

2G/GSM/ GPRS/MMS/SMS
Digital Infrared Trail Camera
User's Manual
HC-300M



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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 (WVGA or QVGA).

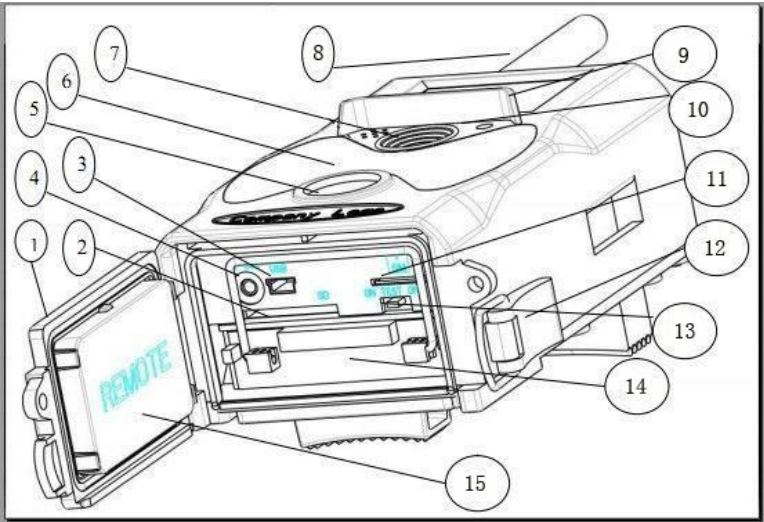
During daytime it begins to take color photos and video till light is not enough, then it begins to take monochrome photos video.

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

1.2 Camera Body Interface

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

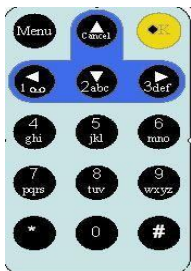
1.3 Camera components and features



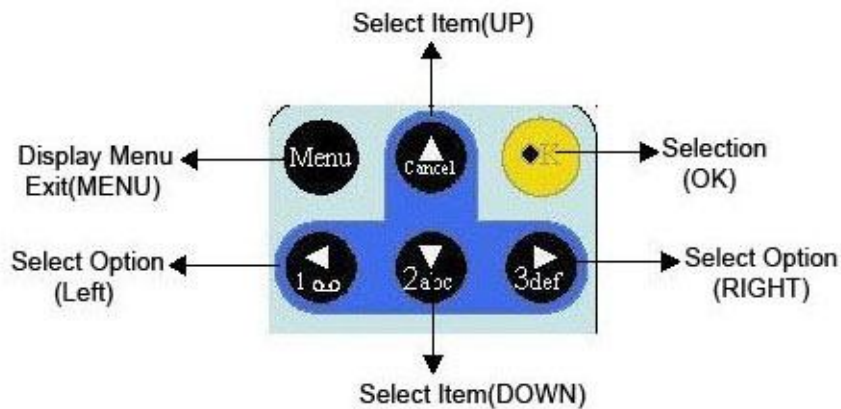
- | | |
|---------------------|--------------------------------|
| 1) Bottom Cover | 9) 2 inch color LCD Display |
| 2) TF-Card Slot | 10) Sound recorder |
| 3) USB Connector | 11) SIM card slot |
| 4) TV Out connector | 12) Lock |
| 5) PIR | 13) Power witch |
| 6) Infrared Flash | 14) Battery Depot |
| 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.

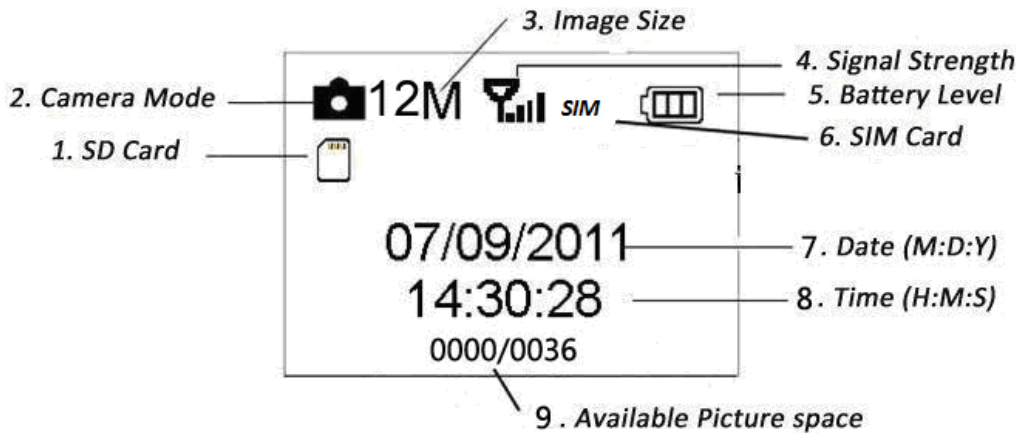


Press LEFT or RIGHT to select menu table,press UP or DOWN to select the sub-menu then press OK to finish
Press the punctuation “*” for laser pointer.



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. SIM 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

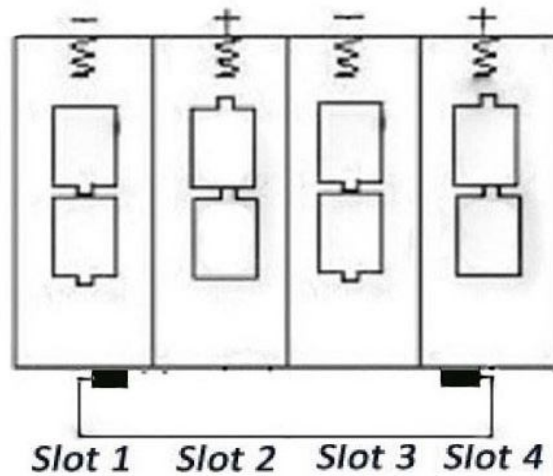
2.1 Power Supply

To supply power for the camera, 4 or 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 TF-card and the SIM-card

Insert TF-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 OK 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 right arrow 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. donot 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

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

3.1.2 Video Setting

Video		
Resolution	→	1080P 720P WVGA QVGA
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 Russian
Distance	→	High Normal Low
TV mode	→	NTSC PAL
Date/Time	→	Day/Month/Year Hour/Minute/Second
Timer	→	
Format	→	Internal Memory SD Card
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
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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
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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


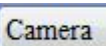

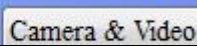


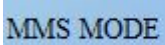

3.2.1 Preparation

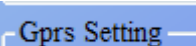
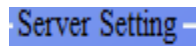
- 1. 2G/GSM Mobile Operator Service
- 2. format 2GB+ TF or SD card
- 3. computer(Vista, Windows 7, windows 8 system)
- 4. One SIM card without PIN lock
- 5. The SIM card should be able to send images via 2G/GSM/ GPRS/MMS network
- 6. 6V power(4 or 8 AA Batteries, or 6V input power supply)
- 7. MMSCONFIG 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)

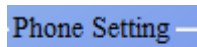
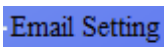


3.2.2 MMS setting:


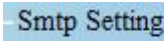
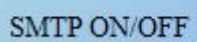

- 1. Insert card and SIM to camera,put batteries in cam, screw antenna to it then turn camera to test mode,check there are signal bar and "SIM" on the camera screen. Then connect the camera to the PC with the included USB cable

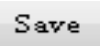
insert CD to computer, open and then double click  MMSCONFIG

- 2. Choose   or   in , Go to  table, select  


- 3. Insert  and 

- 4. Fill in  and or 
 

- 5. Go to ,choose 
 

- 6. Click  button and save as Parameter.dat to TF card

- 7. Plug USB cable from camera


- 8. Go to  in camera menu, check the subsetting is the




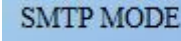

same with above setting


- 9. Turn camera to on mode

3.2.3 SMTP setting

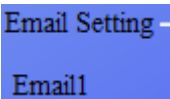
1. Insert card and SIM to camera,put batteries in cam, screw antenna to it then turn camera to test mode,check there are signal bar and "SIM" on the camera screen. Then connect the camera to the PC with the included USB cable


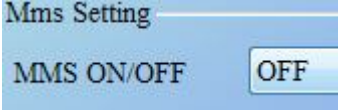
insert CD to computer, open and then double click  MMSCONFIG


2. Choose Choos  Camera or  Camera & Video , Go to  SMTP table, select  SMTP MODE  Manual

3. Insert all 

4. Fill in sender email info in  and



5. Go to  MMS table,choose 

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

7. Plug USB cable from camera

8. Go to  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 recieve ***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 recieve ***520*** command

530 turn on camera

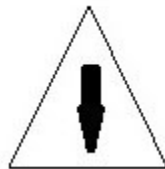
(can work in both mms and smtp mode)

sim will send [Start OK](#) when recieve ***530*** command

531 turn camera to sleeping mode

(can work in both mms and smtp mode)

Sim will send [Stop OK](#) when recieve ***531*** command



4. Cautions

The working voltage of the camera is 6.0V.

Please unlock and format the TF-card.

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

Please do not insert or take out the TF-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	TF 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/VGA
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
Periodic shot	1Second~24Hours
Stand-by current	0.2mA
Stand-by time	3 Months (8 AA Battery)
Interface	TV out (NTSC/PAL); USB; TF Card Holder; 6V DC External
Fix Method	Belt, Tripod Nail
Operation Temperature	-30 ~+70℃ /-22~+158 °F
Power Supply	8×AA or 4×AA battery
Camera Socket	Yes
Water proof	IP54
Security authentication	FCC,CE,RoHS

Appendix II : Parts List

Part Name	Quantity
Digital Camera	1
Wireless controller	1
Antenna	1
USB Cable	1
TV cable	1
User's Manual	1
Solar power supply	Optional