4G LTE FULL HD CELLULAR WIRELESS TRAIL CAMERA

USER'S MANUAL

Model:Watch1/Watcher1w/Watcher1-4G/Watcher1w-4G

IMPORTANT NOTE

Congratulations on your purchase of one of high quality digital trail camera on the market! WildGuarder is very proud of this little unit and we are sure you will be pleased with it as well. We truly value your business and will continue to provide you top quality customer service should you ever need help with any of our products.

Please refer to the notes below and the instructions in this manual to ensure that you are completely satisfied with this product. If your WildGuarder HD Trail Camera Watcher1 does not   seem to be functioning properly or if you are having photo/video quality issues, please check the Troubleshooting/FAQ section on pages. Problems are often due to something simple that was overlooked, or require only changing one setting to solve.

If your problem continues after trying the solutions in the Troubleshooting/FAQ section, please contact your local Agent/Dealer or email us through support@wildguarder.com directly.

You will also find this manual and other technical articles at Wildguarder official site: www.wildguarder.com

WildGuarder recommends using a external solar panel power or full set of Twelve Lithium AA batteries

in these Watcher1 models to obtain maximum battery life

Do not mix old and new batteries Do not mix battery types-use ALL lithium or ALL alkaline

WildGuarder recommends using SanDisk® class 6 or faster SDHC Cards (up to 32GB capacity)

in your Watcher1 Series

Table Of Contents

1.General Information

The **Watcher1 Series** is **WildGuarder®** Latest generation of 4G LTE network in the market. This manual applies to basic model **Wathcer1** and 4G LTE cellular model **Watcher1-4G**, the *WildGuarder®* top version 4G LTE cellular mobile communication scouting camera, with unique 4G FDD-LTE wireless module and high speed of communication function. The module of *Watcher1-4G* scouting camera is able to transmitting original size picture of Maximum 20MP & 30MB big file 1080P HD video files to your email at high communication speed with 4G LTE network, however, the other brands 3G scouting camera is sending Thumbnail size only. In addition, the latest version Watcher1-4G supports FTP function, the camera is able to uploads the video & picture to the FTP space, then you can preview & download the video & picture via FTP PC software/APP. Furthermore, Watcher1 series camera , with its highly sensitive Passive Infra Red (PIR) sensor, triggers to take pictures/videos and sends the images to your cell phone or E-mail account.

WildGuarder® **Watcher1 series** are highly qualified products that can be operated easily, with its unique patent design & excellent performance.It was R&D by our diligent and smart engineers based on feedbacks and requirements from customers globally, as *WildGuarder®* is always open-minded with willing to adopt creative ideas from you. You will enjoy the excellences reflected on this series product.

Please read the USER'S MANUAL in details before starting for better operation of *WildGuarder® Watcher1 series* scouting trail camera.
There are four version of **Watcher1 Series**:
Watcher1 is basic model(non cellular) with regular angle
Watcher1w is basic model(non cellular) with wide angle
Watcher1-4G is 4G LTE Network wireless cellular model with regular angle.
Watcher1w-4G is 4G LTE Network wireless cellular model with wide angle.

There are three versions of *WildGuarder® **Watcher1-4G***:
Supported 4G/3G/2G network frequency bands list in below:
Version for Europe
- 4G FDD-LTE frequency: B1 B3 B5 B7 B8 B20
- 3G WCDMA frequency: B1 B5 B8
- 2G GSM Network: B3 B8

Version for Australia
- 4G FDD-LTE frequency: B1 B2 B3 B4 B5 B7 B8 B28
- 3G WCDMA frequency: B1 B2 B5 B8
- 2G GSM Network: B2 B3 B5 B8

Version for North America (AT&T, T-mobile)
- 4G FDD-LTE frequency: B2 B4 B12
- 3G WCDMA frequency: B2 B4 B5

Version for North America (Verizon)
- 4G FDD-LTE frequency: B4 B13

1.1 Fully Functionality Introduction

Besides all the functions you may experience from any other similar products. The ***WildGuarder*®** digital scouting camera is aimed to offer user the most friendly using experience with many extraordinary features, such as sending up to 30Mb big file FHD 1080P video & maximum 20 Megapixel high quality image, 70° or 110° Wide Angle FOV lens, 54pcs 940NM No-Glow IR LEDs, 04s-6s seconds trigger time, SMS remote control, FTP function, user friendly operational menu, etc.

1.2 Application

This 20MP digital camera is an ideal product for housing security, warehouse surveillance, and monitoring wild animals with its camouflage appearance and nice shape. It is convenient to install or fasten, could be used to take photographs manually and carry on full HD 1080P videos in Test mode.

A. Instant surveillance camera for home, office, construction site, and warehouse, etc

B. Motion-triggered infra-red night vision surveillance;

C. Animal observation and hunting;
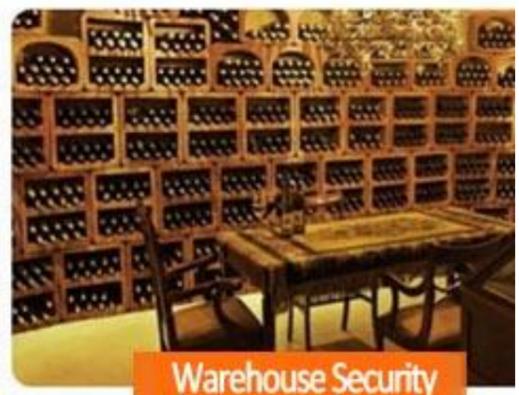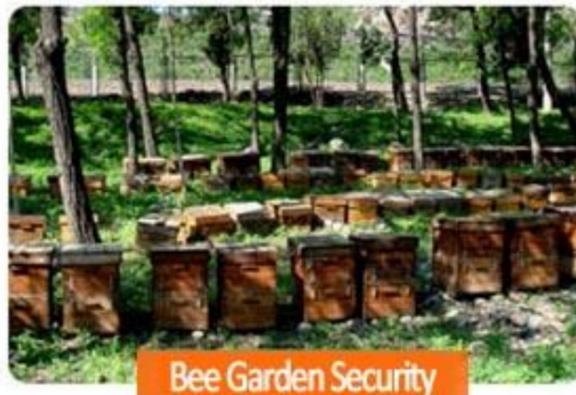
1.3 Main Features

1.Support 4G FDD-LTE network and downward compatible with 3G WCDMA /2G GSM/GPRS network

2. Regular lens model: 70 degree FOV lens; 70 degree PIR angle;

   Wide lens model: 110 degree FOV lens; 110 degree PIR angle;

3.Supports sending up to 30Mb big file 1080P video files & 20MP/12MP/5MP/1.3MP original size image via 4G FDD-LTE network

4.FTP Function: Supports uploading 30Mb 1080P HD video & 20MP/12MP/5MP/1.3MP original size picture to FTP space, allow users preview & download the video & picture via FTP software/APP.

5. GPS parameter(longitude & latitude) can be inputted via camera menu. (The longitude & latitude will be displayed on the pictures & video)

6.WildGuarder APP & SMS Remote control function: The Camera setting can be changed via WildGuarder APP.

7.Programmable VGA or 1.3MP or 5MP or 12MP or maximum 20 Megapixel high-quality resolution.

8.Rapid 0.4-0.6 seconds trigger speed.

9. Real high-definition Full HD 1080P (1920x1080): 30FPS, 720P (1280x720),640x480 video with audio record.

10.There are 54pcs invisible 940NM No-Glow black LEDs in total.

11. The former provides up to 20 meters flash range whereas the latter up to 15 meters flash range.

12.In "Cam + Video" mode, camera takes both pictures and video at every trigger event.

13.Ultra low standby power consumption. Extremely long in-field life. Support external solar panel power, the working time will be extend.

14.Support multiple functions: adjustable PIR sensitivity, Multi-shot (1~3 photos per trigger), programmable delay between motions, Time Lapse, Timer, Audio Recording, TV out, stamp of (Logo, date/time, temperature, moon phase,) on every single photo.

15.Perform in the most extreme temperatures from -22°F to 158°F.

16.In Time Lapse setting, the camera automatically and constantly takes pictures/videos at specified interval. This is very useful when observing plants flowering, birds building nest, or when monitoring unattended properties such as parking lots.

17.With Timer setting on, the camera can be programmed to only work in specified period every day. This feature able to works with 'Time-Lapse' at the same time.

18.Convenient to be mounted on trunk or tripod.

19.Built-in 2.0" TFT color display to review images and videos.

20.Brand Logo, Date, time, longitude and latitude temperature and moon phase would be stamped on the bottom of the pictures.

21.Lockable and password protected.

22.Users can configure the Camera on the computer, or directly on the built-in TFT screen.

1.4 Power Supply

Batteries

The **Watcher1 series** trail camera runs on 4 or 8 or 12 pieces AA size batteries (12V power supply to ensure camera well performance of all functions); It is able to work with alkaline, high-quality NiMH, and Lithium rechargeable batteries. But we suggest to run camera with NiMH and Lithium batteries only as performance of alkaline batteries is much poorer than either NiMH or Lithium batteries.

NOTE: Don't mix batteries types! Different batteries to be used in camera may cause permanent damage which also violates warranty policy!

CAUTION: 1.Please note that even in the OFF mode, the camera still consumes a small amount of battery power. If you are not using the camera for an extended period of time, we highly suggest users to remove the batteries from the camera to avoid possible acid leak that may damage the camera and void the warranty.

2.Always have the camera in the OFF position when installing or removing batteries and memory card. Removing batteries or memory card while the camera is ON may damage the camera

Solar Panel

To bring better using experience for our users, the **Watcher1 series** are designed to be able to work with most standard 12V/1~2 A lithium battery build-in solar panel, that means the working time of camera can be greatly extended.

Power Adaptor—Security Surveillance Purpose

This camera can also be powered by an external 12V/ 1~2A DC adapter. Recommend to remove the AA size batteries when power adapter is used. Electrical power is recommended for security purposes.

1.5 SD Card Selection

Using a memory card is required to operate the camera. When the camera is "**ON**" and no memory card is used, the screen displays "Please insert memory card". The SD slot of the camera has a maximum **32GB memory capacity**. Before inserting or removing the memory card, the camera must be turned to "**OFF**". Failing to do may cause the loss or damage the pictures already recorded from the memory card. When the SD card is full, the viewing screen indicates "Memory Full". The following data shows an approximate quantity of photos which can be recorded by the camera depending on the memory card capacity.

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

1.6 Attention

1. Insert the SD memory card correctly, camera does not support SD card hot swap (insertion).

2. Please use high-quality AA batteries in order to prevent battery cells from corrosion of leaked acid.

3. Use right adaptor (12V/1A or 2A) of this camera to supply power, and do not invert the electrode when put in batteries.

4. In Test mode, camera will automatically enter PIR Auto mode if no keypad touching within 60 sec. Please manually turn ON it as if you want to do some further configuration.

5. Don't interrupt power supply during system upgrade, please deliver it back to factory if the device doesn't work after upgrading.

6. Do not frequently insert or pull out SD card and battery or plug in and out the adaptor when the camera is on.

7. Do not have any floating objects, such as leaves, strings, or ribbons in the 3M motion detection zone of cameras, to avoid mistaking photograph or videos.

8. Keep camera away to hot irrelevant objects, air conditioner exhaust vents, and light, etc. to avoid mistaking photos or videos.

9. Programmed Date/Time can be saved in camera for 12 hours once camera was powered 1 hour above.

10. Slide the power switch to OFF position to turn off the camera, Please note that even in the OFF mode, the camera still consumes a small amount of battery power. Therefore, please remove the batteries if the camera is not in use for a long time

2.   Whole View and Details of Camera

① 4G Antenna	⑧ Security Lock	⑮ Power Swtich	㉒ Sim Card Slot
② WildGuarder Brand Name	⑨ WildGuarder Brand Logo	⑯ Built-in Speaker	
③ 54Pcs No-Glow Leds	⑩ Mircophone	⑰ USB Port	
④ Light Sensor	⑪ LCD Display Screen	⑱ HDMI Port	
⑤ Power Light	⑫ Batteries Slot	⑲ SD Card Slot	
⑥ Lens	⑬ Control Panel	⑳ Tripod Mount	
⑦ PIR Motion Sensor	⑭ WildGuarder Logo	㉑ 12V Power Jack	

3. Quick Started

3.1 Insert SIM Card

A SIM card is needed for *Watcher1-4G* (If it is non cellular model *Watcher1*, do not need SIM card) from a Mobile Phone Network Operator. Make sure it supports 4G LTE network and provide Short Messaging Service (SMS), Multimedia Messaging Service (MMS) and data traffic service.

Open the camera, you will see the SIM card slot at the side part, insert SIM card as the sign aside to finish SIM card insertion. Pay attention to the right direction to insert SIM card when insertion.

3.2 Insert SD Card and Format It

Open the camera, you will see the SD card slot at the side part, insert the SD card as the sign aside the card slot.

The camera do not comes with internal memory, therefore, it will not work without a SD (Secure Digital) memory card or SDHC (High Capacity) card. Before inserting the SD card, please make sure the write-protect switch on the off side of the SD card (NOT in the "Lock" position). The supported memory capacity is up to 32GB, please always format the SD card on camera before starting.

3.3 Load Batteries

Open the camera cover, you will see the battery slot.

Please load at least 4 AA batteries should be inserted as indicated inside the battery slot. Upside down batteries electrode may cause device malfunction. Also, we strongly recommend changing the batteries when power icon(on camera screen) or photo stamp is empty. Make sure the 12 new and full AA alkaline batteries are loaded.

Slot1 Slot2 Slot3 Slot4 Slot5 Slot6
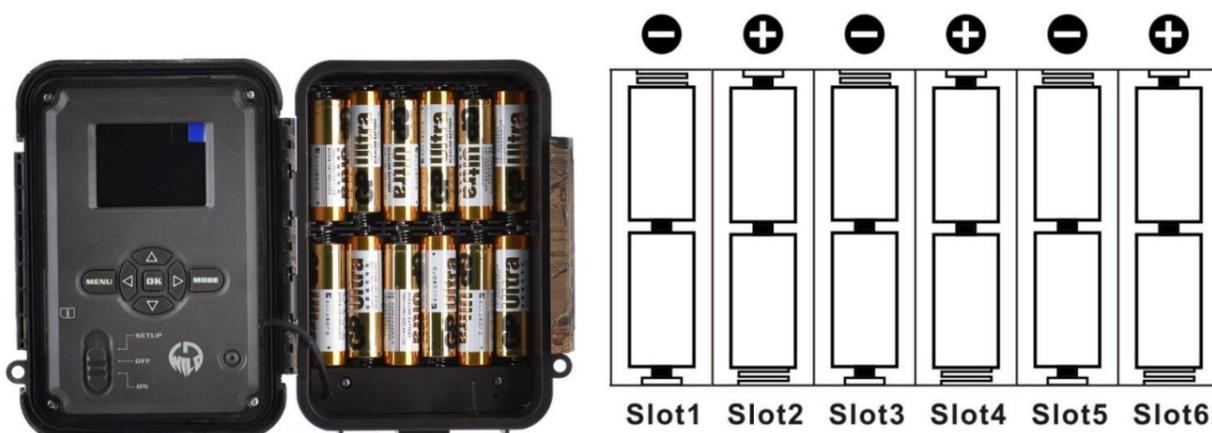
3.4 Enter Setup Mode(Test Mode)

Switching Setup and off , making settings

After connecting a power supply, switch camera to the "**SETUP/Test**" position to make the settings described on the following pages using the buttons (photo as follows). In off mode, the infrared led are off. When turn to 'On' or 'Setup/Test' mode, the red light will work for a while.
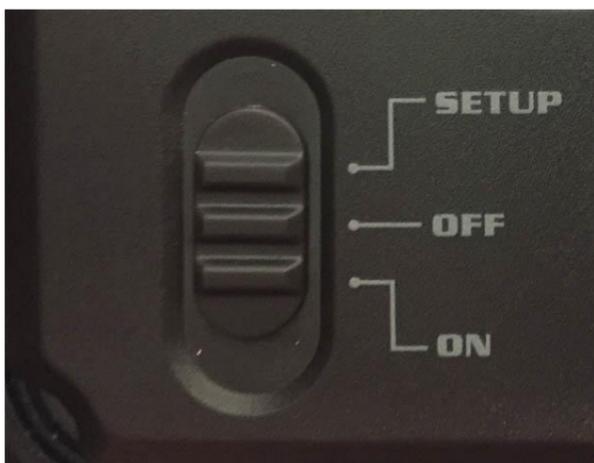
In the 'Setup mode', you can test the working area of PIR (Passive Infrared) sensor, specifically the sensing angle and distance.

To perform the test:

-First position the camera at proper height and aim at the region of interest (ROI).

-Walk slowly from one side of the ROI to the other side parallel to the camera. Try different distances and angles from the camera.

- If the Motion Indicator flashes blue, it means that the position you located is detected by one of the side Prep PIR sensors. If the Motion Indicator flashes red, it indicates that position is captured by the main PIR sensor.

The best position to place the camera could be found through this test. Generally, it is recommended to place the camera at the height of 3 to 6 feet (1 to 2 meters) to the ground.

3.5 Enter Live Mode

After finishing & checking all setting, switch camera to the '**ON**' position to enter the live mode. The motion indicator will flash red for about 3 seconds and the camera starts working after flash. It will immediately take pictures or record videos when person or animal enters the area of the PIR sensor.

Caution: To avoid potential false triggers due to temperature and motion disturbances, please do not aim the camera at a heat source

(e.g.: the sun, heated stone or metal) or nearby tree branches and twigs. The ideal direction to aim at is the north and the open place without heat source. Also, remove any twigs close to the front of the camera.

Operation Panel:

Press the ▲ key to choose the upper option.

Press the ▼ key to choose the next option.

Press the ▶ (SHOT key) to manually trigger the shutter. A photo or video (depending on the red mode key) will be taken and saved to the SD card.

Press '**OK**' key to save the menu setting

Press '**Mode**' key to swift photo mode and video mode; review or replay the photo or video; swift the number, letter, symbol when re-setting up mobile ID and Email.

The '**Menu**' on the keypad allows you to program the camera to work the way you want.

4. Advanced Setting:

4.1. Set up Parameters on Camera

To select whether photos or videos are to be recorded in motion detection mode or time lapse mode. In Photo + Video mode, the camera first takes a photo and then starts filming video.
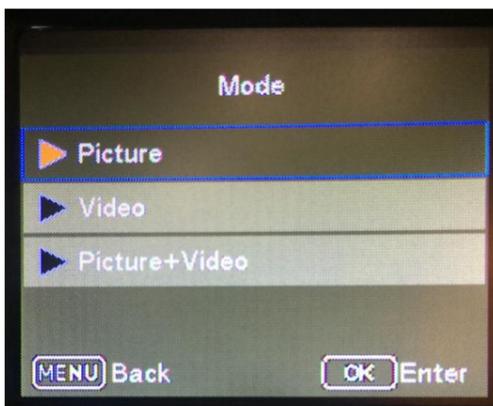
Language

There are 12 language for your selection - **English / French / Spanish / Portuguese / Deutsch/ Italian / Russian / Hungarian / Polish / Swedish / Slovak / Czech / Finnish**. You can set the language via camera menu or WildGuarder PC software.

Image size

There are 5 different photo resolution for your selection - **20MP**, **12MP**, **5MP**, **1.3MP**,**VGA**

Note: The larger the file size, the more detailed the image. However, the maximum number of high-resolution images that can be stored in the memory card is much fewer than small size images .

For example: If you use a 16GB(=16384MB) SD card and set the image size as 20MP. You will get about 818 pieces images.

If you set the image size as 5MP,you will get about 3275 pieces images.

In addition, the transmitting speed of small file image will be much faster than the big file image.
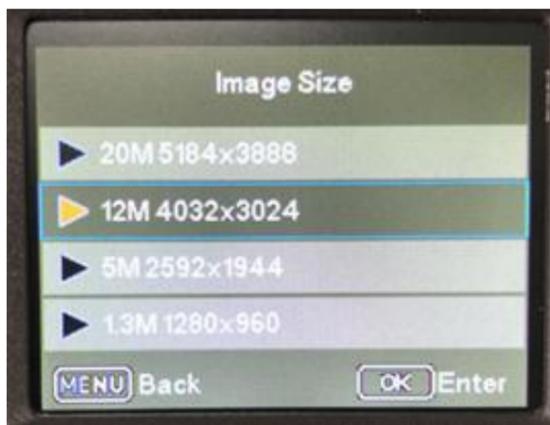
Video resolution

There are three video solutions for your selection - **1920 × 1080, 1280 × 720, 640 × 480**.

The higher resolution produces better quality videos, but creates larger files that will take up more SD card space and fills it up faster.

Note: The transmitting speed of VGA video will be much faster than the high-definition video.
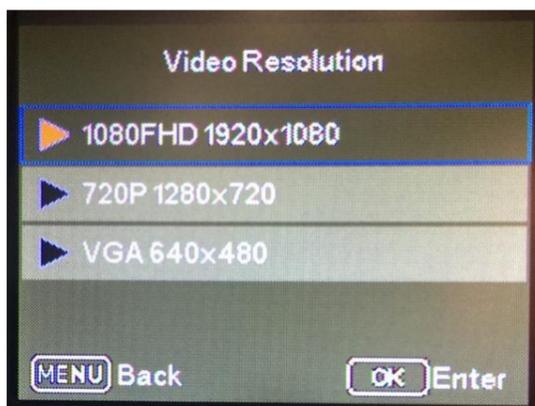
Date & time

Set up date and time. They will be displayed on the photos and video that taken by camera.
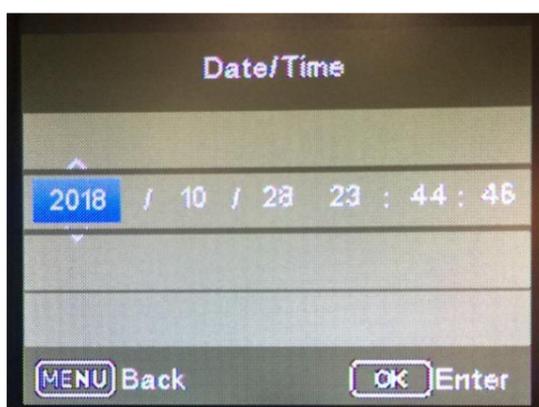
Shooting No.

Select the number of photos that will taken in one succession, when the camera is activated in '**Photo**' or '**Camera + Video**' mode.

If you select '**01 Photo**', camera will take 1 photo after one trigger.

If you select '**02 Photo**', camera will take 2 continuous photo after one trigger.

If you select '**03 Photo**', camera will take 3 continuous photo after one trigger.
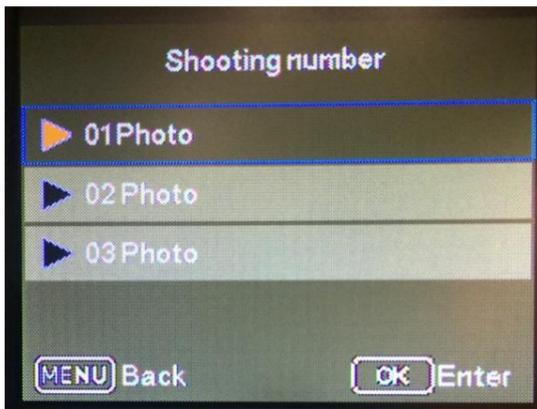
Video length

Use the up/down buttons to select the length of the video recording (between 5–30 seconds) that is to be made when video recording is activated. The longer the recording time selected, the shorter the operating time.

Note:

1. For saving power, it is better to set the video length within 10 second if you use video transmitting function.
2. The transmitting speed of small file video will be much faster than the big file video.
3. If users would like to transmitting big file video or image, we recommend the solar panel power to extend the working time of camera.
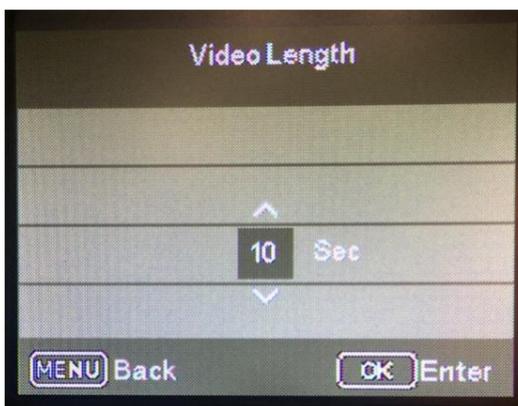
Interval

Allows users to customize how often the PIR sensor can be allowed to work. This prevents the card from filling up with too many redundant images. Options are 3-60 seconds and 1-60 minutes.

The recommend interval setting is : 3-5 seconds
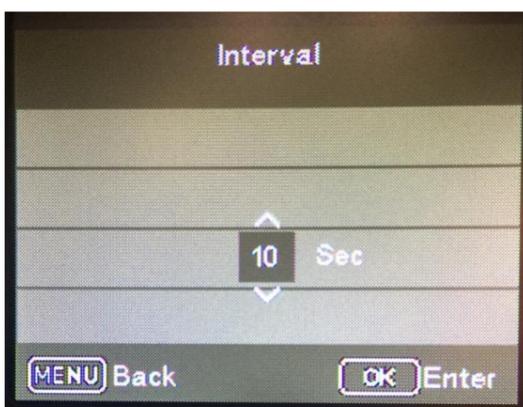
PIR Sensitivity

For interior areas and environments with little interference, such as branches blowing in the wind, select "High". Select "Medium" for exterior areas and environments with a normal amount of interference, and select "Low" for environments with a high level of interference.
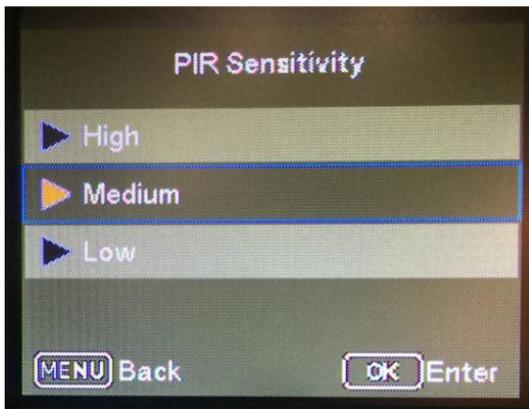
Date stamp

Here you can choose whether to save your photos with a time stamp. You can choose whether the stamp consists of the '**Date and Time**' or '**Date**' only. The date stamp will be showed on the image.
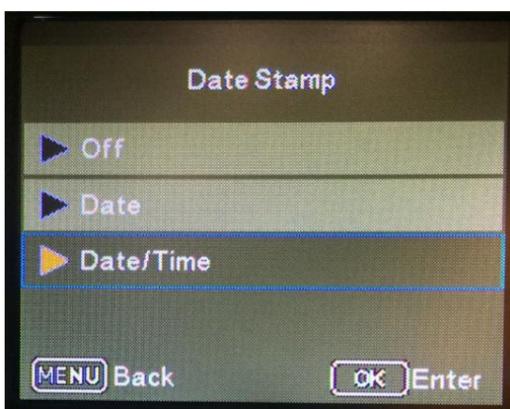
Timer

Select "**On**" if the camera should only be active during a certain time period. In the sub- menu, you can set the start and end time for PIR mode and Time-lapse mode. There are two 'Timer' for your setting.
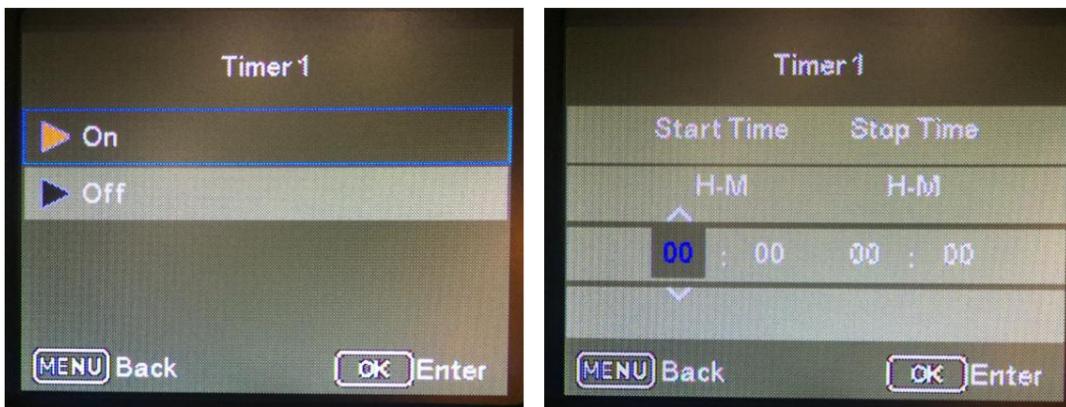
Press the 'up/down' buttons to set the hour for the start of the active phase. Then switch to the next field using the right button. Press the up /down buttons to set the minutes for the start of the active phase.

The settings made here apply every day. The camera will not record any images outside of the active phase.

Confirm your selection with the OK button. Afterwards, press the 'MENU' button to close this sub-menu.

Password Setting

Select "**On**" if you would like to use a password to protect the camera from unwanted access. In the following screen menu, you can set a 4-digit combination:

Press the up /down buttons to select the first digit between '0–9'.

Then switch to the next field using the right button. Press the up /down buttons to select the second digit between 0–9. Confirm your selection with the '**OK**' button. Afterwards, press the '**MENU'** button to close this sub-menu. The set number combination must now be entered each time the camera is switched to test mode.

If you forget the number combination, please ask the supplier for firmware to reset it to the factory default settings.
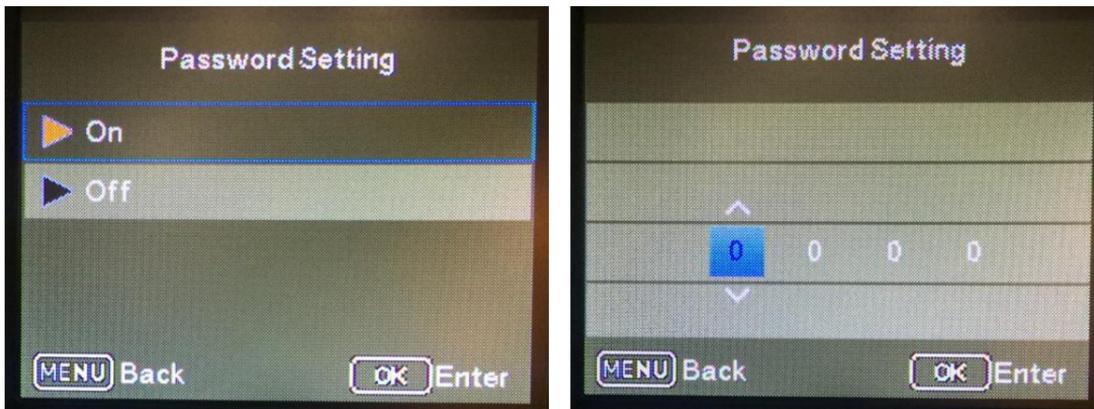
Serial NO.

The serial number stamp will be showed on the picture or video, this function will help users to tell where the image came from.

1.Select "**On**" if users want to use a serial number to rank the camera. In the following screen menu, you can set a 4-digit combination.

2. Press the up /down buttons to select the first digit between 0–9.

3. Switch to the next field by using the right button. Press the up/down buttons to select the second/third/fourth digit between 0–9.
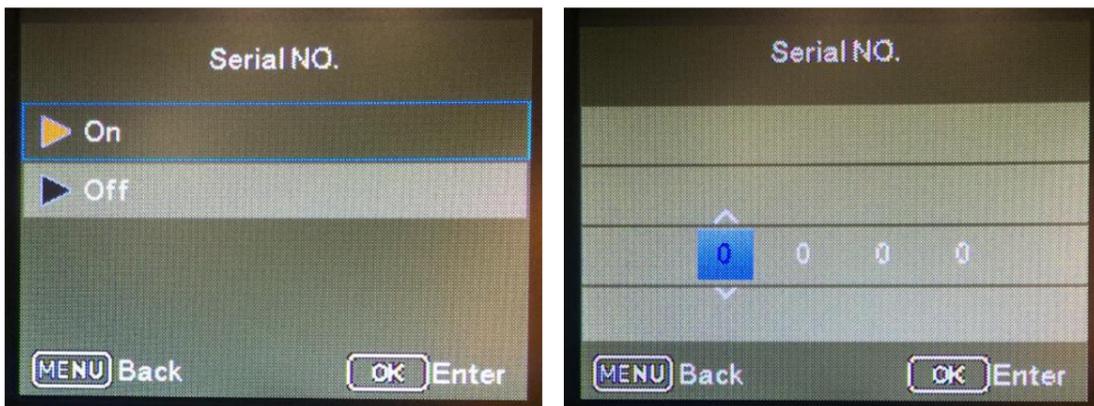
Time lapse

With this function the camera automatically takes pictures at adjustable intervals. This function is useful if you want to observe the blooming of plants or the others, for example. When users confirm "On" with the OK button, you can then set the desired time interval using the menu that now appears:
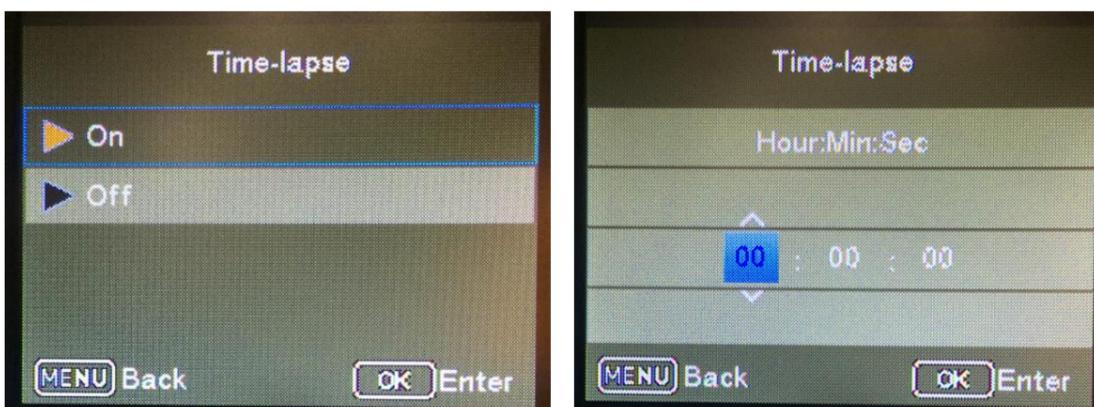
Press the up/ down buttons to set the hour of the desired time interval. Then switch to the next field, "Min", using the right button. Press the up/down buttons to set the minutes of the desired time interval. Then switch to the next field, "Sec", using the right button. Press the up/down buttons to set the seconds of the desired time interval. Confirm your selection with the OK button. Afterwards, press the MENU button to close this sub-menu.

SD cycle
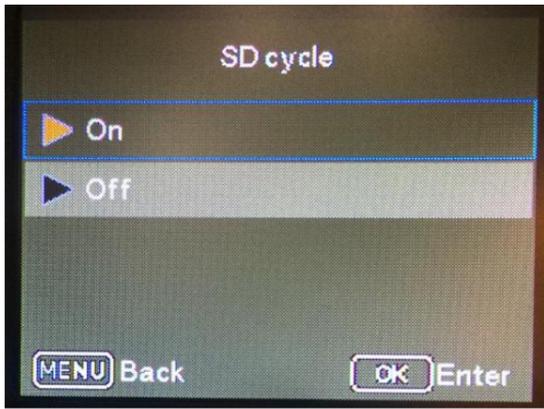
Select the '**On**' option, the oldest pictures or video will be deleted from SD card if there is not enough memory space for the new files.

Select the '**Off**' option, the camera won't take the pictures or video if there is not enough SD card memory storage.
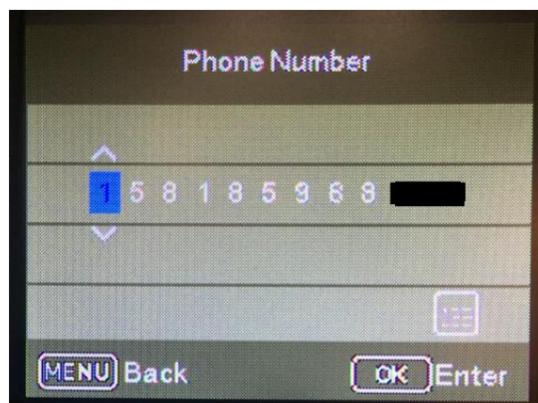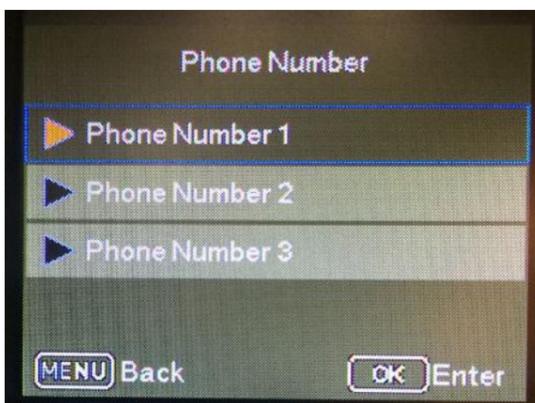
MMS Status

If you would like to use MMS function, please select '**VGA**' or '**QVGA**' option.

If you would like to turn off MMS function ,please select '**Off**'

There will be two image size for your selection - **VGA=640x480** or **QVGA=320x240**
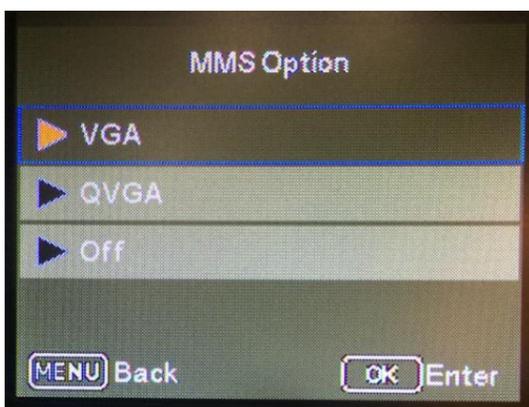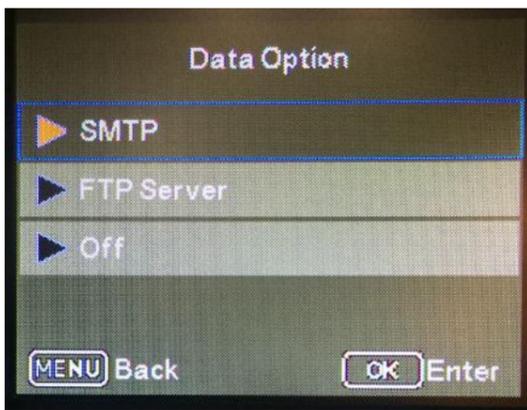

MMS Setup

Set the recipient cellphone number to receive the picture via MMS function. User will be allow to set three recipient cellphone number.

GPRS Status

Please select '**SMTP**' if you would like to use SMTP(Email)function to transmitting the image

Please select '**FTP**' if you would like to use FTP function to transmitting the image.

Note: Both SMTP & FTP function supports sending image & video. But if users would like to transmitting big file image & video,

FTP will be the best choice. Because some mail servers do not allow transmitting & receiving big files or they have limit. moreover, the

transmitting speed of FTP function will be faster than SMTP.

GPRS setup
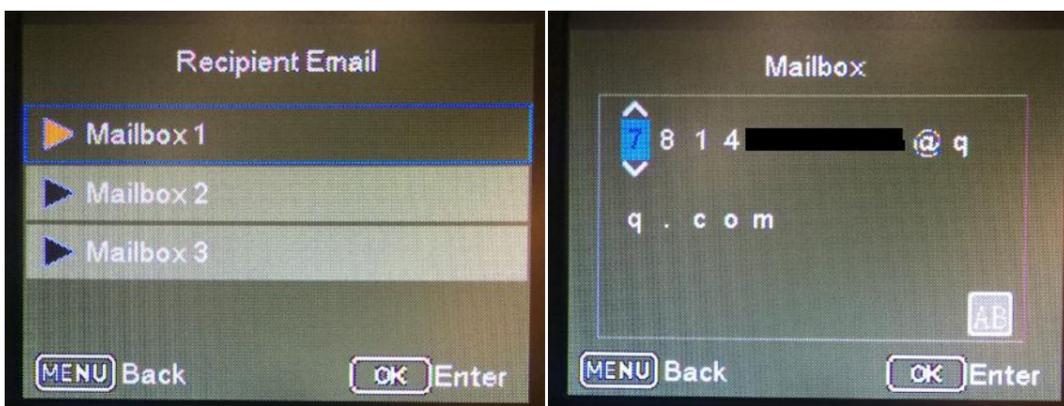
Users allow to set three different recipient email address.

FTP Setup

The File Transfer Protocol (FTP) is a standard network protocol that can be used for the transfer files between a camera and server via 4G network.

By setup FTP function, the 1080P video & 20MP original size image will be uploaded to your FTP space via 4G network once the camera captures wildlife. Then the image & video able to be previewed & downloaded via FTP PC software or FTP APP.

The necessary FTP parameter are '**Server**', '**Port**', '**Account**', '**Account Password**'

Note: Before using the FTP function, user need to register a FTP account. We recommend the

paid FTP space/account, because it will be more stable and faster when transfer flies and there will be no spam any more.

SMS Remote Control Interval:
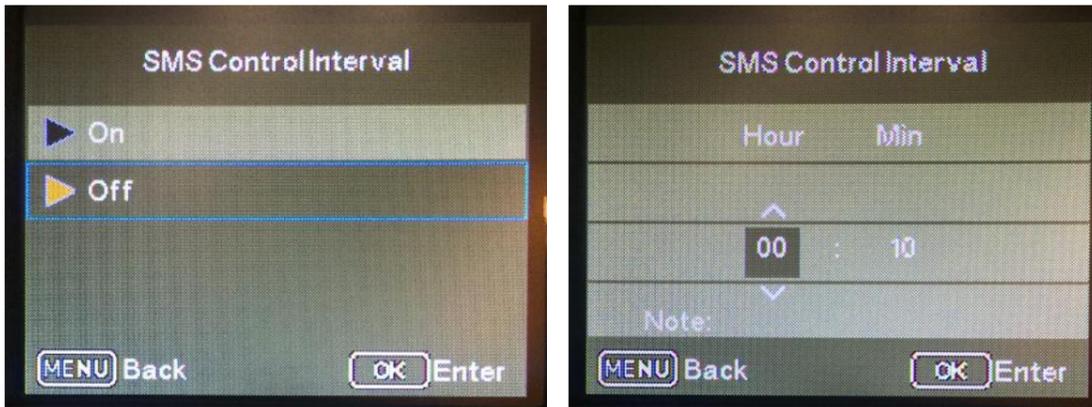
Inter the On sub-menu, input the interval time. The SMS module will be activated each interval time and receive SMS command.

The instruction can be made via APP. After camera is activated, it will be awaken for 6mins. The shortest SMS Control Interval is 10min.

For example: SMS control interval 5 hours. The camera will receive SMS text command at each 5 hours interval.

Note:

In order to reduce power consumption, we suggest to set the SMS control interval more than 24 hours. If you set it with short interval, the SMS module will always be awaken, it is resulting in increase power consumption.
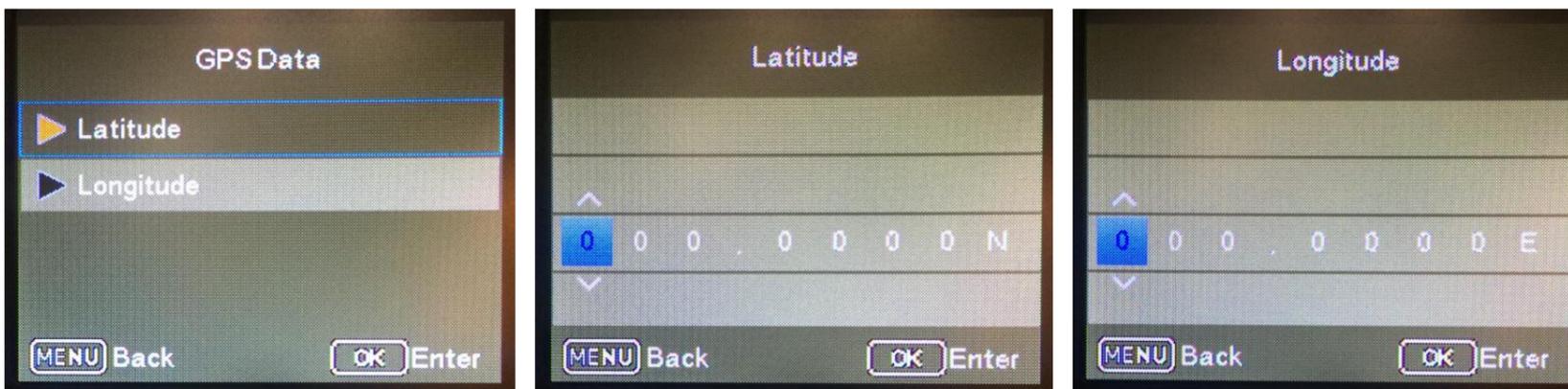
Record audio

Turn on this function, camera able to records sound while recording video.
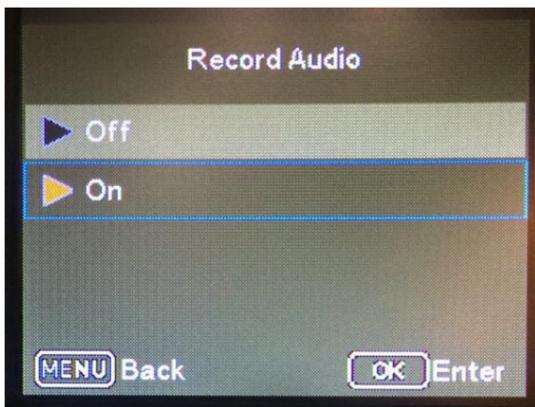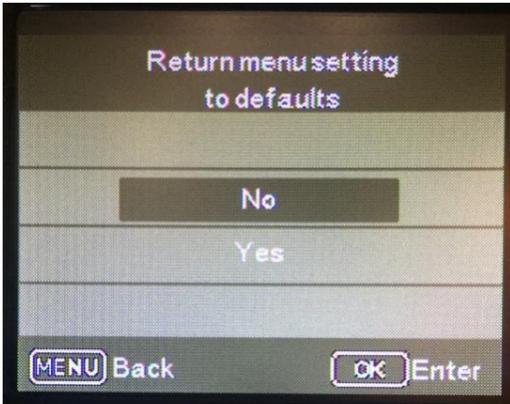

GPS Data

This function allow users input the GPS parameter that your got from other GPS instrument.

The **Latitude** & **Longitude** stamp will be displayed on the picture & video.

Default Settings

If user select "**Yes**" the menu item and press the OK button, all previously made camera settings including any password will be deleted and the factory settings will be restored.
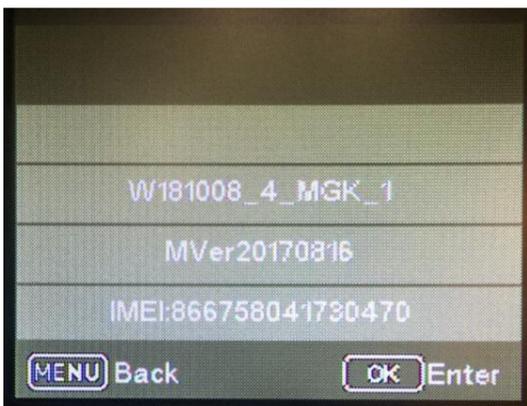
Format

Formatting the memory card will permanently delete all data on it including the locked images. Before you use a new memory card in the camera or a card that has previously been used in another device, you should first format the memory card. Select "Yes" with the OK button and confirm the following prompt with the OK button. The formatting process starts. While the card is being formatted, the message "**Please wait**" appears.
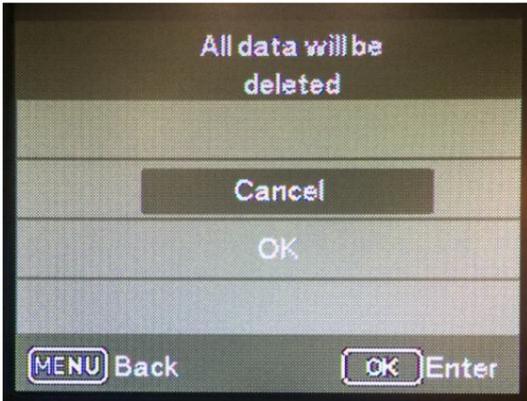
Version

Check the Software Version number. That will help manufacturer to find our the reason when the camera with problem.

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Detachable Decorative Board

4.2 Setup Camera On PC.

After formatting the SD card on camera, retrieve the SD card and insert into computer. The SD card reader may be needed if your computer unable to read SD card directly, or you can directly connect the camera to computer by using USB cable to read SD card in the Test mode.

Obtain the CD from the packing box and insert into computer, the disc drive may be needed if the PC without the disc drive. Then run the WildGuarder-4G setup.exe software from the CD.
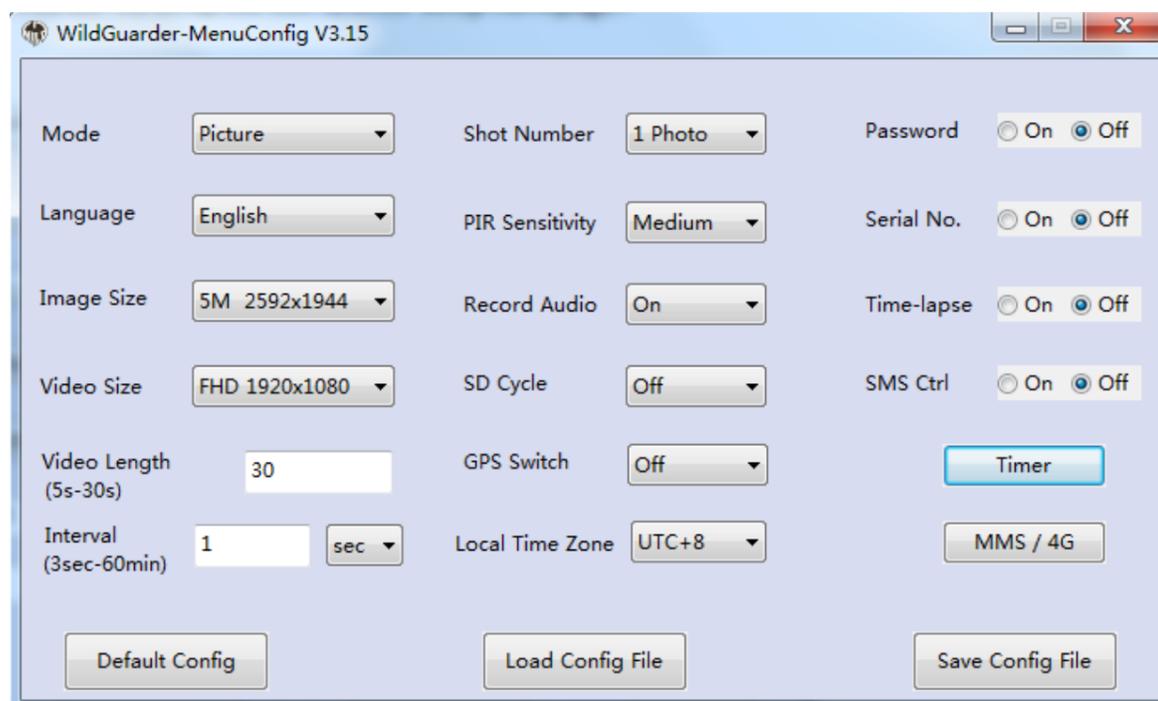
If your computer unable to read the disc, please download the software from WildGuarder official website directly:

http://www.wildguarder.com/firmware-downloads.html

Below is the icon of the WildGuarder-4G setup.exe software:

Double click the WildGuarder-4G setup.exe icon to enter Setup homepage:

A. Mode

Select whether photos or videos are to be recorded. In "Photo + Video" mode, the camera first takes a photo and then starts filming video. This mode is available for motion detection and Time-lapse mode.

B. Language

There are 12 language for your selection - **English / French / Spanish / Portuguese / Deutsch/ Italian / Russian / Hungarian / Polish / Swedish / Slovak / Czech / Finnish**. You can set the language via camera menu or WildGuarder PC software.

C. Image size

Select a photo size: VGA, 1.3 MP, 5 MP (preset) , 12 MP, 20MP.

The larger the file size, the more detailed the image. However, the maximum number of high-resolution images that can be stored before the memory card is full.

D. Video size

Select the screen resolution: 1920 × 1080, 1280 × 720, 640 × 480. The higher the resolution, the sooner the capacity limit of the memory card will be reached.

E. Video length

Use the up/down buttons to select the length of the video recording, that is to be made when video recording is activated. The longer the recording time selected, the shorter the operating time.

F. Interval

Input the minimum time period(between 3second and 60mins) that the camera should wait before reacting to subsequent

activation of the sensor after the initial recording. During the selected interval, the camera will not record any images or videos. This prevents the memory card from being filled up with too many recordings of the same event. You can select between 3 seconds to 60 minutes.

Select the number of photos that are to be taken in succession when the camera can photo. In addition to single shot mode 1 photo, you can take"2 photos"or"3 photos".

H. PIR Sensitivity

The sensitivity of the main motion sensor is set here. For interior areas and environments with little interference, such as branches blowing in the wind, select "High". Select "Medium" for exterior areas and environments with a normal amount of interference, and select "Low" for environments with a high level of interference.

I. Date stamp

Here you can choose whether to save your photos with a time stamp. You can choose whether the stamp consists of the time and date or just the date.

J. 4G Setup

Please refer below MMS/4G Setup

K. Record audio

Turn on the function, you can record sound while recording video.

L. SD Cycle

If select 'On' option, the camera will delete the oldest pictures & video from SD card if there is not enough storage.

If Select 'Off' option, the camera will stop taking photo & video if there is not enough storage of SD card.

M. Timer

Select "On" if the camera should only be active during a certain time period. In the screen menu that subsequently appears, user can set the start and end time for the active phase:

Input the hour and minute for the start/end of the active phase. Confirm your selection with the "OK" button and to close this sub-menu.

The settings made here apply every day. The camera will not record any images outside of the active phase.

N. Password Setting

Select "On" if you want to use a password to protect the camera from unwanted access. In the following sub-menu, you can set a 4-digit combination:


Confirm your selection with the "OK" button and close this sub-menu.

The set number combination will work when camera is on test mode.

If you forget the number combination, please ask the supplier for firmware to reset it to its factory default settings.

O. Serial No

Select "On" if you want to use a serial number to identify the camera. In the following sub-menu, you can set a 4-digit combination:
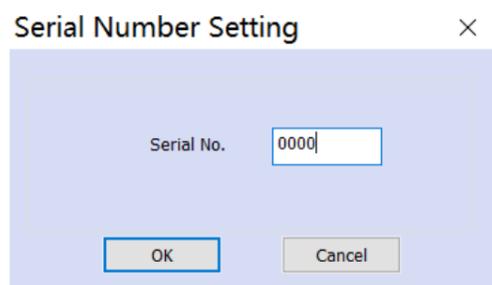
Confirm your selection with the "OK" button and close this sub-menu.

P. Time lapse

With this function the camera automatically takes pictures at adjustable intervals. This is useful if users want to observe the blooming of plants or the others. For example, when you confirm "On" with the OK button, interval using the menu that now appears.

Input the hour/minute/second of the desired time interval.

Confirm your selection with the "OK" button and close this sub-menu.

Note: The time-lapse function unable to work with PIR mode so far
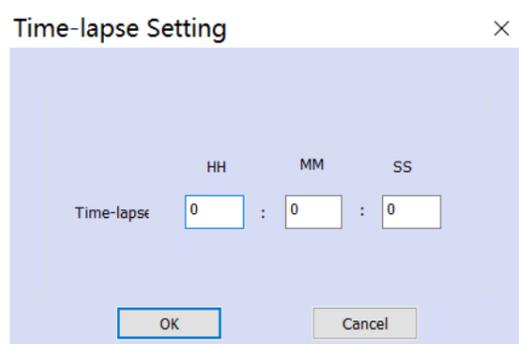
Q. Local time zone

This camera can read local time after use choose local time zone. Example, China is UTC+8, so when setting, please choose ''+8''. If users do not know which time zone they are in, please check local time and camera time when on Test mode, for example, camera time: 03:00, local time is 06:00, please choose "+3"on local time zone option.

R. SMS Remote Control

Input an interval time. The camera will receive indicated every interval time. The shortest interval is 10 min

For example: input 2 hours. Camera will wake up and receive the indicated that from cell phone/APP every 2 hours.

If users turn on this function, please delete menu.cfg from SD card first.

R. Default Config

All the setting data will be back to the factory setting after you click this key.

S. Load Config File

Load menu.cfg from your SD card(that was made before)

T. Save config file

After finishing setting, then click the "save config file" to save the data to your SD card. There will be'Cleaninmenu.cfg"file in your SD card.

all the data that you set will be show on the camera display after you input the SD card to your camera.

U. Exit

Exit the system.

4.3 Setup MMS/SMTP/FTP On PC.

Double click the WildGuarder-4G setup.exe icon to enter Setup homepage:
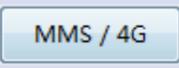
Click [MMS / 4G] to pop out 4G Parameter Settings interface:

4.4 4G Setup
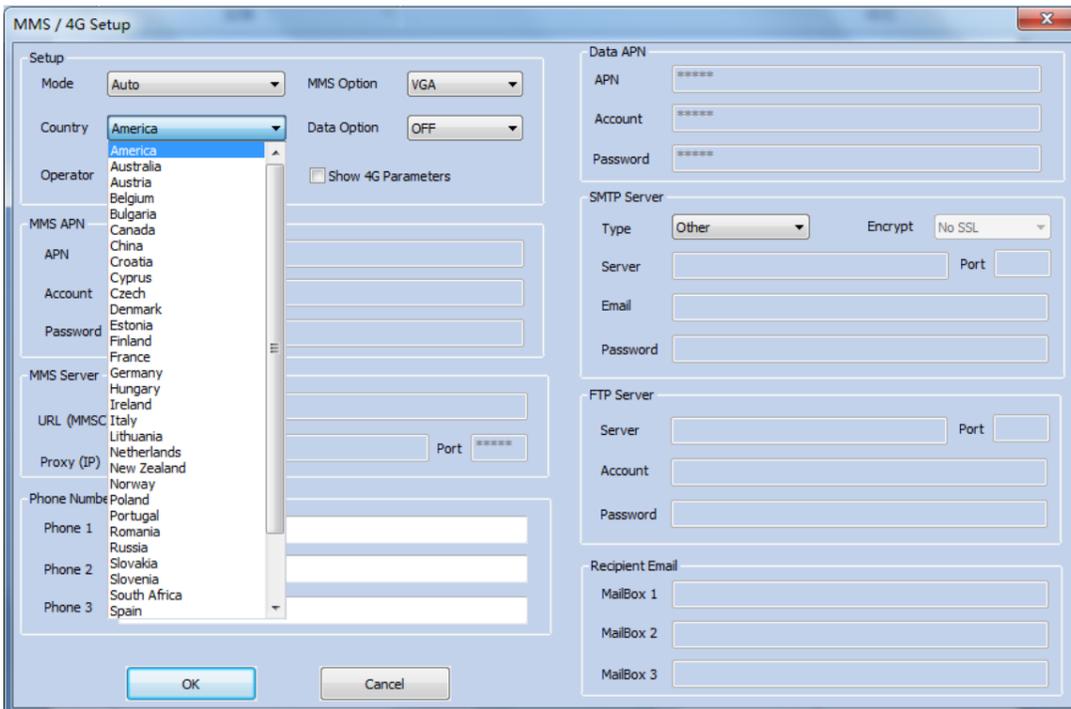
1.Mode

There are two setup mode for your selection.

A: **Auto Mode**: Most of countries and telecom operators already in our preset list. Users choose the correct country and operator.

B: **Manual Mode**: User needs to input the correct operator data into the camera if user's operator not list in auto system.
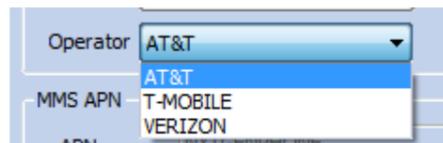
Auto Mode Setup

Select the '**Country**' & '**Telecom operators**'.

Select your local telecom operator(SIM Card provider) from the available list by steps below:

i.e.: America:

"Operator"→Press it ""→"AT&T"

2.MMS Setup

This function supports sending image to users' cellphone via MMS.

Select the MMS status: VGA (640x480), QVGA(480x320) or OFF(Turn off the MMS function)
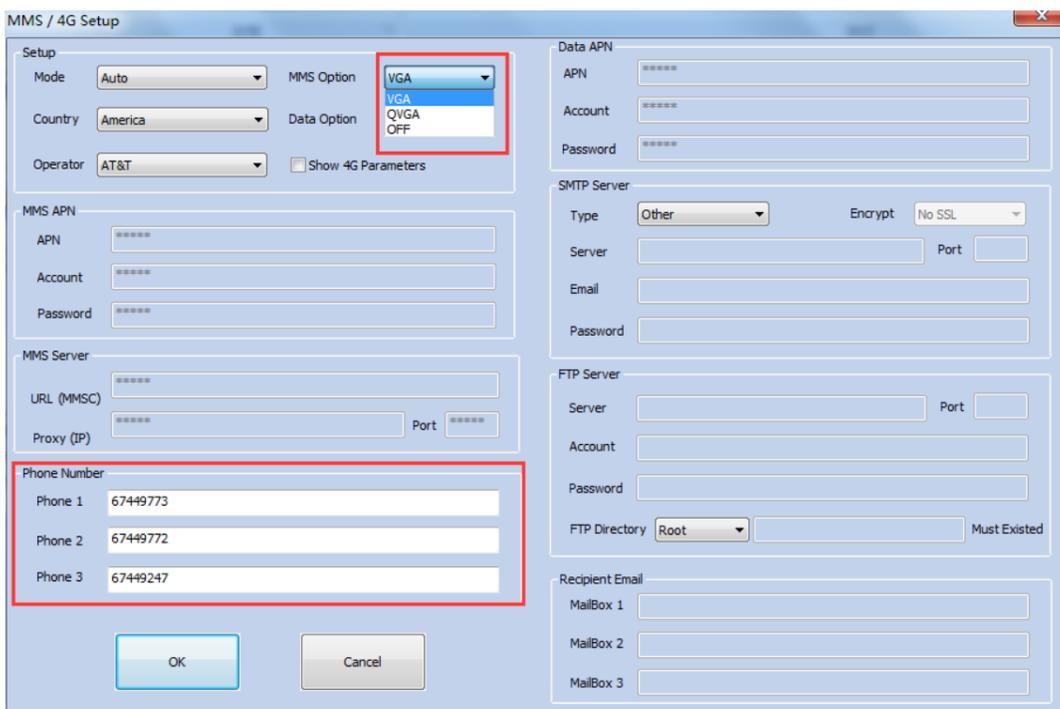
3.SMTP Setup

This function supports sending original size image & video to users' via **SMTP(Email)** function.

Set **SMTP function**, users need to fill in the sender email and receipt email. Select an email address as the sender in the auto system.

(We have preset 7 different mail server information, if user select the preset mail server, you need to fill the email address & password only, if you use other mail servers, please select 'Other', you need to fill the necessary parameter like **Server IP, Port**)

Note:

1. Please note users email SMTP server must be turn on.

2. When sending email, it should not need to input verification code.

3. Please add the recipient emails to white list

4. It allows less-secure sign-in method.

5.Some email servers have third-party log password, please input it in email password.

6.Some email servers do not allow transmitting & receiving big file, it's better to set the video length less than 10 seconds if you use SMTP function to send video. For sending big file video or image, we recommend FTP function.

4.FTP Setup

A.This function supports sending maximum 20MP original size image & up to 30MB FHD 1080P video to FTP server.

e.g:
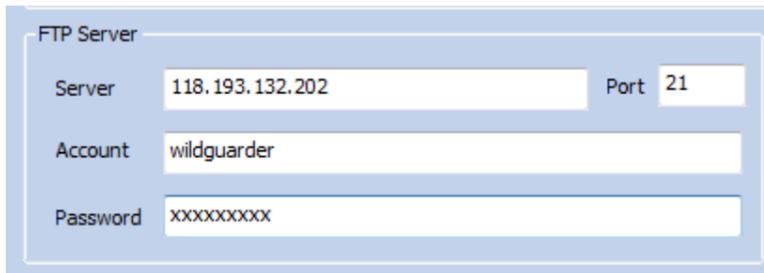
B. Cellhone number is needed for FTP function, fill the 'Phone 1' to get FTP sending notice.

There are two type of FTP server, Free FTP server & Paid FTP server

Here is our recommend free FTP service provider, user is allowed to apply for a free account(1G),please check below link:
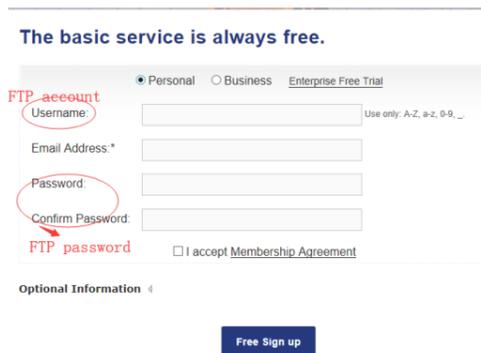
https://www.drivehq.com/secure/freeSignup.aspx

Server：ftp.drivehq.com

IP: 66.220.9.51

port：21

It supports manage image & video file via FTP PC software.

It supports to preview image & video via FTP APP as well.
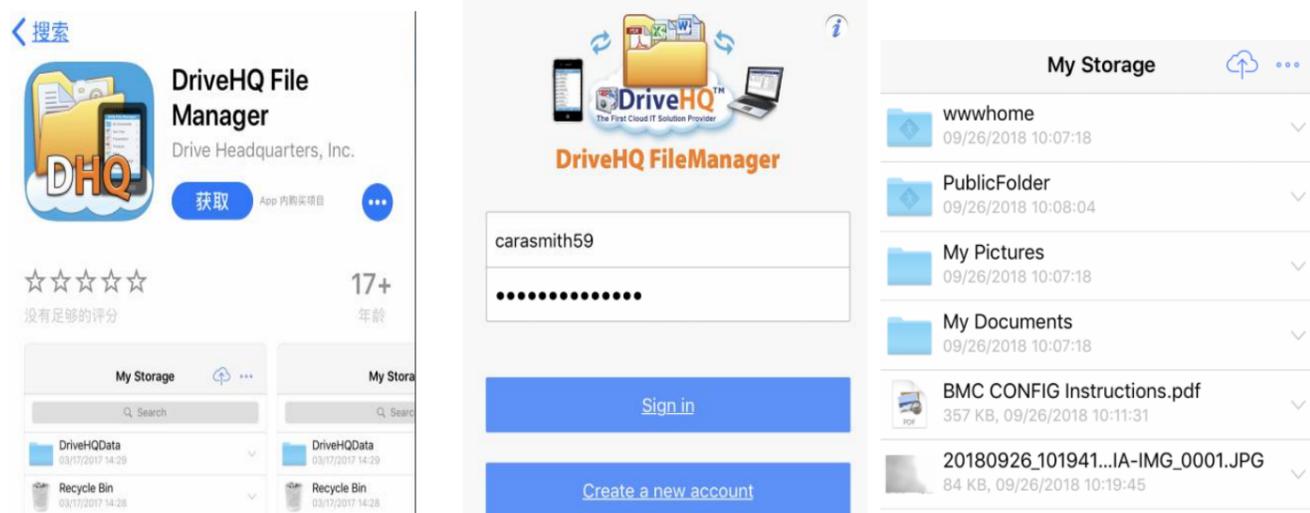
We recommend paid FTP account & service, because it will be more stable and faster than using free FTP server.

REMARKS

	Picture mode	Video mode	Picture + Video Mode
Only MMS Function (VGA, QVGA, OFF)	User can select VGA or QVGA	Do not work	User can select VGA or QVGA.
Only SMTP Function. (Original image, 1080P video)	User can choose the original picture size of 20MP 5184*3880, 12MP 4032*3024, 5MP 2592*1944, 1.3MP 1280*960,VGA 640*480	MMS function do not works.　Supports transmitting up to 30MB 1080P video. User can select FHD 1920*1080P, HD 1280*720P,VGA 640*480	User can select both 1080P video & 20MP/12MP/5MP/1.3MP/VGA original size picture
MMS Function +SMTP Function	MMS Status(User can select VGA or QVGA), SMTP Status(User can select original size image)	MMS function do not works. SMTP function works with 1080P video. HD video, VGA video.	MMS Status(User can select VGA or QVGA), SMTP Status(User can choose original image & 1080P video)
FTP Function	User can select VGA or QVGA or original size picture	User can select FHD 1920*1080P, HD 1280*720P,VGA 640*480	User can select both 1080P video & original size picture
FTP Function + MMS Function	MMS Status(User can select VGA or QVGA), FTP Status(User can select original size image)	MMS function do not works. FTP function works with 1080P video. HD video, VGA video.	MMS Status(User can select VGA or QVGA), FTP Status(User can select original image & 1080P video)

Note:

1. In '**Camera**' mode, if user choose 5MP image resolution and GPRS method to send images, the taken 5MP image will be email out

2. In 'Video mode', please note that it supports sending up to 30 seconds 1080P video or VGA video(about 30MB~33MB),if

you set the videos length with more than 30 seconds, the video will not be sent out via SMTP or FTP.　All the video can't be sent out via

MMS method.

3. In '**Picture + Video**' mode, only Images can be sent out, if user choose MMS method. The QVGA or VGA image will be sent via MMS, it

depends on user choice when select MMS Status. If user choose SMTP method, the original images will be email out, for

example, if user choose 5MP image size, the taken 5mp image will be email out.

4.When turn on multi-shoot function, the last taken image will be sent out

5.After setup PC firmware, and camera will read menu.cfg. If user want to change mobile ID and email ID, please format SD and input via

SMS Remote Control function.

4.5 SMS Remote Control APP

WildGuarder APP is developed for WildGuarder Latest version Watcher1-4G and the follow-up 4G models.

It's easy to communicate with the camera and change the setting via APP & SMS remote control function.

By setup the SMS remote control via APP, change the setting, then press '**Send**' button, the APP will send a SMS text command to the camera, and the camera setting will be changed.
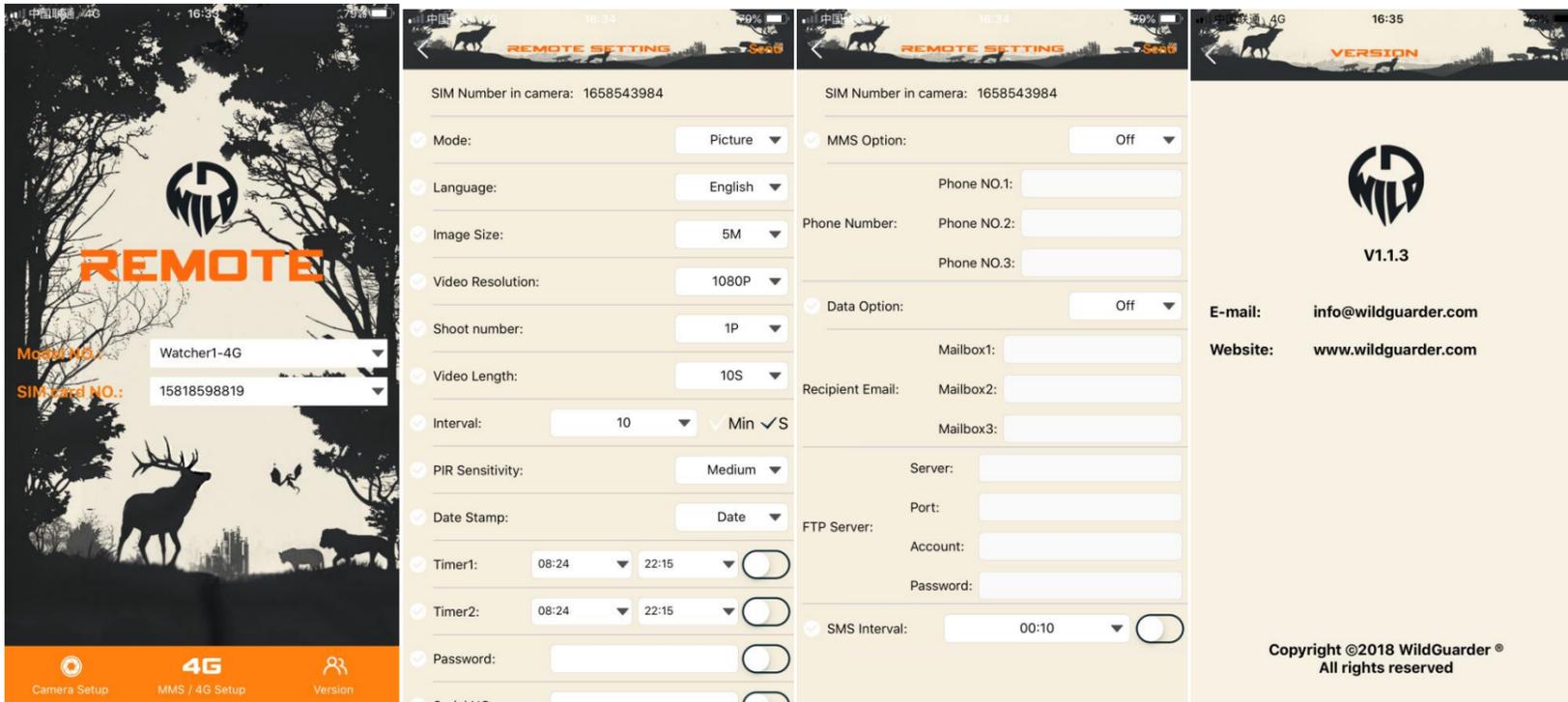
Note:

The SMS switch must be set to '**On**' (User can set it via PC software as well)and set the SMS control interval. In order to save the power, We suggest to set the SMS interval more than 24 hours. It means that the SMS module will be activated every 24 hours. If you use external solar panel power, the working time will be extended, user can set the shortest SMS control interval.
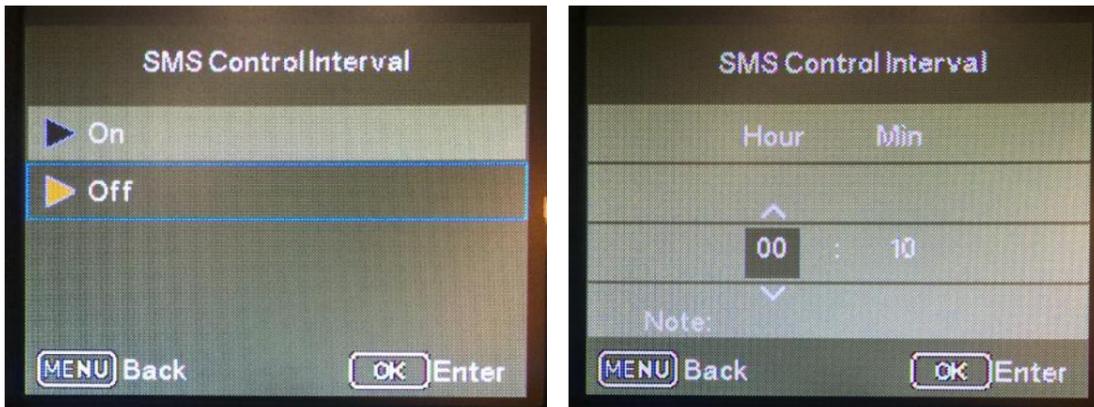
Incase if you would like to send SMS commands to camera by normal text messages, below are the main SMS commands for your reference:

Note: When sending sms command, please add "**menu**," ,it is the necessary parameter. For example,**menu,IS1,** it means set the image size as 12MP.

Item	Option	Message	Comments
Mode	Picture	M0	'M' means 'Mode', 0 means the first option
	Video	M1	
	P+V	M2	
Language	English	L0	
	Français	L1	
	Español	L2	
	Português	L3	
	Deutsch	L4	
	Italiano	L5	
	Russian	L6	
	Magyar	L7	
	Polski	L8	
	Svenska	L9	
	Czech	L10	
	Svenska	L11	
	Finnish	L12	
Image Size	20MP	IS0	
	12MP	IS1	
	5MP	IS2	
	1.3MP	IS3	
	VGA	IS4	
Video Resolution	1080P	VR0	
	720P	VR1	
	VGA	VR2	
Shoot number	1P	S0	
	2P	S1	
	3P	S2	
Video Length	5S-30S	V30	V = 'video', V30 means 30 second video
Interval	3S-60MIN	I10	I = 'Interval'
PIR Sensitivity	High	P0	
	Medium	P1	
	Low	P2	
Data Stamp	Off	D0	
	Date	D1	
	Date/Time	D2	
Timer1	On	T10;08:24;22:15	'T1' means 'Timer1', '0'means 'ON', the following are the starting time & ending time（H:M）
	Off	T11	
Timer2	On	T20;08:24;22:15	
	Off	T21	
Password	On	PA0;9999	
	Off	PA1	
Serial NO.	On	SN0;9999	
	Off	SN1	
Time-lapse	On	TL0;01:20:43	'TL' means 'Time-lapse', '0' means 'ON', The following is shooting interval
	Off	TL1	
Organization Name	On	N0;SLDKJFJF	
	Off	N1	
SD Cycle	On	SC0	
	Off	SC1	
MMS Status	VGA	MS0	

	QVGA	MS1	
	Off	MS2	
MMS Setup	Phone num1	MP1;13512345678	
	Phone num2	MP2;13412345678	
	Phone num3	MP3;13412345678	
GPRS Status	SMTP	GS0	
	FTP	GS1	
	Off	GS2	
GPRS Setup	Mailbox1	GP1;google@gmail.com	
	Mailbox2	GP2;google@gmail.com	
	Mailbox3	GP3;google@gmail.com	
FTP Setup	Server	FS;192.102.18.223	FTP Server IP
	Port	FT;80	FTP Port
	Account	FA; wildguarder	FTP account
	Password	FP;808080	FTP password
SMS Interval	On	SI0;01:30	
	Off	SI1	
Record Audio	On	R0	
	Off	R1	

4.6 Working Condition of 4G LTE Module

Watcher1-4G Lte cellular version is able to take photo/ video automatically then send to mobile and computer with 4G LTE module. It is working with below conditions:

Camera is in 'On' mode and functioning well. SD card with enough storable capacity. Correct installation and enough power of 12 AA batteries(We recommend solar panel power, it will extend the working time). MMS sending by timing or triggering should be workable in Camera mode or Camera+ Video mode only, not in Video mode, text message would be sent in Video mode.

The SIM card supports 4G LTE has been installed. SMS, MMS and data traffic service are activated (some MMS services need pre-paid balance in the account).The SIM card is not password-protected.

-The signal is sufficiently strong in the field.

-MMS/email parameters and email password should be correct.

- If you have the 'Timer' 'on', please make sure the specified time of timer is in the period of MMS sending.

- Make sure the 4G Send Options is not closed for sending MMS picture.

-The camera is stationary while working

Note: FDD-LTE, WCDMA and GSM network are supported by camera. It do not support CDMA2000 or CDMA or TDD-LTE network. The *Watcher1-4G* will detect operator name and current network from 4G, 3G then 2G automatically. During this process, it costs several minutes. Please make sure that there is at least 3 bars on camera scream, then begin to use cellular function.

4.6 Transferring recordings to a computer

Connect the mini USB plug of the supplied USB cable to the USB port on the camera and the USB plug to a free USB 2.0 port of a switched-on computer. This will now recognize the device as" mass storage". When you have confirmed this message of the camera with 'OK', the camera connects to the computer and the content of the SD/SDHC memory card will appear as a new drive on the computer. Now carry out the required file operations.

4.7 Cleaning

Damage to the device!

To avoid irreparable damage, ensure that no moisture penetrates the device during cleaning.

■ Clean the surfaces of the device with a soft, dry cloth. Use a normal commercial detergent and water to remove stubborn residue. Ensure that no water gets into the device.

■ Always keep the seal clean so that no moisture gets into the device and damages it. Contamination of the seal can impair the dust and water spray protection .

Handling and operation

In this chapter you will receive important information for the handling and operation of the device.

5. Trouble Shooting

5.1 Photos Do Not Capture Subject of Interest

1. 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 for "Low".

2. Try to set your camera up in an area where no heat resources are in the camera's field of view.

3. In some cases, set the camera near water will make the camera take images with no subject in them. Try to aim the camera over ground.

4. Try to set camera on stable and immovable objects, i.e.: large trees.

5. At night, motion detector may detect beyond range of the IR illumination. Reduce distance setting by adjusting sensor sensitivity.

7. Rising sun or sunset can trigger sensor. Camera must be reoriented.

8. If person/animal moves quickly, it may move out of the camera's field of view before photo is taken. Move camera further back or redirect camera.

5.2 Camera Stops Taking Images or Won't Take Images

1. Please make sure that the SD card have enough memory storage. If the card is full, camera will stop taking images. Or user can turn on Cycle Recording to avoid such problem.

2. Check batteries to make sure that alkaline, NiMH or lithium AA batteries left power is enough for camera to work.

3. Make sure that the camera power switch is in the "On" position and not in the "Off" or "Test" modes.

4. When GPRS 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.

5. 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

1. 4pcs AA batteries is not able to support camera night vision ability; please install 8-12 pieces AA batteries;

2. Please check to make sure that batteries are fully charged or left power is enough;

3. "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;

4. High-quality 1.5V NiMH or Lithium rechargeable AA batteries can also offer much better IR flash range; alkaline batteries cannot deliver enough amperage to power the illuminator consistently at night;

5. To ensure accuracy and quality of night time image, please mount camera to dark environment without any obvious light sources;

6. A certain surroundings (like trees, walls, ground, etc.) within flash range can get you better night time images; please do not aim camera to total open field where there is nothing within IR flash range to reflect flash back; it's like shinning a flashlight into sky in night, you just can't see anything; same does camera;

6.0 Specifications

GPS function (4G version optional)	Supports GPS parameter input. The longitude & latitude will be showed on the pictures & video
MMS Function (4G version optional)	1-3 mobile ID（only sending VGA and QVGA image）
SMTP function (4G version optional)	1-3 Email ID（SSL/TSL support, supports sending up to 30 seconds 1080P video & 20MP/12MP/5MP/1.3MP original size picture. If need to send video, please choose 'video mode' or 'Picture + Video mode' and 5-30 second video length）
FTP Function (4G version optional)	The File Transfer Protocol (FTP) is a standard network protocol used for the transfer of computer files between a client and server on a computer network. Setup the FTP function, the video & picture will be upload to your FTP space via 4G network. Then you can watch & download the video & picture via FTP PC software or APP. Note: Before using the FTP function, please ensure you have registered a FTP space. We recommend the paid FTP space. Because it will be more stable and faster when transfer flies and there will be no spam any more.
SMS Remote Control Function	Sending message command to change the camera setting.
4G FDD-LTE network frequency (4G version optional)	**Version for Europe** **4G FDD-LTE frequency: B1 B3 B5 B7 B8 B20** 3G WCDMA frequency: B1 B5 B8 2G GSM Network: B3 B8 **Version for Australia** **4G FDD-LTE frequency: B1 B2 B3 B4 B5 B7 B8 B28** 3G WCDMA frequency: B1 B2 B5 B8 2G GSM Network: B2 B3 B5 B8 **Version for North America (AT&T, T-mobile)** **4G FDD-LTE frequency: B2 B4 B12** 3G WCDMA frequency: B2 B4 B5 **Version for North America (Verizon)** **4G FDD-LTE frequency: B4 B13**
Image Sensor	5 Mega Pixels Color CMOS
Effective Pixels	2592*1944
Day/Night Mode	Yes
IR range	20m
IR Led	54pcs,940 No-Glow
Operating remote control	7 button
Lens (Wide lens model)	F=1.8; FOV=110°; NO IR-Cut-Remove (at night)
Lens (Regular lens model)	F=1.8; FOV=70°; NO IR-Cut-Remove (at night)
LCD Screen	2.0" TFT, RGB, 262k
PIR Sensitivity	3 sensitive levels: High / Normal / Low
PIR distance	20m
PIR Angle	110°
Picture size	VGA/1.3MP/5MP/12MP/20MP =640x480/1280x960/2592x1944/4032x3024/5184x3880
Picture Format	JPEG
Video resolution	1080P (1920x1080): 30FPS, 720P (1280x720):30FPS, 640x480
Video Format	MOV H.264
Video Length	5-30 sec. programmable
Shooting Numbers	1-3
Trigger Time	0.4s
Trigger Interval	3s-60min
Camera + Video	Yes
Time lapse	supporting

Timer Setting	3 Timers	
Device Serial No.	Yes	
Built-in Speaker	Yes	
Recording Voice	ON/OFF	
Operation Power	Battery: 6V; DC: 12V	
Battery Type	12AA	
Stand-by Current	0.035mA	
Stand-by Time	3-6 months (4×AA~12×AA)	
Auto Power Off	auto switch to mode "OFF" in 180s without any operations	
Power Consumption	IR LEDs Off	Photo: 200mA; Video: 200mA
	IR LEDs On	Photo: 1.2A Video: 1.2A
Interface	HDMI out/USB/SD Card/DC Port	
Mounting	Strap; Tripod	
Storage temperature	-30 °C to 60°C	
Operation Humidity	5%-90%	
Memory Storage	Up to 32GB	
Waterproof spec	IP66	
Dimensions	11(length)* 6(width)* 15(height)cm	
Weight	500g	
Certification	CE FCC RoHs	

7.0 WildGuarder® Warranty

With great pride and full confidence in **WildGuarder®** products, we always keep our words which are given to our customers as specified warranty terms and services below. Based on a strict QC system, we initially offer all our customers **two years Long time limited warranty**, come along with selectable chargeable renewal policy of warranty as one, two, three, or four years.

Our products are warranted against defects in materials and workmanship for a period of one year from the date of original purchase. If a defect exists, we will, at our option and to extent permitted by law will (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 product is returned freight charge paid.

This warranty excludes damage resulting from abuse, accident, modifications 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.

To obtain warranty service, please contact us to determine the nature of problem before return the product under this warranty (with a written description of the problem and print samples) for repairing or exchanging.

WildGuarder

Customer Contact:

Email: support@wildguarder.com

Website: www.wildguarder.com