

## **User Manual**

### Megapixel IR IP Camera



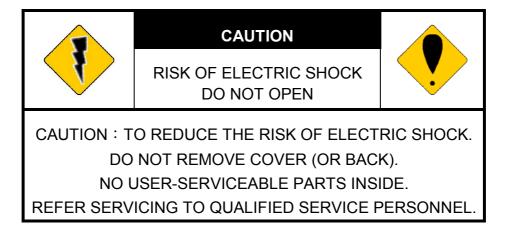


#### WARINGS

TO REDUCE THE RISK OF FIRE OR ELECTRIC SHOCK, DO NOT EXPOSE THIS PRODUCT TO RAIN OR MISTURE.

DO NOT INSERT ANY METALLIC OBJECT THROUGH VENTILATION GRILLS.

#### CAUTION



#### COPYRIGHT

THE TRADEMARKS MENTIONED IN THE MANUAL ARE LEGALLY REGISTERED TO THEIR RESPECTIVE COMPANIES.



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### I. Preface

IR IP CAMERA is a Megapixel IR IP camera. It has built-in web server which enables user to view real-time video via IE browser. It also supports simultaneously H.264, MPEG-4&JPEG video compression and dual streaming which provides smooth and high video quality.

IR IP CAMERA is an easy-to-use IP Camera which is designed for security application.

### **II. Product Specifications**

- Video Out
- High Definition Resolution at 30FPS support(720P)
- IP66
- External Vari-focal lens adjustment
- True Day/Night Function
- Mechanism IR Cut Filter Available
- Fan Built-in
- IR Distance: 40/30 Meter
- H.264/ JPEG/ MPEG4 compression
- Support Cell Phone/PDA/3GPP
- Triple streaming
- SDK for Software Integration
- Free Bundle 36 ch recording software

#### **Specifications**

Hardware	
CPU	ARM 9 ,32 bit RISC
Memory	256MB
Flash	16MB
Sensor	1/3" CMOS(2M-Pixel)
Sensitivity	0 Lux(IR on)
Lens	30M/40M: Vari-Focal Auto Iris 3.6~16mm
Fan	Always On



ICR	Yes				
	56 Unit 5φ 850nM infrared LED, 10000hrs				
LED	(40M) 42 Unit 5φ 850nM infrared LED, 10000hrs				
	(30M)				
IR DISTANCE	40M/30M				
I/O	1 in/ 1out(Relay Out)				
Video Out	1				
Power Consumption	DC 12V				
Water Resistance					
Dimensions	114mm( $\psi$ ) x 260mm(D) (With Shield)				
	99.4mm(ψ) x 225mm(D) (Without Shield)				
Network					
Ethernet	10/ 100 Base-T				
Network Protocol	HTTP, UDP,TCP/ IP, SMTP, FTP, PPPoE,				
	DHCP, DDNS, NTP				
Wireless (Optional)					
Wireless	802.11b/g				
Security	WEP,WPA-PSK,WPA2-PSK				
System					
Video Resolution	1600x1200, 1280x1024, 1280x960,1280x720,				
	800x600,640x480, 320x240, 176x144				
Video adjust	Brightness, Contrast, Sharpness, BLC, Night				
	Mode				
Triple Streaming	Yes				
Image snapshot	Yes				
Full screen monitoring	Yes				
Privacy Mask	Yes				
Compression format	H.264/JPEG/MPEG4(3GPP only)				
Video bitrate adjust	CBR, VBR				
Motion Detection	Yes, 3 different areas				
Triggered action	Mail, FTP, Relay				
Pre/ Post alarm	Yes, configurable				
Security	Password protection				
Firmware upgrade	HTTP mode, can be upgraded remotely				
Simultaneous connection	Up to 10				



Web browsing requirement				
OS	Windows 2000, XP, 2003, Microsoft IE 6.0 or			
	above			
Hardware				
Suggested	Intel Dual Core 1.66G,RAM: 1024MB, Graphic			
	card: 128MB			
Minimum	Intel-C 1.6G, RAM: 256MB, Graphic card: 32MB			

\*SPECIFICATIONS ARE SUBJECT TO CHANGE WITHOUT NOTICE.

### **III. Product Installation**

### A. Monitor Setting

i. Right-Click on the desktop. Select " Properties"



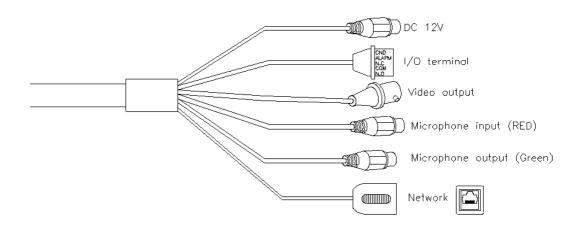
ii. Change color quality to highest (32bit).

	Desktop	Screen Saver	Appearance	Settings	
		r anna Seanna Thairte			
			977 972		
				<u>.</u>	
Display Plug an Family		itor on Intel(R) 8	2915G/GV/91	OGL Express C	hipset
	n resolution	1	Color qua	ality	
Less	-0	More	Highest	(32 bit)	~
	1024 by 7	68 pixels			
			Troublesh		vanced



# B. Hardware Installation and I/O PinAssignment

i. Connect a power adapter and IP Camera to PC or local network





#### ii. I/O Control Instruction

I/O terminal connector – used in application, for e.g., motion detection, event triggering, alarm notifications. It provides the interface to:

1 Digital Input (GND+Alarm) – An alarm input for connecting devices that can toggle between an open and closed circuit, for example: PIRs, door/window contacts, glass break detectors, etc. When a signal is received the state changes and the input becomes active. Relay output (COM +N.O.) / (COM+N.C.) – An output to Relay switch, for

example: LEDs, Sirens, etc

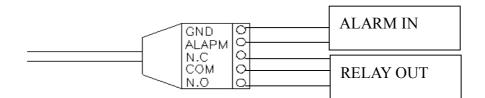
iii. Digital Input

Alarm Input

- 1. GND (Ground) : Initial state is LOW
- 2. Alarm : Max. 50mA, DC 3.3V

#### Relay Output

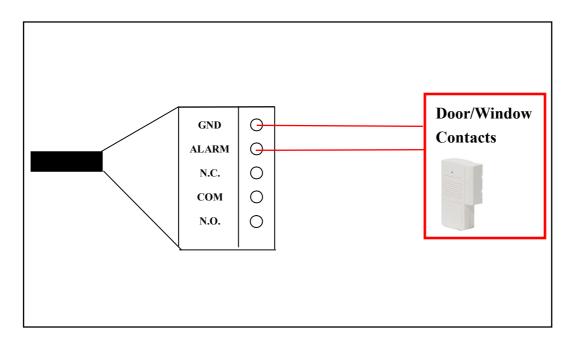
- 1. N.C. (Normally Close): Max. 1A, 24VDC or 0.5A, 125VAC
- 2. COM: (Common)
- 3. N.O. (Normally Open): Max. 1A, 24VDC or 0.5A, 125VAC





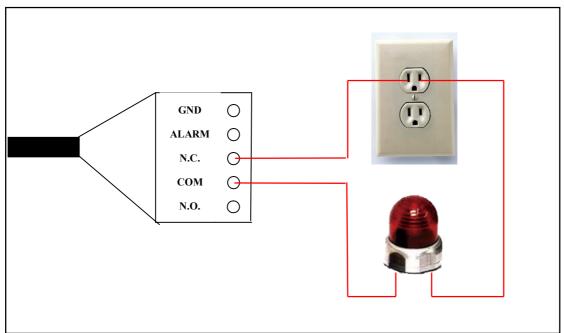
iv. Relay

1. Digital Input connection

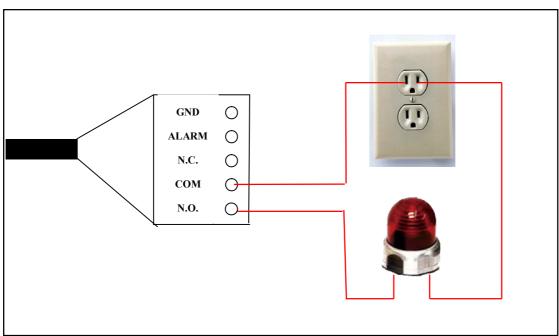




#### 2. Relay Output Connection



Or





#### C. IP Assignment

- i. Use the software, "IP Installer" to assign the IP address of IP CAMERA. The software is in the attached software CD.
- ii. IP installer supports two languages
  - a. IPInstallerCht.exe : Chinese version
  - b. IPInstallerEng.exe : English version
- iii. There are 3 kinds of IP configuration.
  - a. Fixed IP (Public IP or Virtual IP)
  - b. DHCP (Dynamic IP)
  - c. Dial-up (PPPoE)
- iv. Execute IP Installer
- v. For Windows XP SP2 user, it may popup the following message box. Please click "Unblock".

	To help protect your computer, Windows Firewall has blocke some features of this program.
lo you	u want to keep blocking this program?
	Name: IPInstaller V2.1 Network Device Scan Publisher: Unknown
	Keep Blocking Unblock Ask Me Later

#### vi. IP Installer configuration:

Server Name IP Camera	IP Address 192.168.001.200		_		C DHC	
P_Camera	192.100.001.200	Name	1	IP_C	amera	
		IP	192	168	1	200
		Netmask	255	255	255	0
		Gateway	192	168	1	254
		DNS 1	168	95	1	1
		DNS 2	168	95	192	1
		Port1		8	0	
		MAC	00	OF: OD	: 20 : 08	:5A
	Search Device	1			Subr	nit
o Change Device Name, I	P address, and Gateway:	_				
Select the device on the	left side.					

- vii. IP Installer will search all IP Cameras connected on Lan. The user can click "Search Device" to search again.
- viii. Click one of the IP Camera listed on the left side. The network



configuration of this IP camera will show on the right side. You may change the "name" of the IP Camera to your preference (eg: Office, warehouse). Change the parameter and click "Submit" then click "OK". It will apply the change and reboot the Device.

IPInstaller	
Rebooting,Ple	ase wait
ОК	7

ix. Please make sure the subnet of PC IP address and IP CAM IP address are the same.

#### The same Subnet:

IP CAM IP address: <u>192.168.1</u>.200

PC IP address: <u>192.168.1</u>.100

#### **Different Subnets:**

IP CAM IP address: <u>192.168.2</u>.200

PC IP address: <u>192.168.1</u>.100

#### To Change PC IP address:

Control Panel→Network Connections→Local Area Connection Properties→Internet Protocol (TCP/IP) →Properties

Please make sure your IP Camera and PC have the same Subnet. If not, please change IP Camera subnet or PC IP subnet accordingly.

Local Area Connection Properties 🛛 🔹 💽	Internet Protocol (	TCP/IP) Properties	? ×
General Authentication Advanced	General		
Connect using:		gs assigned automatically if your network suppor vise, you need to ask your network administrator tings.	
Configure	Obtain an IP ad		
This connection uses the following items:	<ul> <li>Ose the followin</li> </ul>	ig IP address:	
Sient for Microsoft Networks      Page File and Printer Sharing for Microsoft Networks	IP address:	192.168.1.100	
Gos Packet Scheduler	Subnet mask:	255 . 255 . 255 . 0	
Treinternet Protocol (TCP/IP)	Default gateway:	192 . 168 . 1 . 254	
Install Uninstall Properties	🔿 Obtain DNS ser	ver address automatically	
Description	💫 🕢 💿 Use the followin	ig DNS server addresses:	
Transmission Control Protocol/Internet Protocol. The default wide area network protocol that provides communication	Preferred DNS ser	ver: 192.168.1.2	
across diverse interconnected networks.	Alternate DNS ser	ver: 168 . 95 . 192 . 1	
Show icon in notification area when connected	~	Advance	d
Close		OK Ca	ancel

x. A quick way to access remote monitoring is to left-click the mouse twice on a selected IP Camera listed on "Device list" of IP Installer. An IE browser will be opened.



Server Name	IP Address		1. St.	stic	C DHC	P
IP_Camera	192.168.001.165	Nane		IP_C	ənera	
		IP	192	168	1	16
		Netnask	255	255	255	0
		Gatevay	192	168	1	25
		DNS 1	168	95	1	1
		DNS 2	168	95	192	1
		Port1		e	0	
		MAC	00	0F:0D	:00:21	:0F
	Search Device	1		Γ	Sub	nit

xi. Then, please key in the default "user name: admin" and "password: admin".

Connect to 19	2.168.1.217 ? 🔀
IP Camera User name: Password:	😰 admin 💌
	Remember my password

### D. Install ActiveX control:

For the first time to view the camera video via IE, it will ask you to install the ActiveX component.

00	- 🦻 http://192.168.1.135/	EN English (United States)
File Edi	t View Favorites Tools Help	
â 🎄	/ IP_Camera	🟠 🔹 🔝 🚽 🖶 Page 🕶 🌍 To

If the installation failed, please check the security setting for the IE browser.

- IE → Tools → Internet Options... → Security Tab → Custom Level... → Security Settings → Download unsigned ActiveX controls → Select "Enable" or Prompt.
- ii. IE → Tools → Internet Options... → Security Tab → Custom Level...
   →Initialize and script ActiveX controls not marked as safe → Select "Enable" or Prompt.



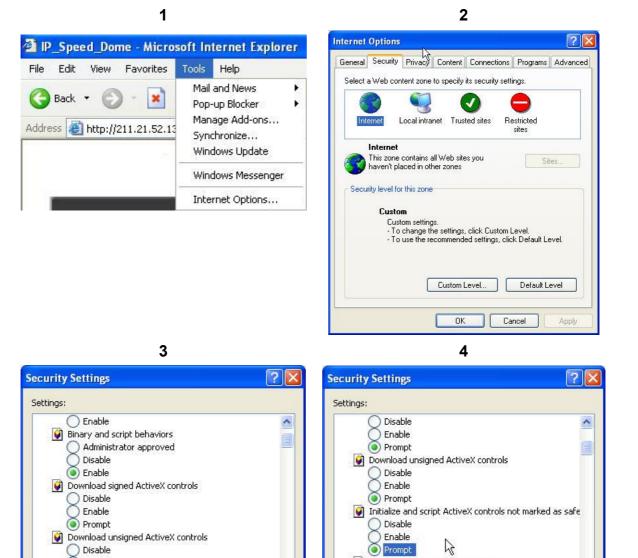
🔵 Disable

🔵 Enable

Promp 100 T-16 <

Reset custom settings

Reset to: Medium



5

<

Reset custom settings

Reset to: Medium

>

Reset

Cancel

Y.

OK

2

>

Reset

Cancel

v

OK

Run ActiveX controls and plug-ins

Administrator approved

When popup the following dialogue box, click "Yes".





### IV. Live Video

Start a IE browser, type the IP address of the IP camera in the address field. It will show the following dialogue box. Key-in the user name and password. The default user name and password are "**admin**" and "**admin**".

Connect to 19	2.168.1.217	? 🛛
IP Camera		
User name:	🙎 admin	*
Password:	•••••	
	Remember my pa	ssword
	ОК	Cancel

When connect to the IP CAMERA  $\circ$  The following program interface shows.







Set into the administration page



1.

I Video Snapshot

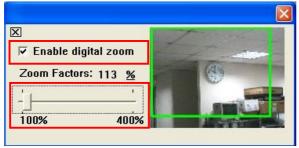
- 3. Show system time, video resolution, and video refreshing rate
- 4. Select video streaming source (When streaming 2 setting in <sup>r</sup>Video Setting is closed, this function will not display)
- 5. IP Camera supports 2-way audio. Click the "Chatting" check box. Then you can use microphone which connects to the PC to talk to server side, which is IP Camera side
- 6. Control the relay which is connected to this camera.

Double-click the video, it will change to full screen mode. Press "Esc" or double-click the video again, it will change back to normal mode.

Right-Click the mouse on the video, it will show a pop-up menu.

S <u>n</u> apshot
<u>R</u> ecord Start
<u>M</u> ute
<u>F</u> ull Screen
<u>Z</u> oom

- 1. Snapshot : Save a JPEG picture
- 2. Record Start : Record the video in the local PC. It will ask you where to save the video. To stop recording, right-click the mouse again. Select "Record Stop". The video format is AVI. Use Microsoft Media Player to play the recorded file.
- 3. Mute : Turn of the audio. Click again to turn on it.
- 4. Full Screen : Full-screen mode.
- 5. ZOOM: Enable zoom-in and zoom-out functions. Select "Enable digital zoom" option first within the pop-up dialogue box and then drag and drop the bar to adjust the zoom factors.





### V. Configuration



to get into the administration page. Click

to go back to the live

video page.

	System Information	System Information	
		Server Information	D
	User Management	MAC Address: 00:0F:0D:21:1D:29	~ ~~
		Server Name: IP_Camera Status Bar	
System	System Update	LED Indicator: O OFF	
		Language: : ම English 🔘 繁體中文 🔘 简体中文 🔘 Polish	
	IP Setting	🔘 French 🛛 Russian 🖉 Italian	
Caro		OSD Setting	
	PPPoE	Time Stamp: O Enabled O Disabled	
	DDNS	Text:   Enabled  Disabled	
Network		OSD_Display Text Edit	
The first way and the		Time Setting	
		Server Time: 2010/5/27 17:10:58 Time Zone: GMT+08:00	
	Image Setting	Date Format: 🛛 💿 yy/mm/dd 🔘 mm/dd/yy 🔘 dd/mm/yy	
	Video Setting	Time Zone: GMT+08:00	
		© NTP:	
A/V Setting	Audio	NTP Server: 198.123.30.132	
		Update: 6 Hour	
	Event Setting	Time Shift: 0 Minutes [-14401440]	
		Synchronize with PC's time	
	Schedule	Date : 2010/5/27	
	I/O Setting	Time : 17:11:46	
	Mail & FTP	Manual	
		Date : 2010/5/27	
	Log Lint		



### A.System

- i System Information
  - a. Server Information: Set up the camera name, select language, and set up the camera time.
    - 1. Server Name : This is the Camera name. This name will show on the IP Installer.
    - Select language : There are English, Traditional Chinese, and Simplified Chinese to select. When change, it will show the following dialogue box for the confirmation of changing language.



b. OSD Setting: Select a position where date & time stamp / text showing on screen.

OSD Setting		
Time Stamp:	🔘 Enabled	O Disabled
Text:	🔵 Enabled	⊙ Disabled
	Test <sub>Tex</sub>	t Edit_

Moreover, click Text Edit can entry to adjust the OSD contents which is including Size and Alpha of text. Finally, click Upgrade button to reserve the setting.



c. Server time setting : Select options to set up time - "NTP",
"Synchronize with PC's time", "Manual", "The date and time remain the same".



Server Time:	2007/4/11 14:	56:	01 Time Zone: GMT+08:00	
Date Format:	💿 yy/mm/d	d	🔿 mm/dd/yy 🔿 dd/mm/yy	
Time zone:	GMT+08:00	~		
● NTP :	GMT-09:00 GMT-08:00	^		
NTP Server :	GMT-07:00			
O Synchronize	GMT-06:00 GMT-05:00			
Date :	GMT-04:00 GMT-03:30			
Time :	GMT-03:00			
🔿 Manual	GMT-02:00 GMT-01:00			
Date :	GMT-00:00 GMT+01:00			
Time :	GMT+02:00			
O The date and	GMT+03:00 GMT+03:30	100	e same	
	GMT+04:00 GMT+04:30			Apply

ii 🗸 User Management

IP CAMERA supports three different users, administrator, general user, and anonymous user.

	User Man	agement	
Anonymous Use	r Login		
	○ YES	💿 NO	Setting
Add User			
Username:			
Password:			
Confirm:			
			Add/Set
User List			
Userame	User Group	Modify	Remove
admin	Administrator	Edit	

a. Anonymous User Login :

Yes : Allow anonymous login

No : Need user name & password to access this IP camera

b. Add user :

Type the user name and password, then click "Add/Set".

c. Click "edit" or "delete" to modify the user.



	5	
	User Setup	
Username:	admin	
Password:		
Confirm:		O

#### iii System update :

	System Update
Firmware Upgrade	
Firmware Version:	V3.2.11
New Firmware:	瀏覽
	Upgrade
Reboot System	
	Start
Factory Default	
	Start
Setting Management	
	Right click the mouse button on Setting Download
Save As a File:	and then select Save As to save current system's
	setting in the PC.
New Setting File:	瀏覽
	Upgrade

- a. To update the firmware online, click "Browse..." to select the firmware. Then click "Upgrade" to proceed.
- b. Reboot system : re-start the IP camera
- c. Factory default : delete all the settings in this IP camera.
- d. Setting Management : User may download the current setting to PC, or upgrade from previous saved setting.
  - Setting download: Right-click the mouse button on Setting Download → Select "Save AS..." to save current IP CAM setting in PC → Select saving directory → Save
  - Upgrade from previous setting Browse → search previous setting → open → upgrade → Setting update confirm → click <u>index.html</u>. to return to main page



### **B.Network**

i > IP Setting

IP Camera supports DHCP and static IP.

	IP Setting	1	
IP Assignment			
🔘 DHCP			
💿 Static			
IP Address:	192.168.1.200		
Subnet Mask:	255.255.255.0		
Gateway:	192.168.1.254		
DNS 0:	168.95.1.1		
DNS 1:	168.95.192.1		
Port Assignment			
Web Page Port:	80		
RTSP Port :	554		
RTP Start Port:	5000	[102410000]	
RTP End port:	9000	[102510000]	
UPnP			
UPnP:	💿 Enabled 🛛 🔘 I	Disabled	
			Apply

- a. DHCP : Using DHCP, IP Camera will get all the network parameters automatically.
- b. Static IP : Please type in IP address, subnet mask, gateway, and DNS manually.
- c. Port Assignment: user may need to assign different port to avoid conflict when setting up IP assignment.
  - 1. Web Page Port: setup web page connecting port and video transmitting port (Default: 80)
  - 2. RTSP Port: setup port for RTSP transmitting (Default: 554)
  - RTP Start and End Port: in RTSP mode, you may use TCP and UDP for connecting. TCP connection uses RTSP Port (554).
     UDP connection uses RTP Start and End Port.

d. UPnP



This IP camera supports UPnP, If this service is enabled on your computer, the camera will automatically be detected and a new icon will be added to "My Network Places."

**Note:** UPnP must be enabled on your computer. Please follow the procedure to activate UPnP

- 1. open the Control Panel from the Start Menu
- 2. select Add/Remove Programs
- 3. Select Add/Remove Windows Components and open Networking Services section
- 4. Click Details and select UPnP to setup the service
- 5. The IP device icon will be added to "MY Network Places"
- 6. User may double click the IP device icon to access IE browser
- ii、 PPPoE:

	PPPoE	
PPPoE Setting		
C Enabled Username: Password:	Disabled	
Send mail after d	ialed	
Enabled		_
Subject:	PPPoE From IPcam	Apply

Select "Enabled" to use PPPoE.

Key-in Username and password for the ADSL connection.

Send mail after dialed : When connect to the internet, it will send a mail to a specific mail account. For the mail setting, please refer to "Mail and FTP" settings.

iii、 DDNS:

It supports DDNS (Dynamic DNS) service.

a. DynDNS:



	DDNS	
DDNS Setting		
🔘 Enabled 🛛 💿	Disabled	
Provider:	dyndns.org	~
Hostname:		
Username:		
Password:		
Schedule Update:	1440	Minutes
State		
ldle		Аррђ
Note:		
IP products which i	installed behind t	chedule update is designed fo he ICS or NAT devices. Update 0 (minutes) and 0 remain to
	more than once	be blocked by DynDNS.org if every 5 minutes to 60 minute y 1440 minutes is

- 1. Enable this service
- 2. Key-in the DynDNS server name, user name, and password.
- 3. Set up the IP Schedule update refreshing rate.
- 4. Click "Apply"
- 5. If setting up IP schedule update too frequently, the IP may be blocked. In general, schedule update every day (1440 minutes) is recommended.



b. Camddns service :

	DDN	IS
DDNS Setting		
O Enabled 💿	Disabled	
Provider:	ddns.camdd	ns.com ⊻
Username:		
Schedule Update:	1440	Minutes
State		
Idle		2
		Apply
IP products which i	installed behin	schedule update is designed fo d the ICS or NAT devices. Update 000 (minutes) and 0 remain to
schedule update is	more than one	II be blocked by DynDNS.org if ce every 5 minutes to 60 minute ery 1440 minutes is

- 1. Please enable this service
- 2. Key-in user name.
- 3. IP Schedule update is default at 5 minutes
- 4. Click "Apply".
- c. DDNS Status
  - 1. Updating : Information update
  - 2. Idle : Stop service
  - DDNS registration successful, can now log by http://<username>.ddns.camddns.com : Register successfully.
  - 4. Update Failed, the name is already registered : The user name has already been used. Please change it.
  - 5. Update Failed, please check your internet connection : Network connection failed.
  - 6. Update Failed, please check the account information you provide : The server, user name, and password may be wrong.
- iv、 Mail & FTP

To send out the video via mail of ftp, please set up the configuration first.



	Mail & FTP
Mail Setting	
Mail Server: Username: Password: Sender's Mail: Receiver's Mail Bcc Mail:	
TP Setting	
FTP Server: Username: Password:	
Port:	21
Path:	



### C. A/V Setting

i . Image Setting



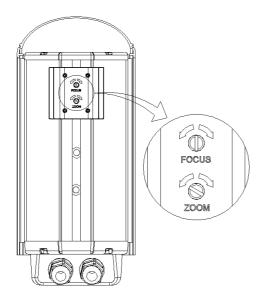
For the security purpose, there are three areas can be setup for privacy mask. Click Area button first and pull a area on the above image. Finally, click Save button to reserve the setting.

Adjust "Brightness", "Contrast", "Hue", "Saturation" to get clear video. Moreover, IP CAMERA supports "Back Light Compensation", "Night Mode" and "Video Orientation".

Among CCD Setting, user can adjust other settings such as BLC Mode, Day & Night, Night Mode, and Video Orientation.

This IP camera belongs to external varifocal lens adjustment camera. Please adjust "**ZOOM**" first and "**FOCUS**" in the following to complete the adjustment.





ii v Video Setting

User may select 2 streaming output simultaneously: Streaming 1 Setting: Basic mode and Advanced mode Streaming 2 Setting: Basic mode, Advanced mode, and 3GPP mode (Max Video Frame Rate for both streaming combined is 30 FPS)

a. Video System: click the drop down list to select the Input Resolution, Video System and TV Output.

Video Setting			
Input Resolution:	1600x1200 @ 15fps 🔽		
Video System:	NTSC 🔽		
TV Output:	Auto 🛛 (Auto : Based on the Video System)		

b. Streaming 1 Basic Mode :

Streaming 1 Setting	
💿 Basic Mode 🛛 🔘 Ad	lvanced Mode
Resolution:	800x600 💌
Quality:	Best 💙
Video Frame Rate:	15 FPS 🔽
Video Format:	H.264 🐱
RTSP Path:	ex:rtsp://<>/ Audio:G.711

1. Resolution :

There are 8 resolutions can be chosen. 1600x 1200, 1280x1024, 1280x960, 1280x720, 800x600, 640x480, 320x240, 176x144

2. Quality :



There are 5 levels to adjust:

Best/ High/ Standard/ Medium/ Low

The higher the quality is, the bigger the file size is. Also not good for internet transmitting

- 3. Video Frame Rate : The video refreshing rate per second.
- 4. Video Format : H.264 or JPEG
- 5. RTSP Path: RTSP output name
- c. Streaming 1 Advanced Mode :

Streaming 1 Setting		
O Basic Mode 💿 Advanced Mode		
Resolution:	800x600 🗸	
Bitrate Control Mode:	○ CBR ④ VBR	
Video Quantitative:	9 🗸	
Video Bitrate:	1.5Mbps 💙	
Video Frame Rate:	15 FPS 🔽	
GOP Size:	1 X FPS 🛛 GOP = 15	
Video Format:	H.264 🔽	
RTSP Path:	ex:rtsp://<>/ Audio:G.711	

1. Resolution :

There are 8 resolutions can be chosen.

1600x 1200, 1280x1024, 1280x960, 1280x720, 800x600,

640x480, 320x240, 176x144

2. Bitrate Control Mode

There are CBR ( Constant Bit Rate ) and VBR ( Variable Bit Rate ) to use.

CBR : 32Kbps~4Mbps (the higher the CBR is, the better the video quality is)

VBR : 1(Low)~10(High) – Compression rate, the higher the compression rate, the lower the picture quality is; vise versa. The balance between VBR and network bandwidth will affect picture quality. Please carefully select the VBR rate to avoid picture breaking up or lagging.

3. Video Frame Rate

The video refreshing rate per second.

NTSC: Max 30 frames/second PAL: Max 25 frames/second

4. GOP Size It means "Group of Pictures". The higher the GOP is, the better



the quality is.

- 5. Video Format : H.264 or JPEG
- 6. RTSP Path: RTSP output connecting route

#### d. Streaming 2 Basic Mode :

Streaming 2 Setting			
💿 Basic Mode 🛛 🔿 Advanced Mode			
Resolution:	640x480 💙		
Quality:	Standard 💌		
Video Frame Rate:	15 FPS 💙		
Video Format:	JPEG 💌		
RTSP Path:	v2 ex:rtsp://<>/v2 Audio:G.711		

1. Resolution :

There are 8 resolutions can be chosen.

1600x 1200, 1280x1024, 1280x960, 1280x720, 800x600,

640x480, 320x240, 176x144

2. Quality :

There are 5 levels to adjust:

Best/ High/ Standard/ Medium/ Low

The higher the quality is, the bigger the file size is. Also not good for internet transmitting

- 3. Video Frame Rate : The video refreshing rate per second.
- 4. Video Format : H.264 or JPEG
- 5. RTSP Path: RTSP output connecting route
- e. Streaming 2 Advanced Mode :

Streaming 2 Setting			
O Basic Mode 💿 Advanced Mode			
Resolution:	640x480 🗸		
Bitrate Control Mode:	⊙ CBR ○ VBR		
Video Quantitative:	7 🗸		
Video Bitrate:	1.5Mbps 💌		
Video Frame Rate:	15 FPS 🔽		
GOP Size:	1 X FPS 🔽		
Video Format:	H.264 🔽		
RTSP Path:	v2 ex:rtsp://<>/v2 Audio:G.711		

1. Resolution :

There are 8 resolutions can be chosen.

1600x 1200, 1280x1024, 1280x960, 1280x720, 800x600,



640x480, 320x240, 176x144

- Quality : There are 5 levels to adjust: Best/ High/ Standard/ Medium/ Low The higher the quality is, the bigger the file size is. Also not good for internet transmitting
- 3. Video Frame Rate :

The video refreshing rate per second.

- 4. Video Format : H.264 or JPEG
- 5. RTSP Path: RTSP output name
- f. 3GPP Streaming mode:

3GPP Streaming Setting			
🔘 Enabled	Oisabled (Resolution=176x144, FPS=5, Format=MPEG4)		
3GPP Path:	3g	ex:rtsp://<>/3g Audio:AMR	
		ex:rtsp://<>/3gx No Audio	
		Apply	

3GPP mode suggested setting: 176x144 resolution, 5FPS, MPEG4 format

- 1. Enable or Disable 3GPP Streaming
- 2. 3GPP: 3GPP output name



iii、 Audio:

IP CAMERA supports 2-way audio. User can send audio from IP Camera audio input jack to remote PC; User can also send audio from remote PC to IP Camera's external speaker.

a. Audio from IP camera built-in mic to local PC: select "Enable" to start this function.

	Audio	
IP Camera to P	2	
Enabled	ODisabled	Apply

b. Audio from local PC to IP Camera: Check "chatting" in the browsing page.





### **D.Event List**

IP CAMERA provides multiple event settings.

i . Event Setting

	Event Setting	
Motion Detection		
Area Setting:	Area 1 Area 2 Area 3	
Sensitivity:	5 💙 5 💙 5	
🔲 Area 1:	E-mail FTP Out1	
🗌 Area 2:	E-mail FTP Out1	
Area 3:	E-mail FTP Out1	
Subject:	IP Camera Warning!	
Interval: 10 sec 🕑 a period of time between every two motions detected.		
Based on the scl	hedule	
Record File		
File Format:	AVI File(with Record Time Setting)	*
Record Time Setting		
Pre Alarm:	5 sec 💙 Post Alarm: 5 sec 💟	10
		Apply

a. Motion Detection :

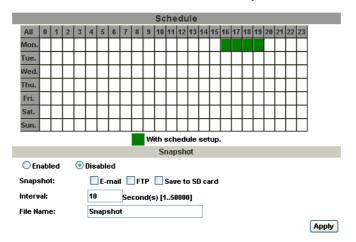
IP CAMERA allows 3 areas motion detection. When motion is triggered, it can send the video to some specific mail addresses, transmit the video to remote ftp server, trigger the relay, and save video to local SD card. To set up the motion area, click "Area Setting". Using mouse to drag and draw the area. The same operation for area 2 and 3.

- Record File Setting: IP CAMERA allows 3 different types of recording file to change its record size.
   When motion/alarm is triggered, there are 3 different types of record mode.
  - 1. AVI File (With Record File Setting )
  - 2. Multi-JPEG (With Record File Setting), only with JPEG compression format.
  - 3. Single JPEG (Single File with Interval Setting)
- c. Record Time Setting :



Pre Alarm and Post Alarm setups for video start and end time when motion detected, I/O, or other devices got triggered. Note: Pre/Post Alarm record time is base on record time setting and IP Cam built-in Ram memory. Limited by IP Cam built-in Ram Memory, When information is too much or video quality set too high, it will cause recording frame drop or decrease on post alarm recording time.

- ii 🔻 Schedule
  - a. Schedule: After complete the schedule setup, the camera data will be recorded according to the schedule setup.
  - b. Snapshot: After enable the snapshot function, user can select the storage position of snapshot file, the interval time of snapshot and the reserved file name of snapshot.



iii 、 I/O Setting

IP CAMERA supports 1 input/ 1 output. When input is triggered, it can send the video to some specific mail addresses, transmit the video to remote ftp server and trigger the relay.

	I/O Setting	
Input Setting		
Input 1 Sensor: Input 1 Action: Subject: Interval: Based on the	N.O     Image: Strain Str	
Output Setting		
Mode Setting: Interval:	OnOff Switch     O Time Switch	Apply

#### CATUTION!!

Please connect to propriety relay box to reduce the risk of electric



shock & damaged.

#### Alarm Input Setting

By GPIO I/O port input that provide related action while I/O input triggered.

#### **GPIO Output Setting**

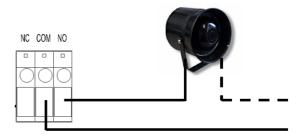
By GPIO I/O port output that provide OnOff Switch, Slide Switch & Pan/Tilt Module for using with relay box.

### GPIO pin define please refer to the part of Front / Back plane & I/O port pin assignment

GPIO 0	ALARM INPUT
	Normal: 3.3V (The voltage differential from GPIO pin & GND)
GPIO 1	Active: 0V (GPIO 0 & GPIO1 link to PIN2 GND)
GPIO 2	ALARM OUTPUT
	Normal: 3.3V (The voltage differential from GPIO pin & GND)
GPIO 3	Active: 0V (GPIO 0 & GPIO1 link to PIN2 GND)

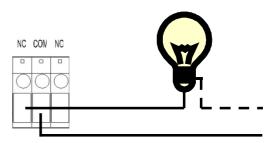
#### **GPIO INSTALLATION EXAMPLE 1**

Trigger a normal off (Normal Open) alarm siren on when event/motion occur at COM:



#### **GPIO INSTALLATION EXAMPLE 2**

Trigger the normal on (Normal Close) indoor illumination off when event / motion occur at COM:



iv 、 Log List



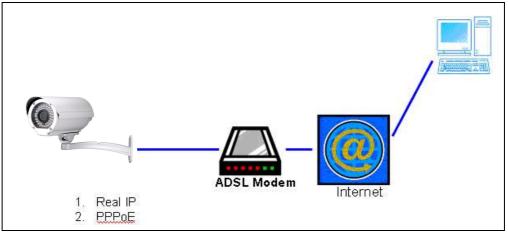
Log List	
System Logs	
	Logs
Motion Detection Logs	
	Logs
I/O Logs	
	Logs
All Logs	
	Logs

Sort by System Logs, Motion Detection Logs and I/O Logs. In addition, System Logs and I/O Logs won't lose data due to power failure.

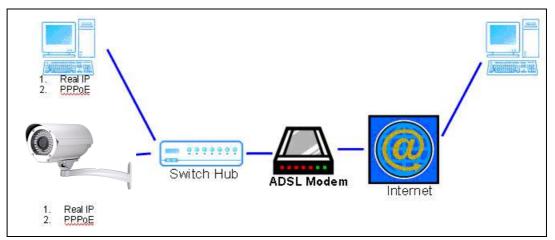


### VI. Network Configuration

i Configuration 1:



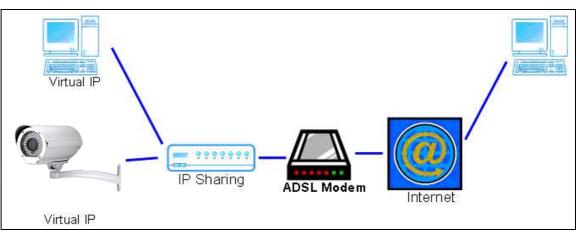
- a. Internet Access : ADSL or Cable Modem
- b. IP address : One real IP or one dynamic IP
- c. Only IP CAMERA connects to the internet
- d. For fixed real IP, set up the IP into IP CAMERA. For dynamic IP, start PPPoE.
- ii Configuration 2:



- a. Internet Access : ADSL or Cable Modem
- b. IP address : More than one real IP or one dynamic IP
- c. IP CAMERA and PC connect to the internet
- d. Device needed : Switch Hub
- e. For fixed real IP, set up the IP into IP CAMERA and PC. For dynamic IP, start PPPoE.



iii 
Configuration 3:



- a. Internet Access : ADSL or Cable Modem
- b. IP address : one real IP or one dynamic IP
- c. IP CAMERA and PC connect to the internet
- d. Device needed : IP sharing
- e. Use virtual IP, set up port forwarding in IP sharing.

### VII. Package contents

- i . IP CAMERA Network Camera
- ii 🔨 Adaptor
- iii 、 Ethernet Cable
- iv 、 CD title (User manual, IP installation Utility)

### **VIII. Factory Default**

- i N Removing an Ethernet cable.
- ii Plugging "a pink default cable" into "GND".
- iii Plug power cable.
- iv 
  When camera starts again, please remove the pink default cable and plug Ethernet cable for new setting.
- v Re-login the camera using the default IP (<u>http://192.168.1.200</u>), and user name (admin), password (admin).



### **Appendix I**

SD Card Recommended :

SanDisk 128M
SanDisk 256M
SanDisk 512M
SanDisk 1G
SanDisk 2G
SanDisk 4G

SanDisk 8GB SanDisk 16GB SanDisk 32GB Transcend 4GB Transcend 8GB Transcend 16GB Transcend 32GB