in camera (Ver: / IMEI: / MCU: / MOD:)

5. Trouble Shooting

5.1 Photos do not capture subjects of interest

6. Check the “SENSOR LEVEL” (PIR SENSITIVITY) parameter setting. For warm environmental conditions, set the Sensor Level to “HIGH” and for cold weather use, set the Sensor Level “LOW”.
7. Try to set your camera up in an area where no heat resources are in the camera’s field of view.
8. In some cases, set the camera near water will make camera take images with no subjects in them. Try to aim the camera over ground.
9. Try to set camera on stable and immovable objects i.e. large trees
10. At night, motion detector may detect beyond range of the IR illumination. Reduce distance setting by sensor sensitivity.
11. Rising or setting sun can trigger the PIR sensor. Camera must be reoriented.
12. If person/animal moves quickly, it may move out of camera’s field of view before photo is taken. Move camera further back or redirect camera.
13. Try to avoid setting the camera up on some small trees that are prone to being moved by strong winds.
14. Remove any tree limbs which are right in front of the camera lens.

5.2 Camera Stops Taking Images or Won’t Take Images

- i. Please make sure that the SD card is not full. If the card is full, camera will stop taking images. Or user can turn on cycle recording to avoid such problem
- ii. Check batteries to make sure that alkaline or NiMH AA left power is enough for camera to work
- iii. Make sure that the camera power switch is in the “ON” position and not in the “OFF” or “TEST” modes.
- iv. When 4G function is on, there will be around 1-minute interval for camera to send out photo before camera shooting the next photo. Turn off the GPRS, camera can shoot photos continuously.
- v. Please format the SD card with camera before using or when camera stops taking images.

5.3 Night Vision Flash Range Doesn’t Meet Expectation

- i. Please check to make sure that batteries are fully charges or left power is enough.

- ii. “MAX RANGE” offers better IR flash range. Given IR flash range values are based on Max Range setting so please adjust Night Mode to Max Range for better night vision flash range.
- ii. High-quality Lithium / 1.5v Li-ion rechargeable AA batteries offer much better IR flash range; alkaline batteries can sometimes not deliver enough amperage to power the illuminator consistently at night.
- iii. To ensure accuracy and quality of night time image, please mount camera to dark environment without any obvious light sources.
- iv. Certain features (like trees, walls, ground etc) within the flash range can get you better night time images; please try not to aim camera to a completely open field where there is nothing within the IR flash range to reflect flash back; it’s like shining a flashlight into the sky in night, you just can’t see anything; same with the camera.

6. Specifications	
Picture size	5MP / 8MP / 12MP / 24MP / 32MP
Modes	Photo / Video / Photo + Video / Time Lapse
Flash range	25m (adjustable) / High / Low
PIR Angle	60° or 100° (depending on model)
PIR Settings	(Adjustable) OFF / Level (L) 1 to L9
Memory	SD Card (8GB – 128GB)
Lens	F=3.0; FOV=60°/100°; Auto IR-Cut-Remove (at night)
Burst mode	1-5
LCD Screen	2" TFT, RGB, 262k
PIR distance	20m (65feet)
Image Sensor	5 Mega Pixels Color CMOS
Picture Format	JPEG
Video resolution	1080P (1920x1080) @ 30fps 720P (1280x720)@ 30fps WVGA (848x480) @ 30fps
Video Format	.MP4
Video Length	05 sec to (max)59 sec (max) clip lengths can be sent / transmitted as follows; 15 sec - WVGA (848*480 @ 30ps) 15 sec - HD (1280*720 @ 30fps) 5 sec - (1920*1080 @ 30fps)

Picture sizes for wireless transmissions	Small (1280*960) Bigger (1984*1488) HD (original) (6528*4896) <i>5MP/8MP/12MP/32MP (depending on the Photo Size setting)</i>
Trigger Speed	0.13s
Trigger Interval	5sec to 24hrs (adjustable)
Device Serial No.	Yes
SD Card cycle	ON/OFF
Battery Type	12 x AA (Alkaline / Lithium / Li-ion rechargeable / NiMH rechargeable)
External DC	12V external battery / solar panel (4.0*1.7mm MALE DC plug)
Stand-by Current	0.135mA
Stand-by Time	5~8 months (6×AA~12×AA)
Auto Power Off	In Test mode, camera will automatically power off in 3 mins if there is no keypad touching.
Wireless Module	4G LTE Cat.4 module; 2G & 3G networks are also supported in some countries.
Interface	USB/SD Card/DC Port
Mounting	Strap; Tripod thread mounts x 2 (<i>bottom and back</i>)
Operating Temperature	-25°C to 60°C
Storage temperature	-30°C to 70°C
Operation Humidity	5%-90%
Waterproof spec	IP66
Dimensions	148.25*117.37*78.25 mm
Weight	367 g
Certification	CE FCC RoHs

7. Warranty

All cameras come standard with a one-year limited warranty from the date of original purchase from CAMERA TRAPS cc. This product is warranted against defects in materials and workmanship for a period of one year. If a defect exists, we will, at our option and permitted by law;

- (1) repair the product at no charge using new or refurbished parts;
- (2) exchange the product with a functionally equivalent product that is new or refurbished provided the defective product is returned to the agent with freight charges paid.

This warranty excludes damage resulting from abuse, accidents, modifications, insect / water damage, battery leakage or other causes that are not defects in materials and workmanship, or by someone other than our authorized technicians. This warranty only covers failures due to defects in materials or workmanship under normal usage.

Please contact us to determine the nature of the problem before returning the product under this warranty (with a written description of the problem and image examples) for repair or exchange.

