

zHunter-500HD Scouting Trail Camera



USER'S MANUAL

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Dear customers, thank you for choosing our 2.0C Series infra-red hunting camera. Please read this manual before using the camera. And please keep it well preserved.

1. General Information

1.1 Features:

- Programmable 5/8/12 Megapixel high-quality resolution.
- Specialized compression format: H.264
- 26PCs IR LED for flash range as 50 feet.
- With 8 AA alkaline batteries, the longest standby time is up to 6 months.
- Available operation temperature: -25°C to 60°C (-13°F to 140°F)
- Impressive quick trigger time: 0.8-1s (GPRS trigger time is 1.2s)
- In Interval setting, the camera automatically and constantly takes pictures or videos at set interval. This function is specialized designed to monitor unattended objects, such as cold-temperature animal snakes or to observe flowering, dolphin swimming, etc.
- With specified Timer Setting, camera will be programmed to work during the set time every day. This function can work together with Interval setting.
- Time stamp of photos and video enables you to identify where and when the camera shot photos.
- Built-in 2.4" TFT color screen to review photos and videos in camera.
- Date, time, temperature and moon icons can be stamped onto photos.
- With MMS and GPRS function, camera can transmit photos to 1-4 settled mobile phones and 1-4 email accounts according to set intervals constantly at lower battery consumption. (2.0CM model only)
- Red lights will flicker when the battery power is low.
- All transmitted photos will save into SD card as well.
- Easy to get real time photos from camera globally via GSM or GPRS network with four bands: 850/ 900/ 1800/ 1900MHZ. (2.0CM model only)
- Multiple photos-shot ensure you get clear images of objects.
- Audio Recording brings you heart pumping like never before.
- Two different TV OUT settings help you review photos even from Television.

1.2 Introduction of Function

2.0C Series adapts IR thermo stimulation technology. Camera will automatically photograph or shoot videos when triggered by moving object. The upgraded 2.0CM can transmit the images to users corresponding to the set phone and computers via GPRS.

This product is mainly used in housing security, monitoring wild animals, and tracking. Camera is under energy saving mode while nothing is detected in the reachable monitoring zone. With 8 AA alkaline batteries, the longest standby time could be around 6 months. (Time to initiate is approximately 1sec).

This product has been equipped supplementary IR LED lights and specialized CMOS photosensitive chip which can automatically power on IR LED lights during dark night to capture clear black-and-white photos or videos; when the light is bright enough, the IR LED will be off and camera will capture colorful photos or videos.

With the high-qualified waterproof shell, this product can be set at wild fields. Please set it 2M high above the ground, avoid the cloud thunder whether, avoid high temperature air vent, and do not bring it to dive.

1.3 Application

2.0C Series is an ideal product for housing security, warehouse surveillance, and monitoring wild animals with its camouflage appearance and nice shape. It is convenient to install or fasten, could be used to take photographs manually and carry on long-time videos in **Test** mode.

a. Instant surveillance camera for home, office, construction site, and warehouse, etc.;

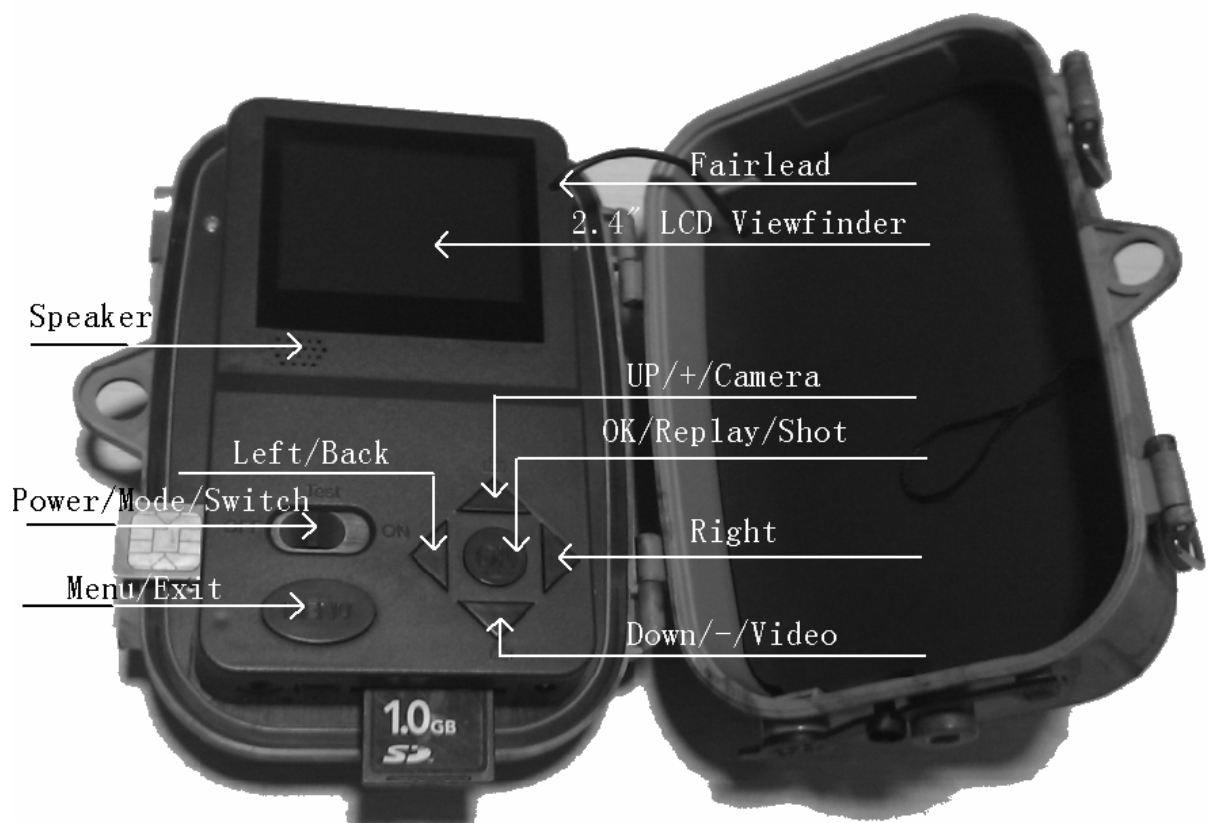
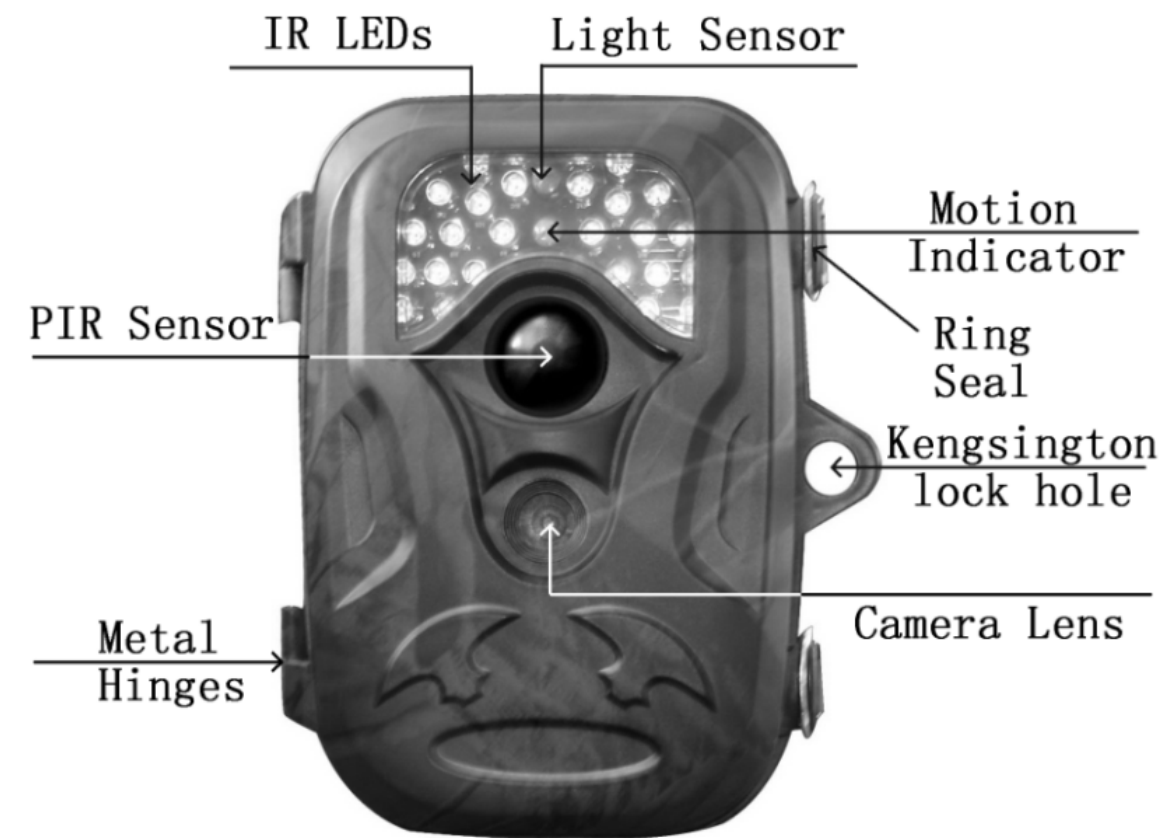
b. Motion-triggered infra-red night vision surveillance;

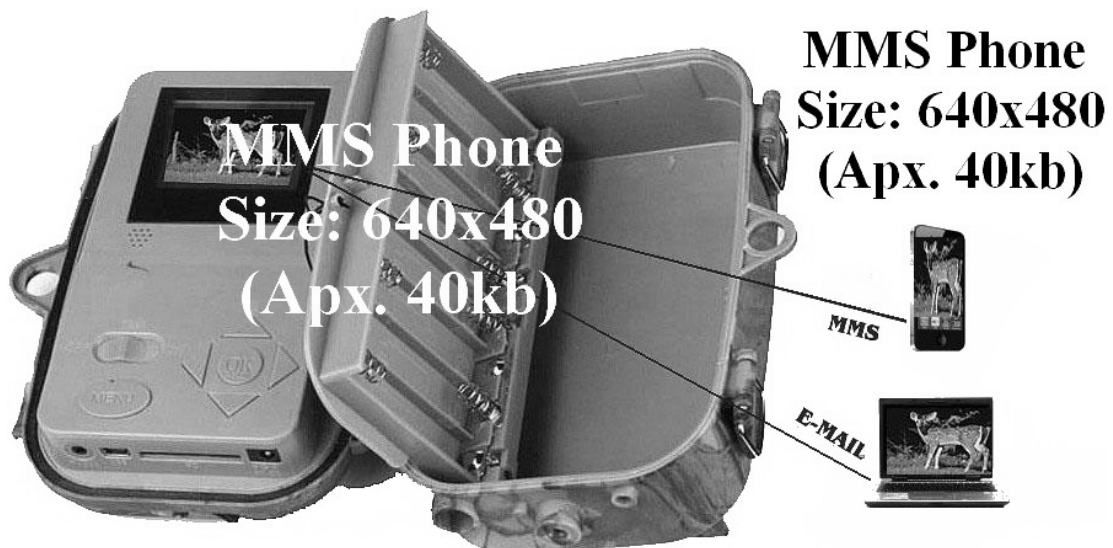
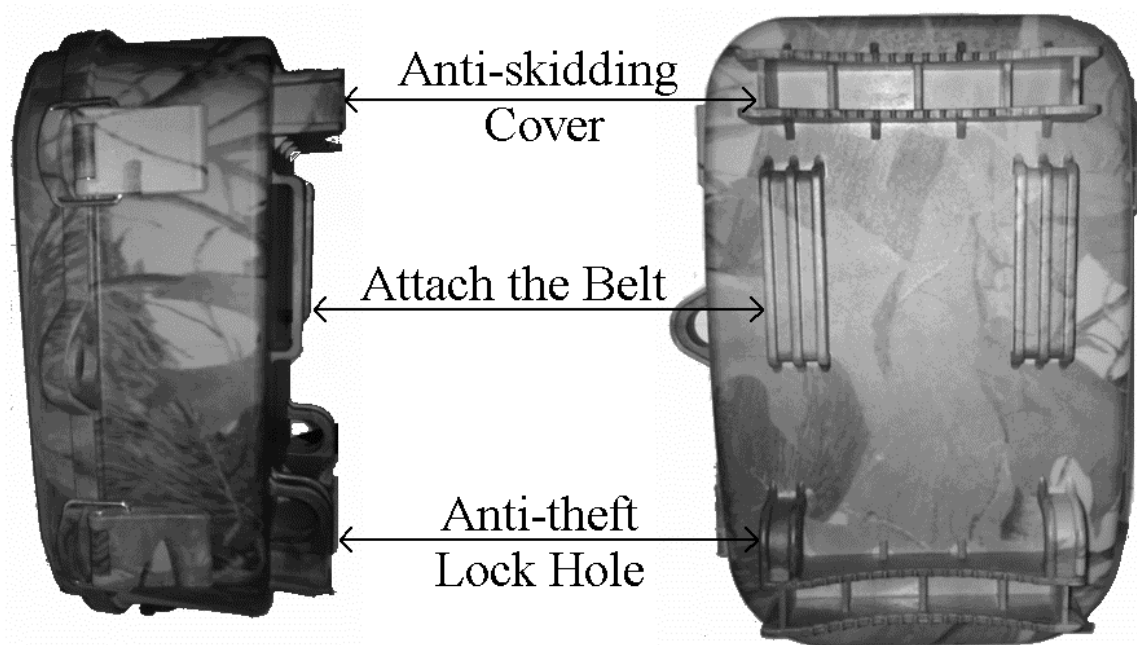
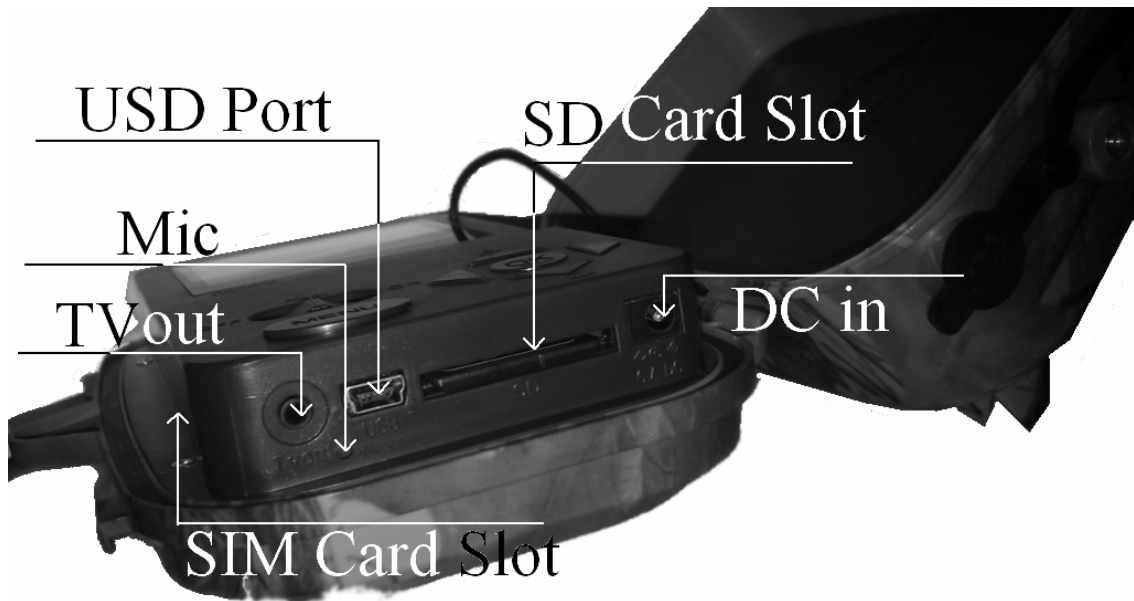
c. Animal observation and hunting;

1.4 Attention:

1. Insert the SD memory card correctly, camera does not support SD card hot swap (insertion).
2. Please use AA battery with good quality in order to prevent battery cells from corrosion of leaked acid.
3. Use right adaptor (6V/1A or 2A) of this camera to supply power, and do not invert the electrode when put in batteries.
4. In **Test** mode, camera will automatically power off in 1min without any operations. Please manually turn ON it as if you want to use it again.
5. Don't interrupt power supply during system upgrade, please deliver it back to factory if the device doesn't work after upgrading.
6. Do not frequently insert or pull out SD card and battery or plug in and out the adaptor when the camera is on.
7. Do not have any floating objects, such as leaves, strings, or ribbons in the 3M motion detection zone of cameras, to avoid mistaking photograph or videos.
8. Do not keep camera next to hot irrelevant objects, air conditioner exhaust vents, and light, etc. to avoid mistaking photos or videos.

2. Whole View and Details of 2.0C Series





3. Brief Operation Manual

Camera stores files in SD memory card. Picture format is (.jpg); video format is (.ASF).

SD card has its corresponding card slot. Camera storage capacity is 8MB-32GB, and system file formats are FAT12 and FAT16.

Please choose stable high-speed SD card to achieve ideal photographing speed.

Attention:

Close SD card protection first to edit files or to format SD card system.

Please insert SD card into the right position (a light sound like “kaca” means you have placed it right. Slightly push SD card until you hear the sound as “kaca” when you want to take out SD card.

Strongly suggest you use the camera to format SD card as if it is the first time for you to use it.



3.1 Power (two ways power supply)

3.1.1 load in 4 or 8 AA alkaline or chargeable batteries corresponding to the right electrode.



3.1.2 external direct-current power supply: input, 110 ~240V, 50/60Hz; output: 6 V/1 A (connect camera first, then plug in the adaptor.)

3.1.3 In “**Test**” mode, camera will automatically power off in 1min to save power.

3.1.4 Indicating light functions,

A. Switch on--green light flickers for 5 seconds before camera gets into stand-by mode

B. **SET** mode-- red light on

C. Electricity power is low-- red light flickers

D. The capacity of SD card is full-- blue light flickers

3.2 Turn on camera (look the picture on right side for reference.)

User can turn on camera after you correctly insert SD card and put batteries in or plug adaptor into the plug slot.

Three modes,

OFF

TEST (testing and parameters setting)

ON (IR intelligent automatically monitoring)

(Attention: there will be LOGO and indicating sound when you turn on camera, initiating time is around 5 seconds in order to maintain system stable.)



3.2.1 Test Mode (in the middle position of the switch)

Operations of Test mode are,

① System setting of camera (press MENU to select)

② Manual photographing and video-recording (press UP/Down to choose to take photo or video)

③ Watch via LCD viewfinder to set

④ Playback video (select **Playback** option in **Camera Mode**, or hold **OK** for 5 seconds to playback videos.)

3.2.2 Switch to “ON” to initiate IR intelligent working mode

Wait for 5 seconds after the green light stop flickering.

Then **IR** mode has been initiated.

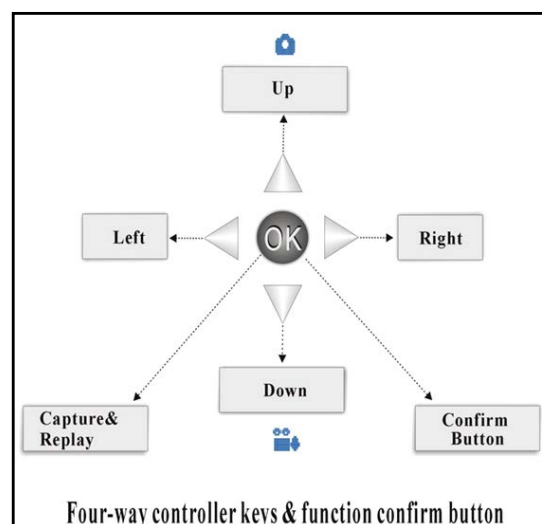
(If there is moving objects get into motion detection zone, camera will take videos corresponding to user’s previous settings.)

(Attention: in the mode “**ON**”, LCD viewfinder and all function keys stop working, nothing will be showed on the screen)

3.2.3 Manual Photographing (look the picture on right side for reference)

Shortcut Keys,

There are two icons for either photographing or video recording. You can press **UP/DOWN** to select.



Photographing: in **TEST** mode, press **OK** when you see the object via LCD viewfinder, the photo will be automatically saved into SD card.

Video Recording: in **TEST** mode, you can keep recording according to the capacity of SD card and power. Press **OK** to stop recording whenever you want to, videos will automatically be saved onto SD card.

3.2.4 IR Intelligent Surveillance Mode

Push switch to “**ON**” after all settings have been done.

Wait for 5 seconds till the green light stop flickering. Then IR mode has been initiated.

(If there is any moving object get into motion detection zone, camera will take videos or photograph corresponding to user’s previous settings. And the video will automatically be saved into SD card.)

Attention:

Do not have any floating or moving objects like leaves, strings, or ribbons within the 3M motion detection zone to avoid mistaken images or videos.

Do not leave camera near hot irrelevant objects, air conditioner exhaust vents, and light, etc. to avoid mistaking images or videos.

3.2.5 Playback/View/Delete the saved photos

(the picture on the right side is the icon of MENU key.)

There are four ways for user to view the photos as following,

A. connect camera to computer to watch.


B. television browsing, watch via AV channel (push

Switch to **TEST**, hold **OK** for 5 seconds; or choose **PLAYBACK** in **Camera Mode** in **MENU**)



- Select the file which needs to playback, use **Left/Right** key to choose; hold **OK** 5 seconds to get back to **Test** mode.
 - Photo camzoom, during the viewing of photos, press **Up/Down** to pan or zoom ; press **OK** to get back to original size.
 - Delete, press menu once, and then press **OK** to choose the photos which need to be deleted.
- C. Take SD card out of camera, watch via computer
- D. Watch directly via LCD screen of camera

Attention,

The recorded files will be arranged into one folder, marked with “JPEG” are photos, and marked with symbol  are recorded videos.

For more setting methods, please read Higher-level Operation Manual

Please check camera menu for specific setting methods.



3.3 Power off

Switch to **OFF**, after a slight sound, camera will be turned off.

PS: please take out batteries after you turn off camera, because camera will waste the power; meanwhile, this action can also protect camera from corrosion of batteries acid.

4. Higher-level Operation Manual

In order to be able to further fully operate camera, users should be familiar with the system when users are carrying on the elementary operation. The following part is a specific description of the basic setting mode and setting methods.

4.1 System Mode and Parameter Setting

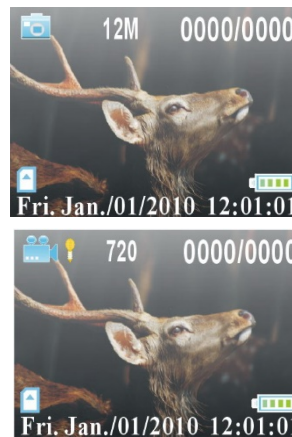
Users can either follow the instruction displayed in camera screen or use TV line to connect it to television to set through television screen.

All the configuration settings of camera are operated in **TEST** mode.

Switch to **TEST**, and then press **MENU** to enter. Users can operate according to the information displayed on the screen. Screen will display valid settings after all the operations.

- A. the displayed formats during camera on and stand-by
Settings of system must be done in “**Test**” mode
Screen displays icons in “**TEST**” mode are as following,

- a. photographing or video icon;
- b. picture pixels or video resolution;
- c. NO. of pictures and left room;
- d. Icon of SD card;
- e. Power of Battery;
- f. Date/Time;
- g. Switch Audio



- B. settings of each mode
Press “**MENU**”, enter settings of each mode as following,
- 1. Camera Mode;
 - 2. Digital zoom;
 - 3. Image Size;
 - 4. Capture Number;
 - 5. Video Size;
 - 6. Video length;
 - 7. Audio Recording;
 - 8. Interval;
 - 9. Video Frames;
 - 10. Time Stamp;
 - 11. Set Clock;
 - 12. Sensor Level;
 - 13. IR LED;
 - 14. Format;
 - 15. TV Out
 - 16. Language;
 - 17. Timer Setting;
 - 18. Default Set
 - 19. Frequency

- 20. GPRS Mode;
- 21. GPRS Setting;
- 22. Send to;

(Attention: only 2.0CM camera has 20/21/22 three function.)

C. In “MENU” mode, specific settings are as following,

Press key Up/Down to set, then press “OK” to confirm the settings. The icon stands for “MENU” is Exit; Back Stands for “Left”; Set Stands for “OK”.

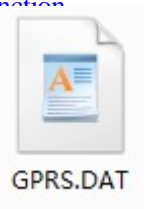
1. Camera Mode	<p>1. In "Test" Mode, key “Up/Down” to switch to take photos or shoot videos;</p> <p>2. key “Playback”, to browse photos or videos Press and hold “Up/Down” to zoom/pan photos, then press “Up/Down/Right/Left” to move the enlarged picture in the screen. Press “OK” , photo will turn back to original size.</p> <p>Note: during photographing or video recording, the screen will show “File Error” if the power is sudden off or the storage malfunction.</p>
2. Digital zoom	<p>supports digital zoom to enlarge the image to 2/3/4 times</p> <p>In “Digital Zoom” mode, choose “YES” and press “OK”, screen will display (2X/3X/4X) optional.</p>
3. Image Size	three optional pixels, 12MP/8MP/5MP (4000x3000,3264x2448, 2592x1944)
4. Capture Number	multiple photo shoots(1/2/3 photos per trigger)
5. Video Size	720/680/320: 720x480/640x480/320x160
6. Video length	5-60s video length(programmable by user)
7. Audio Recording	YES/ NO, each stands for audio and video recording together, or video recording only.
8. Interval	0sec-60Min; Once user set the interval time, camera will only be able to capture photos after the interval user set.
9. Video Frames	30fps/15fps, programmable
10. Time Stamp	ON/OFF
11. Set Clock	Date/Time; Date: “day/month/year”, 2010 to 2030; Time: “hour/minute”
12. Sensor Level	<p>High/ Normal/ Low;</p> <p>Higher sensitivity is more sensitive to movements, easier to trigger camera to record.</p> <p>In high temperature environment, sensitivity of camera will be weaken, suggest set High.</p>
13. IR LED	ON/OFF
14. Format	YES/NO; "Yes" to format both SD card and Camera build-in memory space(21MB)

15. TV Out	NTSC/PAL, programmable
16. Language	English
17. Timer Setting	Disable/Enable; Select "Enable", you can set the beginning time and end time (hour/minute); camera will only work during the time user set.
18. Default Set	YES/NO; "Yes" to get camera default settings
19. Frequency	50/60Hz; wrong setting may cause camera screen flicker.
20. GPRS Mode	ON/OFF; "ON" to run GPRS function After user turn on GPRS mode, user can press button "Left" to search for GPRS signal. Button "Right" to test photo-sending.
21. GPRS Setting	URL Setting/APN setting/ IP setting/ Port setting ---recommend user to set GPRS via PC with file "GPRS.DAT" in SD card. Note: file "GPRS.DAT" can be open by "Microsoft Word" or "Text" For detail setting steps, please read " 4.2.2 "
22. Send to	Phone and Email; set phone 1-4 numbers and 1-4 email accounts

4.2 GPRS Function (2.0CM model only)

4.2.1 MMS Requirements

- ① Camera is working. SD card inserted into camera has enough memory space. 8 AA batteries have enough electric power to run GPRS function;
- ② MMS parameters are set correct; (check parameter setting 21) above); **Ensure all the settings as "URL Setting/APN setting/ IP setting/ Port setting" are configured according to right information from your local Mobile Phone Network Operator of your SIM card.**
- ③ SIM card is inserted into the right position; MMS network is active(some MMS services need pre-paid balance in the account.) Different from the similar cameras in the market, **MMS function on 2.0CM scouting camera can work even SIM card used is password-protected.**
- ④ Check again if the recipients' phone numbers and email accounts are correct.
- ⑤ If all the settings are configured right, please copy out all the information in Document (GPRS.DAT) first, and then format the used SD card once; reconfigure the settings mentioned above. Attention: as if the signal is not strong enough may cause camera sending MMS slower.



Note: GPRS function works when the signal strength is beyond one bar.

4.2.2 Easier way to set GPRS function via PC

1. Insert SD card into huntingcam;
2. Select "On" in "GPRS Mode";
3. Get into "Send to" mode(do not need to set Email accounts or Phone numbers);
4. Turn off camera, take out SD card;
5. Read the SD card on the computer, you may see a document named GPRS.DAT

6. Open this document "GPRS.DAT" with "Microsoft Word", edit the email accounts, phone numbers, and all the other settings;

User can check MMS information of local mobile operator from following website:

<http://www.activeexperts.com/xmstoolkit/mmsclist/>

China			
Provider Name	China Mobile	Provider APN	cmwap
		WAP Gateway	http://10.0.0.172:8080
		MMSC	http://mmsc.monternet.com

MMSC=URL; Provider APN=APN; WAP=IP; Gateway=Port

Correct Setting example

URL=mmsc.monternet.com

APN=cmwap

IP=10.0.0.172

Port=8080

Tel1=

Tel2=

Tel3=

Tel4=

Email1=

Email2=

Email3=

Email4=

Note: "http://" and any symbol in the end should be cut off; i.e.: WAP=http://10.0.0.172:

Correct IP=WAP=10.0.0.172___(no http://, no last symbol---colon:)

7. After you type in all the numbers and letters, you can take off the SD card and insert it into huntingcam, all the information you set with computer will also automatically saved into camera.
8. After user turn on GPRS mode, user can press button "Left" to search for GPRS signal. Button "Right" to test photo-sending.

5. Comprehensive Description of Infrared Cameras Features

5.1 IR intelligent monitoring surveillance

When you initiate the IR monitoring function, because of default setting, you'll get 5s waiting time to prepare or install camera. PIR will start once the green light is off.

Due to the sensitive characteristic of PIR which is especially sensitive to near-by floating objects, please do not have any floating objects like leaves, strings, or ribbons within the 3M motion detection zone when you install camera, to avoid mistaken photographs or videos.

The photograph and video function will automatically start once the motion detector found any moving object get in the monitoring zone. Meanwhile, various default settings will be initiated, camera will run according to the settings of system.

5.2 PIR Detection Distance according to different temperature

The motion detection zone of PIR sensor could reach 20M far away under zero degrees Celsius; but under the temperature 32 degrees Celsius, the detection zone is only around 6M.

5.3 System File Format

The system file formats which camera supports are FAT12/FAT16. Videos are saved into SD card according to the default setting FAT16.

5.4 Photograph File Format

Camera saves photos and videos into SD card. The photograph format is sy000001.jpg; video format is sy000001.asf.

5.5 Information Displayed on Recording Files—photos and videos

Photo—icons display on screen are, LOGO, Week, Year/Month/Day, Hour/Minute/Second, temperature, and day or night scene.

Video—icons display on screen during video play are, LOGO, Week, Date, Time. The format is as following, Logo Fri. Jan. 01/2011 12:01:01.

5.6 Battery power is not enough, camera will inform user—indicating light will flicker quickly or blue light will turn on.

5.7 System Upgrade:

upgrade system via SD card, or connect camera to computers through USB to upgrade.

6. Factory Default Settings of 2.0C Series

NO.	MENU Setup	Default Set
1	Camera Mode	Camera
2	Digital Zoom	1X
3	Image Size	12M
4	Capture Number	1
5	Video Size	720
6	Video Lengs	5s
7	Audio Recording	Yes
8	Interval	0s
9	Video Frames	30fps
10	Time Stamp	Yes
11	Set Clock	01/12/2010 .12:01:01
12	Senser Level	Normal
13	IR LED	Yes
14	Format	NO
15	TV Out	NTSC
16	Language	English
17	Time Setting	NO
18	Default Set	NO
19	Frequency	60Hz
20	GPRS Mode	OFF
21	GPRS Setting	NO
22	Send To	NO

As if you want to check the settings, please press MENU in TEST mode to enter menu. If there are any settings you want to change, please follow the steps mentioned above to reset step by step.

7. Technical Specifications

Video	
Image Sensor	5 / 8 / 12 Mega Pixels Color CMOS
Effective Pixels	2592x1944
Day/Night Mode	Color during day / B&W at night
Minimum Illumination	0 Lux (IR on)
White Balance	Automatic
Infrared Cut Filter	Yes
Lens	F=3.0; FOV=52° ; Auto IR-Cut-Remove (at night)

Viewing Angle	PIR: 105; Max View:52°
IR-Flash	Yes / No / 8M
PIR Sensitivity	PIR with 3 sensitive level: High / Normal / Low
GPRS	
GPRS	Support Mobile, Email receiving images by motion trigger
	Also support mobile visit the GPRS(not available now)
MMS Cell Phone	0-4 Mobile Phone Number
MMS Email	0-4 Email address
Recording	
Video Format	H.264;
Video Resolution	720x480; 640x480; 320x240
Video Frame Rate	15 or 30 FPS (.asf)
Video Length	1-60sec. programmable
Still Image Format	JPEG
Still Image Resolution	12MP (4000x3000); 8MP (3264x2448); 5MP (2592x1944)
Multiple Still Image Capture	Yes (3)
Image Overlays	Date/Moon Phase
Record Delay Range	5 seconds~60 minutes 59 seconds
Night Vision	
Night Vision Distance	0-15m
Number of Infra-Red LEDs	26pcs
General	
Audio Recording	Available
Operation Power	6V DC
Battery Type	8AA
Auto Power Off	automatically power off in 1min without any operations
Time Stamp	format series NO., temperature, and moon icons
Timer Setting	On/Off, Available
Interface	TV out (NTSC, PAL); USB; SD card holder;
Indoor / Outdoor	Outdoor
Memory Type and Size	SD Card up to 32G
Display	2.4" Color viewer LCD
Language	English
Sensor Type	PIR (Passive Infrared)
Sensor Range	0-15m
Sensor Trigger Speed	0.8-1 s
Operating Temperature	-25°C to 60°C (Storage temperature: -30 °C to 70°C)
Operation Humidity	5%-90%
Waterproof spec	IP54
Dimensions	14.5x11.6x7.8cm
Weight	240g
Certification	CE FCC RoHs

8. Trouble Shooting

2.0C series Camera won't power on

1. Make sure that you have installed at least 4 batteries in the battery compartment all stacked together.
2. Make sure that the batteries are installed correctly.
3. When moving the switch from "Off" to "Test" or "On", the user should make sure that the switch stops in a positive position to ensure the proper mode (and do not move the switch too fast).

a. the voltage should be between 4.5V and 6.5V;

b. in Test mode, camera will automatically power off if there is no operation in 1 minute.

4. Make sure batteries power is enough; or else, camera may power off suddenly when IR leds is on in TEST mode.

2.0C series hunting camera stops sending photos to email or mobiles.

1. Check if the SIM card is out of charge.
2. Check SIM card MMS function with mobile phone.
3. Check if the signal is too weak or there is no signal.
4. Make sure the GPRS setting is right (check the manual)

2.0C series hunting camera stops taking images or won't take images

1. Please make sure that the SD card is not full. If the card is full, the camera will stop taking images.
2. Check batteries to make sure that they are new alkaline or lithium AA batteries.
3. Make sure that the camera power switch is in the "On" position and not in the "Off" or "Test" modes.
4. When GPRS function is on, **there will be 1 minute interval before camera shooting the next photo.** Turn off the GPRS, camera can shoot photos continuously.
5. Please format the SD card with 2.0C huntingcam before using or when camera stops taking images.

Photos Do Not Capture Subject of Interest

1. Check the "Sensor Level" (PIR sensitivity) parameter setting. For warm environmental conditions, set the Sensor Level to "High" and for cold weather use, set the sensor for "Low".
2. Try to set your camera up in an area where there is not a heat source in the camera's line of sight.
3. In some cases, set the camera near water will make the camera take images with no subject in them. Try aiming the camera over ground.
4. Try to avoid setting the camera up on small trees that are prone to being moved by strong winds.
5. Remove any limbs which are right in front of the camera lens.

9. Available Models, IR LEDs, and Case Colors

1. Two different models with the same case:

Non-GPRS model: 2.0C;
GPRS/MMS model: 2.0CM.

2. IR LEDs:

- 1) visible 850nm IR LEDs:** up to 50 feet flash range;
application: animal hunting, event observation.
- 2) invisible 940nm IR LEDs:** flash light is invisible to human naked eyes;
application: instant surveillance for anti-theft and anywhere invasion evidence needed.
- 3) LEDs color:** transparent/dark blue

3. Case Color: Black and camouflage



10. Limited Warranty

With great pride and full confidence in our products, we always keep our words which are given to our customers as specified warranty terms and service below. Based on a strict QC system, we initially offer all our customers [one year long time limited warranty](#), come along with selectable

chargeable [renewal policy of warranty as one, two, three, or four years](#).

Our products are warranted against defects in materials and workmanship for a period of one year from the date of original purchase. If a defect exists, we will, at our option and to extent permitted by law will (1)repair the product at no charge using new or refurbished parts; (2)exchange the product with a functionally equivalent product that is new or refurbished. Provided the product is returned freight charge paid.

This warranty excludes damage resulting from abuse, accident, modifications or other causes that are not defects in materials and workmanship, or by someone other than our authorized technicians. This warranty only covers failures due to defects in materials or workmanship under normal usage.

To obtain warranty service, please contact us to determine the nature of problem before return the product under this warranty(with a written description of the problem and print samples) for repairing or exchanging.