

Dericam

User Manual

Model: H218W

Megapixel Indoor Pan/Tilt IP Camera



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1 Introducing Mega Pixel IP Camera H218W

Dericam Megapixel outdoor IR IP camera H218W is designed to meet the demands for High Definition indoor IP video surveillance in the DIY Home & SME & Small business security markets. This camera is specially designed to offer you a way to view what is going on inside your home, warehouse, shops or office.

Key Features

- 1/3" CMOS image sensor, 1.0 Mega pixels
- **Auto IR-LED illumination**
- **36pcs Φ8 IR LEDs IR Night vision range (up to 8 meters)**
- **Bundled with 32 Channel Surveillance Software**
- **User-friendly & Multi-lingual UI**
- Giving alarm in cause of motion detection
- Wireless networks connection (IEEE 802.11b/g/n)
- Support WEP/WPA/WPA2 encryption
- Control Panel add-in, i.e. snapshot, image setup, PT control
- Support Mac OS Safari browser
- Support iPhone through Safari browser
- Mobile Phone Streaming Live Video through Phone View APP
- Multi-level Password Protection for Restricting Camera Access
- DDNS, UPnP Supported
- H.264 video compression format

2 Package Contents

- | | |
|---|-----|
| ● IR IP Camera H218W | x 1 |
| ● Power Adapter 12V-2A | x 1 |
| ● Network Cable | x 1 |
| ● WiFi Antenna (Wireless Version H218W) | x 1 |
| ● CD-ROM with Setup Software and User Guide | x 1 |

3 Physical Descriptions



Fig3.1 Physical parts description



Fig3.2 Interface description

- 1-----DC Power Input Socket
- 2-----Reset Button
- 3-----RJ45 Ethernet Socket
- 4-----Audio Input Socket
- 5-----Audio Output Socket
- 6-----RS485 Socket

● 7-----Alarming Output/ Alarming Input

The alarm output socket is connected with a relay in the IP camera. IP camera will control the switch to trigger the alarm bell or buzzer to alarm. The relay is able to control the switch of an alarm whose voltage is no more than 36V, and current is lower than 2A. Please refer to the Figure 3.3 for the connection of an external alarm.

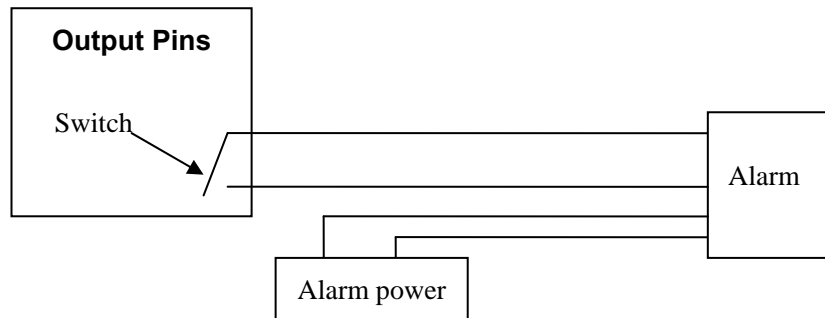


Figure 3.3

Please refer to the schematic Diagram of Figure 3.4 for how external detector collects alarm information.

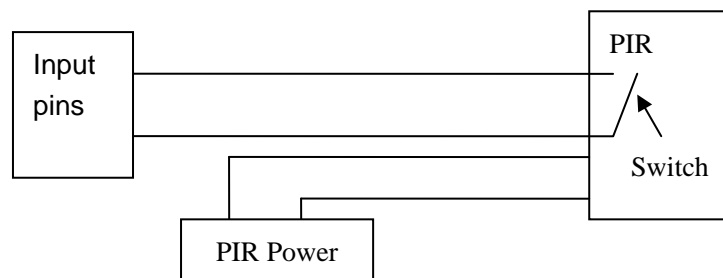


Figure 3.4

The detector should be switched type (always on or always off). If the detector has detected the smoke or people or animal to enter the area, the detector will switch on or switch off. And it will send the external alarm signal into the IP camera.

● 8---Analog signal output Socket

Supply BNC Female, can output AV signal, to connect analog signal device. **(This device does not support it)**

Note

Please never press reset button unless you have forget the password to login the camera.

4 Surveillance Software GUI

Please refer to the Quick Installation Guide if you install the camera at first time. After finishing quick installation, you can take time to learn the operation of the software.

4.1 Login Window

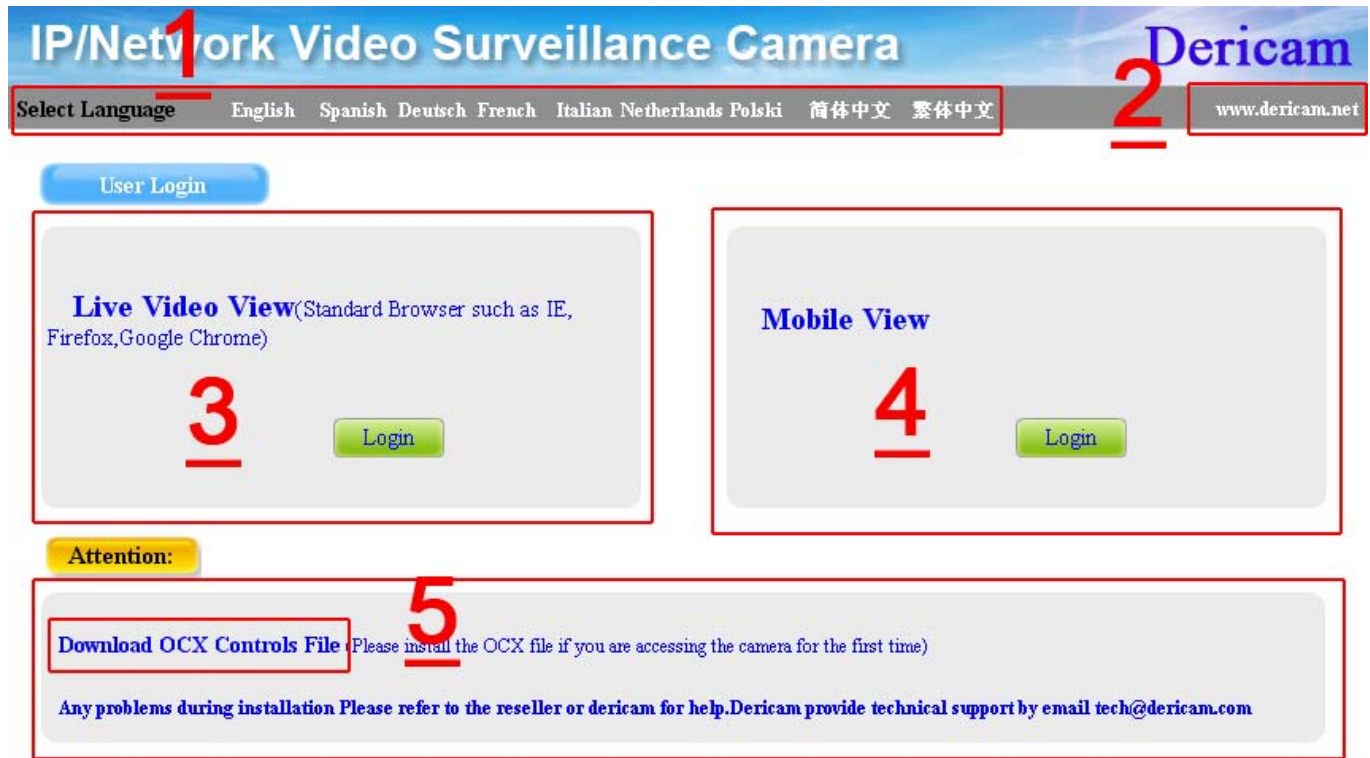


Fig4.1 Login window of Dericam H501W

Please check the login window above, it was divided to 5 sections from no. 1 to 5.

4.1.1 Section 1 Select Language

Dericam M series camera supports up to 8 languages, such as English, Spanish, Deutsch and so on. You can select the language you need via click on the select language bar to switch.

4.1.2 Section 2 Dericam Website Link

There is an access link to Dericam website homepage, if you need tech support you can contact Dericam directly.

4.1.3 Section 3 Live Video View

If you are using IE-based browsers like IE6, IE, IE8, and standard browser like Firefox, Google chrome, please choose Live Video View login method.

4.1.4 Section 4 Mobile View

If you are using mobile phone to access the camera, please choose Server Push Mode method.

4.1.5 Section 5 Note / Download OCX Controls

Please download the OCX and install it if you are access the camera for the first time. You can get tech support directly from the reseller where you bought Dericam camera or refer to our tech engineer for help. Dericam provide good after-sales tech support service to help customers complete the installation successfully.

4.2 Surveillance Window

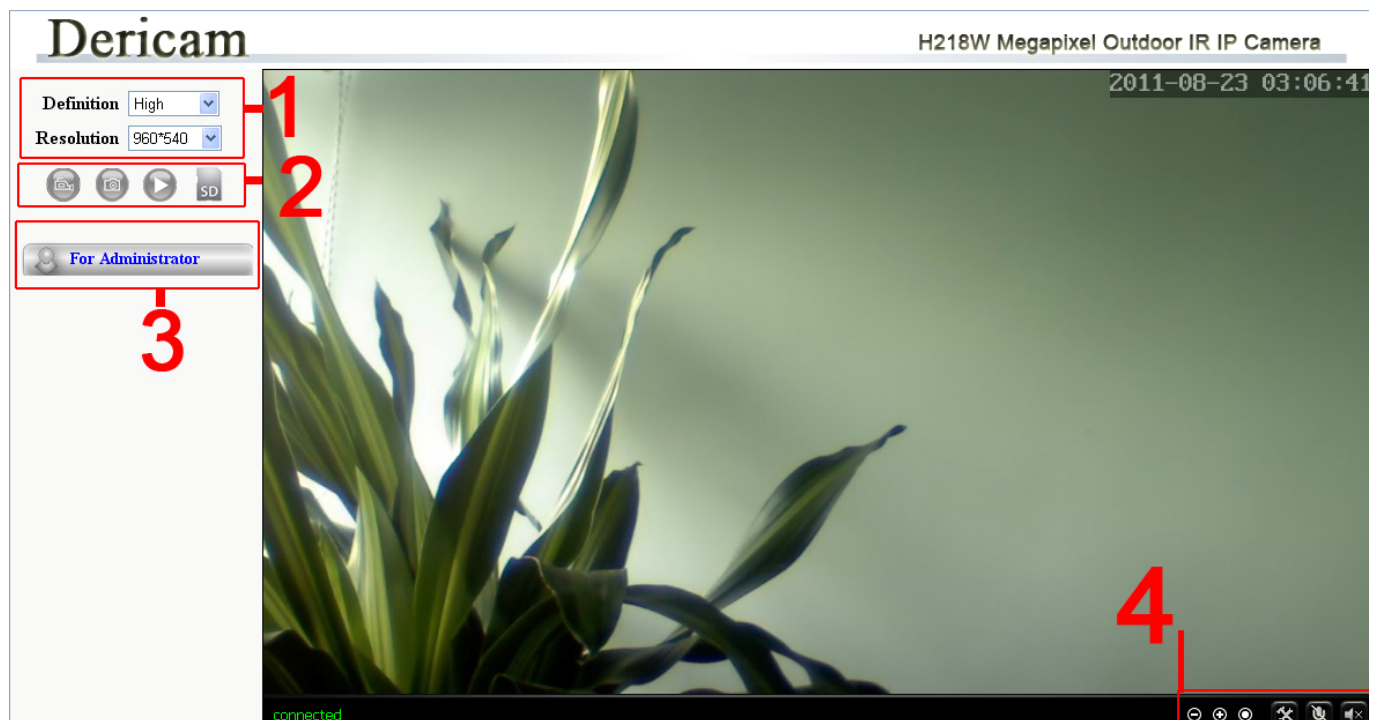


Fig4.2 Surveillance Window of Dericam H218W

Please check the surveillance window above, it was divided to 4 sections from no. 1 to 4.

4.2.1 Section 1 Definition /Resolution

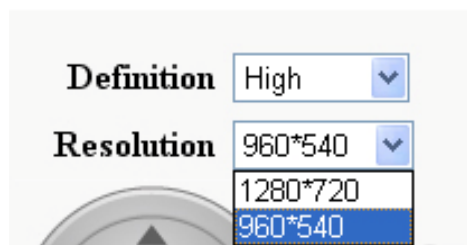


Fig4.3 High Definition options

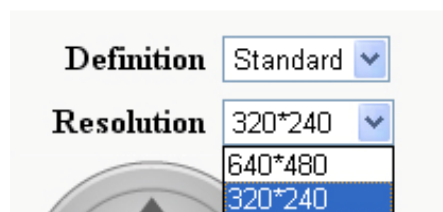


Fig4.4 Standard Definition options

There are two definition options, one is High Definition which has two resolutions 1280*720,960*540, and the other is Standard Definition which has two resolutions 640*480, 320*240. Please choose lower resolution if you want to get faster video stream, especially if you are accessing the camera via internet remotely.

4.2.2 Section 2 Record/Snap/Playback/SD buttons



4.2.3 Section3 For Administrator



For Administrator-----Path to Administrator Control Panel, Click it, and it will lead to Administrator Control Panel.

Dericam
H218W Megapixel Outdoor IR IP Camera

Device Info	Device Status	
Device ID	002fezs	
Network connection:	LAN	
Software Version	V1.4.0.1.3	
Mac Address	7c:dd:90:06:8e:42	
IP Address	192.168.8.138	
Subnet Mask	255.255.255.0	
Gateway	192.168.8.1	
Primary DNS	202.96.128.86	
Secondary DNS	202.96.134.133	
Start Time	2011-8-26 0:58:4	
SD Status	no devices	

[Browser SD Card ..](#)
[Format SD Card as fat32](#)
[Unplug SD Card](#)

Back

System Log

Access Log

Reboot Device

Restore Factory Settings

Backup & Restore Settings

Upgrade Device Firmware

Motion Detect Settings

Schedule Settings

External Alarm Settings

Alarm Settings

FTP Service Settings

Mail Service Settings

DDNS Service Settings

UPnP Settings

Snap Settings

Wireless Lan Settings

Basic Network Settings

Users Settings

Date&Time Settings

Display Settings

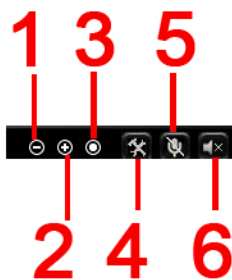
Video Settings

Audio Settings

Device Info

Fig4.5 Administrator Control Panel

4.2.4 Section 4 Digital Zoom & Record save path & Talk & Listen buttons



- | | |
|--------------------------|-------------------------------|
| 1-----Digital Zoom- out; | 2-----Digital Zoom+ In; |
| 3-----Original image; | 4----- Set recoding save path |
| 5-----Talk button; | 6----- Listen button |

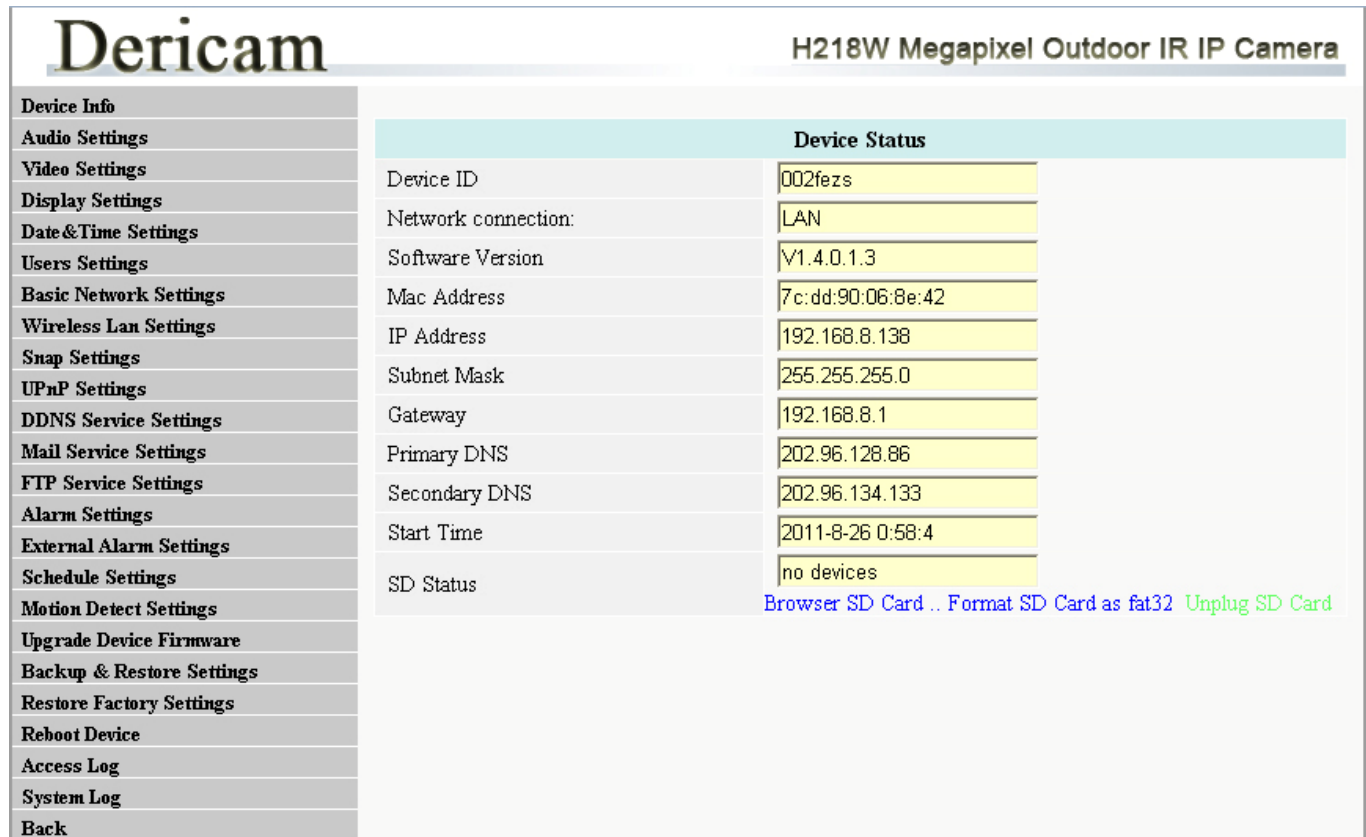
Note

For Advanced settings, please go to chapter five Advanced Camera Settings

5 Advanced Camera Settings

Click the bar “For Administrator”, goes to Administrator Control Panel to make advanced camera settings.

5.1 Device Information



Dericam H218W Megapixel Outdoor IR IP Camera

Device Status	
Device ID	002fezs
Network connection:	LAN
Software Version	V1.4.0.1.3
Mac Address	7c:dd:90:06:8e:42
IP Address	192.168.8.138
Subnet Mask	255.255.255.0
Gateway	192.168.8.1
Primary DNS	202.96.128.86
Secondary DNS	202.96.134.133
Start Time	2011-8-26 0:58:4
SD Status	no devices

[Browser SD Card ..](#) [Format SD Card as fat32](#) [Unplug SD Card](#)

Fig5.1 Device Information

Device ID	Factory Device name
Network Connection	LAN
Software version	Firmware version
Mac Address	MAC ID of the camera
IP Address	LAN IP address of the camera
Subnet Mask	Subnet Mask of the LAN network
Gateway	Gateway of the Router
Primary DNS	Primary DNS of the LAN network
Secondary DNS	Secondary DNS of the LAN network
SD Status	Browser SD Card or Format SD Card

5.2 Audio Settings

Dericam H218W Megapixel Outdoor IR IP Camera

Device Info

Audio Settings

Video Settings

Display Settings

Date & Time Settings

Users Settings

Basic Network Settings

Wireless Lan Settings

Snap Settings

UPnP Settings

DDNS Service Settings

Audio Settings

mode: MIC

High Definition

Audio Capture: ☒ Open ☐ Close

Audio Type: G.711

Standard Definition

Audio Capture: ☐ Open ☒ Close

Set Refresh

Fig5.2 Audio Settings

1---Mode

There are two modes, one is MIC, the other is Line-in. If you are using the build-in or external MIC to gather the sound signal, please choose MIC. If you are going to get signal from external audio gathering system (like sound pick-up), please choose Line-in.

2---Audio Capture

Open--- Enable Audio

Close--- Disable Audio

3---Audio Type

There are two types G.711 and G.726. G.711 bit rate is higher, but clearly, G.726 compression rate is higher.

5.3 Video Settings

Dericam H218W Megapixel Outdoor IR IP Camera

Device Info

Audio Settings

Video Settings

Display Settings

Date & Time Settings

Users Settings

Basic Network Settings

Wireless Lan Settings

Snap Settings

UPnP Settings

DDNS Service Settings

Mail Service Settings

FTP Service Settings

Alarm Settings

External Alarm Settings

Schedule Settings

Motion Detect Settings

Upgrade Device Firmware

Backup & Restore Settings

Restore Factory Settings

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Access Log

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Back

Video Settings

Frequency: 50HZ

High Definition: 720P(1280x720)

Baudrate: 4096 kbps

Frame Rate: 25

Key frame Interval: 50 (1-300)

Bit rate control: ☐ CBR ☒ VBR

Image quantity: 1 (select 1, the image quantity is best, bit rate is max)

Standard Definition: QVGA(320x240)

Baudrate: 512 kbps

Frame Rate: 25

Key frame Interval: 50 (1-300)

Bit rate control: ☒ CBR ☐ VBR

Image quantity: 1 (select 1, the image quantity is best, bit rate is max)

Time Stamp: ☒ On ☐ Off

Device Name: ☐ On ☒ Off

Device Name: IP Camera

Set Refresh

Fig5.3 Video Settings

1---Frequency

- 1) 50HZ -----Indoor surveillance (Region: Europe, China)
- 2) 60HZ -----Indoor surveillance (Region: USA, Canada)

There are two options within the menu of Frequency, 50HZ, 60HZ. It depends on the frequency of the electricity.

2----High Definition Parameter

You can specify stream, normally, high bit rate, higher image quality. But the frame rate need to setting according to the bandwidth, when bandwidth is narrow, if set high frame rate, the result will be worse.

You can set Max frame rate, when the bandwidth is limited, suggest set to lower frame rate. Normally, above 15fps the stream is smoothly.

3----Standard Definition Parameter

You can set higher frame rate if you are suing standard lower resolution.

4----OSD Time, Device name

Here you can set OSD information of the camera. Or you can change the camera name which displayed on the surveillance windows.

5.4 Display Settings

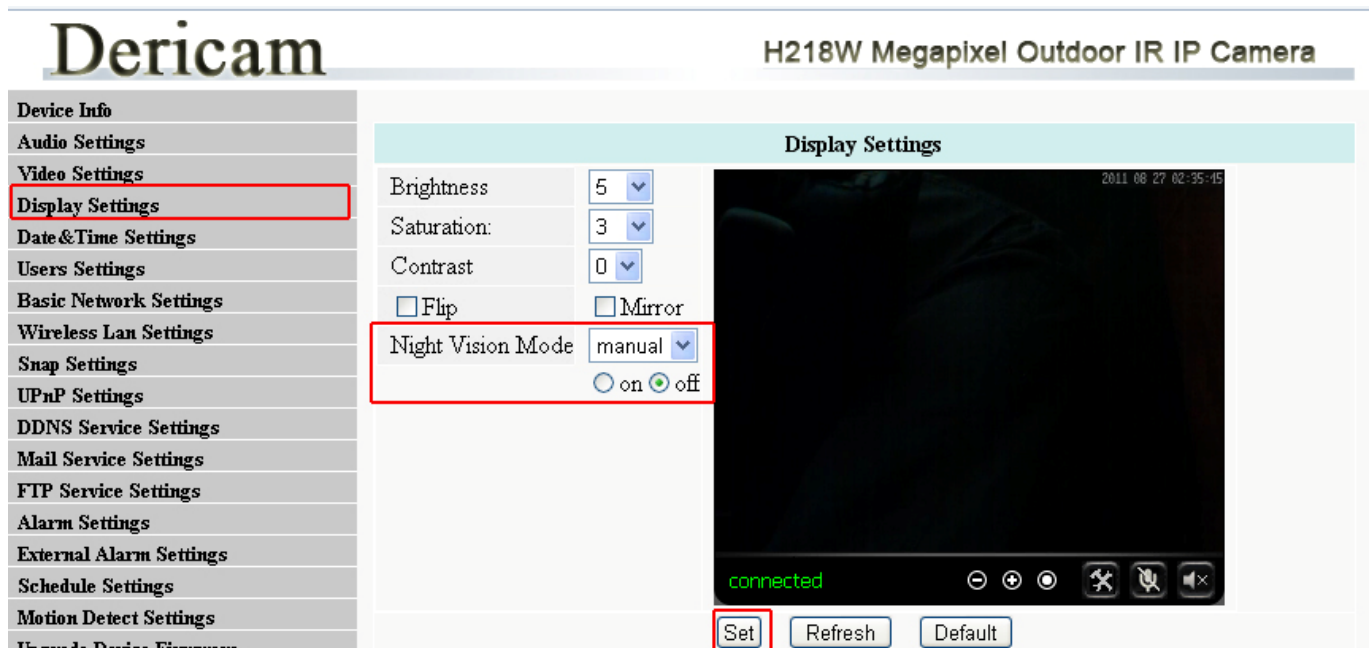


Fig5.4 Display Settings

- **Brightness**

Default parameter is 5. You can adjust the brightness of the image by select different value.

- **Saturation**

Default Saturation is 3. You can adjust the Saturation by select difference value.

- **Contrast**

Default Contrast is 0. You can adjust the Contract by select difference value.

- **Flip/Mirror**

You can flip the image by enabling Flip button, or mirror the image by enabling Mirror button.

- **Night Vision Mode/ IR LED Switch control**

You can set Night vision mode as auto or Manual. If you want to make the IR LED off, you have to set manual, status off.

5.5 Date & Time Settings

Dericam H218W Megapixel Outdoor IR IP Camera

Date & Time Settings

Device Clock Time: 2011-08-27 03:44:51

Device Clock Timezone: (GMT+08:00) Beijing, Chongqing, Hong Kong, Urumqi

Manual setting: ☐

Sync with PC Time: ☐

Sync with NTP Server: ☐

Keep current setting: ☒

Set Refresh

Fig5.5 Date & Time Settings

1-----Device Clock Time

You can set Device clock time via the three methods list as below.

2-----Device Clock Time zone

Select the time zone which belongs to your region

3-----Manual Setting

Set time by manual

4-----Sync with PC Time

Enable to sync with your computer's time

5-----Sync with NTP Server

Enable with Network Time Protocol

5.6 User Settings

Dericam H218W Megapixel Outdoor IR IP Camera

Users Settings

User	Password	Group
admin	••••••	Administrator
user	••••	Operator
guest	•••••	Visitor
		Operator
		Operator
		Operator
		Operator
		Operator
		Operator
		Operator
		Operator

Set Refresh

Fig5.6 User Settings

The default user name is admin, and the password is 123456. There are three levels of accessing right, 1) Administrator, 2) Operator, 3) Visitor. You can set users with different levels of accessing right.

Note

You need remember the new user name & password when you change the user & password. It is better for you to write it on your memo.

5.7 Basic Network Settings

Dericam H218W Megapixel Outdoor IR IP Camera

Basic Network Settings

Obtain IP from DHCP Server ☒

IP Address: 192.168.8.138

Subnet Mask: 255.255.255.0

Gateway: 192.168.8.1

Primary DNS: 202.96.128.86

Secondary DNS: 202.96.134.133

Http Port: 88 (80 or (1024-49151))

Set Refresh

Fig5.7 Basic Network Settings

1-----Obtain IP from DHCP Server

Enable DHCP, if disable DHCP, you can assign IP address by yourself

2-----Http Port

You can change port no. here by entering customized no. and click set

5.8 Wireless Lan Settings

Dericam H218W Megapixel Outdoor IR IP Camera

Wireless Lan Settings

undefined

Using Wireless Lan ☒

WPA Algorithm: TKIP

Key:

Scan

Set Refresh

Click here, goes to Wireless Lan Settings

Click Scan until it search out the SSID of your wireless router, then choose the SSID belongs to your wireless router

Tenda[00:b0:0c:00:7d:e8]Infra\OPEN\NONE\11-39

ChinaNet-Hk\Wc[00:25:68:e8:d5:22]Infra\WPA-PSK

ChinaNet-qDps[50:67:f0:a2:51:9b]Infra\WPA-PSK

Fig5.8 Wireless LAN Settings

Click Scan to search the SSID of the wireless router. Please make sure you click scan to search until the SSID of your router is list on the small window showed as Fig5.8.

Select the SSID belongs to your router, and enter wireless security key password, and click set to finish the wireless setup. When the wireless settings is done, please unplug the network cable, and unplug the power & plug the power back in order to let the camera get restarted. After restart by unplug & plug back the power adapter, the camera will make wireless connection by itself.

The Camera device name will disappear if you click "search" before the camera gets restarted. Just wait for around 1 minute, and click "Search" again, the device name of the camera will be showed again on the window if wireless connection is successful. **Congratulations!** You have done wireless connection of the camera successfully.

5.9 Snap Settings

The screenshot shows the Dericam web interface for the H218W camera. On the left is a sidebar with settings categories: Device Info, Audio Settings, Video Settings, Display Settings, Date&Time Settings, and Users Settings. The main area has a top bar with the Dericam logo and the camera model. Below this, the 'Snap Settings' tab is selected and highlighted with a red rectangle. The settings are as follows:

Snap Settings	
Snap interval(Minutes)	60
Save Picture on the SD Card	<input type="checkbox"/>
<input type="button" value="Set"/> <input type="button" value="Refresh"/>	

Fig5.9 Snap Settings

You can set interval of Snapshot on the SD card. Please enable Save picture on SD card if you want to save the snapshots on SD card.

5.10 UPnP Settings

The screenshot shows the Dericam web interface for the H218W camera. On the left is a sidebar with settings categories: Device Info, Audio Settings, Video Settings, Display Settings, Date&Time Settings, and Users Settings. The main area has a top bar with the Dericam logo and the camera model. Below this, the 'UPnP Settings' tab is selected and highlighted with a red rectangle. The settings are as follows:

UPnP Settings	
Using UPnP to Map Port	<input type="checkbox"/>
<input type="button" value="Set"/> <input type="button" value="Refresh"/>	

Fig5.10 UPnP Settings

You can enable UPnP if your router's UPnP option is enabled. You can just leave this setting alone, because you have done port forwarding within the router when doing remote access settings during quick installation procedure.

5.11 DDNS Settings

The screenshot shows the Dericam web interface for the H218W camera. On the left is a sidebar with settings categories: Device Info, Audio Settings, Video Settings, Display Settings, Date&Time Settings, Users Settings, Basic Network Settings, and Wireless Lan Settings. The main area has a top bar with the Dericam logo and the camera model. Below this, the 'DDNS Service Settings' tab is selected and highlighted with a red rectangle. The settings are as follows:

DDNS Service Settings	
DDNS Service	Dyndns.org
DDNS User	dericam
DDNS Password	••••••••
DDNS Host	dericam.dyndns.org
<input type="button" value="Set"/> <input type="button" value="Refresh"/>	

Fig5.11 DDNS Service Settings

Please set **DDNS Service Settings** within the camera by **hostname**, a **user name** and **password** you've got from www.dyndns.com. Please refer to Quick Installation Guide for detailed steps.

5.12 Mail Service Settings

Dericam H218W Megapixel Outdoor IR IP Camera

Mail Service Settings

Sender	dericam@163.com
Receiver 1	dericam@163.com
Receiver 2	dericam@hotmail.com
Receiver 3	denny@dericam.com
SMTP Server	smtp.163.com
SMTP Port	25
SSL	<input checked="" type="checkbox"/>
Need Authentication	<input checked="" type="checkbox"/>
SMTP User	dericam
SMTP Password	••••••••
subject	alarm snapshot
Message	<div></div> the max length is 255

Set Refresh

Fig5.12 Mail Service Settings

- | | |
|-----------------------|--|
| 1-----Sender | Email address to be used as a sender |
| 2-----Receiver 1 to 3 | Email address to be used as a receiver, up to four receivers |
| 3-----SMTP Server | SMTP Server of the Sender mailbox |
| 4-----SMTP Port | SMTP port no. of the mail server of the sender mailbox |
| 5-----SMTP User | ID Account of the sender email address |
| 6-----SMTP Password | The password of the sender email address |

Trouble Shooting----The email failed to send emails or snapshots

1. Check the mail service settings, and make sure all of them are correct and try it again.
2. Check if the sender email is enabled with SMTP server.

5.13 FTP Service Settings

Dericam H218W Megapixel Outdoor IR IP Camera

FTP Service Settings

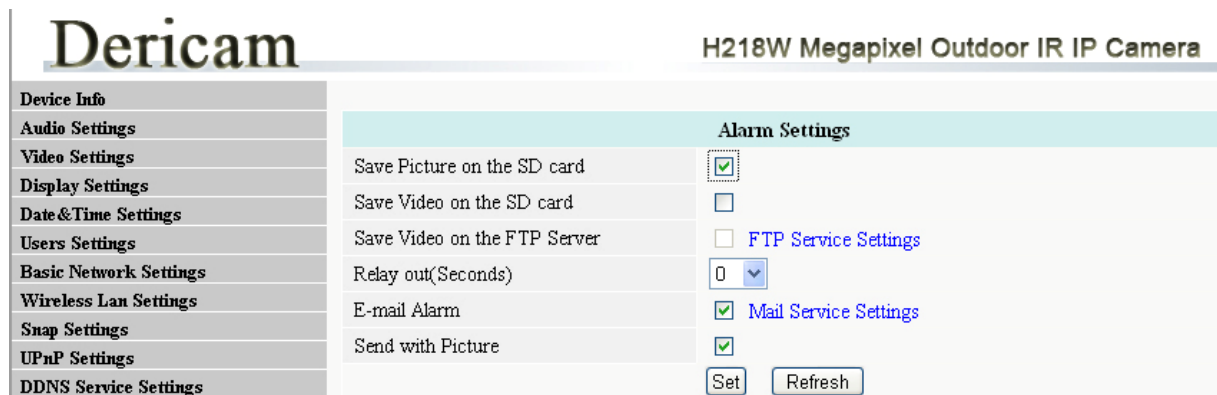
FTP Server	192.168.8.198
FTP Port	21
FTP User	dericam
FTP Password	••••••••
FTP Mode	<input type="radio"/> on <input checked="" type="radio"/> off

FTP Passive mode Set Refresh

Fig5.13 FTP Service Settings

In order to use FTP function, user should apply user name and password on the FTP server first. And please apply for storage right, in order to write and create sub-category on the FTP server.

5.14 Alarm Settings



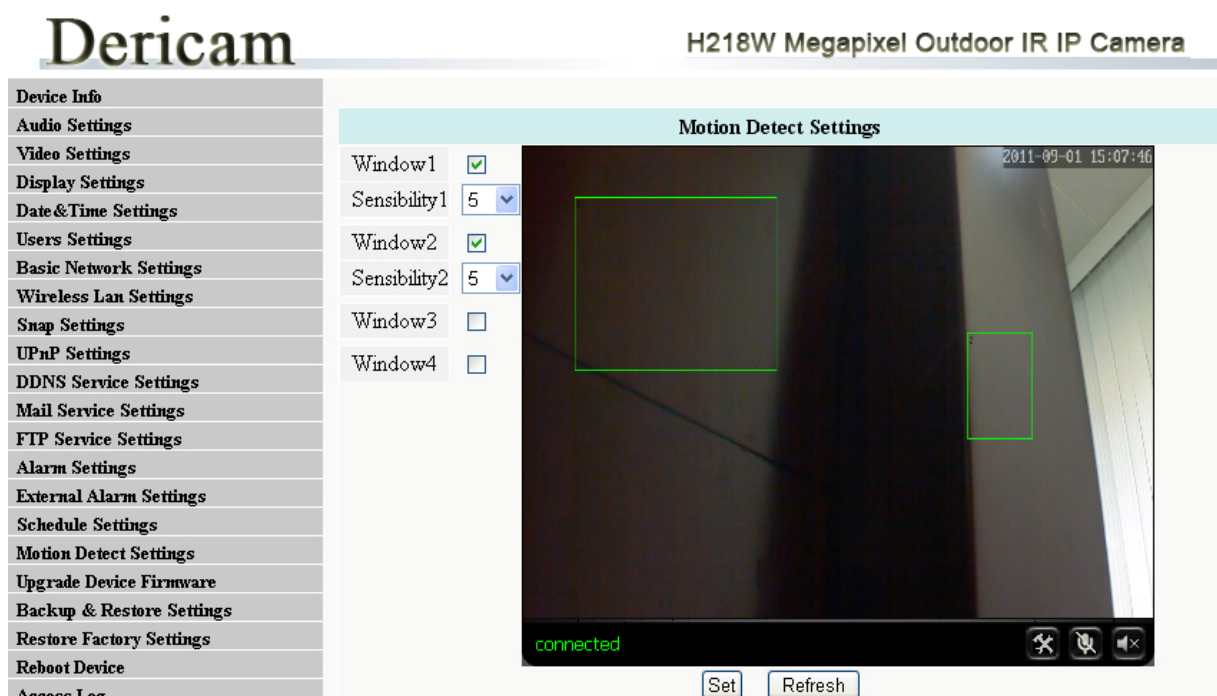
Dericam H218W Megapixel Outdoor IR IP Camera

Alarm Settings

Save Picture on the SD card	<input checked="" type="checkbox"/>
Save Video on the SD card	<input type="checkbox"/>
Save Video on the FTP Server	<input type="checkbox"/> FTP Service Settings
Relay out(Seconds)	0 <input type="button" value="v"/>
E-mail Alarm	<input checked="" type="checkbox"/> Mail Service Settings
Send with Picture	<input checked="" type="checkbox"/>

Fig5.14 Alarm Settings

5.15 Motion Detection Area Settings



Dericam H218W Megapixel Outdoor IR IP Camera

Motion Detect Settings

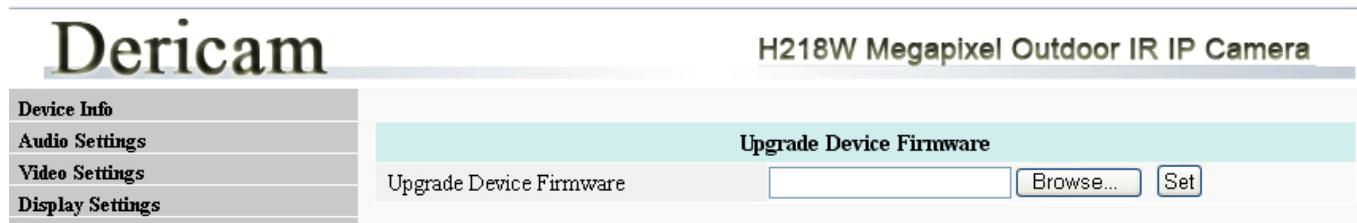
Window1	<input checked="" type="checkbox"/>
Sensibility1	5 <input type="button" value="v"/>
Window2	<input checked="" type="checkbox"/>
Sensibility2	5 <input type="button" value="v"/>
Window3	<input type="checkbox"/>
Window4	<input type="checkbox"/>

2011-09-01 15:07:46

connected

Fig5.15 Motion detection Area setup

5.16 Upgrade Device Firmware



Dericam H218W Megapixel Outdoor IR IP Camera

Upgrade Device Firmware

Upgrade Device Firmware

Fig5.16 Motion detection Area setup

Click Browse, and select the Firmware file to open, and click set to upgrade.

Please use wired connection method before you upgrading the files

Please do not try to upgrade the firmware, if the existing firmware works ok. It takes risk of making the camera dead if the upgrading operation is not right. Please email to tech@dericam.com if you want update firmware.

5.17 Backup & Restore Settings

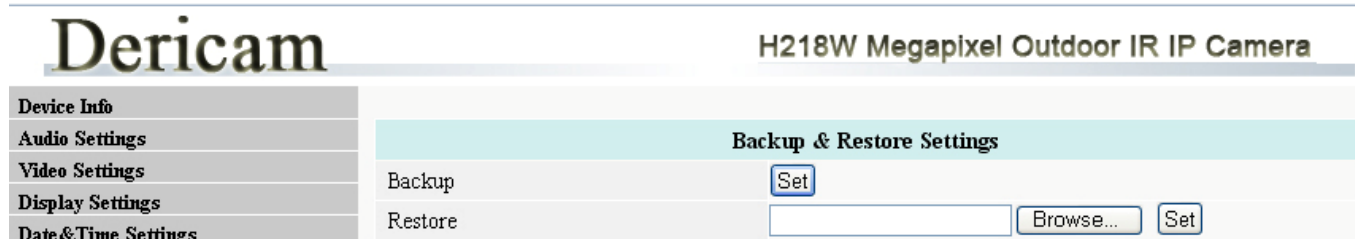


Fig5.17 Backup or Restore Settings

You can backup all settings by saving the settings as a .bin file. And also you can restore the existing settings by saved .bin. file.

5.18 Restore Factory Settings

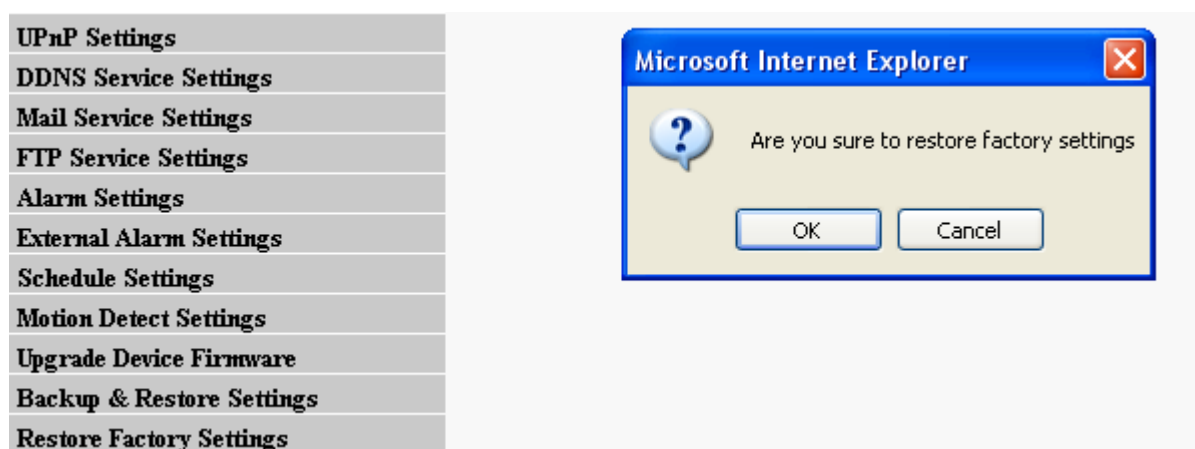


Fig5.18 Restore Factory Settings

5.19 Reboot Device

Click option "reboot device" to get the camera restarted, which is the same as unplug the power and re-plug it.

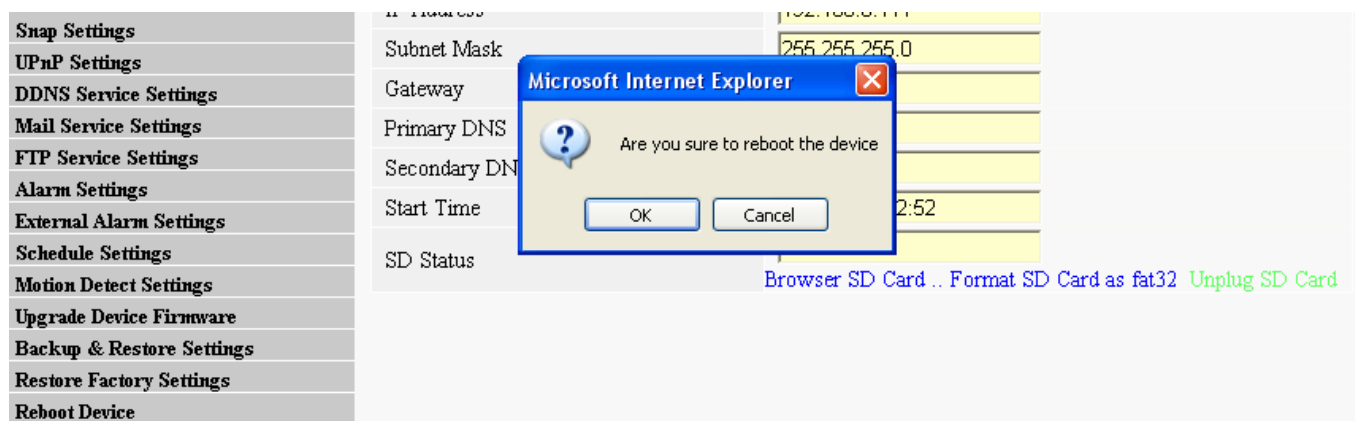


Fig5.19 Reboot Device

5.20 Access Log

Dericam H218W Megapixel Outdoor IR IP Camera

Access Log

[	]	[Tue Aug 23 03:03:06 2011]:[192.168.8.101]	GET /MEDIA
[	]	[Tue Aug 23 03:03:06 2011]:[192.168.8.101]	GET getvencattr.cgi enccfc
[	]	[Tue Aug 23 03:04:38 2011]:[192.168.8.101]	GET ptzctrl.cgi ptzctrl&s
[	]	[Tue Aug 23 03:04:39 2011]:[192.168.8.101]	GET ptzctrl.cgi ptzctrl&s
[	]	[Tue Aug 23 03:10:55 2011]:[192.168.8.101]	GET param.cgi cmd=getserve
[	]	[Tue Aug 23 03:10:55 2011]:[192.168.8.101]	GET param.cgi cmd=getsysir
[	]	[Tue Aug 23 03:10:55 2011]:[192.168.8.101]	GET param.cgi cmd=getnetir
[	]	[Tue Aug 23 03:39:49 2011]:[192.168.8.101]	GET getvencattr.cgi enccfc
[	]	[Tue Aug 23 03:39:49 2011]:[192.168.8.101]	GET getsetupflag.cgi authc
[	]	[Tue Aug 23 03:39:49 2011]:[192.168.8.101]	GET getidentify.cgi identi
[	]	[Tue Aug 23 03:39:49 2011]:[192.168.8.101]	GET getidentify.cgi identi
[	]	[Tue Aug 23 03:39:50 2011]:[192.168.8.101]	GET getvdisplayattr.cgi ge
[	]	[Tue Aug 23 03:39:50 2011]:[192.168.8.101]	GET /MEDIA
[	]	[Tue Aug 23 03:39:50 2011]:[192.168.8.101]	GET getvencattr.cgi enccfc
[	]	[Tue Aug 23 04:04:40 2011]:[192.168.8.101]	GET getvencattr.cgi enccfc
[	]	[Tue Aug 23 04:04:40 2011]:[192.168.8.101]	GET getvencattr.cgi enccfc
[	]	[Tue Aug 23 04:04:40 2011]:[192.168.8.101]	GET getsetupflag.cgi authc
[	]	[Tue Aug 23 04:04:41 2011]:[192.168.8.101]	GET getidentify.cgi identi
[	]	[Tue Aug 23 04:04:41 2011]:[192.168.8.101]	GET getidentify.cgi identi
[	]	[Tue Aug 23 04:04:41 2011]:[192.168.8.101]	GET getvdisplayattr.cgi ge

Clean

Fig5.20 Record of access log

5.21 System Log

Dericam H218W Megapixel Outdoor IR IP Camera

System Log

Thu Jan 1 00:00:04 UTC 1970	BOOTTAB: System Start!
Aug 23 03:02:43	syslogd started: BusyBox v1.1.2
Tue Aug 23 03:02:47	STD 2011 VS_AUTO : vs_server start !
Aug 23 03:02:55 vs[382]:	[EXT]:creat ext alarm msg rcv thread 4101 sucess
Aug 23 03:02:55 vs[382]:	[SNAP]:creat snap msg rcv thread 6151 sucess
Aug 23 03:02:55 vs[431]:	[ENC]:getstream thread 0 of channel 11 started ...
Aug 23 03:02:55 vs[432]:	[ENC]:getstream thread 0 of channel 12 started ...
Aug 23 03:02:55 vs[433]:	[CHNOSD]:time Dynamic osd thread 0 of cam 1(region 0
Aug 23 03:02:55 vs[382]:	[MP]: start mp msg center thread 10251 ok...
Aug 23 03:02:57 vs[446]:	thttpd/2.25b 29dec2003 starting on port 81
Aug 23 03:02:57 vs[446]:	started as root without requesting chroot(), warning
Aug 23 03:02:57 vs[382]:	[INIT]:INIT WEB SERVER[OK]

Clean

Fig5.21 Record of login in information

5.22 Back

Click Back button to go back to surveillance window