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Killgerm Motion Sensor Camera **Instruction Manual**



Instruction Manual was adapted and edited by Killgerm Chemicals Ltd

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1. General Information

This digital trail camera isn't just a standard motion sensor camera that takes pictures and records video. It also has text/MMS and email/SMTP capabilities built into the camera.

It is triggered by any movement day and night by animals or humans in the region monitored by the camera. Once set-up it will automatically capture pictures (up to 12 mega pixels) and can also record 1080p or HD video clips.

When triggered in the daytime it will take pictures and record in full colour, until the light fades, where it will begin to take monochrome photos and videos.

It supports 2G/GSM/MMS/SMTP/SMS. And it is waterproof IP65.

File formats:

- Photos - images will be sent and saved on the Micro SD card as a JPG image.
- Videos - footage will be sent and saved on the Micro SD card as AVI files.

Power supply:

The camera requires x8 AA batteries for power (batteries not included). We would advise using single-use batteries and not rechargeable ones.

When in **"TEST"** Mode the camera will automatically shut down to conserve power if not in operation for a couple of minutes.

When the camera is running low of power it will also automatically shut down. At this stage we would advise you to change the batteries.

Mobile Phone Networks:

Phone networks vary from network to network, all of which use different network information. Due to these variations we would strongly advise only using the following networks for the MMS/SMTP functionality:

- O2
- Vodaphone

2. Quick guide set-up

The below steps are a brief instruction in setting up your camera to help you get started. However, we would advise you read this whole document to set up your camera fully, especially if you are utilising the text/email functionality provided:

Step 1: Open-up the camera and insert the x8 AA batteries and Micro SD Card into their specific slots.

Step 2: Switch the camera into **"TEST"** Mode and press the **"MENU"** button and set the appropriate camera/video setting to suit you.

Step 3: Switch the camera into **"ON"** Mode and set in position ready to trigger. This will give you approximately 10 seconds to evacuate the area while a red light will blink before setting into action.

Steps 1 to 3 will allow you to use the camera as a traditional motion sensor camera. If you require the text/email functionality then continue with steps 4 to 6.

Step 4: Download Software and insert/test SIM, credit. (See point 2, Page 12)

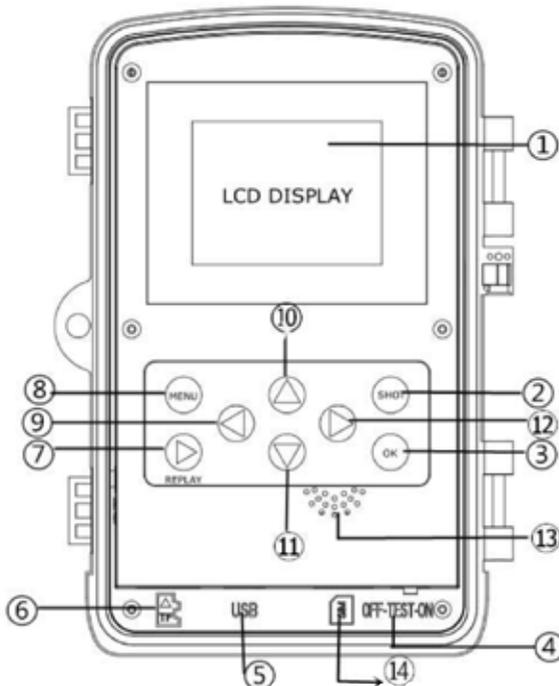
Step 5: Load up software and the pre-set network settings, insert your personal details eg. phone number / email.

Step 6: Save the settings as the Parameter.dat file on the Micro SD Card. Then switch the camera into **"ON"** Mode and set in position ready to trigger. Finally text the command *505* to the Sim card number in the camera to activate.

3. Camera Body Interface

The camera has the following interfaces: USB connector, SIM card slot, TV output and external DC power connect slot.

Internal layout:



- | | |
|--|--|
| 1. 2inch colour LCD display screen | 8. Menu button |
| 2. Shot button | 9. Left button |
| 3. OK button | 10. Up button |
| 4. Power switch | 11. Down button |
| 5. USB connector | 12. Right button |
| 6. Micro SD card slot (card not included) | 13. Speaker |
| 7. Replay button | 14. Mobile Sim card slot (sim not included) |

Front of camera layout



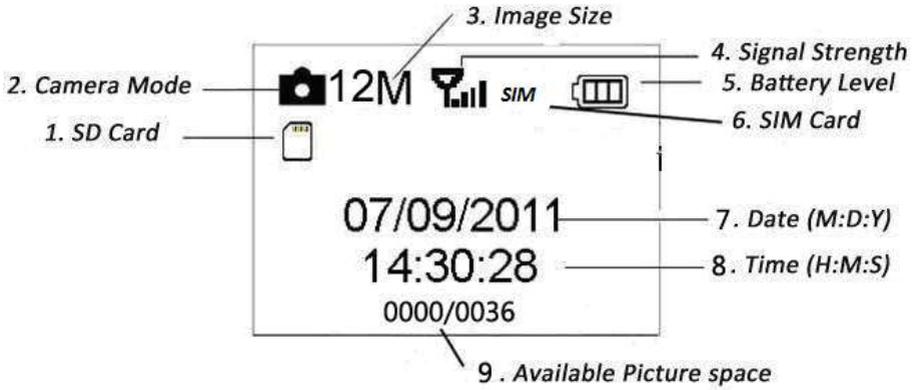

Micro SD Card 32GB


8X AA Batteries


Agilent
70-5017-1015-01
PIR sensor

4. Camera display information

The information in the diagram below will display when the camera is placed into "TEST" mode:



Sim Card display icons

There are two Sim card display functions on the screen:

- 1. Signal Strength** - this displays the signal strength for the network at current location, exactly like a mobile does.
- 2. Sim icon** - this will display the network name (eg. O2) when the sim card is inserted correctly and can work on the camera.

Please ensure both icons display when utilising the Text/Email functionality of the camera.

5. User Settings

There are a variety of functions that can be used and set on the camera including; *camera set-up, manual capture and preview.*

To use these functions and set the camera settings, first place the camera into **"TEST"** mode.

Press the **"MENU"** button and scroll through the various settings (mode, time interval, picture resolution, video resolution and length).

Manual Capture

Press the **"Shot"** to manually capture photos or record video

View images or videos

There are four ways to view the captured images of videos:

1. On Camera Screen
2. TV Monitor

To view on the above options, press **"Replay"** to view the captured files. The latest image will then be displayed on the camera or TV screen. Press **"Up"** to view the last, and press **"Down"** for the next one.

For videos, press **"Left"** button to play the video, and again to pause. Then press **"OK"** to exit the viewing process.

3. On Computer - plug the USB wire into your computer, then into the camera, and switch the camera onto **"TEST"** mode. This will enable you to view the files captured onto the Micro SD Card.
4. Micro SD Card - remove the card from the camera and put in to an appropriate hardware that accepts the card. This will enable you to view the files captured onto the Micro SD Card.

Field Use - Putting into "ON" Mode

Before field use, please pay attention to the following information:

- Do not face directly into a light course as it may cause false triggers.
- Place a minimum of 1m from the ground to provide an optimum space to capture.

After switching the camera into the **"ON"** mode, a red light will blink for approximately 10 seconds. This time-period is a delay, allowing you to close the camera, place in position, and evacuate the view of the camera to prevent false triggers.

Turning Off

Simply, slide the power switch to the **"OFF"** position to turn the camera off. If you aren't using the camera for a long period of time, please remove the batteries to reduce the risk of damaging the contacts on the camera.

6. Settings Menu

Press the "MENU" button when the camera in the TEST mode to change and set the camera settings.

System Settings:

(Image 1)

Setting	
Mode	Camera Video Camera+Video
Language	English Francais Deutsch Espanol etc
TV mode	NTSC PAL
Date/Time	Month/Day/Year Hour/Minute/Second
Timer	0:00:00 23:59:59
Format	All data will be deleted Cancel OK
Password	OFF/ON
Default	Cancel OK
Version	

Photo Settings:

(Image 2)

Camera	
Resolution	12MP 8MP 5MP
Interval	1 Second 5 Seconds 10 Seconds 30 Seconds 1 Minute 5 Minutes 10 Minutes 30 Minutes
Multi	Single 3 Pictures 6 Pictures 9 Pictures
ISO	100 200 400
ID	CAM000

Video Settings

(Image 3)

Video	
Resolution	1080P 720P WVGA
Video Length	10S 30S 60S 90S
Voice	OFF ON

7. Text messaging / MMS and Email / SMTP functionality

Preparation

You will need to ensure you have the following items, before being able to set up the text messaging or email function on the camera.

1. SIM Card:

- 2G/GSM Mobile Operator SIM Card - we would advise buying a Pay As You Go (PAYG) SIM Card from a local shop, on the networks of O2 or Vodaphone.
- Ensure the SIM Card does not have a pin lock.
- Add credit/money to the SIM Card you're using - Check the credit has been added as "credit after Top-up as some networks covert your Topup to contract tariff, and not direct credit. Some networks allow you to set-up an online account for the associated Sim, which we would advise doing so you can change the tariff and keep an eye on credit spend.

2. Software Download

- Computer - your computer will need to have a windows operating system and a CD Drive to download the MMS Configuration software from the CD provided. Alternatively, you can download a copy of the MMS. Configuration software for the camera at; www.killgerm.com/onlinecatalogue/motion-sensor-camera

3. SIM Card check

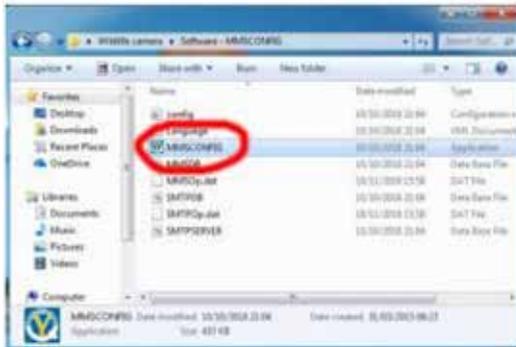
Insert the SIM Card into the camera, and switch the camera into **"TEST"** mode. Check that there is a "signal bar" and the "Network name" or "SIM" is displayed onscreen before continuing. If there isn't, remove the SIM Card and reinsert it until the "signal bar" and "Network Name" are displayed.

If the SIM does not work, consider trying a different one on an alternative network.

4. Software set-up

- Connect the camera to the PC with the included USB cable.
- Load up the MMS Configuration Software on your computer.
- First select and open the software file as highlighted in image 4 below.

(Image 4)



- Next, click the “RUN” option when the pop-up window appears as seen in image 5: (You may not see this window if using the CD provided)

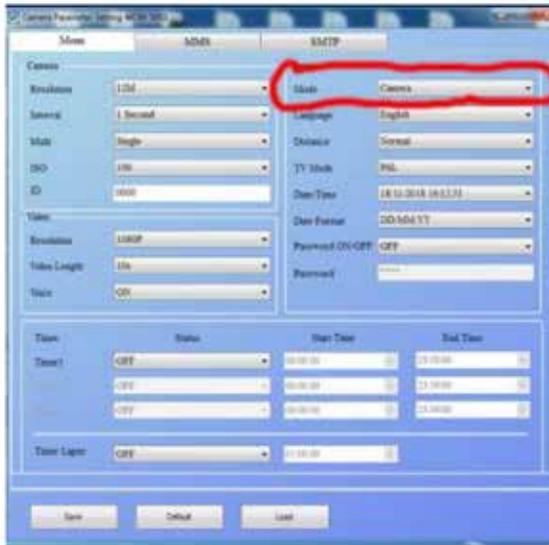
(Image 5)



- Once the software has loaded, you will see the software screen display as per image 6.

- Amend the information on the menu tab to set your requirements of the information you want to record and receive. Importantly - you need to change the **"MODE"** setting to suit you as circled in image 6.

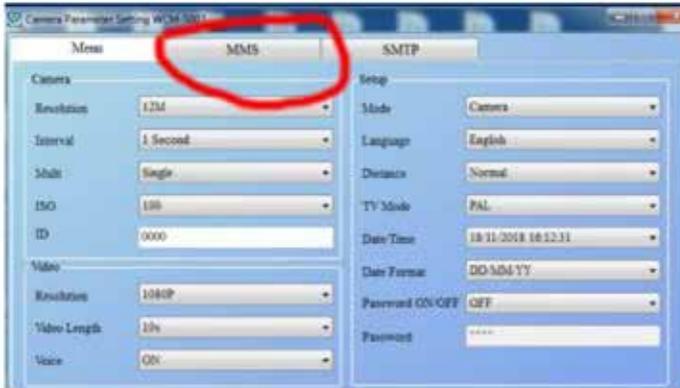
(Image 6)



8. Network settings for text/MMS

Once you have loaded up the software, select the MMS tab (circled in image 7) in the middle to set the specific network settings.

(Image 7)



Once on the MMS page, switch the "Mode" to manual instead of "Auto".

Network settings for text/MMS

Each network is different and has very specific settings you need to input to get the SIM Card working and sending data.

We would strongly advise using the networks Vodafone or O2, as those networks are the easiest to set-up. For anyone using the above networks we have provided the specific information you need to input on the software.

IMPORTANT:

Killgerm have provided the specific Network set-up data in pre-set files which are available in the software download package from the website. These files cover the set up details for Vodafone and O2 as outlined in the following pages.



Text messaging / MMS - O2 Set-up

Load up the software, and select the "MMS" tab. Once on the MMS page, switch the "Mode" to manual instead of "Auto and then input the data in each section as per the information below:

GPRS Settings:

APN: payandgo.o2.co.uk

Account: payandgo

Password: password

Server Settings:

MMSC: <http://mmsc.mms.o2.co.uk:8002>

IP: 82.132.254.1

Port: 8080

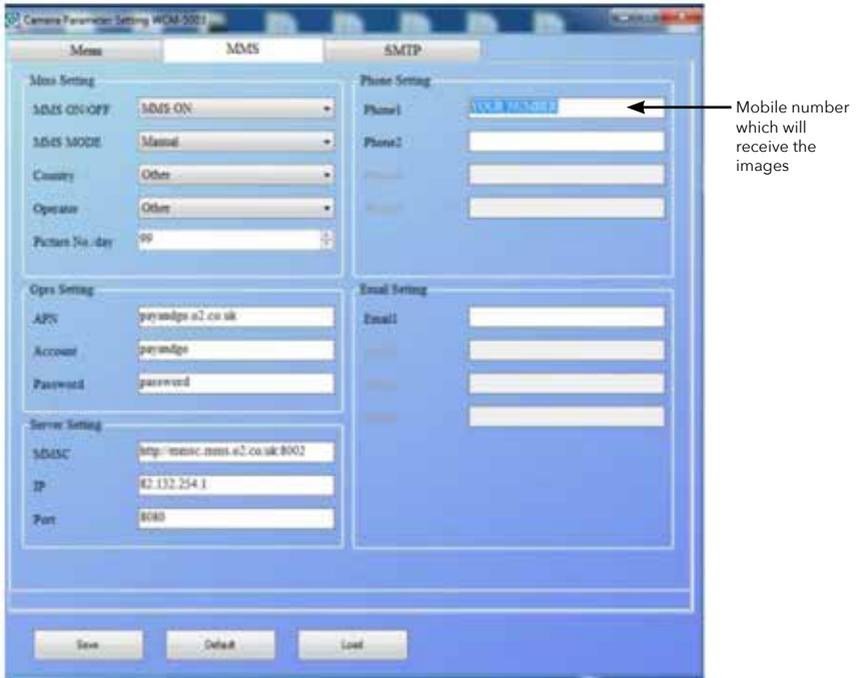
Phone Settings:

Phone1: Insert your phone number (eg. 07123456789)

Phone2: Leave blank.

See correct network data input into the software of image 8.

(Image 8)



- Once you have completed inputting the correct network data. Click the **“SAVE”** button and save as **“Parameter.dat”** file to the MICRO SD Card.

Note: Only have 1 “Parameter.dat” saved onto the MICRO SD Card at any one time or the camera won’t work.

- Unplug USB cable from the camera, and then turn the camera to the **“OFF”** mode, and then back to the **“TEST”** mode. Once in the **“TEST”** screen, double check that the Signal bar and network sim is displaying on screen (wait a minute for this to display).
- Once the Sim is displaying in the **“TEST”** mode, simply switch to the **“ON”** position and use as you see fit.



Text messaging / MMS - Vodafone Set-up

Load up the software, and select the "MMS" tab. Once on the MMS page, switch the "Mode" to manual instead of "Auto and then input the data in each section as per the information below:

GPRS Settings:

APN: pp.vodafone.co.uk

Account: wap

Password: wap

Server Settings:

MMSC: <http://mms.vodafone.co.uk/servlets/mms>

IP: 212.183.137.12

Port: 8799

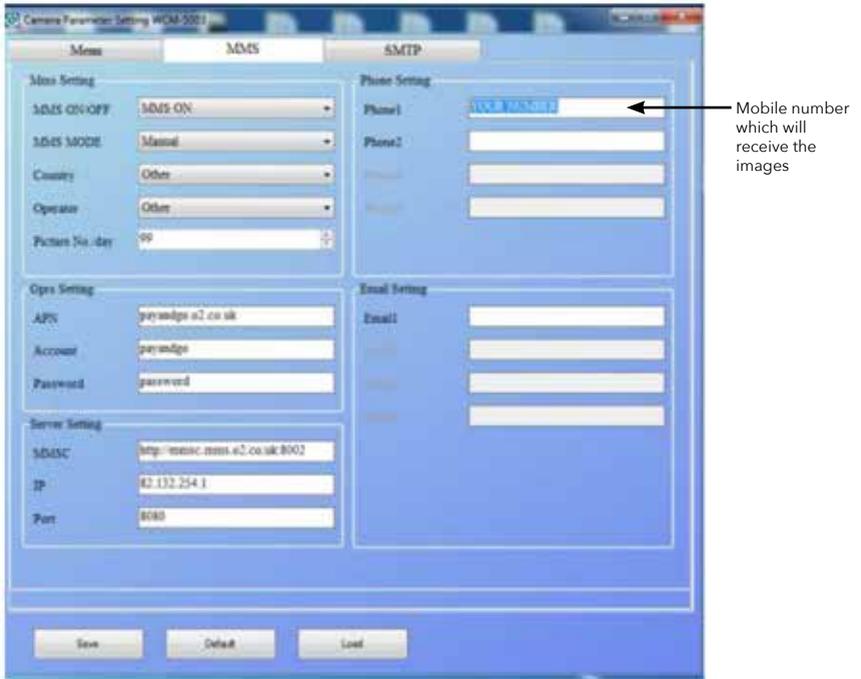
Phone Settings:

Phone1: Insert your phone number (eg. 07123456789)

Phone2: Leave blank

See correct network data input into the software of image 9.

(Image 9)



- Once you have completed inputting the correct network data. Click the **"SAVE"** button and save as "Parameter.dat" file to the MICRO SD Card.

Note: Only have 1 "Parameter.dat" saved onto the MICRO SD Card at any one time or the camera won't work.

- Unplug USB cable from the camera, and then turn the camera to the **"OFF"** mode, and then back to the **"TEST"** mode. Once in the **"TEST"** screen, double check that the Signal bar and network sim is displaying on screen (wait a minute for this to display).
- Once the Sim is displaying in the **"TEST"** mode, simply switch to the **"ON"** position and use as you see fit.



Text messaging / MMS - Three network Set-up

Load up the software, and select the "MMS" tab. Once on the MMS page, switch the "Mode" to manual instead of "Auto and then input the data in each section as per the information below:

GPRS Settings:

APN: three.co.uk

Account: Leave blank

Password: Leave blank

Server Settings:

MMSC: <http://mms.um.three.co.uk:10021/mmsc>

IP: Leave blank

Port: 8799

Phone Settings:

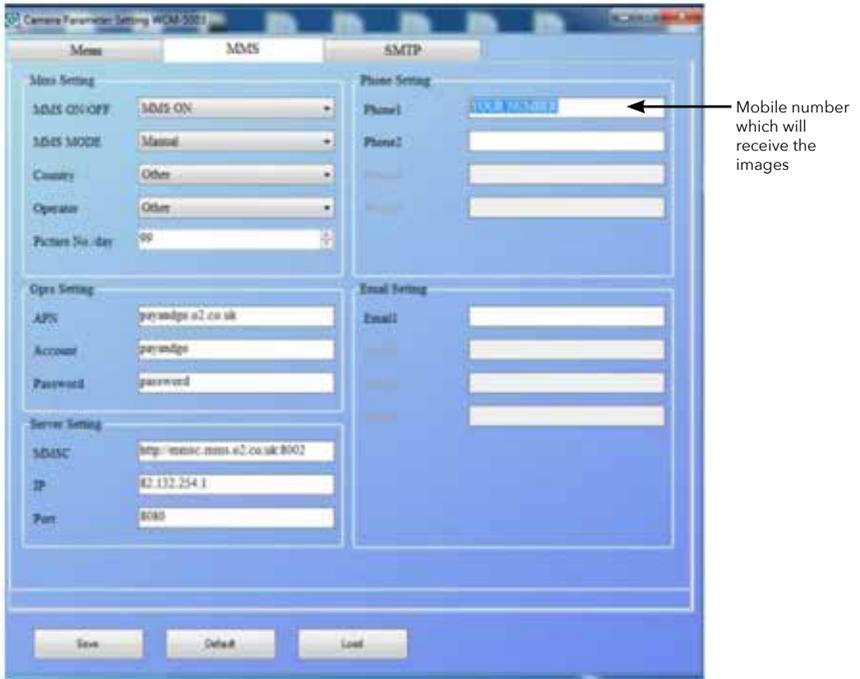
Phone Settings:

Phone1: Insert your phone number (eg. 07123456789)

Phone2: Leave blank

See correct network data input into the software of image 10.

(Image 10)



- Once you have completed inputting the correct network data. Click the **"SAVE"** button and save as "Parameter.dat" file to the MICRO SD Card.

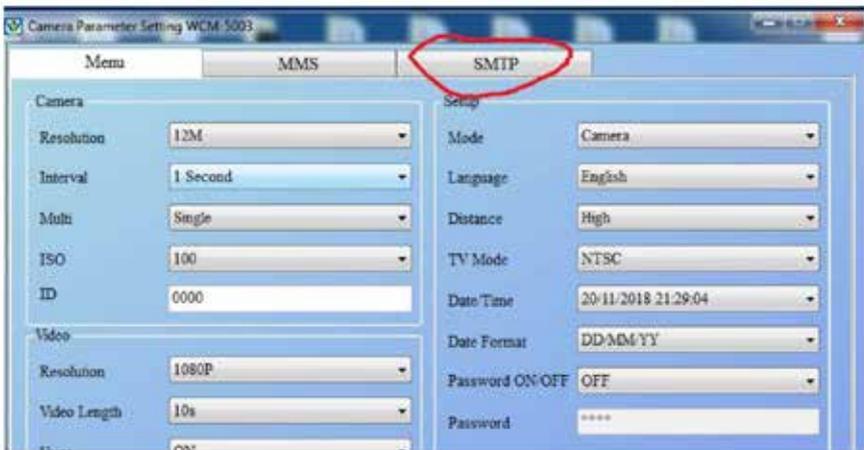
Note: Only have 1 "Parameter.dat" saved onto the MICRO SD Card at any one time or the camera won't work.

- Unplug USB cable from the camera, and then turn the camera to the **"OFF"** mode, and then back to the **"TEST"** mode. Once in the **"TEST"** screen, double check that the Signal bar and network sim is displaying on screen (wait a minute for this to display).
- Once the Sim is displaying in the **"TEST"** mode, simply switch to the **"ON"** position and use as you see fit.

9. Network settings for email/SMTP

Load up the software, select the SMTP tab (circled in image 11) in the middle to set the specific network settings.

(Image 11)



Network settings for email/SMTP

Each network is different and has very specific settings you need to input to get the SIM Card working and sending data.

Also due to the differences in email/hosting servers, you will require specific account information to be able to set up and authorise the sending of files from the camera to your email address.

Therefore we would advise using Gmail or Hotmail for the email functionality where we have provided the information below.

Alternatively, please speak to your IT assistant to obtain the email hosting information you require.



Email / SMTP for Gmail with O2 Sim

Load up the software, and select the “SMTP” tab. Once on the SMTP page, switch the “Mode” to manual instead of “Auto and then input the data in each section as per the information below:

SMTP Settings:

SMTP ON-OFF: ON
SMTP MODE: Manual
Country: Other
Operator: Other

Server Settings:

Type: Gmail
Server: smtp.gmail.com
Port: 465
Email: Insert your email address
Password: Insert the password to your email address

GPRS Settings:

APN: payandgo.o2.co.uk
Account: payandgo
Password: password

Email Settings:

Phone1: Insert your email address
Phone2: Leave blank

See correct email data input into the software of image 12.



Email / SMTP for Hotmail with O2 Sim

Load up the software, and select the "SMTP" tab. Once on the SMTP page, switch the "Mode" to manual instead of "Auto and then input the data in each section as per the information below:

SMTP Settings:

SMTP ON-OFF: ON

SMTP MODE: Manual

Country: Other

Operator: Other

Server Settings:

Type: Other

Server: smtp-mail.outlook.com

Port: 465

Email: Insert your email address

Password: Insert the password to your email address

GPRS Settings:

APN: payandgo.o2.co.uk

Account: payandgo

Password: password

Email Settings:

Phone1: Insert your email address

Phone2: Leave blank

See correct email data input into the software of image 13.



Email / SMTP for BT Internet with O2 Sim

Load up the software, and select the “SMTP” tab. Once on the SMTP page, switch the “Mode” to manual instead of “Auto and then input the data in each section as per the information below:

SMTP Settings:

SMTP ON-OFF: ON
SMTP MODE: Manual
Country: Other
Operator: Other

Server Settings:

Type: Other
Server: mail.btinternet.com
Port: 465
Email: Insert your email address
Password: Insert the password to your email address

GPRS Settings:

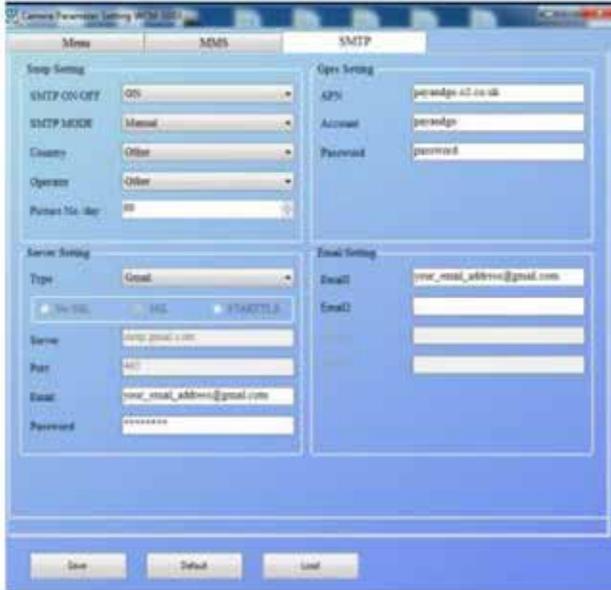
APN: payandgo.o2.co.uk
Account: payandgo
Password: password

Email Settings:

Phone1: Insert your email address
Phone2: Leave blank

See correct email data input into the software of image 14.

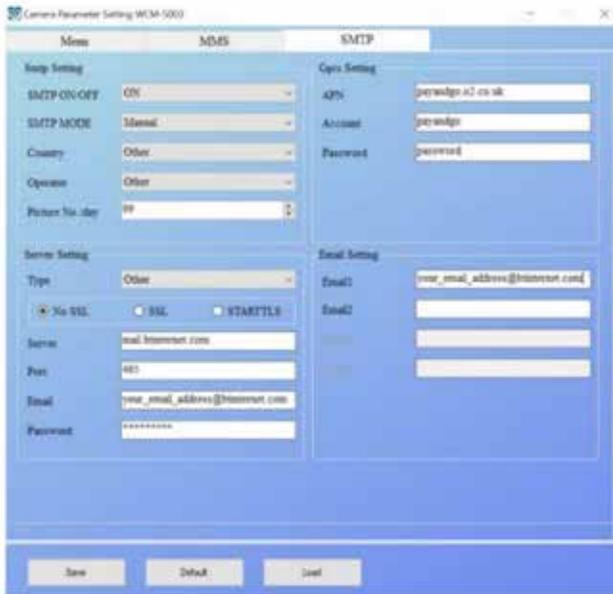
(Image 12)



(Image 13)



(Image 14)





Email / SMTP for Gmail with Vodafone Sim

Load up the software, and select the "SMTP" tab, then input the data in each section as per the information below::

SMTP Settings:

SMTP ON-OFF: ON

SMTP MODE: Manual

Country: Other

Operator: Other

Server Settings:

Type: Gmail

Server: smtp.gmail.com

Port: 465

Email: Insert your email address

Password: Insert the password to your email address

GPRS Settings:

APN: pp.vodafone.co.uk

Account: wap

Password: wap

Email Settings:

Phone1: Insert your email address

Phone2: Leave blank

See correct email data input into the software of image 15.



Email / SMTP for Hotmail with Vodafone Sim

Load up the software, and select the "SMTP" tab, then input the data in each section as per the information below:

SMTP Settings:

SMTP ON-OFF: ON

SMTP MODE: Manual

Country: Other

Operator: Other

Server Settings:

Type: Hotmail

Server: smtp-mail.outlook.com

Port: 465

Email: Insert your email address

Password: Insert the password to your email address

GPRS Settings:

APN: pp.vodafone.co.uk

Account: wap

Password: wap

Email Settings:

Phone1: Insert your email address

Phone2: Leave blank

See correct email data input into the software of image 16.



Email / SMTP for BT Internet with Vodafone Sim

Load up the software, and select the “SMTP” tab, then input the data in each section as per the information below:

SMTP Settings:

SMTP ON-OFF: ON

SMTP MODE: Manual

Country: Other

Operator: Other

Server Settings:

Type: BT Mail

Server: mail.btinternet.com

Port: 465

Email: Insert your email address

Password: Insert the password to your email address

GPRS Settings:

APN: pp.vodafone.co.uk

Account: wap

Password: wap

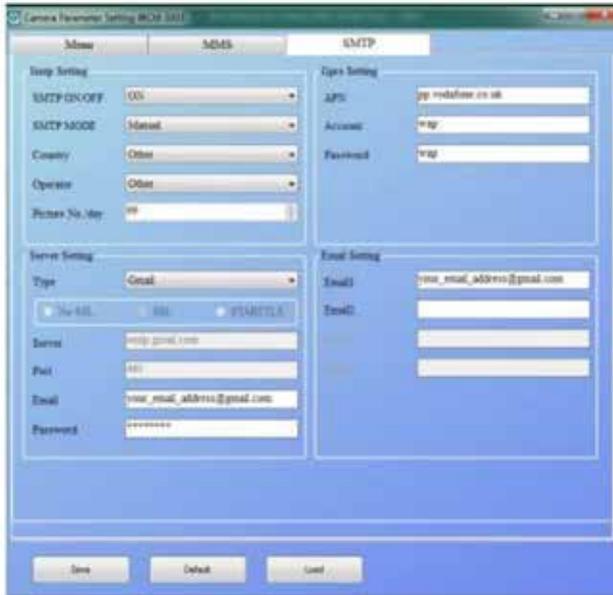
Email Settings:

Phone1: Insert your email address

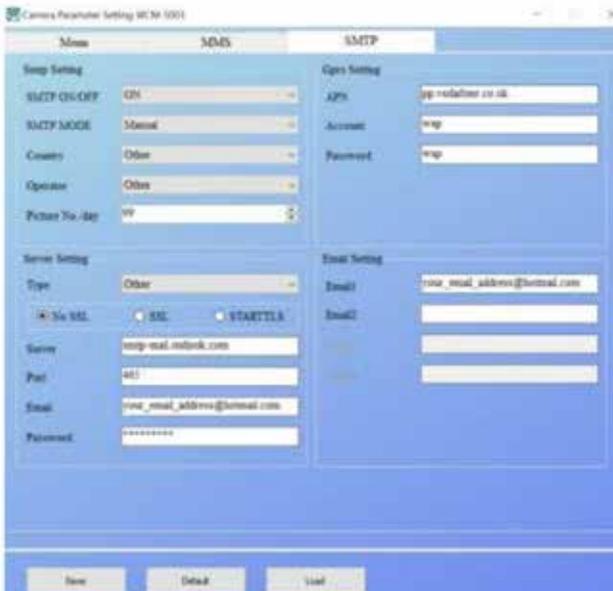
Phone2: Leave blank

See correct email data input into the software of image 17.

(Image 15)



(Image 16)



(Image 17)





Email / SMTP for Gmail with Three Network Sim

Load up the software, and select the "SMTP" tab, then input the data in each section as per the information below:

SMTP Settings:

SMTP ON-OFF: ON

SMTP MODE: Manual

Country: Other

Operator: Other

Server Settings:

Type: Gmail

Server: smtp.gmail.com

Port: 465

Email: Insert your email address

Password: Insert the password to your email address

GPRS Settings:

APN: three.co.uk

Account: Leave blank

Password: Leave blank

Email Settings:

Phone1: Insert your email address

Phone2: Leave blank

See correct email data input into the software of image 18.



Email / SMTP for Hotmail with Three Network Sim

Load up the software, and select the "SMTP" tab, then input the data in each section as per the information below:

SMTP Settings:

SMTP ON-OFF: ON

SMTP MODE: Manual

Country: Other

Operator: Other

Server Settings:

Type: Hotmail

Server: smtp-mail.outlook.com

Port: 465

Email: Insert your email address

Password: Insert the password to your email address

GPRS Settings:

APN: three.co.uk

Account: Leave blank

Password: Leave blank

Email Settings:

Phone1: Insert your email address

Phone2: Leave blank

See correct email data input into the software of image 19.



Email / SMTP for BT Internet with Three Network Sim

Load up the software, and select the “SMTP” tab, then input the data in each section as per the information below:

SMTP Settings:

SMTP ON-OFF: ON

SMTP MODE: Manual

Country: Other

Operator: Other

Server Settings:

Type: BT Mail

Server: mail.btinternet.com

Port: 465

Email: Insert your email address

Password: Insert the password to your email address

GPRS Settings:

APN: three.co.uk

Account: Leave blank

Password: Leave blank

Email Settings:

Phone1: Insert your email address

Phone2: Leave blank

See correct email data input into the software of image 20.

(Image 18)



(Image 19)



(Image 20)



10. Text Command Codes

Once the camera is set up for text/MMS or email/SMTP, In order to get pictures/ information sent to your phone or email, you'll need to send SMS commands to the SIM Card phone number.

Below is a choice of commands you have:

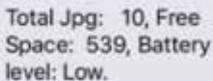
TEXT: *505*

This command will send a picture to the mobile number or email as used in the set-up software, when it is triggered by a pest.

TEXT: *520*

This command will give you information as to the picture quantity, free space on the MICRO SD Card, and battery level.

Example response below:



Total Jpg: 10, Free Space: 539, Battery level: Low.

TEXT: *530*

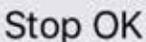
Turn on sensors (can work in both MMS and SMTP mode) SIM will send Start Ok once the command *530* has been received.

TEXT: *531*

This command will put the camera in **"sleeping mode"**. You may want to use this function to save credit once the camera has triggered and sent you some images of the pest. Required to save you receiving further messages if the camera is triggered again.

The sim in the camera will respond "Stop OK" once the command has been received to confirm.

Example of response below:



Stop OK

11. Cautions

The working voltage of the camera is 6.0 V.

- Please unlock and format the Micro SD Card before use.
- Please unlock and add credit to the SIM Card before use.
- Please do not insert or take out the Micro SD Card when the power switch is in the ON position.
- As communications networks may vary, we can't guarantee the MMS and GPRS function will work.
- If you are struggling to get the camera working, please contact your supplier directly for advice.

Part Name	Quantity
Motion Sensor Camera	1
USB Cable	1
TV Cable	1
Tweezers	1
Software CD	1
Instruction manual	1

12. Support

Still having issues with setting up your camera? Contact the Killgerm Technical team of 01924 268512 or technical@killgerm.com.

Alternatively contact your Killgerm Area Sales Manager for onsite support.

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