

# Infrared Mobile Digital Scouting Camera

## *User's Manual* *Boly Guard,SG550M*



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# 1 Instruction

## 1.1 General Description

This camera, a digital scouting camera with MMS function, is a surveillance camera working automatically. It can be triggered at once by any movement of human (or animals) in a certain region of interested (ROI) monitored by a high sensitive Passive Infrared (PIR) motion sensor, and then automatically captures high quality pictures (up to 5M pixels) or records video clips (VGA). Then it can send the pictures instantly to your mobile device via GSM network. You'll be alerted just when something has happened;

It takes color pictures or videos under sufficient daylight. While at the dark night, the built-in infrared LEDs functioning as flash light, the camera takes clear pictures or videos (monochrome).

It is easy to use. Because there is a 1.7" LCD display on camera and a sound recorder embedded in the camera. A laser pointer is used to help target the photo area of the camera. And it supports MMS/SMS/E-mail via GSM Network.

It is resistant against water and snow for outside uses. Furthermore, the camera can be used as a portable digital camera.

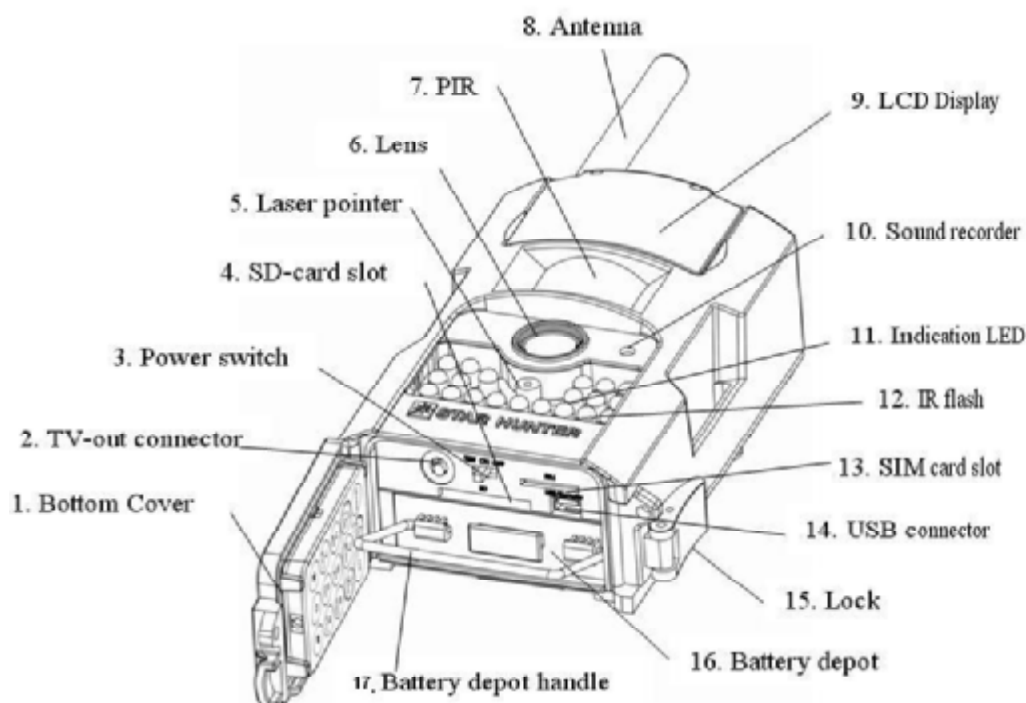
It is Operating Temperature (-10°C to + 50°C)

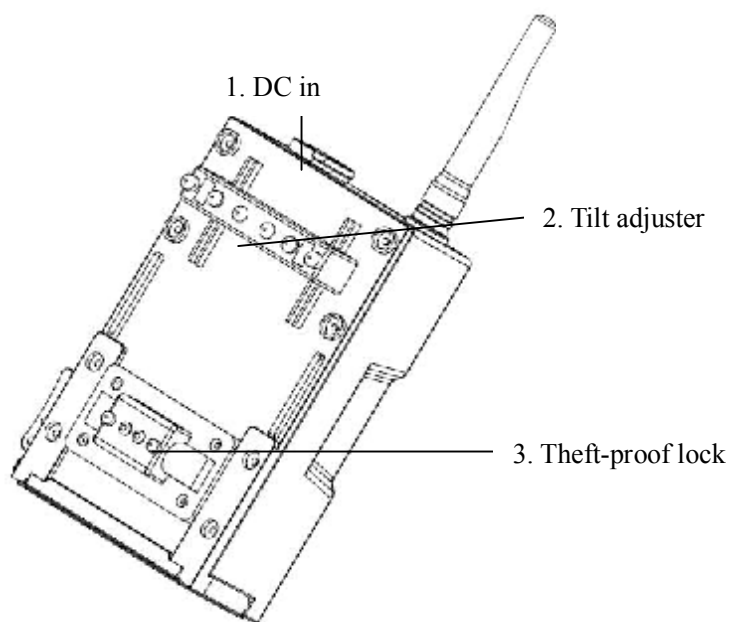
## 1.2 Camera Body Interfaces

The camera has the following I/O interfaces: USB connector, SD-card slot, TV output and external DC power connector.

On the back of camera, there is a lock for theft-proof and an adjuster to change the tilt when mounting on an irregular interface e.g. tree.

Take a few moments to familiarize with the camera controls and displays. It is helpful to





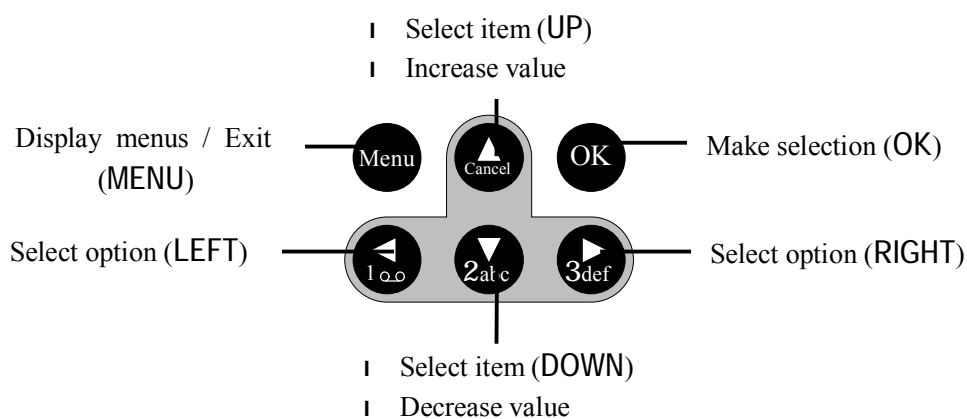
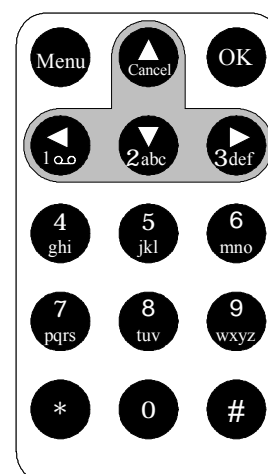
### 1.3 Remote Control

The remote control is an input device of the camera and is primarily used for customer settings and password input. This is an infrared type wireless remote control. The maximum remote distance is 9 meters.

There are fifteen buttons on the remote control.

#### 1.3.1 Navigating

Press UP or DOWN to select or highlight the menu item, while press LEFT or RIGHT to select the option of each item and press OK to make selection.



#### 1.3.2 Characters

While entering digits, letters or punctuations into input column, there are some usefully characters can be used by pressing the button continuously:

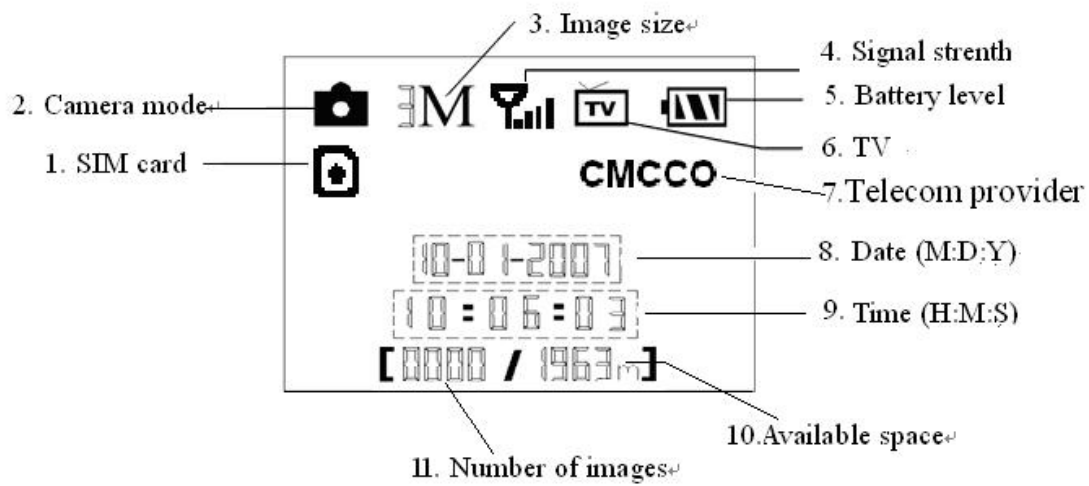
◀ : 1 . / : @ \_

0 : 0 + -

Press the punctuation “\*” for laser pointer.



## 1.4 Shooting Information Display

When the camera is turned on (the power switch is slid to **ON** or **TEST** position), the shooting information will be displayed in the monitor.



## 1.5 MMS function

This camera can send pictures instantly to your mobile device via GSM network. You'll be alerted just when something has happened; The MMS through GPRS to send, so before using this function you need to open this business. It supports four band : 850MHz, 900MHz, 1800MHz and 1900MHz. Related information, please refer to section 4.1.15.

SIM card Icon: There are two SIM card icon .  It means the SIM card is inserted and it works well.  It means the MMS function can't work correctly for the feeble signal or other communication issues. If the SIM card is not inserted, no SIM card icon will be displayed.

## 1.6 Supported Format

Item	Format
Photo	JPG

Video	AVI
File format	FAT32

Here are some important notices. You don't need to concern about the file system format of the camera unless you have problems with reading the SD-card by your other equipments. If this happened, please format the SD-card in the camera or in a computer at first and then reinsert the card into your camera to make a try.

## 2 Cautions

- ★ The working voltage of the camera is 6V. The camera is supplied by four or eight AA batteries.
- ★ Please install batteries according to shown polarity.
- ★ Please unlock the write-protect before inserting the SD-card.
- ★ Please insert the SD-card when the power switch is at OFF position before testing the camera. The camera has no internal memory for saving images or videos. If no SD-card is inserted, the camera will shut down automatically after a continuous indication sound.
- ★ Please do not insert or take out the SD-card when the power switch is at ON position.
- ★ It is recommended to format the SD-card by the camera when used at the first time.
- ★ The camera will be in USB mode when connected to a USB port of a computer. In this case, the SD-card functions as a removable disk.
- ★ In the TEST mode, the camera will shut down automatically after 3 minutes if no operation is done. Please turn on the power again if you want to continue to work with the control.
- ★ Please ensure sufficient power when having firmware upgrade, otherwise the upgrade process could be interrupted incorrectly. If any fault occurs after improper upgrading process, the camera may stop function properly.





## 3 Easy Operations

### 3.1 Power Supply

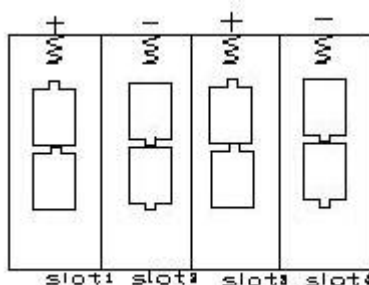
To supply power for the camera, four or eight AA size batteries are needed.

Open the bottom cover. Confirm that the power switch is at the OFF position, pull out the battery depot. Load the fully charged batteries into the depot according the polarities sign shown below. Push back the depot to the battery chamber. The following batteries with 1.5V output can be used:

1. High-density and high-performance alkaline batteries (Recommended)
2. Rechargeable alkaline batteries
3. Rechargeable NiMH batteries

There are four battery slots. Slot 1 and 2 form one group ("1" will mark on depot), while slot 3 and 4 form the other group ("2" will mark on depot) where each group can supply the power individually.

When in low-battery state, camera will be automatically shut down after two indication sounds. Please change the batteries in time. If you have set the MMS function, it will send you a MMS/SMS or Email to indicate the low battery situation.



### 3.2 Insert the SD-card and the SIM-card

Open the bottom cover. Insert SD-card into the card slot with unmarked side upwards. Please note that the SD-card can only be plugged in one direction. Make sure that the write-protect switch of the SD-card is on the "write" position otherwise the camera cannot be switch on. When use MMS/SMS/E-mail function, be sure to insert SIM-card into the SIM-card slot with angle in the upper left.

### 3.3 Power on and Enter into the ON Mode

Before switching on, please pay attention to the follows:

1. Avoid temperature and motion disturbances in front of the camera such as big leaf, curtain, air-conditioner, air outlet of the chimney and other heat sources to prevent from false triggering.
2. The height from ground for placing the camera should vary with the object size appropriately. In general, **one to two meters** are preferred.

Slide the power switch to the ON position to power on the camera and enter into the **ON** mode. Before entering into the ON mode, you can adjust the camera the target

monitoring area by laser pointer. Related information, please refer to section 4.3.

After switching on the camera, the motion indication LED (red) will blink for about 10s. The 10s is a buffering time before autonomic capturing photos or videos, e.g. for closing and locking the bottom cover, fixing the camera on a tree and walk away.

In **ON** mode, it is unnecessary to use the remote control. The camera will take pictures or videos automatically according to the default settings or previous custom settings. The camera has the sound recording function, so the sound will be embedded in the video clip while capturing a video.

### **3.4 Enter into the TEST Mode**

Slide the power switch to the **TEST** position and enter into the **TEST** mode. There are some functions in **TEST** mode: Custom settings, manual capture ,preview or send MMS manually. The remote control is needed in this mode.

#### **3.4.1 Custom Settings**

Press **MENU** on the remote control to enter into menu setting. The camera can be taken over control to manually customize the camera settings which display on the LCD screen on camera or external TV monitor. The detailed operations will be described in “Advanced Operations” chapter.

#### **3.4.2 Manual Capturing**

You can press **RIGHT** to manually capture photos or recording video.

#### **3.4.3 View Images or Videos**

There are two ways to view the captured images or videos:

1. LCD screen on camera
2. TV monitor which connect to camera with TV cable

Press **OK** to view images, the latest image will be shown in the LCD screen on camera or TV monitor. Press **UP** to view the previous image and press **DOWN** for the next. Please note that video cannot be played back in the LCD screen and only thumbnail of the video is showed.

The detailed operations like deleting images or videos will be described in “Advanced Operations” chapter.

#### **3.4.4 Send MMS**

When the MMS Mode is set as “Manual”, you can send the selected photo to the preset address in **TEST** mode. “Daily Report” and “Instant” mode is used under **ON** mode.

### **3.5 Power Off**

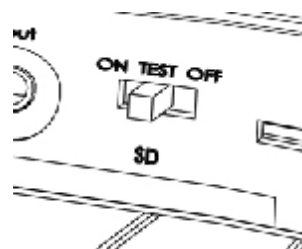
Slide the power switch to **OFF** position to power off the camera. Please note that even in the **OFF** mode, the camera still consumes certain power at  $\mu\text{A}$  level. Therefore, please remove the battery if the camera will not be used for a long time.

## 4 Advanced Operations

From the basic operations of the camera in previous chapter, we know that the camera has three basic operation modes:

1. **OFF** mode: Power switch is at OFF position.
2. **ON** mode: Power switch is at ON position.
3. **TEST** mode: Power switch is at TEST position.

In the above three modes, the **OFF** mode is the specified safe mode when replacing the SD-card or batteries and transporting the camera.



This chapter explains the advanced operations for customizing the camera settings. The settings can only be customized in **TEST** mode and remote control is needed.

### 4.1 Settings Menu

To view the camera settings menu, press MENU in the **TEST** mode (called settings menu in this chapter). The settings menu will be shown on the LCD on camera or the external TV monitor. There are seventeen items of menu setting for M10:

Setting Items	Description
<b>Camera Mode</b>	Choose capturing images or recording videos.
<b>Format</b>	Format the SD-card. All images and videos in the SD-card will be deleted.
<b>Photo Size</b>	Choose the image size, e.g. 5 mega pixels.
<b>Video Size</b>	Choose the video size, e.g. 640×480 (VGA).
<b>Set Clock</b>	Set camera date and time.
<b>Photo Burst</b>	Choose the continuous shooting numbers after each triggering.
<b>Video Length</b>	Choose duration of recording video.
<b>Video Sound</b>	Choose if the sound recorder will be used.
<b>Interval</b>	Choose how long the camera will stop functioning after each triggering. The camera's PIR will be disabled during this interval.
<b>Sense Level</b>	Choose sensitivity of PIR. There are 3 choices "HIGH", "NORMAL" and "LOW". The higher, the easier the sensor would be triggered by motion. It is recommended to use <b>Normal</b> mode. The sensitivity of PIR is strongly related to the temperature. Higher temperature leads to lower sensitivity.
<b>Timer</b>	The camera will be awoken up at certain time duration in a day. In the rest of the time the camera is shut off.
<b>Flash Range</b>	Infrared Flash range: .20 ft./6m and 40 ft./12m
<b>MMS Set</b>	The MMS through GPRS to send, so before using this function you need to open this business with your network provider. It

	<p>supports four band : 850MHz, 900MHz, 1800MHz and 1900MHz. You should set the right MMS setting parameters . The settings of MMS: <b>URL</b>, <b>APN</b>, <b>IP</b> and <b>Port</b>. Please contact the network service provider if you are not familiar with the settings.</p>
<p><b>MMS Mode</b></p>	<p>There are 3 MMS modes: “Manual ” works in TEST mode , “Daily report” and “Instant” work in ON mode.</p> <p>1)“<b>Manual</b>”:</p> <p>Choose “Manual” in Test mode. Please ensure SIM card is inserted properly; Please note, only photo can be sent in TEST mode .Video information can’t be sent in TEST mode.</p> <p>2)“<b>Daily Report</b>”:</p> <p>Daily report, which means that the camera will report the summarized information in preset time (if the preset time is, eg.20:00PM) on how many pictures it had taken, so, you will get a summarized text message with the last picture taken until 20:00PM.</p> <p>Choose “Daily Report” in ON mode. If it is on camera mode, the camera will send a MMS at the presetting time. The MMS will show you the last photo and the total numbers of how many pictures .If it is on video mode, the camera will send a SMS at the presetting time. The SMS will show you how many video clips the camera has taken.</p> <p>3)“<b>Instant</b>”:</p> <p>Instant, which means that the camera will send instantly the picture taken each day, while, for the economy consideration from customer, there is a limitation on the pictures quantity.</p> <p>Choose “Instant” in ON mode. Enter into this mode to further programming, the camera will send every photo after the camera takes a photo during the day, while there is a quantity limitation of the sending times for economy consideration, when the operation reaches the limitation, the camera will stop to send any MMS;</p> <p>Note: If the camera mode is chose as “Video”, the MMS function will just work in “Daily Report” , and the Camera will send the summarized SMS information that tells the total number of video clips taken.</p> <p>4)“<b>OFF</b>” : To close MMS function.</p>
<p><b>Send To</b></p>	<p>Enter the phone number or email which the MMS to be sent. There are maximum four numbers or four emails to be sent at the same time.</p> <p>1&gt; <b>Number</b>: press “#”for switch between each input;</p> <p>2&gt; <b>Email</b>: see 1.3.2 for punctuation information;</p> <p>3&gt; <b>Both</b>: ensure there is at least one phone number and one email address.</p> <p>Note: The warning message will not be sent if the phone number is</p>

	empty.
<b>Password</b>	For the security sake, enter a password each time when entering <b>Test</b> mode. The default password is 0000. You could choose OFF to stop this function.
<b>Default Set</b>	Restore all customer settings to default values.

#### 4.1.1 Default Setting

Defaults settings are listed below:

Setting Items	Default	Options	Submenu
Camera Mode	Photo	Video	
Format	Enter		Yes, No
Photo Size	3M Pixel	5M Pixel	
Video Size	640×480	320×240	
Set Clock	Enter		Adjust Clock
Photo Burst	1 Photo	2 Photo, 3 Photo	
Video Length	Avi 10 sec	Avi 5–60 sec	
Video Sound	On	Off	
Interval	1 Min	5–60 seconds, 1-60 min	
Sense Level	Normal	High, Low	
Timer	Off	On	Start, Stop (00:00 – 23:59)
Flash Range	20ft./6m	40ft./12m	
MMS Set	Enter		URL, APN, IP, Port
MMS Mode	Off	Manual, Daily Report, Instant	
Send To	Number	Email, Both	4 inputs
Password	OFF	ON	
Default Set			

#### 4.1.2 General Settings

The operating steps are suitable for following menu items: **Camera Mode**, **Photo Size**, **Video Size**, **Photo Burst**, **Video Length**, **Interval**, **Sense Level**, **Timer** and **MMS Mode**.

#### 4.1.3 Set Camera Mode

There are two ways to set the camera mode: 1. Via shortcut key; 2. Via setting menu.

1. Shortcut key: Press UP to set the camera mode as **Video** or press DOWN to set camera mode as **Photo** in info display of **TEST** mode.
2. Setting menu: The following shows how to set camera mode to **Video**, provided that the previous option is **Photo**:
  - a) Press MENU to display the setting menu.
  - b) Press UP or DOWN to select **Camera Mode**.

- c) Press LEFT or RIGHT to select **Video**.
- d) Press OK to save the current setting and the option will be un-highlighted.  
Press MENU to cancel setting and return to info display.

#### 4.1.4 Format SD-Card

The system will delete all images or videos stored in the SD-card after formatting, make sure that you have made a backup of important data.

- a) Press MENU to display the setting menu.
- b) Press UP or DOWN to select **Format**.
- c) Press OK to choose **Enter** to enter into submenu.
- d) Press LEFT or RIGHT to select **Yes**. **Yes** will be highlighted.
- e) Press OK to start formatting the SD-card. During formatting, the display screen will show a message "Please Wait" as below.  
Press MENU to cancel setting and return to info display.

**Please Wait!**

#### 4.1.5 Set Photo Size

The following shows how to set pixel size as **3M Pixel** provided that the previous option is **5M Pixel**:

- a) Press MENU to display the setting menu.
- b) Press UP or DOWN to select **Photo Size**.
- c) Press LEFT or RIGHT to select **3M Pixel**.
- d) Press OK to save the current setting and the option will be un-highlighted.  
Press MENU to cancel setting and return to info display.

#### 4.1.6 Set Video Size

The following shows how to set video size as **320×240** provided that the previous option is at **640×480**:

- a) Press MENU to display the setting menu.
- b) Press UP or DOWN to select **Video Size**.
- c) Press LEFT or RIGHT to select **320×240**.
- d) Press OK to save the current setting and the option will be un-highlighted.  
Press MENU to cancel setting and return to info display.

#### 4.1.7 Set Date and Time

The date format is **month/day/year**, the time format is **hour: minute: second**. The valid value for year is between 2006 and 2031. Provided that the date and time are needed to be set to November 15th, 2007 and half past ten, the steps are as following:

- a) Press MENU to display the setting menu.
- b) Press UP or DOWN to select **Set Clock**.
- c) Press OK to **enter** into submenu.
- d) Press LEFT or RIGHT to select item, press UP or DOWN to change the value.

- e) Press OK to save all current setting and return to info display.  
Press MENU to cancel setting and return to info display.

#### 4.1.8 Set Photo Burst

The following shows how to set photo burst to **3 Photo** , provided that the previous option is **1 Photo**:

- a) Press MENU to display the setting menu.
- b) Press UP or DOWN to select **Photo Burst**.
- c) Press LEFT or RIGHT to select **3 Images**.
- d) Press OK to save the current setting and the option will be un-highlighted.  
Press MENU to cancel setting and return to info display.

#### 4.1.9 Set Video Length

Press LEFT or RIGHT to decreases or increases the value by 1 second.

The following shows how to set video length to **5 Seconds** provided that the previous value is **10 Seconds**:

- a) Press MENU to display the setting menu.
- b) Press UP or DOWN to select **Video Length**.
- c) Press LEFT or RIGHT to decrease or increase to **5 Seconds**.
- d) Press OK to save the current setting and the option will be un-highlighted.  
Press MENU to cancel setting and exit.

#### 4.1.10 Set Video Sound

The following shows how to set video sound as off that the previous option is on:

- e) Press MENU to display the setting menu.
- f) Press UP or DOWN to select **Video Sound**.
- g) Press LEFT or RIGHT to select **off** or **on**.
- h) Press OK to save the current setting and the option will be un-highlighted.  
Press MENU to cancel setting and return to info display.

#### 4.1.11 Set Interval

Press LEFT or RIGHT to decreases or increases the value by 5 second or 1 minute.

The following shows how to set triggering interval time to **5 Minutes** provided that the previous value is **1 Minute**.

- a) Press MENU to display the setting menu.
- b) Press UP or DOWN to select **Interval**.
- c) Press LEFT or RIGHT to decrease or increase to **5 Minutes**.
- d) Press OK to save the current setting and the option will be un-highlighted.  
Press MENU to cancel setting and return to info display.

#### 4.1.12 Set PIR Sensitivity

It is recommended to use **Normal** mode. The following shows how to set PIR sensitivity as **Low** provided that the previous option is **Normal**.

- a) Press MENU to display the setting menu.
- b) Press UP or DOWN to select **Sense Level**.
- c) Press LEFT or RIGHT to select **Low**.
- d) Press OK to save the current setting and the option will be un-highlighted.

Press MENU to cancel setting and return to info display.

#### 4.1.13 Set Timer

Please note that the start and stop time can only be effective when the timer is set as **On**. Provided that the camera should work from eight a.m. to five p.m., the steps are as following:

- a) Press MENU to display the setting menu.
- b) Press UP or DOWN to select **Timer**.
- c) Press LEFT or RIGHT to select **On**.
- d) Press OK to enter into submenu.

Press MENU to cancel setting and return to info display

- e) Press LEFT or RIGHT to select item, press UP or DOWN to change the value.
- f) Press OK to save all current setting and the option will be un-highlighted.

Press MENU to return to previous menu.

#### 4.1.14 Set Flash Range

The following shows how to set flash range:

- i) Press MENU to display the setting menu.
- j) Press UP or DOWN to select **Flash Range**.
- k) Press LEFT or RIGHT to select 20 ft./6m or 40 ft./12m.
- l) Press OK to save the current setting and the option will be un-highlighted.

Press MENU to cancel setting and return to info display.

#### 4.1.15 MMS Settings

Enter the MMS setting which provided by the network service provider. There are **only** four setting to be entered, the steps are as follows:

- a) Press MENU to display the setting menu.
- b) Press UP or DOWN to select **MMS Set**.
- c) Press OK to **Enter** into submenu.
- d) There are four inputs for key in **URL**, **APN**, **IP** and **Port**, press **#** to switch between each inputs. Press number buttons to key in the digits, letters or punctuations. Press UP(Cancel) to delete.
- e) Press OK to save all current setting and return to info display.

Press MENU to cancel setting and to return to previous menu.

---

#### Easy Access to MMS setting (edit in the computer)



1. Load the fully charged batteries.
2. Insert SD card.
3. Insert SIM card.
4. Power on and entering into the **TEST** Mode.
5. A new file named '**PROFILE.INI**' is created automatically in a new folder named '**MMS**' in the SD card.
6. Reedit the file '**PROFILE.INI**' in the computer to set the MMS parameters, below is for reference:

**URL:** (Max. 64 characters)

**A.P.N:** (Max. 32 characters)

---



**IP:** (Max. 16 characters)

**Port:** (Max. 6 characters)

**Account and Password :** (Some telecom operators need to set account and password to launch MMS.)

**Number:** (Max. 24 characters for each phone number)

**Email:** (Max. 48 characters for each email)

Please note that this is only an example, for more details please contact your network service provider, and there are only 4 parameters needs to be edited, do pls not change other parameters expect these 4 parameters to avoid operation failure.

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#### 4.1.16 Set MMS Mode

There are 3 MMS modes: “Manual” works in TEST mode, “Daily report” and “Instant” work in ON mode.

The following shows how to set the MMS mode to **Instant** provided that the previous option is **Off**:

- a) Press MENU to display the setting menu.
- b) Press UP or DOWN to select **MMS Mode**.
- c) Press LEFT or RIGHT to select **Instant**.
- d) Press OK to save the current setting and the option will be un-highlighted.

Press MENU to cancel setting and return to info display.

If you choose “Daily Report”, you need to set the daily report time: xxH, xxM.

If you choose “Instant”, you need to set how many MMS you want to send for economy consideration. You can choose 0 to 99 pictures.

#### 4.1.17 Set Send to

Enter the phone number or email which the MMS to be sent. The following shows how to set sending to **Number** provided that the previous option is **Email**:

- a) Press MENU to display the setting menu.
- b) Press UP or DOWN to select **Send To**.
- c) Press LEFT or RIGHT to select **Number**.
- d) Press OK to enter into submenu.

Press MENU to cancel setting and return to info display

- e) There are four inputs, press **#** to switch between each inputs. Press number buttons to key in the digits, letters or punctuations. Press UP to delete.
- f) Press OK to save all current setting and return to info display.

Press MENU to cancel setting and to return to previous menu.

#### 4.1.18 Enter Password

If the password setting is selected as **On**, after switch on the camera, the LCD screen on camera will prompt to enter password. The default password is 0000. Please key in the password by using the remote control. It can be changed where the steps are as following:

- a) Press MENU to display the setting menu.
- b) Press UP or DOWN to select **Password**.

- c) Press LEFT or RIGHT to select **On**.
- d) Press OK to enter into submenu.
- e) There are three inputs for key in new, old and confirm password, press # to switch between each inputs. Press number buttons to key in the digits. Press UP to delete.
- f) Enter OK to save all current setting and return to info display. If the inputs are blank, the password will not be changed; if key in correctly, the new password is set. The LCD screen will prompt to enter password next time you switch on the camera.  
Press MENU to cancel setting and return to previous menu.

#### 4.1.19 Reset to Default Settings

To reset the setting to the default values, the steps are as followings:

- a) Press MENU to display the setting menu.
- b) Press UP or DOWN to select **Reset**.
- c) Press OK to reset to default settings and return to info display.  
Press MENU to cancel setting and return to info display.

## 4.2 Playback

In playback mode, images or videos can be viewed, deleted and image can be manually sent by MMS. It can only be done in **TEST** mode.

The images can be viewed on: LCD screen on camera and TV monitor which connect to camera with TV cable; the videos can only be viewed on TV monitor. For simplicity, operations with PC won't be introduced here.

### 4.2.1 Viewing Photo or Video

- a) Switch to **TEST** mode and enter into info display.
- b) Press OK to view the latest picture (or video) in LCD screen on camera, TV monitor or Image viewer with TV-in connector.
- c) Press RIGHT to start playing the video clip in TV monitor, video clip cannot be played in LCD screen on camera.
- d) Press RIGHT to stop playing and return to playback mode.
- e) Press UP to view the next picture (or video) and DOWN for the previous.
- f) Press OK to return to info display.

When view images, the total number of all images in the SD-card and the index of the displaying image will be shown respectively.

### 4.2.2 Delete Photo or Video

- a) View the image (or video) which to be deleted (please refer to 4.3.1).
- b) Press MENU to display the playback menu.
- c) Press UP or DOWN to select **Delete**. **One** is highlighted.
- d) To delete the current image, just skip this step. To delete all images and videos, press LEFT or RIGHT to select **All**.
- e) Press OK, **No** and **Yes** are prompted. **No** is highlighted.
- f) Press LEFT or RIGHT to highlight **Yes**.
- g) Press OK to delete the image or video.

Press MENU to cancel and return to playback.

Please note that after deleting a picture or a video file, the deleted files can't be restored! Furthermore, in order to delete all images and video clips in the SD-card, it is suggested to format the SD-card, please refer to 4.2.4.

#### 4.2.3 Send MMS Manually

The **Send MMS** option will only be shown when the setting item **MMS Mode** is selected as **Manual**.

- a) View the images and select one to send.
- b) Press MENU to display the playback menu.
- c) Press UP or DOWN to select **Send Message**. **Send** is highlighted
- d) Press OK to send MMS according to the setting in setting menu.

Press MENU to cancel and return to playback.

Please note that the images can only be sent and video cannot be sent. If the SIM card is not inserted, the image cannot be sent as well.

### 4.3 Laser Pointer

A laser can be turn on especially in the night time or dark environment as an additional function for pointing to an object or a certain region of interested (ROI).

Press **\*** to turn on the laser light in **TEST** mode and use the tilt adjuster on the back of camera to adjust the angle of capturing direction.

NOTE:



Please note that the laser could be harmful to the eyes if pointed at other person.

### 4.4 File Numbering

Images and videos are saved in the pre-named folder. File numbering continues by adding one to the last number for each new image or video. The saving name likes IMAG0001.JPG or IMAG0001.AVI. Through the suffix you can distinguish whether the file is an image (with suffix .jpg) or a video (with suffix .avi).

### 4.5 Firmware Upgrade

This camera is equipped with an automatic upgrade function for you. Upgrading is needed only when an improved firmware is available.



**WARNING**

**Upgrade is risky, please be cautious!**

## Appendix I : Technical Specifications

<b>Image Sensor</b>	5MP Color CMOS
<b>Lens</b>	F/NO=3.0 FOV(Field of View)=52°
<b>IR-Flash</b>	6-12m
<b>Display Screen</b>	1.7" LCD
<b>Memory Card</b>	From 8 MB to 16 GB
<b>Picture Resolution</b>	5MP = 2560×1920 3MP = 2048×1536
<b>Video Resolution</b>	640×480 (16fps) 320×240 (20fps)
<b>PIR Sensor</b>	Multi Zone
<b>PIR Sensitivity</b>	Adjustable (High/Normal/Low)
<b>Trigger Time</b>	1.2s
<b>Weight</b>	0.30 kg
<b>Operation/Storage Tem.</b>	-10 - +50°C / -30 - +70°C
<b>Interval</b>	1s – 60 min.
<b>Photo Burst</b>	1–3
<b>Video Length</b>	1–60s
<b>Power Supply</b>	8×AA or 4×AA
<b>Stand-by Current</b>	< 0.25 mA (<6mAh/Day)
<b>Power Consumption</b>	400 videos (interval=5min, video length=10s) ; >500 MMS(use 8*AA batteries)
<b>Low Battery Alert</b>	LED Indicator
<b>Display Screen</b>	LCD display on camera
<b>Sound Recording</b>	Available
<b>Mounting</b>	Rope/Belt/Python lock
<b>Dimensions</b>	140 x87 x55 mm
<b>Operation Humidity</b>	5% - 90%
<b>Security authentication</b>	FCC, CE, RoHS

\*without battery

## Appendix II : Parts List

Part Name	Quantity
Digital Camera	One
Wireless Remote Control	One
USB Cable	One
TV cable	One
Belt	One
User Manual	One
Antenna	One

## Compliance with FCC Regulations

### FCC Section 15.105 (b)

This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

- Reorient or relocate the receiving antenna.
- Increase the separation between the equipment and receiver.
- Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
- Consult the dealer or an experienced radio/TV technician for help.

### FCC Section 15.21 Information to the user

Changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment.

### FCC Section 15.19 Labelling requirements

This device complies with Part 15 of the FCC Rules.

Operation is subject to the following two conditions:

1. This device may not cause harmful interference, and
2. This device must accept any interference received, including interference that may cause undesired operation.

### FCC RF Radiation Exposure Statement

This equipment complies with FCC RF radiation exposure limits set forth for an uncontrolled environment. The antenna used for this transmitter must be installed to provide a separation distance of at least 20 cm from all persons and must not be co-located or operating in conjunction with any other antenna or transmitter.