

ENG

GPRS/MMS/SMS Digital Infrared Trail Camera User's Manual HSM-5003



Table of Contents

1. Instructions 1

1.1 General Description 1

1.2 Camera Body Interface 1

1.3 Camera components and features 1

1.4 Remote Control..... 1

1.5 Shooting Information Display 2

1.6 Brief Introduction for SIM card and Signal..... 2

1.7 Supported Format 2

2. Easy Operation..... 2

2.1 Power Supply..... 2

2.2 Insert the MICROSD-card and the SIM-card 3

2.3 Enter into the TEST Mode..... 3

2.3.1 User Settings 3

2.3.2 Manual Capturing 3

2.3.3 View Images or Videos 3

2.4 Power on and Enter into the ON Mode 4

2.5 Power Off..... 4

3. Advanced Operations..... 4

3.1 Settings Menu 4

3.1.1 Photo Setting..... 4

3.1.2 Video Setting 4

3.1.3 System Setting 5

3.1.4 MMS Menu Setting 5

3.1.5 SMTP Menu Setting 5

3.2 MMS/SMTP Settings..... 6

3.2.1 Preparation..... 6

3.2.2 MMS setting: 6

3.2.3 SMTP setting 6

3.3 SMS Command Code 7

4. Cautions 8

Appendix I : Technical Specifications..... 9

Appendix II : Parts List 9

1. Instructions

1.1 General Description

This digital trail camera with MMS function can work automatically day and night. It can be triggered by any movement of human (or animals) in a certain region monitored by motion sensor, and then automatically captures pictures (up to 12M pixels) or records 1080p or HD video clips.

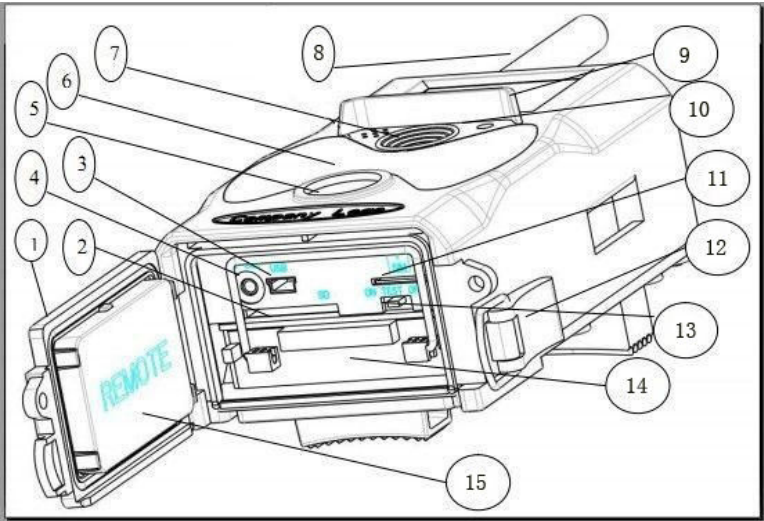
During daytime it begins to take color photos and video till light is not enough, then it begins to take monochrome photos and video.

It supports 2G/GSM/MMS/SMTP/SMS. And it is waterproof IP54.

1.2 Camera Body Interface

It has the following interfaces: USB connector, MICRO SD-Card Slot, SIM card slot, TV output and external DC power connector.

1.3 Camera components and features



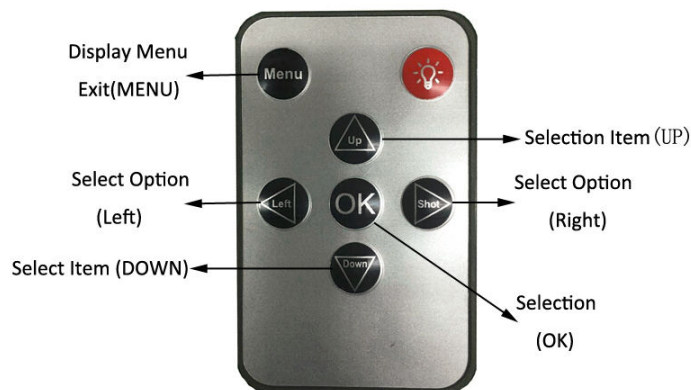
- | | |
|-----------------------|--------------------------------|
| 1) Bottom Cover | 9) 2 inch color LCD Display |
| 2) Micro SD-Card Slot | 10) Sound recorder |
| 3) USB Connector | 11) SIM card slot |
| 4) TV Out connector | 12) Lock |
| 5) PIR | 13) Power witch |
| 6) Infrared Flash | 14) Battery Depot |
| 7) Lens | 15) Portable remote controller |
| 8) GSM Antenna | |

1.4 Remote Control

The remote control is primarily used for menu settings and password input. This is wireless remote control. The maximum remote distance is 9 meters.

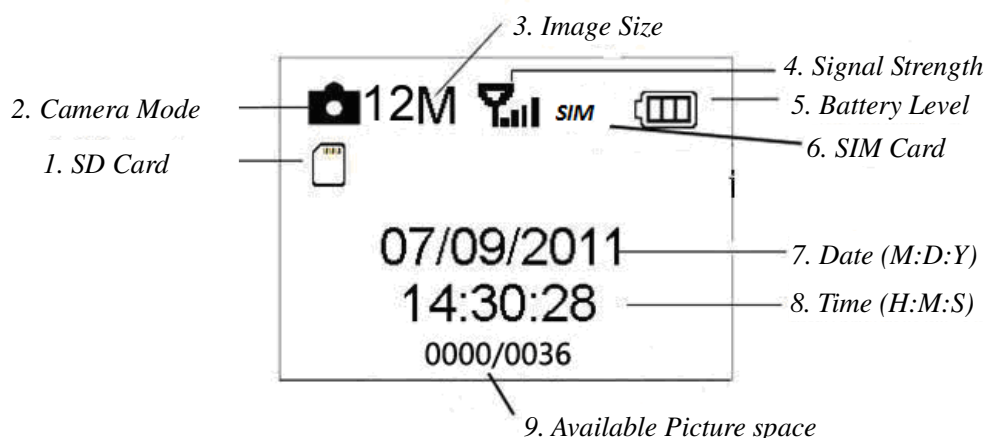


Press LEFT or RIGHT to select menu table, press UP or DOWN to select the sub-menu then press OK to finish



1.5 Shooting Information Display

When power switch is turn to TEST position, the shooting information will be displayed in the monitor.



1.6 Brief Introduction for SIM card and Signal

There are two SIM card icons. It means the SIM card is inserted and it can work well. It means the network signal in your local place is very good.

1.7 Supported Format

Item	Format
Photo	JPG
Video	AVI

2. Easy Operation

2.1 Power Supply

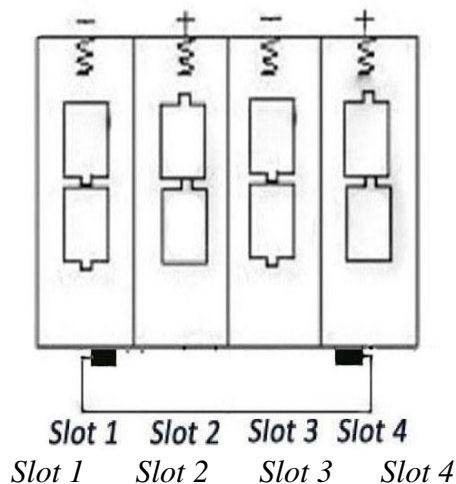
To supply power for the camera, 8 AA batteries are needed.

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

When in Test Mode, camera will be automatically shut down to save power if without any operation within 3 minutes; it could be waked up by any movement detection.

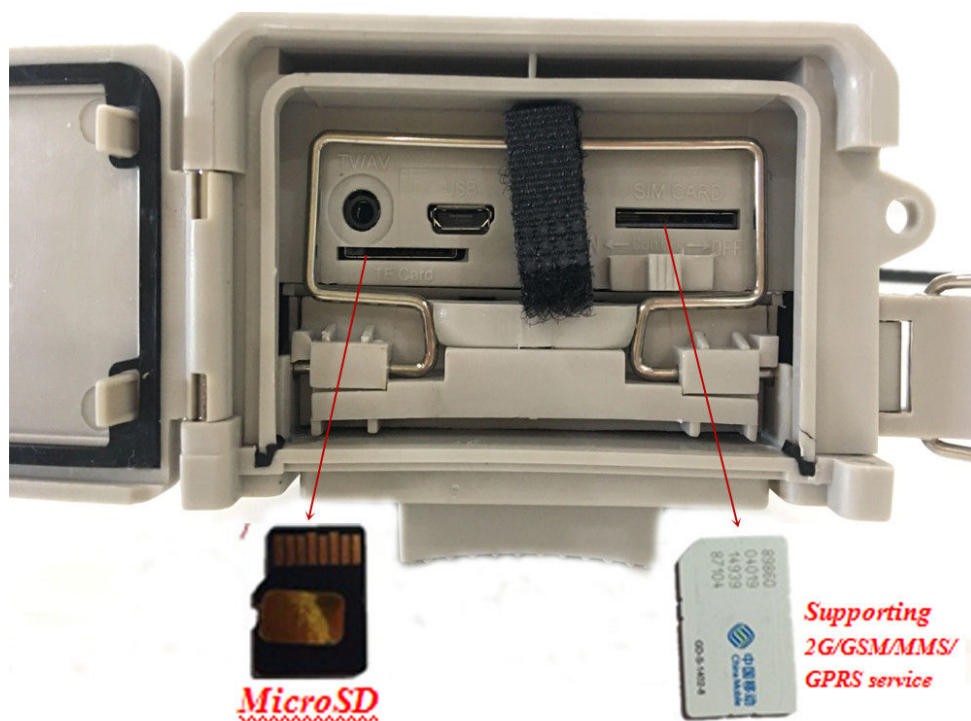
When in low power state, camera will also automatically shut down. Please change the batteries in time.



2.2 Insert the MICRO SD-card and the SIM-card

Insert MICRO SD-card and SIM into the card slot.

When use MMS/E-mail function, be sure to insert SIM-card into the SIM-card slot correctly.



2.3 Enter into the TEST Mode

Turn the power switch to the TEST position to enter into the TEST mode. There are some functions in TEST mode: user settings, manually capture, preview.

2.3.1 User Settings

Press the MENU button. The camera can be set (mode, interval, picture resolution, video resolution& length, etc.) the detailed operations will be described in following chapter.

2.3.2 Manual Capturing

Press **Right** to manually capture photos or record video.

2.3.3 View Images or Videos

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

1. LCD screen on camera
2. TV monitors which connects to camera with TV cable

Press **OK** to view captured files, the latest image will be shown in the LCD screen or TV monitor. Press UP to view the last and press DOWN for the next. The detailed operations like deleting images or videos will be described in “Advanced Operations” chapter.

2.4 Power on and Enter into the ON Mode

Before switching on, please pay attention to the following items:

1. Do not face light source directly. These may cause false triggers

2. The height from ground for placing should be 1-2 meters. For example for deer height is good size appropriately.

After switching on the camera, the red light will blink for about 10s. The 10s is a buffering time before automatic capturing, e.g. for closing and locking the bottom cover, fixing the camera on a tree and walking away.

2.5 Power Off

Slide the power switch to OFF position to turn off the camera.

Therefore, please remove the battery if the camera will not be used for a long time.

3.Advanced Operations

This chapter explains that user settings can only be done in TEST mode and the remote control is needed.

3.1 Settings Menu

Press MENU when camera in the TEST mode. The settings menu will be shown on the LCD or the external TV monitor.

3.1.1 Photo Setting

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

3.1.2 Video Setting

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

3.1.3 System Setting

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	→	

3.1.4 MMS Menu Setting

MMS	→	MMS ON/OFF Country Operator MMS APN Account Password MMSC Gateway IP Gateway Port MMS Phone MMS Email
-----	---	---

3.1.5 SMTP Menu Setting

SMTP	→	SMTP ON/OFF Country Operator SMTP APN Account Password SMTP Server SMTP Port SendEmail SendEmail Password SMTP Email
------	---	--

This camera can send pictures instantly to user’s mobile via MMS method. So before using this function user needs to finish the settings mms in MMSCONFIG.

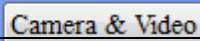
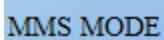
3.2 MMS/SMTP Settings

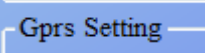
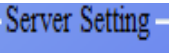
3.2.1 Preparation

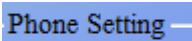
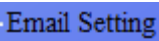
- 1. 2G/GSM Mobile Operator Service
- 2. format 2GB+ MICRO SD or SD card
- 3. computer(Vista, Windows 7, windows 8 system)
- 4. One SIM card without PIN lock
- 5. The SIM card should be able to send images via 2G/GSM/ GPRS/MMS network
- 6. 9V power(8 AA Batteries, or 9V input power supply)
- 7. MMSCONFIG Program in CD
- 8. Users need to ask the provider 2G MMS data (APN+Account+Password, MMSC+IP+PORT), or find this info on providers homepage.
- 9. 2G GPRS data for SMTP setting from provider (APN+Account+Password)
- 10. Sender Email server info(server+port+email+password)

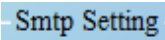
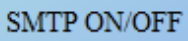
3.2.2 MMS setting:

1. Insert card and SIM to camera, put batteries in cam, screw antenna to it then turn camera to test mode, check there are signal bar and "SIM" on the camera screen. Then connect the camera to the PC with the included USB cable insert CD to computer, open and then double click  MMSCONFIG

2. Choose   or   in  , Go to  table, select  

3. Insert  and 

4. Fill in  and or 
 and or 

5. Go to  ,choose 
 

6. Click  button and save as Parameter.dat to MICROSD card

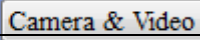
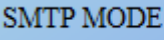
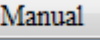
7. Plug USB cable from camera

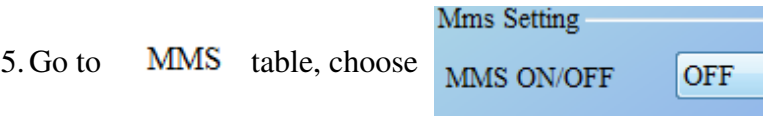
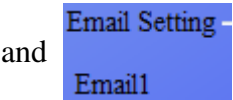
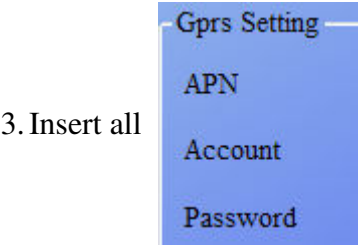
8. Go to  in camera menu, check the subsetting is the same with above setting

9. Turn camera to on mode

3.2.3 SMTP setting

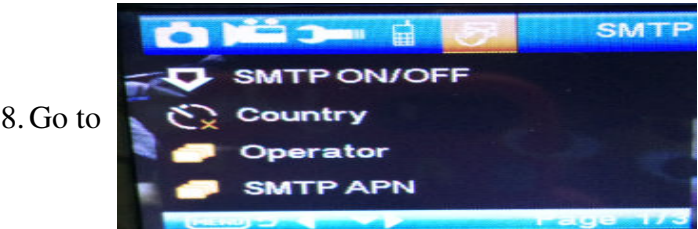
1. Insert card and SIM to camera, put batteries in cam, screw antenna to it then turn camera to test mode, check there are signal bar and "SIM" on the camera screen. Then connect the camera to the PC with the included USB cable insert CD to computer, open and then double click  MMSCONFIG

2. Choose   or   , Go to  table, select  



6. Click **Save** button and save as **Parameter.dat** to MICROSD card

7. Plug USB cable from camera



in cam menu, check the

subsetting is the same with above setting

9. Turn camera to on mode

3.3 SMS Command Code

mms/smtp need to be set 'on' mode well before using thes sms command

500 take picture

(Can work in both mms and smtp mode)

sim in camera will send **Capture** when receive ***500*** command

505 take picture and send to the mobile who sends sms

sim in camera will send **Start capturing...** and still send picture to mms Mobile or smtp email when got ***505*** Command, no matter MMS or smtp mode.

But sim will send mms to the mobile who sends sms when camera **only in mms mode**

520 check the picture quantity and battery status

(Can work in both mms and smtp mode)

sim will send **Total Jpg: Free Space: Battery Level:** when receive ***520*** command

530 turn on camera

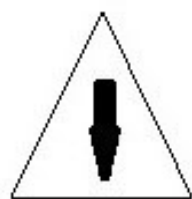
(Can work in both mms and smtp mode)

sim will send **Start OK** when receive ***530*** command

531 turn camera to sleeping mode

(Can work in both mms and smtp mode)

Sim will send **Stop OK** when receive ***531*** command



4. Cautions

The working voltage of the camera is 9.0 V.

Please unlock and format the Micro SD card.

Please insert the Micro SD-card when the power switch is at OFF position.

Please do not insert or take out the Micro SD-card when the power switch is at ON position.

Please ensure full power when having firmware upgrade, otherwise the upgrade process could be stopped.

As communications networks may vary we can't guarantee 100% MMS and GPRS can work fine

Appendix I : Technical Specifications

Image Sensor Type (True Megapixels)	5 Mega Pixels Color CMOS
Memory	MICRO SD Card 8MB~32GB
Lens	F=3.1; FOV=60 °
Size	145mm * 80mm * 55 mm
IR Filter:	Full Automatic IR Filter
TFT Display Screen:	2.0 inch
PIR Sensor Sight Angle	60 Degrees
PIR Sensing Distance	65ft/20m
Number of IR LED	36 LEDs Black or White
Max Night Vision Lighting Distance	65ft/20 meters
Trigger Speed	1.1 second
Triggering Interval :	1 second ~ 30mins (default 1 sec)
Selectable Image Resolution:	12MP/8MP/5MP
Multiple Frame	1/3/6/9
Video Resolution	1080P/720P/WVGA
File Format	JPEG/AVI
Date Time Imprint	Yes
Moon Phase Imprint	Yes
Exposure:	Auto
MMS/EMAIL/Support	Support
SMS Control	Support
Password Security	4 Digits set by yourself
Default camera password	1314
Default camera ID	CAM000
Periodic shot	1Second~24Hours
Stand-by current	0.2mA
Stand-by time	3 Months (8 AA Battery)
Interface	TV out (NTSC/PAL); USB; Micro SD Card Holder;9V DC External
Fix Method	Belt, Tripod Nail
Operation Temperature	-30 ~+70°C/-22~+158°F
Power Supply	8×AA battery
Camera Socket	Yes
Water proof	IP54
Menu Langugae	English, French, Germany, Spanish , Russian, Danish, Dutch, Poland, Portuguese, Swedish, Italian, Finnish
Security authentication	FCC, CE, RoHS, REACH, R&TTE, HealthSAR

Appendix II : Parts List

Part Name	Quantity
Digital Camera	1
Wireless controller	1
Antenna	1
USB Cable	1
TV cable	1
User's Manual	2
QSG	1
CD	1
Wall Mount	1

ALL RIGHTS RESERVED, COPYRIGHT DENVER ELECTRONICS A/S

DENVER®

www.denver-electronics.com



Electric and electronic equipment and included batteries contains materials, components and substances that can be hazardous to your health and the environment, if the waste material (discarded electric and electronic equipment and batteries) is not handled correctly.

Electric and electronic equipment and batteries is marked with the crossed out trash can symbol, seen below. This symbol signifies that electric and electronic equipment and batteries should not be disposed of with other household waste, but should be disposed of separately.

As the end user it is important that you submit your used batteries to the appropriate and designated facility. In this manner you make sure that the batteries are recycled in accordance with legislature and will not harm the environment.

All cities have established collection points, where electric and electronic equipment and batteries can either be submitted free of charge at recycling stations and other collection sites, or be collected from the households. Additional information is available at the technical department of your city.

DENVER ELECTRONICS A/S

Omega 5A, Soeften

8382 Hinnerup

Denmark

facebook.com/denverelectronics

Hereby, Inter Sales A/S declares that the radio equipment type HSM-5003 is in compliance with Directive 2014/53/EU. The full text of the EU declaration of conformity is available at the following internet address:

www.denver-electronics.com and then click the search ICON on topline of website.

Write modelnumber: HSM-5003. Now enter product page, and red directive is found under downloads/other downloads

Operating frequency rate:850-1900MHz

Max output power:2W