

MMS/GPRS Security Camera
User's Manual
BG30L



For Model: BG30L

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1 Product Feature

1.1 General Description

The BG30 is a mini GSM MMS Alarm system, based on GSM GPRS MMS (Multimedia Message Service), GSM SMS (Short Message Service) and GSM Voice Technologies. When it activated, will send MMS(Pictures) alerts to your cellphone or Email and send Text Alerts by SMS to your mobile phone immediately. Also, you can let the GSM MMS Alarm System BG30 send pictures to you in fixed time.

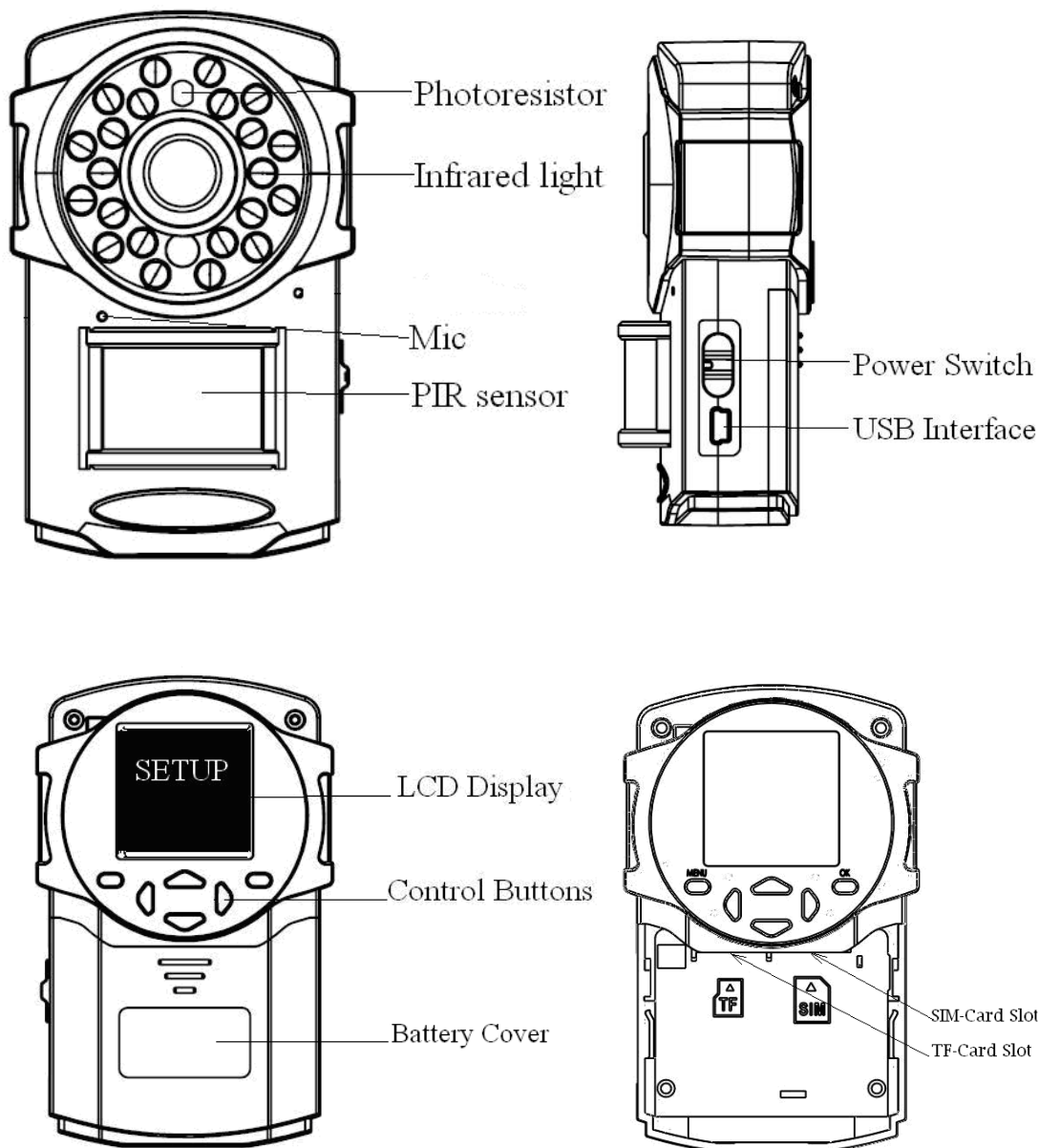
The BG30 can monitor your home, office, shop, store, warehouse or factory by your mobile phone from everywhere and any time.

The GSM MMS Alarm System BG30 can be programmed by PC programmer tool through TF card, USB cables or SMS command. This is a new solution in the worldwide

1.2 Camera Body Interfaces

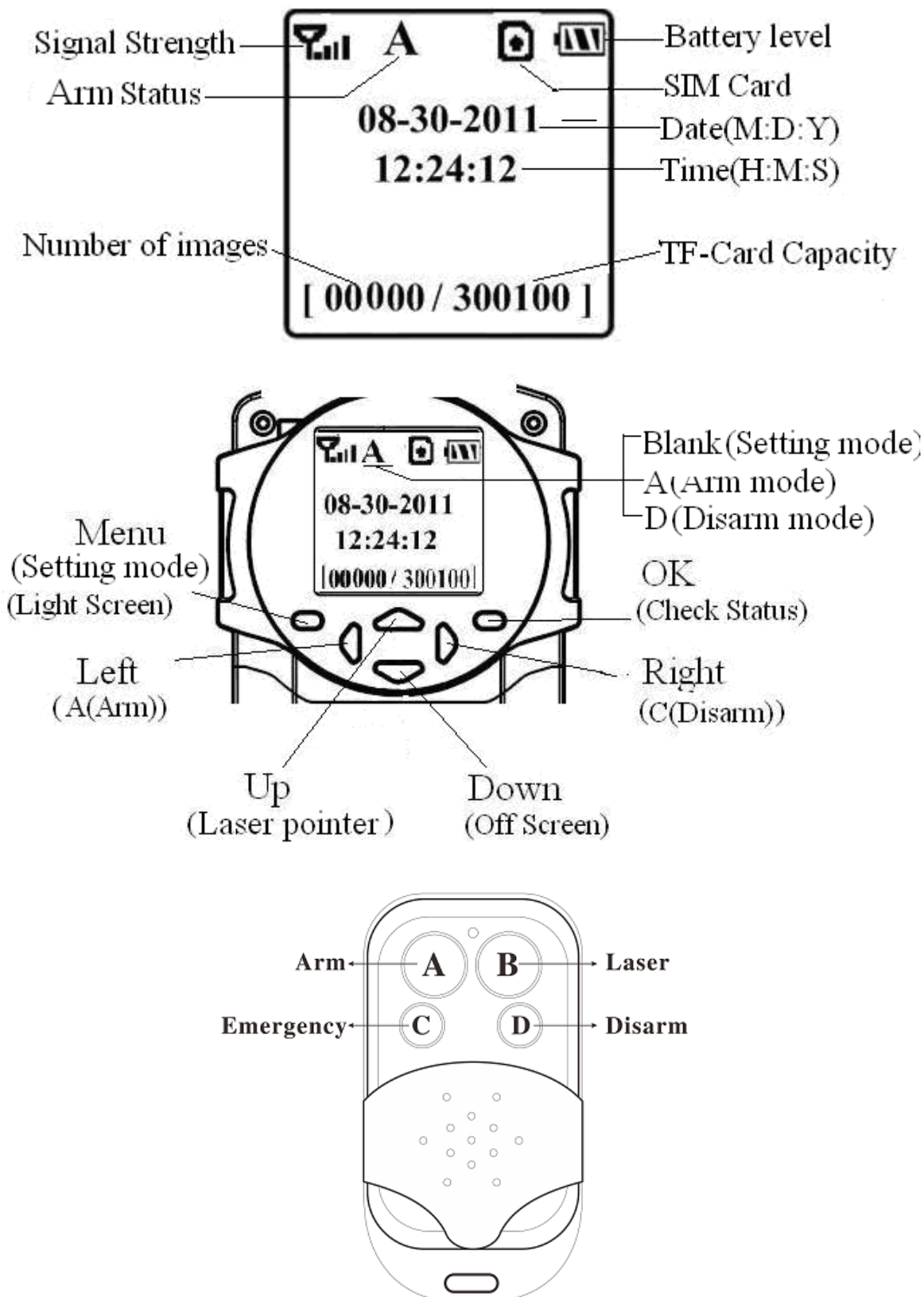
The camera has a LCD display for easily setting up and has the following I/O interfaces: Power/USB connector, TF-card slot, and SIM-card slot.

Take a few moments to familiarize with the camera controls and displays. It is helpful to bookmark this section and refer to it when read through the rest of the manual.



1.3 Shooting Information Display

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



1.4 Product Feature

1. This product can use TF card (Micro-SD card) to store images.
2. It can send MMS images to the Mobile phone or to an e-mail

address.

3. Integrated PIR detector to provide precise and timely alarm.
4. Built-in CMOS camera and infrared LED. Even in dark environment, camera can get clear images.
5. SMS remote control: User can control the camera by SMS command or calling.
6. Listen in the monitoring area: Call the device number to listen in monitoring area. (Only pre-set number to dial the camera)
7. Multimode alarm: Camera can send alarm messages by SMS, MMS, E-mail.
8. Schedule monitor: User can set the camera working as the preset schedule.
9. Built-in Lithium battery: Rechargeable battery ensures operation in case of external power failure.
10. Easy installation: Wireless connection. It can be installed at any place you want

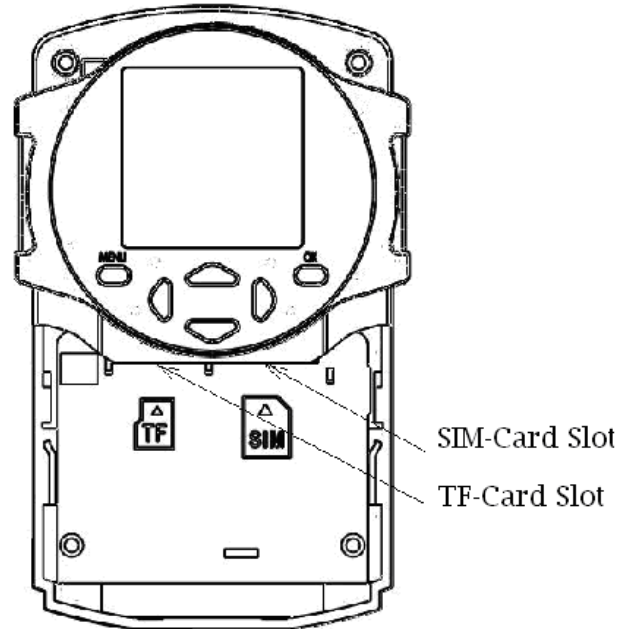
2 Cautions

- ✧ Please use this product according to the law. Respect one another's privacy. Neither monitor another's home nor private. We hold no responsibility for the illegal use of this product.
- ✧ We don't guarantee for the document veracity, reliability or any content except regulate in proper laws. Including no guarantee for product suitable market or suitable area promise.
- ✧ We hold no responsibility for any loss of data or income; or any special, incidental, consequential or indirect damages howsoever caused.
- ✧ The contents of this document are provided "as is". Except as required by applicable law, no warranties of any kind, either expressed or implied, including, but not limited to the accuracy, reliability or contents of this document. We reserve the right to revise this document or withdraw it at any time without prior notice.

3 Quick Start

3.1 Install TF card and SIM card

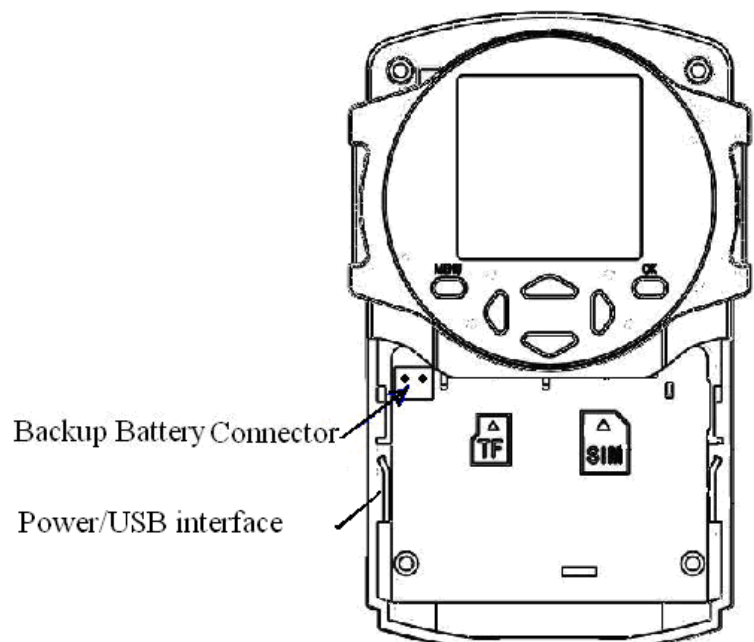
Open the battery cover. Insert TF card and SIM card into the card slot accordance with the direction shown. Follow the right direction



3.2 Insert the battery and Power on

Open the battery cover. Find the spare lithium battery connector and insert the lithium battery.

Insert the power adapter into the Power/USB interface for power supply, and slide the power switch to ON position.



3.3 Quick start

Settings Must Be Done

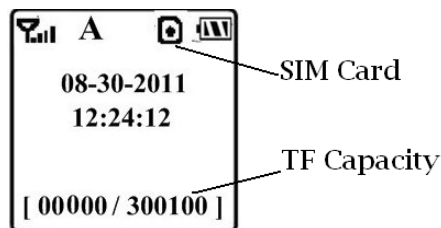
- 1 Must set a master number to the camera.
- 2 Must correctly set the network parameters for MMS and E-mail.
- 3 Must have at least one receiving phone number and one receiving E-mail address.
- 4 Must choose a proper Send Mode: Number(send MMS to mobile phone),E-mail(send pictures to E-mail),Local(just save pictures to TF card, don't send out).



*[1-4 can be set on computer via profile.txt file or mobile phone via SMS]

STEPS:

Step1: Confirm cards status

Confirm the TF card and SIM card are inserted correctly. You can see the card status on the display.

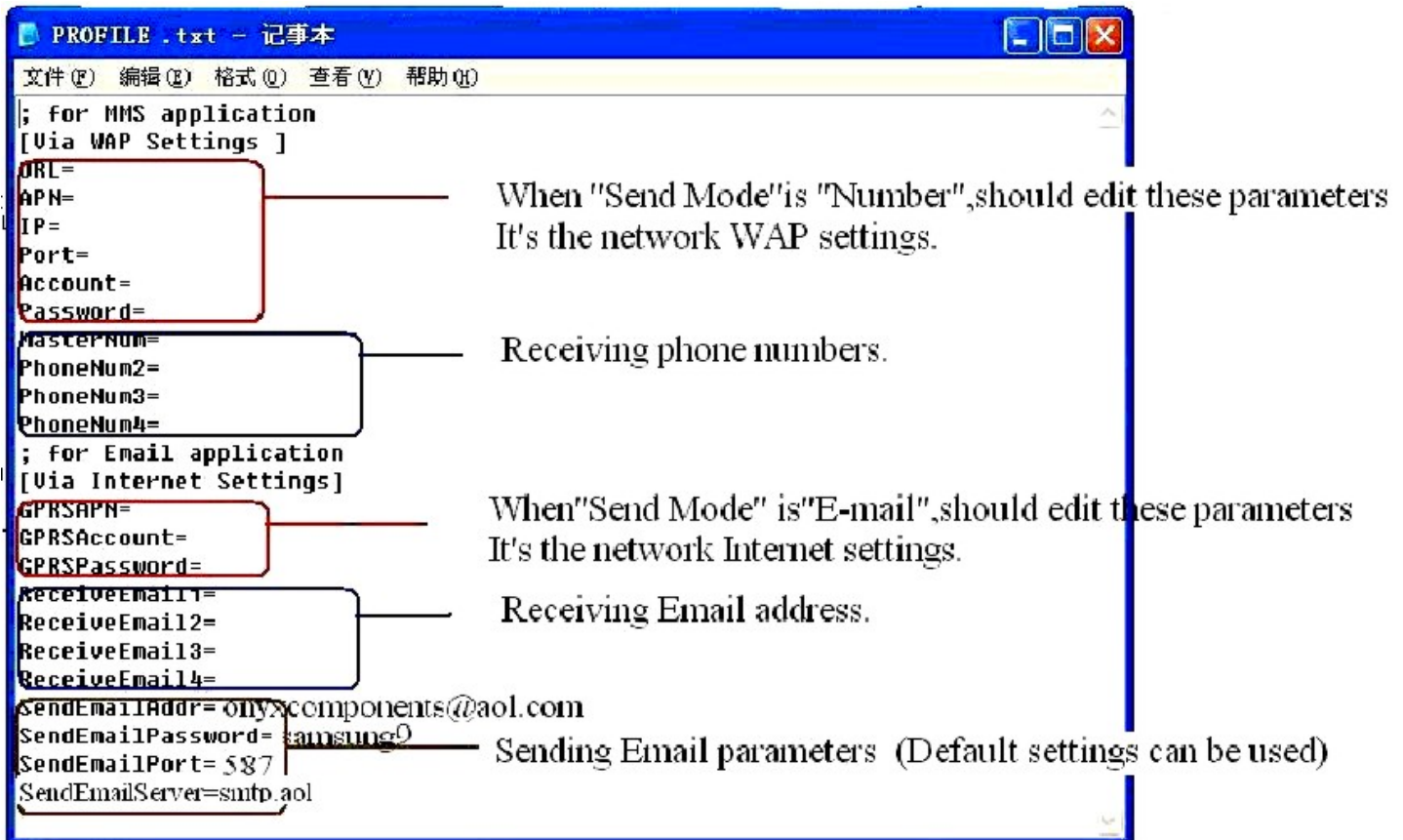


 means the SIM card is inserted and it works well.  means no SIM card or the SIM card is not properly inserted.

TF Capacity means how many pictures can be stored. **It should be a nonzero number.**

Step2: Edit MMS parameters via computer

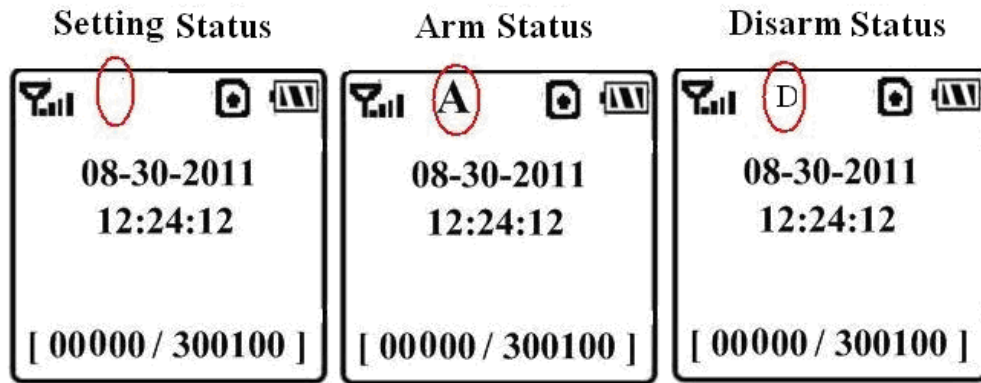
A new file named "profile.txt" is created automatically in a new folder named "MMS" in the TF card. Reedit the file to set the MMS parameters, below is for reference:



Step3: Choose "Send Mode"

There are 3 mode: Number(Send MMS to mobile phone),E-mail(Send images to E-mail address),and Local(Just store images in the TF card, do not send out). For the first use, we suggest you choose "Number" to test if you can get MMS.

Step4: Go to Arm Status



Arm status is the work status. If you are in Setting Status, there are two methods to go to Arm Status: 1 Do not press any key and wait for 1 minute, the camera will automatically switch to Arm Status; 2 Use the remote control, press “A”, then it will go to Arm Status immediately.

After going to Arm Status, if the camera is triggered it will automatically work.

There are 3 ways the camera will react when it's triggered:

Only insert TF card: After take photos and it just stores the images in the TF card but doesn't send out.

Only insert SIM card: After take photos and it just sends out via MMS or email but doesn't store in the TF card.

Both insert TF and SIM card: take photos, store in the TF card and send out to your phone or your email.

Step5: Check setting parameters

If you can't get MMS or the camera is not working correctly, you can **Press “OK” button in Setting status.** Then it will show you your MMS settings, Email settings or Camera settings according to your Send Mode.


Step6: Get on spot images via SMS

When the camera is armed and the Send Mode is Number, you can send a text message “#T#” to your camera’s SIM card number to get an on spot image.

4 Basic use and settings

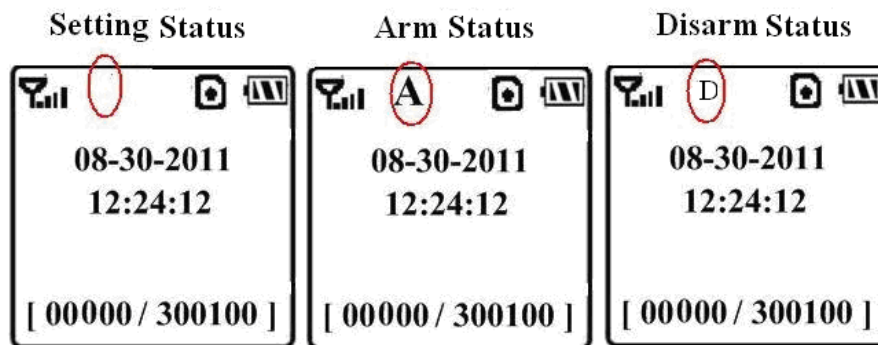
4.1 Mount the camera

Camera can be mounted on a wall or put down on any suitable horizontal surface.

- 1) According to base board installing hole space, make holes on the wall with a power drill.
- 2) Fix base board with the host by connecting screw hole.
- 3) Press “” button to open the laser pointer for helping positioning.

4.2 Three camera status

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



Setting Status: You can change or check camera settings in this status. You can also But via SMS, you can change or check settings in any status.

Arm Status: It's the work status. When there is a motion trigger, the camera will take photo and send the picture to your phone or mailbox.

(There are 3 ways the camera will react when it's triggered:

Only insert TF card: After take photos and it just stores

the images in the TF card but doesn't send out.

Only insert SIM card: After take photos and it just sends out via MMS or email but doesn't store in the TF card.

Both insert TF and SIM card: take photos, store in the TF card and send out to your phone or your email.)

Disarm Status: The camera will not be triggered in disarm status.

4.3 User authorization

There are two users: Master and normal users. Each user has a different authorization level:

Functions	User Level
Set master number	Only Master's password
Set master 's password	Master
Set camera parameters	Master
Set normal user	Master
Receive emergency calling	Master, normal user
Send SMS for on spot picture	Master, normal user
Call the camera to listen in live voice	Master, normal user
Receive MMS when triggered	Master, normal user
Check camera status	Master, normal user
Get help information	Master, normal user

4.4 Set master number

You should set a master number when you first use this

camera.

Method1: Send SMS command:

Send **#BG30#5555#your phone number#** to your camera's SIM card.

Here **5555** is the original master's password. Please note all the SMS commands should begin and end with "#".

For example, if you phone number is 13800138000, you can edit **#BG30#5555#13800138000#** to set your phone number as the master number.

If success, reply SMS: **Dear master, your number is 13800138000.**

If fail, reply SMS: **Please check the password.**

Method2: Editing the profile.txt:

Edit **MasterNum=13800138000;**

4.5 Set normal users

You can set at most 3 normal users. And the normal users should be set by the Master.

Method1: Send SMS command:

#N#13800138001#13800138002#13800138003#

Reply SMS: **http://mmsc.monternet.com, 10.0.0.172, 80, cmwap,, master number, PhoneNum2, PhoneNum3, PhoneNum4**

Method2: Editing the profile.txt:

PhoneNum2=xxx,PhoneNum3=xxx,PhoneNum4=xxx

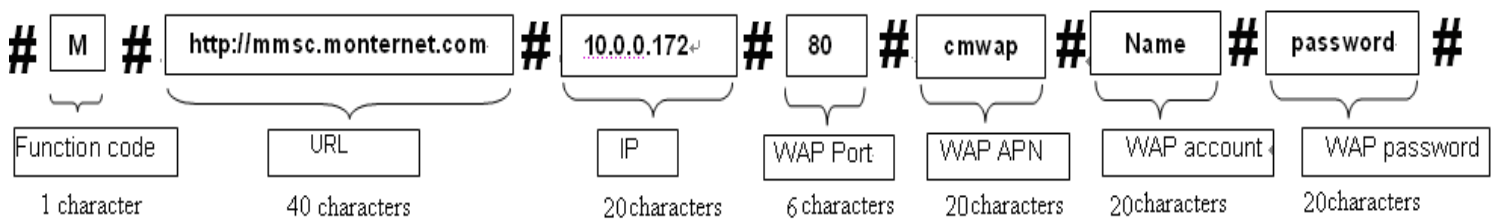
4.6 Set MMS parameters

If you want get instant MMS images when the camera is triggered, you should set the MMS parameters correctly.

Method1: Send SMS command:

#M#URL#IP#Port#APN#Account#Password#

The following chart shows the meaning of each field. Please note there is a “#” between each field. Please don’t forget the character “#” at the end of the command.

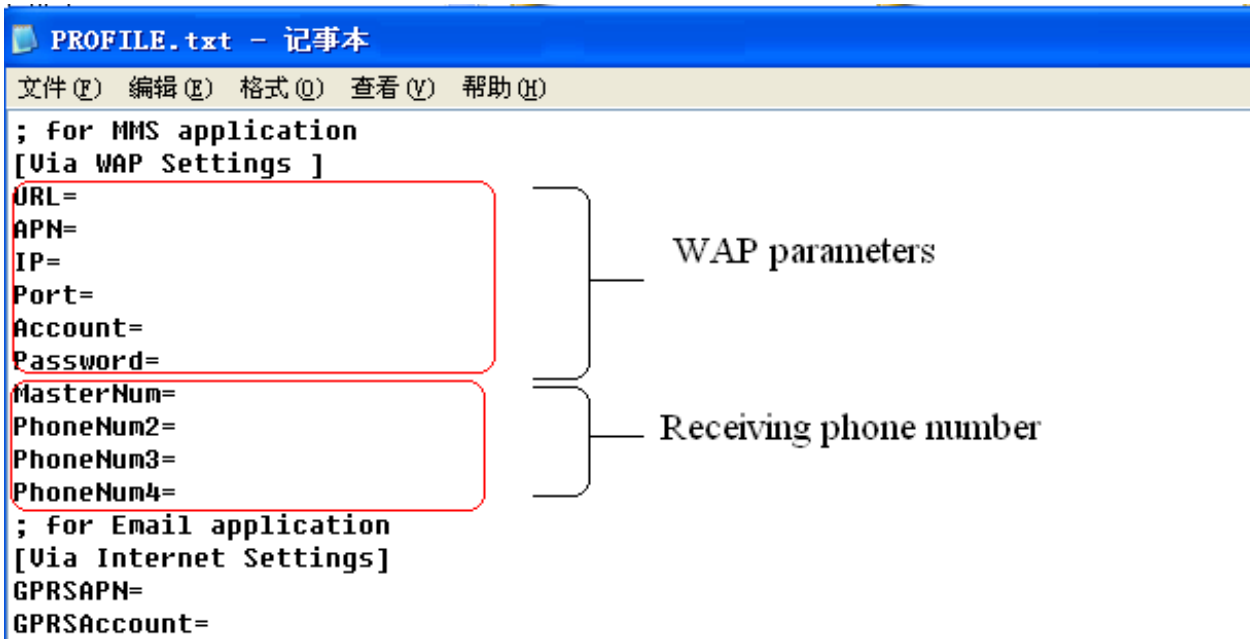


Please note each field has a max. character number limit.

If success, reply SMS: **http://mmsc.monternet.com, 10.0.0.172, 80, cmwap, name, password, 1380013800, , , ,**

If fail, reply SMS: **Command error. Please check again!**

Method2: Reedit the profile.txt in the computer to set the MMS parameters, below is for reference:



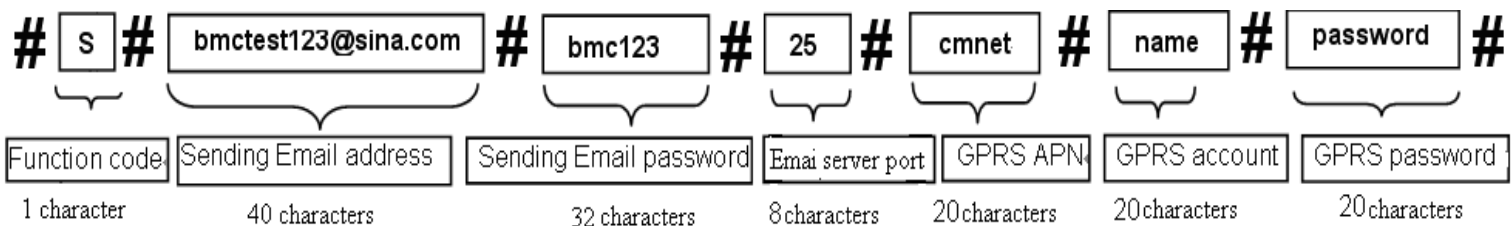
For more details of URL, APN, IP, Port, Account and Password, please contact your network service provider.

4.7 Set email parameters

You also can choose Send Email mode to get the pictures via a cheaper channel. This Send Email mode can send out the pictures via GPRS internet but WAP, so the communication cost is much lower than MMS.

Method1: Send SMS command:

**#S#Sending E-mail address#Sending email password
#Sending email server port#GPRS APN#
SMTPServer#Account #Password #**

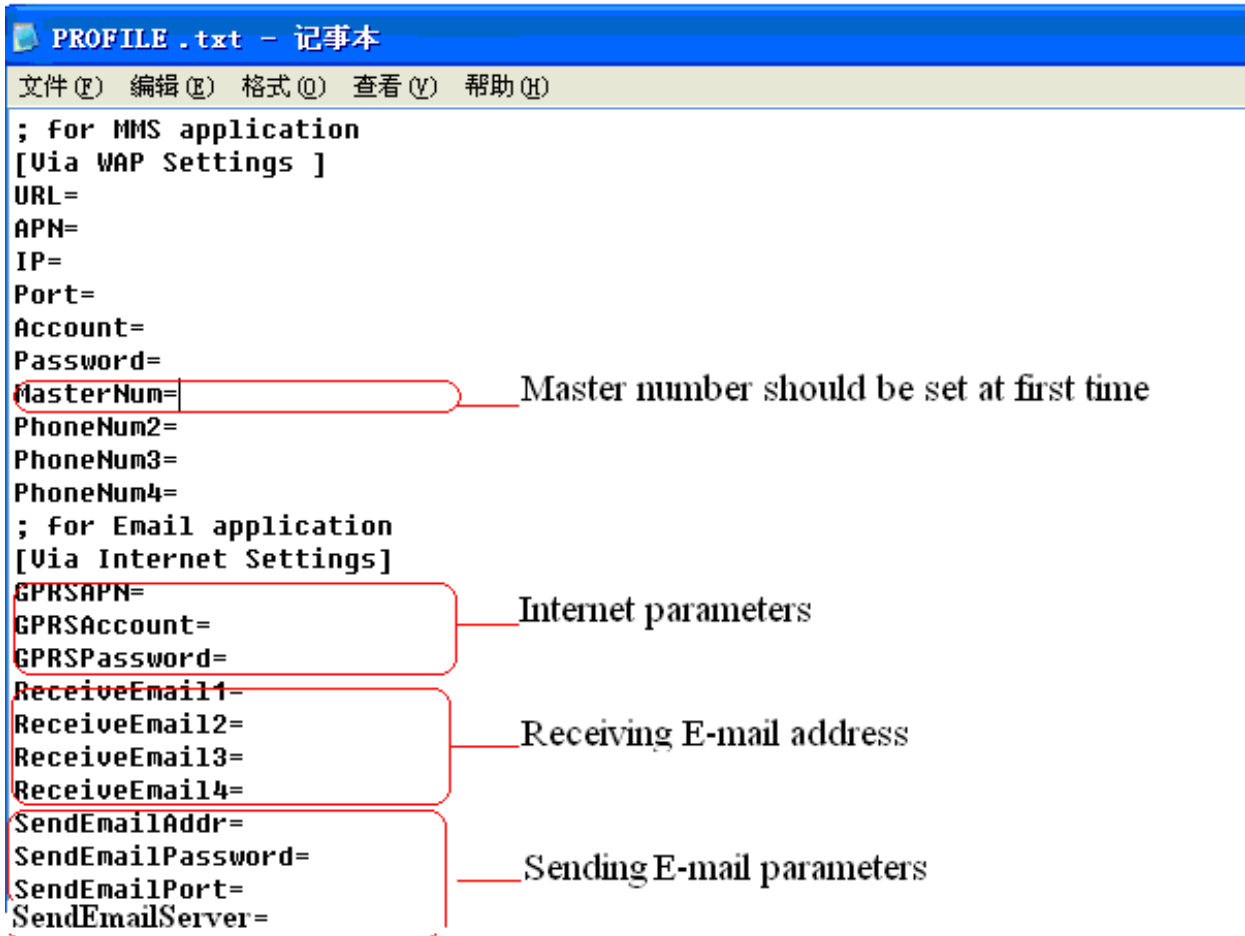


Please note each field has a max. character number limit.

If success, reply SMS: **bmctest123@sina.com, bmc123, 25, cmnet, smtp.sina.com, , , ,**

If fail, reply SMS: **Command error! Please check again.**

Method2: Reedit the profile.txt in the computer to set the E-mail parameters, below is for reference:

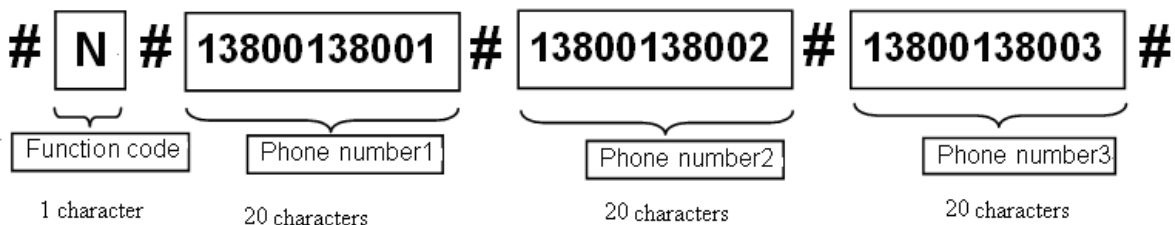


For more details of GPRS APN, GPRS Account and GPRS Password, please contact your network service provider.

4.8 Set receiving email address

Method1: Send SMS command:

#N#Receiving phone number 1# Receiving phone number 2# Receiving phone number 3# Receiving phone number 4#



The receiving phone number1 is the master number.

Please note each field has a max. character number limit.

Reply SMS: **http://mmsc.monternet.com, 10.0.0.172, 80, cmwap, , , master number, receiving phone number 1,**

receiving phone number 2, receiving phone number 3,

Method2: Editing the profile.txt: fill the receiving phone number field.

4.9 Get on spot photo

Method: Send SMS command:

T

Function code

1 character

Edit SMS **#T#** send to your camera's SIM card.

If fail, reply SMS: **Photo error:xx** , **Settings error:xx** , **MMS error:xx** or **Time out!**

If success, the camera will take an on-spot picture and send to your mobile phone.

4.10 Arm

Method1: Send SMS command:

A

Function code

1 character

Edit SMS **#A#** and send to your camera's SIM card.

If success, reply SMS: **Arm mode is active!**

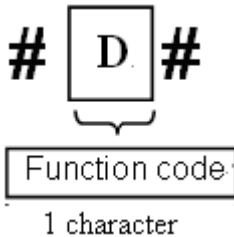
If fail, reply SMS: **Command error! Please check again.**

Method2: Use the remote control

Use the remote control, press the **button "A"** to arm the camera;

4.11 Disarm

Method1: Send SMS command:



Edit SMS #D# and send to your camera's SIM card.

If success, reply SMS: **Disarm mode is active!**

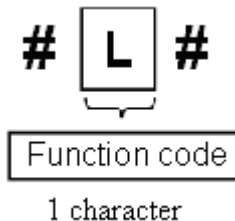
If fail, reply SMS: **Command error! Please check again.**

Method2: Use the remote control

Use the remote control, press the **button "D"** to disarm the camera;

4.12 Check camera settings

Method1: Send SMS command:



Edit SMS #L# and send to your camera's SIM card.

If success, reply SMS: **Email address, password, port, SMTPServer,protocol, email1,email2, email3,email4, mms serve net address, server ip, port, protocol, Number1, Number2, Number3, Number4, Alarm:on/off, Interval 0m:0s,photo Burst 1, Send Mode: Local/Number/Email, Work Day 111111, Timer: off/on 09h00m:17h00m, Date Time:2011/7/12 18:12:12,Active Zone:011111**

Method2: Via operation button:

When you are in setting status, press OK

4.13 Set camera parameters

Method1: Via Setting menu

To view the camera settings menu, press MENU in the TEST mode. The settings menu will be shown on the LCD.

Setting Items	Default	Options	Description
Set Clock	Enter		Set camera date and time.

Format	Enter		Format the SD-card. All images and videos in the SD-card will be deleted.
PIR Interval	1 Minute	0–59 seconds, 1-60 minutes	Choose how long the camera will stop functioning after each triggering. The camera's PIR will be disabled during this interval.
Photo Burst	1 Photo	2 -9Photos	Choose the continuous shooting numbers after each triggering.
Send Mode	Number	Email\Local	Number: Send MMS to preset phone number; Email: Send picture to preset email address; Local: Just take pictures, don't send out.
Work Day	All	Sunday\Monday\ Tuesday\Wednesday\ Thursday\Friday\ Saturday	Choose which day the camera works.
Timer Switch	Off	On	The camera will be awoken up at certain time duration in a day. In the rest of the time the camera is shut off.
RGB Set	Off	On	R:0-9;G:0-9;B:0-9;
Password	Off	ON, set	This password is used to lock or unlock the camera's control panel.
Default Set			Restore customer settings to default values.

Explanation of items:

▼ Photo Burst

It means Continuous Capturing Number. This parameter affects the number of pictures taken for each triggering in Camera mode. It has nine values: "1 Photo" to "9 Photos".

▼ PIR Interval

This parameter means that how long the PIR (Passive Infrared motion sensor) will be disabled after each triggering in ON mode. During this time the PIR of the device will not react to the motion of human (or animals). The minimum interval is 0 second, it means the PIR works all the time. The maximum interval is 1 hour, it means the PIR will be disabled for 1 hour after

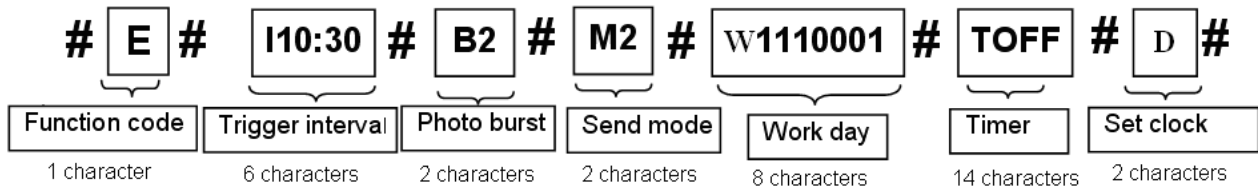
each triggering. The default value is 1 minute. Press “◀” and “▶” to decreases or increases the value.

▼Timer

This parameter defines a certain time lapse in a day when the camera can be triggered, while in the rest of the time lapse the device is shut off. The effective value ranges from 00:00:00 to 23:59:59.

Timer Switch OFF means the camera works all along; Timer switch ON means the camera works only during the time lapse according to the preset settings.

Method2: Send SMS command:



I10:30: I: Trigger Interval; 10: the minutes(0~59min); 30: the seconds(0~59sec);

B2: B: Photo Burst; 2: the numbers of continuous take photo after trigger (1 picture~9pictures);

M2: M: Send Mode; 2: the function number (0: local ; 1: MMS; 2:email);

W1110001: D: Work Day; 1110001: Each bit represents a day, followed by Sunday, Monday, Tuesday, Wednesday, Thursday, Friday, Saturday; 1 means Arm;0 means Disarm.

TOFF: S: Timer; OFF: timer function off, it means the PIR sensor will work all the time.

TON10:20-16:30: S: Timer; ON10:20-16:30: means the PIR sensor just work from 10:20 to 16:30.

D: D: Set Clock; This command can set clock use your current cellphone time.

If success, reply SMS: **Interval 10:30, Burst 2, Work Day 1110001, Time Switch OFF, Date Time: 2011/8/2418:12:12, Active Zone: 011111**

If fail, reply SMS: **Command error! Please check again.**

Note: **#E#** can't be omitted when use this command to change any camera settings.

4.14 Format TF card

Method1: Send SMS command:

F

Function code

1 character

Edit SMS **#F#** and send to your camera's SIM card.

If success, reply SMS: **Format SD card successfully!**

If fail, reply SMS: **Format SD card failed!**

4.15 Set master's passwords

Method1: Send SMS command:

P # **4321**

Function code New master password

1 character 4 characters

Edit SMS **#P#your password#** and send to your camera's SIM card.

If success, it will reply SMS: **The password is successfully changed to 4321.**

4.16 Get help

Method: Send SMS command:

H

Function code

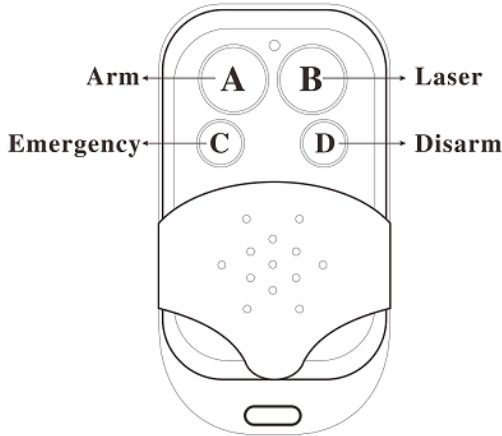
1 character

Edit SMS **#H#** and send to your camera's SIM card.

If success, it will reply SMS:

A: Arm, D: Disarm, H: help, L: look over settings, T: take photo.

4.17 Use the Remote control

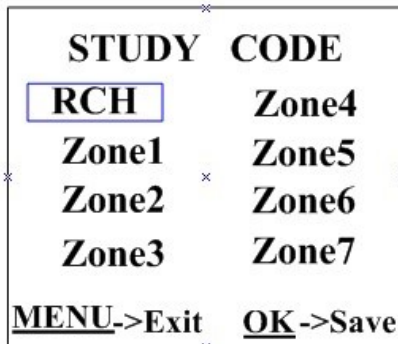


You can use the remote control to easily arm (button A) or disarm (button D). Also you can dial the emergency numbers via button C in case of emergency. Press button B can open or close the laser (You can easily mount the camera with the help of the laser point.).

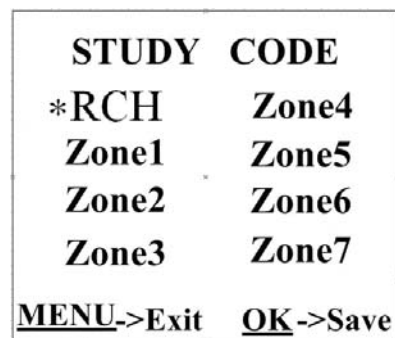
- Button A : Arm the camera;
- Button D :Disarm the camera
- Button C :Emergency call button
- Button B :Laser point;



Setting Status



Study Code Menu



Study Code Menu

Add remote control(s) to the camera: Enter the Setting Status, press LEFT button and enter the study code menu. Choose "RCH", press OK button, then press button A . When it's successful, there will be a "*"before RCH;

4.18 Load and remove a wireless sensor

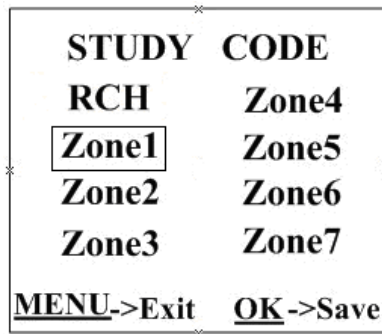
Any 433MHz wireless sensor, such as infrared body sensor, wireless door magnet, wireless smoke detector etc. can be set as an alarm sensor of the camera.

Method to load or remove a wireless sensor:

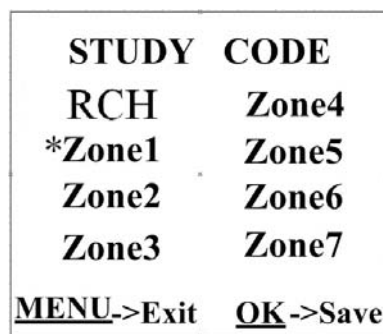
1. Power on the wireless sensor;
2. Enter the Setting Status, press LEFT button and enter the study code menu. Choose Zone1 or Zone2,press OK button, then trigger the wireless sensor to check if the sensor is loaded successfully . When it's successful, there will be a "*"before zone1 or zone2



Setting Status



Study Code Menu



Study Code Menu

3. When you want to remove the wireless sensor. Please enter the study code menu, press LEFT button to cancel the "*". If there is not a "*" before the zone, it means the sensor has been removed from the camera.

5 SMS command list

Below is a SMS command list for example.

No.	Function	SMS Command
1	Set Master Number	#BG30#5555#13800138000#
2	Set Normal Users	#N#13800138001#13800138002#13800138003#
2	Set MMS Parameters	#M#http://mmsc.monternet.com#10.0.0.172#80#cmwap#
3	Set Email Parameters	#S#bmc123@sina.com#bmc123#25#cmnet#smtp.sina.com#
4	Set Receiving Email address	#N#12345678901#12345678902#
5	Set Receiving Email Address	#R#mail1@163.com # mail2@163.com#
6	Get on spot Photo	#T#
7	Arm	#A#
8	Disarm	#D#
9	Check camera settings	#L#
10	Set Camera Parameters	#E#I10:30#B2#M2#W1110001#TOFF#D# (Trigger Interval: I; Photo Burst: B; Send Mode: M; Work day: W; Timer: T; Date Time Set: D;)
11	Format TF Card	#F#
12	Set Password	#P#4321#
13	Help	#H#

Appendix I : Technical Specifications

Image Sensor	0.3MP Color CMOS
Lens	F/NO=3.1mm FOV(Field of View)= 80°(BG30L)
Detection Range	BG30L:22M;
Display Screen	1.4" LCD
Memory Card	2GB TF card
Picture Resolution	VGA
PIR Sensor	Multi Zone
Trigger Time	0.3s
Weight *	0.15 kg
Operation/Storage Tem.	-20 - +60°C / -30 - +70°C
Interval	1s – 60 min.
Photo Burst	1–9
Power Supply	5V2A DC; Lithium battery(backup)
Stand-by Current	< 0.25 mA (<6mAh/Day)
Display Screen	LCD display
Dimensions	105x 65x 35 mm
Operation Humidity	5% - 90%
Security authentication	FCC, CE, RoHS

*without battery

Appendix II : Parts List

Part Name	Quantity
Security camera	One
Remote control	Two
Power adaptor	One
Lithium battery	One
USB cable	One
Universal mounting kit	One
Adhesive tape	One
User Manual	One
Warranty Card	One
2G TF Card	One
433M Wireless sensor	(Option)