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DENVER[®]

Wild Camera

DENVER HSC-3004

Instruction Manual

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1. Instructions

1.1 General Description

This digital trail camera is a surveillance camera working automatically. It can be triggered at once by any movement of human (or animals) in a certain region of interested (ROI) monitored by a high sensitive Passive Infrared (PIR) motion sensor, and then automatically captures high quality pictures (up to 8M pixels) or records FHD video clips (WVGA or QVGA).

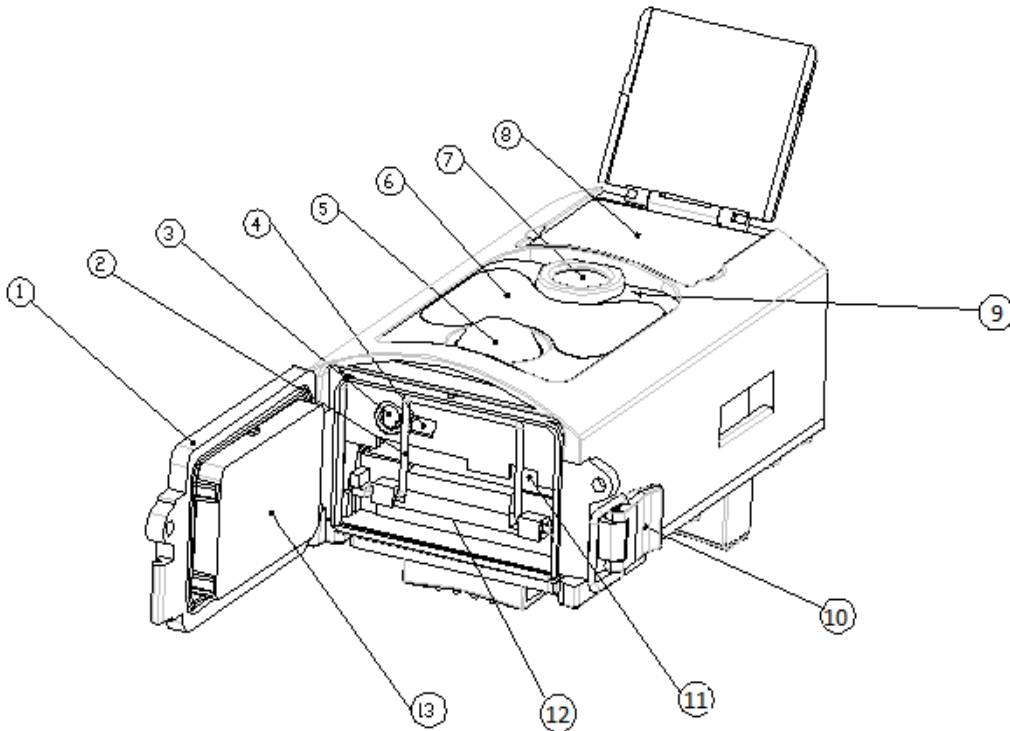
At sunrise the unit begins to take color photos and video until there is insufficient light (dusk) when it begins to take infrared (monochrome) photos and video. It is easy to use, there is a 2.0 inch colorful LCD display on camera. It is resistant against water and snow for outside uses.

1.2 Camera Body Interface

The camera has the following I/O interfaces: USB connector, SD-card slot, TV output.

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

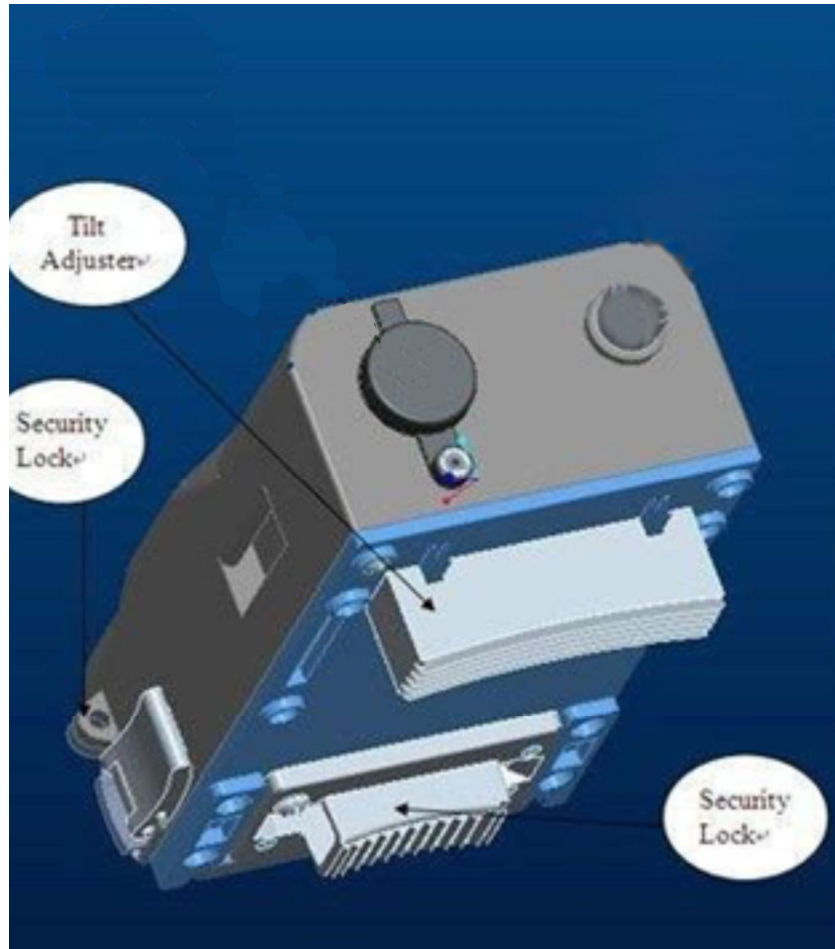
1.3 Camera components and features



- | | |
|---------------------|-----------------------------|
| 1) Bottom Cover | 8) 2 inch color LCD Display |
| 2) SD-Card Slot | 9) Sound recorder |
| 3) USB Connector | 10) Lock |
| 4) TV Out connector | 11) Power switch |
| 5) PIR | 12) Battery Depot |
| 6) Infrared Flash | 13) Portable remote control |
| 7) Lens | |

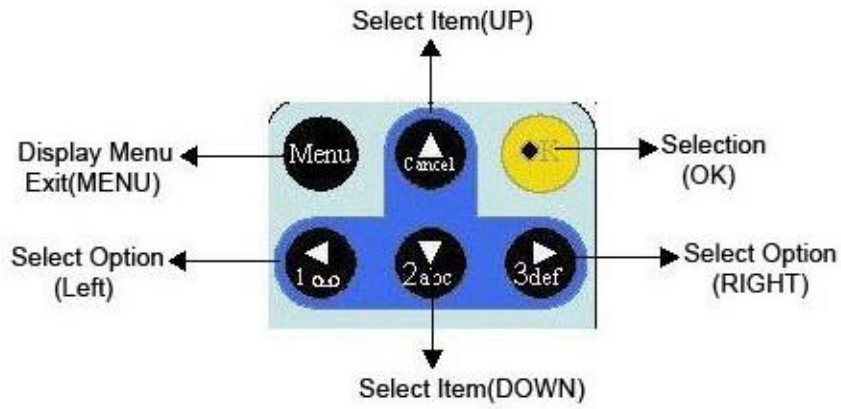
1.4 Remote Control

The remote control is an input device of the camera and is primarily used for customer settings and password input. This is an infrared type wireless remote control. The maximum remote distance is 9 meters. There are fifteen buttons on the remote control. (Note: Remote control is inside of the camera.)



1.4.1 Navigating

Press UP or DOWN to select or highlight the menu item, while press LEFT or RIGHT to select the option of each item and press OK to make selection.



1.5 Wallmount's Function & Installation

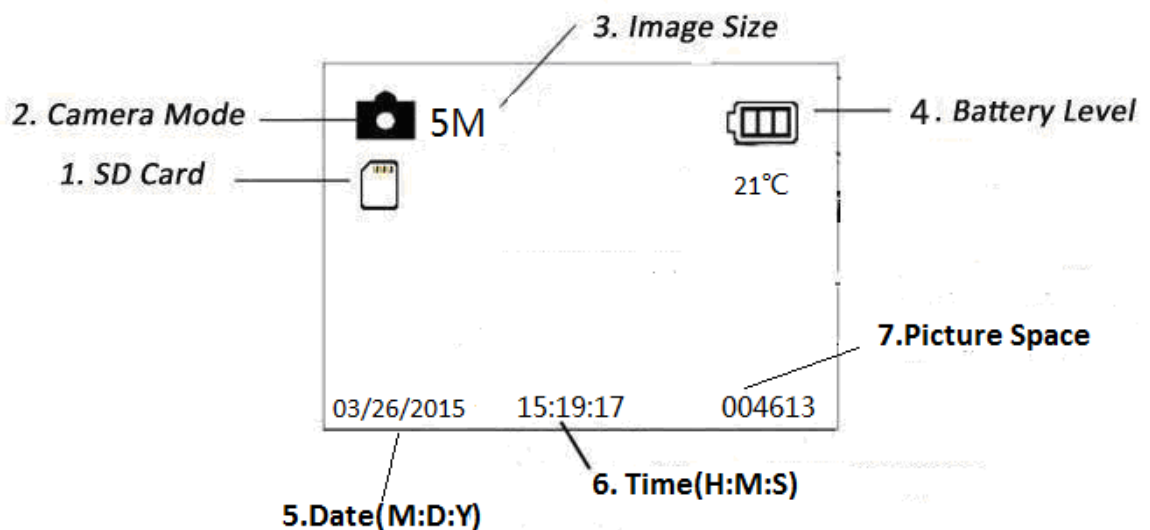
This wallmount is for camera to set in house. It can support 10kg and do the level of 360° rotating and 90° vertical turn

After selecting suitable vertical angle, please fix with turning strips. then settle down wallmount on wall with three screws. Please make srcew hole at camera button connected with threaded stud at wallmount top.



1.6 Shooting Information Display

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



1.7 Supported Format

Item	Format
Photo	JPG
Video	AVI
File Format	FAT32

Here are some important notices. You don't need to concern about the file system format of the camera unless you have problems with reading the SD-card by your other equipment. If this happened, please format the SD-card in the camera or in a computer at first and then reinsert the card into your camera to make a try.

2. Cautions

The working voltage of the camera is 6.0 V. The camera is supplied by four or eight AA batteries.

Please unlock the write-protect before inserting the SD-card.

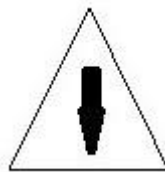
Please insert the SD-card when the power switch is at OFF position before testing the camera.

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

It is recommended to format the SD-card by the camera when used at the first time.

The camera will be in USB mode when connected to a USB port of a computer. In this case, the SD-card functions as a removable disk.

Please ensure sufficient power when having firmware upgrade, otherwise the upgrade process could be interrupted incorrectly. If any fault occurs after improper upgrading process, the camera may stop function properly.



3. Easy Operation

3.1 Power Supply

To supply power for the camera, four or eight AA size batteries are needed. Open the bottom cover. Confirm that the power switch is at the OFF (Right) position, pull out the battery depot. Load the fully charged batteries into the depot according the polarities sign shown below. Push back the battery compartment to the battery chamber.

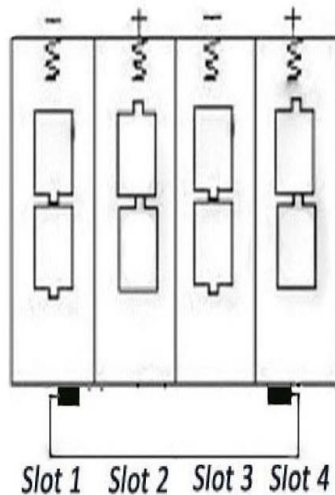
The following batteries with 1.5V output can be used:

1. High-density and high-performance alkaline batteries (Recommended)
2. Rechargeable NiMH batteries

There are four battery slots. Slot 1 and 2 form one group ("1" will mark on depot), while slot 3 and 4 form the other group ("2" will mark on depot) where each group can supply the power individually.

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-battery state, camera will be also automatically shut down. Please change the batteries in time.



3.2 Insert the SD-card

Insert SD-card into the card slot with marked side upwards.

Please note that the SD-card can only be plugged in one direction. Make sure that the write-protect switch of the SD-card is on the “write” position.

3.3 Power on and Enter into the ON Mode

Before switching on, please pay attention to the following:

1. Avoid temperature and motion disturbances that could be construed as animals or humans such as trees that are exposed to direct sunlight for much of the day or any other heat source. These may cause false triggers.
2. The height from ground for placing the camera should 1 meter with the object. For example for deer waste height is good size appropriately. In general, one to two meters are preferred.

Slide the power switch to the ON position to power on the camera and enter into the ON mode.

After switching on the camera, the motion indication LED (red) will blink for about 15s. The 15s is a buffering time before automatic capturing photos or videos, e.g. for closing and locking the bottom cover, fixing the camera on a tree and walk away.

In ON mode, the camera will take pictures or videos automatically according to the default settings or previous custom settings. The camera has the sound recording function, so the sound will be embedded in the video clip while capturing a video.

3.4 Enter into the TEST Mode

Slide the power switch to the TEST position to enter into the TEST mode. There are some functions in TEST mode: Custom settings, manual capture, preview.

3.4.1 Custom Settings

Press the MENU switch to enter into menu setting. The camera can be taken over control to manually customize the camera settings which display on the camera or external TV monitor. The detailed operations will be described in “Advanced Operations” chapter.

3.4.2 Manual Capturing

You can press OK to manually capture photos or recording video.

3.4.3 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.

Turn right the select switch to view images, the latest image will be shown in the LCD screen on camera or TV monitor. Press UP to view the previous image and press DOWN for the next. The detailed operations like deleting images or videos will be described in “Advanced Operations” chapter.

3.5 Power Off

Slide the power switch to OFF position to power off the camera. Please note that even in the OFF mode, the camera still consumes certain power at μA level. Therefore, please remove the battery if the camera will not be used for a long time.

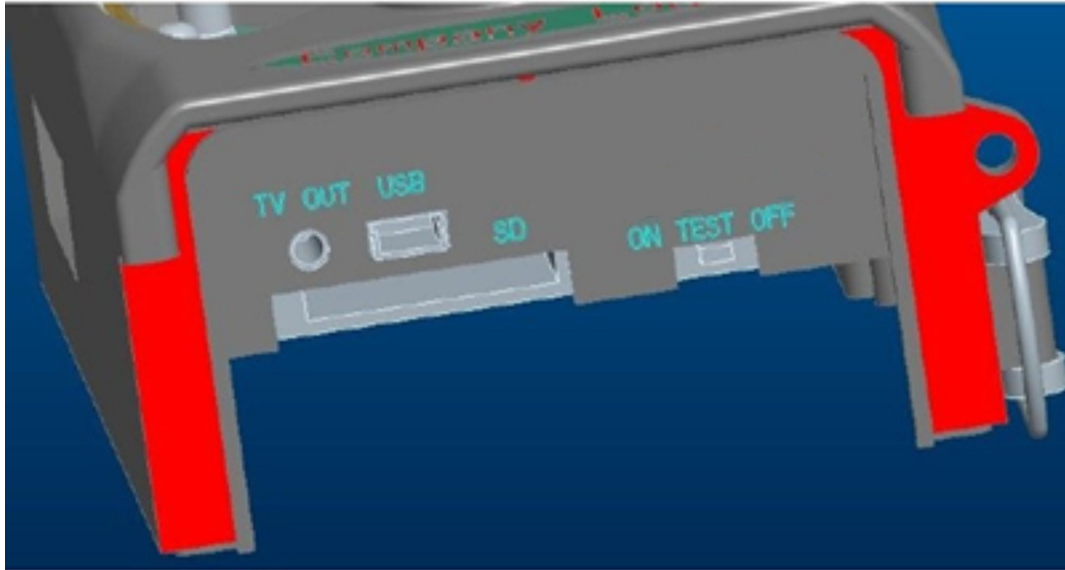
4 Advanced Operations

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

1. OFF mode: Power switch is at OFF position (Right).
2. ON mode: Power switch is at ON position (Left).
3. TEST mode: Power switch is at TEST position (Middle).

In the above three modes, the OFF mode is the specified safe mode when replacing the SD-card or batteries and transporting the camera.

This chapter explains the advanced operations for customizing the camera settings. The settings can only be customized in TEST mode and the remote control is needed.



4.1 Settings Menu

To view the camera settings menu, press MENU in the TEST mode (called settings menu in this chapter). The settings menu will be shown on the LCD on camera or the external TV monitor.

4.1.1 System Setting

Setting		
Mode	→	Camera Video Camera+Video
Language	→	English Francais Deutsch Espanol Russian
TV mode	→	NTSC PAL
Date/Time	→	Month/Day/Year Hour/Minute/Second
NO.	→	CAM000
Timer	→	0:00:00 23:59:59
Format	→	All data will be deleted Cancel OK
Password	→	OFF/ON
Default	→	Cancel OK
Version	→	

4.1.2 Camera Setting

Camera		
Resolution	→	8MP 5MP 3MP
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	→	AUTO 100 200 400

4.1.3 Video Setting

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

4.1.4 Default

Default Settings are listed as below:

Setting	Default	Items
Mode	Camera	Camera, Video, Camera&Video
Resolution (Camera)	5mp	8MP,5MP,3MP Interpolated
Interval	1 Seconds	5-30 Seconds,1-30 Minute
Multi	Single	Single,3,6,9 Pictures
ISO	auto	100,200,400
Resolution (Video)	1080P	1080P,720P,WVGA,QVGA
Video Length	10s	10s,30s,60s,90s
Date/Time	Same as last time	YY/MM/DD,MM/DD/YY,DD/M M/YY Adjust
Language	English	English, French, Germany, Spanish and Russian
Timer	0 0 0 to 23 59 59	Adjust
Format	Internal Memory	Internal Memory, SD Card
TV Mode	NTSC	NTSC,PAL
ID	CAM000	0-Z , Adjust
Password	Off	Off, On

4.1.5 General Settings

The operating steps are suitable for following menu items: Camera Mode, Photo resolution, Video Resolution, Multi, Video Length, Interval, and Timer.

4.1.6 Set Camera Mode

There are three camera modes: Camera, Video and Camera + Video. The way to set the camera mode is via setting menu.

The following shows how to set camera mode to Video, provided that the previous option is Photo:

- Press MENU and RIGHT twice to display the setting menu.
- Press DOWN to select Mode.
- Press OK and DOWN to select Video.
- Press OK the select switch to save the current setting.

4.1.7 Format SD-Card

The system will delete all images or videos stored in the SD-card after formatting, make sure that you have made a backup of important data.

- a) Press MENU to display the setting menu.
- b) Press RIGHT twice to select System setting.
- c) Press DOWN until to select Format.
- d) Press OK and DOWN to select OK. OK will be highlighted
- e) Press OK to start formatting the SD-card. During formatting, the display screen will show a message “Please Wait” as below.

Please Wait!

4.1.8 Set Photo Size

This parameter has three values: 8MP, 5MP and 3MP. The default one is 5 mega pixels. The following shows how to set pixel size as 5M Pixel:

- a) Press MENU to display the setting menu.
- b) Press DOWN to select Resolution.
- c) Press OK to select Pixel.
- d) Press DOWN the select 5MP, press OK to save the current setting, then press menu to return to info display.

4.1.9 Set Video Size

This parameter also has four values: 1080P, 720P, WVGA, QVGA.

The default value is 1080P, the following shows how to set 720P video size:

- a) Press MENU and RIGHT to display video setting.
- b) Press DOWN to select Resolution.
- c) Press OK, then down to select 720P.
- d) Press OK to save the current setting, then press menu to return to info display.

4.1.10 Set Date and Time

You can change the date and time of the device when necessary, e.g., after every battery change. The date format is year/month/day, the time format is hour: minute: second. The valid value for year is between 2014 and 2050.

Provided that the date and time are needed to be set to November 15th, 2014 and half past ten, the steps are as following:

- a) Press MENU to display the setting menu.
- b) Press RIGHT twice to enter into setup
- c) Press DOWN till to select Date/Time.
- d) Press OK to Display Date/Time Interface, Press UP and DOWN to change the digit. Press LEFT and RIGHT to slide to nex item
- e) Press OK to save all current setting, then press MENU to return to info display.

4.1.11 Set Multi

This Item affects the number of pictures per each triggering in the camera or camera+video mode. It has four options: “Single”, “3 Pictures” “6 Pictures” and “9 Pictures”. Its default setting is “Single”. The following shows how to set photo multi to 3 Pictures, provided that the previous option is 1 Photo:

- a) Press MENU to display the setting menu.
- b) Press DOWN until to select Multi.
- c) Press OK and DOWN to select 3 pictures.
- d) Press OK switch to save the current setting, then press MENU to return to info display.

4.1.12 Set ISO

This menu could only help you get a better photo at night, there are 4 values: AUTO,100,200,400. default setting is AUTO

- a) Press MENU to display the setting menu.
- b) Press DOWN until to select ISO

- c) Press OK and DOWN switch to save the current setting, then press MENU to return to info display.

4.1.13 Set Video Length

The following shows how to set video length to 30 Seconds, provided that the previous value is 10 Seconds:

- a) Press MENU to display the setting menu.
- b) Press RIGHT and DOWN twice to Video Length.
- c) Press OK switch to enter, then press DOWN to select 30s.
- d) Press OK to return to info display

4.1.14 Set Video Sound

The following shows how to turn off the sound of the video:

- a) Press MENU to display the setting menu.
- b) Press RIGHT and DOWN three time to select Voice.
- c) Press OK switch to enter and Press UP, then press OK to save
- d) Press menu to return to info display.

4.1.15 Set Interval

This parameter means that how long taking picture/video will be disabled after each trigger in ON mode. During this time the PIR of the device will works all the time. The minimum interval is 1 seconds. The maximum interval is 30 minutes. The default value is 1 seconds.

The following shows how to set PIR Triggering Interval Time as 5 seconds provided that previous option is 1 second.

- a) Press MENU to display the setting menu.
- b) Press DOWN twice to select Interval.
- c) Press OK to enter in to the interval setting.
- d) Press DOWN to select 5 seconds.
- e) Press OK switch to save the current setting, then press MENU to return to info display.

4.1.16 Set Timer

This parameter defines a certain camera working time in a day. In the rest of the time the device is shut off. The effective value of the hour ranges from 0 to 23 while the minute ranges from 0 to 59.

Provided that the camera should work from eight a.m. to five p.m., the steps are as follows:

- a) Press MENU to display the setting menu.
- b) Press RIGHT twice and DOWN until to select Timer.
- c) Press OK to select item, press UP or DOWN to change the value until the start time changes to 8:00 and the stop time changes to 17:00.
- d) Press OK switch to save the current setting, then press MENU to return to info display.

4.1.17 Enter Password

If the password setting is selected as On, after switching on the camera, the LCD screen on camera will prompt to enter password. The default password is off. It can be changed where the steps are as following:

- a) Press MENU to display the setting menu.
- b) Press DOWN until to select Password.
- c) Press Up to select ON, then press Right to select 4 numbers as password.
- d) Press OK to save the current setting, then press MENU to return to info display.
- e) The LCD screen will prompt to enter password next time you switch on the camera.

4.2 Playback

In playback mode, images or videos can be viewed, deleted. The images and videos can be viewed on: LCD screen on camera and TV monitor which connect to camera with TV cable. For simplicity, operations with PC won't be introduced here.

4.2.1 Viewing Photo or Video

- a) Switch to TEST mode and enter into info display.
- b) Press RIGHT the select switch to view the latest picture (or video) in LCD screen on camera, TV monitor or Image viewer with TV-in connector.
- c) Press LEFT to start playing the video when viewing.
- d) Press LEFT again to stop playing the video.
- e) Press UP to view the previous picture (or video) and DOWN for the next.
- f) Press OK to return to info display.

When viewing images, the total number of all images in the SD-card and the index of the displaying image will be shown respectively.

4.2.2 Delete All Photo or Video

The operations are as following:

- a) Press Right to display Photos and Videos.
- b) Press Menu,DOWN to select Delete.
- c) Press OK to select delete all or cancel
- d) Press OK, Cancel and OK are prompted.
- e) Press DOWN to delete the image or video.

Please wait	No Flie
-------------	---------

Press cancel to cancel, then press OK to return to info display.

Please note that after deleting a picture or a video file, the deleted files can't be restored! Furthermore, in order to delete all the images and video clips in the SD-card, it is suggested to format the SD-card

4.3 Firmware Upgrade

This camera is equipped with an automatic upgrade function for you. Upgrading is needed only when an improved firmware is available. The operations are as following:

1. Unzip the update file.
2. Copy the bin file to SD card.
3. Insert the SD card into the camera.
4. Power on the camera (Test Mode).
5. The camera will read it and update itself automatically. When updating the camera, its screen is black.
6. The screen will light on after being finished.
7. Plug out the SD card, then insert it into pc, delete the FW18NA.bin in the SD card (If you don't do this, the camera will enter update mode when power on again).
8. Insert the SD card into the camera for its working.

Appendix I : Technical Specifications

Image Sensor	3 Mega Pixels Color CMOS
Memory	SD Card to 32GB
Lens	F=3.1; FOV=120 °
Size	145mm * 80mm * 55 mm
IR Filter	Full Automatic IR Filter
TFT Display Screen	2.0 inch
LED	Black Invisible 940nm
PIR Distance	High/Normal/Low
PIR Sensor Sight Angle	120 Degrees
PIR Sensing Distance	65ft(day)
Number of IR LED	48 LEDs
Max Night Vision Lighting Distance	65ft/20 meters
Trigger Speed	1.0second
Triggering Interval :	1 second ~ 30mins (default 1 sec)
Selectable Image Resolution:	8MP/5MP/3MP
Multiple Photo on one detection	1/3/6/9
Video Resolution	1080P/720P/VGA
File Format	JPEG/AVI
Date Time Imprint	Yes
Exposure:	Auto
Password Security	4 digital PIN code
Periodic shot	1Second~24Hours
Stand-by current	0.2mA
Stand-by time	6 Months
Interface	TV out (NTSC/PAL); USB; SD Card Holder; 6V DC External
Fix Method	Belt, Tripod Nail
Operation Temperature	-10 ~+70°C/-22~+158°F
Power Supply	8×AA battery or 4× AA battery
Camera Socket	Yes
Water proof	IP54
Security authentication	CE, FCC,RoHS,REACH

Appendix II : Parts List

Digital Camera*1	Wireless controller*1
USB Cable*1	TV cable *1
Strap*1	Belt *1
Wall Mount*1	English manual *1
German manual*1	QSG *1

Please note, that this is not an error with the Camera:
Heavy rain, fog and drizzle (in the dark) will give white photos without motive

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

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

All cities have established collection points, where electric and electronic equipment 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.

Please fill the blank with the model number of this player for future reference

Importer:
DENVER ELECTRONICS A/S
Stavneagervej 22, DK-8250 EGAA, DENMARK
www.facebook.com/denverelectronics