Trail Cameras
VSD8210A and VSD8210B

USER'S MANUAL

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GENERAL INFORMATION

1.1 Introduction

The VSD8210A & B trail camera (also called game camera/ hunting camera) is a scouting device. It can be triggered by sudden change of ambient temperature caused by moving game in a region of interest, which is detected by a highly sensitive Passive Infra-Red (PIR) sensor, and then take pictures or video clips automatically.

The Feature:

- 12/10/8/5 Mega Pixels CMOS sensor.
- Built-in 2.5" TFT color display to review images and videos
- Unique side Prep Sensor design provides wider sensing angle and enhances camera's response speed
- Saves the day photos and videos in color, record with sounds
- Optical filter can filter away the glare during daytime
- Zoom in/out picture when you check it
- Impressively quick trigger time (1 second)
- Date, time, temperature and moon phase can be imprinted in every photo
- Programmable to work as Time-Lapse camera taking pictures/video in long range day and night
- When Timer setting on, programmable to only work in specified period every day. This feature can be used together with Time Lapse feature to meet your

- timetable
- Laser light makes the camera focus to the optimal point
- Ultra low standby power consumption .Extremely long in- field life(in standby mode ,up to more than 4 months
- with 4 x AA batteries and 8 Months with 8 x AA batteries)
- Multi-shot of Single, Camera+Video, 3 pictures, 5 pictures
- Sharp and bright color photos in daytime and clear black/white photos at night
- Unique side Prep Sensor design provides wider sensing angle and enhances camera's response speed
- Compact size. Well designed to deploy covertly
- Serial Number function enables you to code locations in the photo. This helps multi-camera users identify
- The location when reviewing the photos
- Password protected

1.2 Application

. Trail camera for hunting
.   Animal or event observations
. Motion-Triggered security camera, for home, office and community
. All other indoor/outdoor surveillance where invasion evidence needed

1.3 Illustration

LED IR Flash

Low battery Indicator

Lens

Prep PIR Sensor

Light Sensor

Laser Light

OFF/ON Laser Light

Main PIR Sensor

Lock Hole

The laser button can help users to confirm the fixed angle of the camera. You should only put the laser key in front of the camera(as shown), the direction indicated by the red light beam is the front of the lens.

SD card | video/photo | TV out
ON/TEST/OFF | USB port

The camera provides the following connections for external devices: USB port, SD card slot, TV out jack, and external DC power in jack .The 3-way Power/Mode Switch is used to select the main operation modes : OFF , ON and TEST.

To supply power, it is recommended to use four new high-performance alkaline AA batteries or low self-discharge Ni-MH chargeable AA batteries. To achieve longer in- field time, install the additional battery box which contains four more AA batteries.

Quick Start

2.1 Load Batteries

Install 4 AA batteries or 8 AA batteries.

2.2 Insert SD Card

The camera comes with 32M internal memory.

Before inserting the SD card into the card slot, please make sure the write-protect switch on the side of the SD card is "off"(NOT in the "Lock " position).The supported memory capacity is up to 32GB . If you use a card capable of above 32GB, make sure you test it before putting the camera in use.

CAUTION: ALWAYS SWITCH THE CAMERA TO OFF MODE BEFORE YOU INSTALL OR REMOVE THE BATTERIES OR THE SD CARD.

Function Switch

There are three positions for the switch: OFF, ON and TEST. They each correspond to three different modes of the camera. When batteries need to be changed or when the device is not in used, it should be at the OFF mode.

2.3 Enter Test Mode

Moving the switch to the TEST position would set camera to the preview testing mode. When the device is in this mode, you can manually take pictures, videotape, view existing photos and videos,

and adjust the parameters just like using an ordinary camera.

There are three scenarios in the testing mode, and they are: 1) the preview mode, where you can see the scenes directly in front of the camera lens from the TFT LCD screen or the TV, 2) the setting mode, where the menu is shown, and 3) the playback mode, where you can view existing photos and videos that are stored in SD card from the TFT LCD screen or the TV. The camera automatically enters into the preview mode when it is first set in the preview testing mode.

Switch to the TEST position to enter the TEST mode. In this mod you can take pictures or video clips like a regular digital camera, or enter the Menu to set up parameters. On the keypad there are four "Shortcut " function keys working as below :

Press the SHOT key to manually trigger the shutter.
A photo or video (depending on the camera setting) will be taken and saved to the SD card. If the display shows "CARD PROTECTED" when you press the SHOT key , switch the power OFF , remove the SD card and slide its write-protect switch to off

Press the OK key to review/ playback photos / videos on the

LCD screen, or a connected TV monitor. Use ▲ and ▼ key to navigate.

There is another key, MENU, on the keypad that allows you to program the camera to work the way you want. Please make reference to 3.1 Parameter Settings in the Advanced Operation section.

2.4 Enter ON Mode (Automatic Infrared Shooting Mode)

Moving the switch to the ON position would set the device in the Automatic Infrared Shooting Mode. There is a waiting time of about 30 seconds before the system adjusts to this mode, and during this period the red LED indicator light will keep flashing. After that the light extinguishes and the camera can start taking pictures by infrared inducement. Once the device is in this mode, there would be no need for any manual operations, and the camera will function automatically by taking pictures or videotaping the subjects such as animals, persons that enters a certain range.

The time interval, the record time can be set before the camera is put to work. The camera will automatically turn on when subjects (animals, persons) enters the area covered by the "PIR" on the left and right sides. Then it will take pictures or start videotaping once the subjects are in the range of the "PIR"。. If the subjects enter the range of the "PIR" directly, the camera will be in operation immediately. If the subjects leave the range of the "PIR", the camera would automatically shut down after a while.

PIR the advantages: General infrared camera to save power, usually only PIR part is working, photographic part is closed, when PIR detect the animals, it begin opens photographic parts supply, Then from the start photographic parts power to start take photo needs certain time, Our camera need 1 second. When an animal is fast across, will pass over the camera 's shoot range, which will have to take a photograph of no animal.

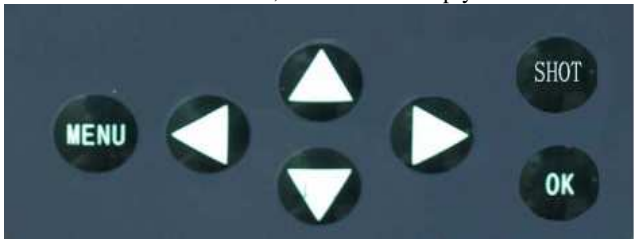Our preparation PIR can solve the problem. Our camera have

prepared PIR, its scope of induction is 100-120° Angle, a very wide range of induction, far outweigh 50° Angle of the camera lens, when the animals into the PIR is detecting range, photographic parts began power on and ready to shoot after 1 second, if animals go in " PIR" range (less the camera lens Angle), will soon, this time is almost negligible, rapidly across the animal able to photograph.

2.5 shortcut key

SHOT :　Under the TEST mode**,** press **SHOT** can take photo or video
MENU : Under the TEST mode**,** Press **MENU,** can set menu
OK: Under the TEST mode, Pres**s OK** can reply

The 7 keys from left to right are: "MENU" , "LEFT", "UP", "DOWN", "Right", "OK" and "SHOT". The key "SHOT" symbolize "SHOT", and they are shortcut keys.　when the key "SHOT" is pressed, a photo or video is take, and　"OK" is pressed, photos and videos can be reviewed.

Advanced Operations

Compared with ordinary cameras, our camera has more professional functions. The user can change the settings according to specific needs under the preview test mode.

3.1 Parameter Setting

Parameter	Settings (Bold= default)	Description
Mode	Camera Video	Select whether still photos or video are taken.
Format	Enter	All files will be deleted after formatting the SD card. Highly recommend you format the SD card if it has been used previously in other devices. Caution: make sure wanted files on the SD card have been backed up first!
Capture Mode	Single Camera +video 3 pictures 5 pictures	In Camera+Video mode, it can first take photo and then shoot video afterward. Select the number of photos taken in sequence per trigger in camera mode. Please also refer to the Interval parameter.
Photo size	5MP,8MP,12MP	Select desired resolutions for

(affects still photos only)		still photos from 5 to 12 mega pixels. Higher resolution produces better quality photos, but creates larger files that take more of the SD card capacity.
Video Size (affects video clips only)	HD 1280*720	Select video resolution (pixels per frame). Higher resolution produces better quality videos, but creates larger files that take more of the SD card capacity.
Video Time	15 sec 30 sec 60 sec 120 sec	Select desired video time for AVI format from 15S to 120S
PIR Sensitivity	High Middle Low	Select the sensitivity of the PIR sensor. The High setting suits indoors and environments with little interference, while the Normal/Low suits outdoors and environments with more interference. Temperature also affects the sensitivity. The High setting is suitable when the ambient temperature is warm, and the Low setting is helpful in cold weather.
Timer	OFF	Select On if you only want the

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	ON	camera to work within a specified time period every day. For instance, if the starting time is set at 18:35 and the ending time at 8:25, the camera will function from 18:35 the current day to 8:25 the next day. Outside the time period the camera will not be triggered or take photos/videos.
Serial No.	OFF ON	Select ON to assign a serial number to each camera you have. You can use the combination of 4 digits and/or alphabets to record the location in the photos (e.g. WT1 for Park).This helps multi-camera users identify the location when reviewing the photos.
Time lapse	OFF ON	If set On, the camera will automatically take photos/videos according to the set interval, regardless of whether the PIR sensor has detected any game. This is helpful when observing cold-blooded animals like snakes, or the process of flowering, etc.

Side PIR	OFF ON	The default setting is **On**. The two side prep PIR sensors provide wider sensing angle and detect more potential triggers. In some situations, you only want to monitor a narrow spot. Too many irrelevant triggers by the side sensors outside of that spot will keep the camera on and off, which drains the battery power rapidly. Or in some other situations you have difficulty removing the interfering branches, or avoiding the sunlight. If so, you have the option to turn off the side sensors.
Delay time	1s, optional from 1s to 1H59M59S	Select the shortest length of time that the camera will wait until it responds to any subsequent triggers from the PIR sensor after a game is first detected. During the selected interval, the camera will not take pictures/videos. This prevents the SD card from filling up with too many redundant images.

IR-LED	Day Night 24H	You can choose IR-LED work time.
TV OUT	NTSC PAL	You can choose TV system NTSC or PAL .
Date Stamp	OFF Date &Time	Select ON if you want the date & time ,temperature and moon phase can be imprinted in every photo .
Language	English Deutsch Suomen Francais Svenska	You can choose language which you need. We can add more languages.
Date & Time	MM/DD/YYYY	Set up date and time
Password Set	OFF, On	Set up a password to protect your camera from unauthorized users.

3.2 Replay

Under the TEST mode, pressing "**OK**" will display the
last photos or videos. Use ▲ and ▼ to playback the
photos or video . If it is a video clip, you can press ▶ to

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play, then press ▶ to stop playing.

When in 12MP camera, Photos can 16 times zoom playback, press ◀ zoom in and press ▶ zoom out, press ▶ view right photo and press ▼ view left photo; In this playback mode, pressing "MENU" will enter into the deletion menu, in which you have the options to delete the current picture/video or to delete all.

Select "OK" and then "Yes" to confirm deletes the file, or select "No" to keep it.

LIMITED   WARRANTY

We take great pride in our products. We always stand behind our promises. We provide a leading warranty term and service. Buying a our product, you are covered under a limited warranty.

We guarantee our products to be free of defects in materials and workmanship for a limited warranty of the original purchase date. This warranty does not cover consumer caused damages such as misuse, abuse, improper handling or installation, or repairs attempted by someone other than our authorized technicians.

We will, at our option during the warranty period, repair your camera or replace it with the same or comparable model free of charge. This warranty only extends to the original retail buyer from our authorized dealer. Purchase receipt or other proof of the date of the original purchase is required to receive warranty benefits. The warranty on any replacement product provided under the original warranty shall be for the remaining portion of the warranty period applicable to the original product.

This warranty extends solely to failures due to defects in materials or workmanship under normal use. It does not cover normal wear of the product.

If you need to return a product under this warranty, please contact your dealer or our distributor.

Appendix I. TECHNICAL SPECIFICATION

Model	Parameters
Image Sensor	12Mega Pixels color CMOS
Max. Pixel Size	3000*4000
Lens	F=3.1;OFV=52°;Auto IR-Cut
IR Flash	65 Feet/20 Meters
LCD Screen	2.5 inch
Operation Keypad	7 Keys
Picture Size	3000*4000 12M 3264*2448 8M ' 2592*1944 5M

Memory	32M , SD card (32M to 32G)
Laser light	Laser light makes the camera focus to the shooting range .Just put Magnet Key on front of camera
Video Size	HD 1280*720 20fps D1 720*480 20fps 640 640*480 20fps 320 320*240 20fps
PIR Sensing Distance	15M
Prep PIR Sensing Angle	Left and right light beams form an angle of 110°;
Main PIR sensing Angle	35°
Trigger Time	0.8-1 Second
Time lapse	1 sec—23H59M59S ;Programmable
Delay time	1 sec—23H59M59S ;Programmable
IR-LED mode	Day/Night/24H
Capture Mode	Single Camera +video 3 pictures 5 pictures
Video time	15 sec 30 sec 60 sec 120 sec
Timer	ON/OFF ; Timer set
Serial NO.	4 Digit NO.

Password	4 Digit NO.
Power Supply	4*AA; Expandable to 8*AA
Stand-By Time	4-8 Months(4*AA –8*AA)
Stand-by Current	0.2mA
Auto Power off	2 minutes while no keypad controlling
Power Consumption	150mA(+500mA when IR LED lights up)
Low Battery Alarm	4.3V
Interface	TV out ; USB; SD card slot; 6V DC External
Waterproof	IP54
Operation Temperature	-20 to +158℉/-30 to +70℃
Operation Humidity	5% -- 95%

Appendix II PACKAGE CONTENTS

Part name	Quantity
Digital camera	1
USB cable	1
TV AV IN cable	1
Strap	1
External DC cable (Optional)	1
Instruction Manual	1