User Manual 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



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

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I. Preface

This is a 1/2.7" 2M CMOS IP camera with the web server built in. User can view real-time video via IE browser. It supports H.264, JPEG and MPEG4 video compression which provides smooth and high video quality. The video can be stored in the Micro SD card and playback remotely.

With user friendly interface, it is an easy-to-use IP camera which is designed for security application.

II. Product Specifications

- 1/2.7" 2M CMOS Sensor
- Digital Noise Reduction
- Digital Wide Dynamic Range
- Shutter Speed adjustion
- Sense Up adjustion
- Power over Ethernet available (Option)
- H.264/ JPEG / MPEG4 compression
- Micro SD card backup
- DI/DO
- Support iPhone/ Android/ Symbian /Blackberry/Mac
- Triple Streaming
- SDK for Software Integration
- Free Bundle 36 Channel Recording Software

Specifications

Hardware	
CPU	ARM 9 ,32 bit RISC
RAM	256MB
Flash	16MB
Image sensor	1/2.7" 2M CMOS sensor
Lens Type	4.2mm @ F1.6
Sensitivity	1.0 Lux @ 25fps
Shutter Time	1 / 5 ~ 1 / 10,000 sec
Audio	G.711(64K) and G.726(32K,24K) audio compression

	Input : Mic built-in		
	Output : 3.5mm phone jack, Support 2-way audio		
10	DI / DO		
Power over Ethernet	Optional		
Operating Temperature	-10°C ~45°C		
Dimensions	59mm x 93.7(mm)x 45.5(mm)		
Weight	240g		
Network			
Ethernet	10/ 100 Base-T		
Network Protocol	HTTP, HTTPS, SNMP, QoS/DSCP, Access list, IEEE		
	802.1X, RTSP, TCP/IP, UDP, SMTP, FTP, PPPoE,		
	DHCP, DDNS, NTP, UPnP, 3GPP, SAMBA		
Wireless (Optional)			
Wireless	802.11 n/b/g		
Security	WEP,WPA-PSK,WPA2-PSK		
System			
Video Resolution	1280x800@30fps,1280x720@30fps, ,640x480@30fps,		
	320x240@30fps, 176x144@30fps		
Triple Streaming	Yes		
CMOS setting	Brightness, Contrast, Hue, Saturation, Sharpness,		
	AGC, Shutter Speed adjustion, Sense-Up, D-WDR,		
	Flip, Mirror, Exposure, Noise reduction		
Image snapshot	Yes		
Full screen monitoring	Yes		
Zoom	Yes		
Privacy Mask	Yes, 3 different areas		
Compression format	H.264/ M-JPEG/ MPEG4		
Video bitrates adjust	CBR, VBR		
Motion Detection	Yes, 3 different areas		
Triggered action	Mail, FTP, Save to SD card, DO, SAMBA		
Pre/ Post alarm	Yes, configurable		
Security	Password protection, IP address filtering, HTTPS		
	encrypted data transmission, 802.1X port-based		
	authentication for network protection, QoS/DSCP		
Firmware upgrade	HTTP mode, can be upgraded remotely		
Simultaneous connection	Up to 10		
Micro SD card manageme	ent		

Recording trigger		Motion Detection, IP check, Network break down (wire			
		only),schedule, DI			
Video format	t	AVI, JPEG			
Video playback		Yes			
Delete files		Yes			
Web browsing requirement					
OS		Windows 7, 2000, XP, 2003, Microsoft IE 6.0 or above			
Hardware	Suggested	Intel Dual Core 2.53G,RAM: 1024MB, Graphic card:			
		128MB			
	Minimum	Intel-C 2.8G, RAM: 512MB, Graphic card: 64MB			

III. Product Installation

A. Monitor Setting

i. Right-Click on the desktop. Select " Screen resolution"



ii. Click "Advance settings"

🔾 📿 🗢 🖳 « Display 🕨 Screen	Resolution	- - ↓	Search Control Panel	م
Change the a	ppearance of your display			
			Detect Identify	
Display:	1. (Default Monitor) on Virtual PC Inte	gration Components	S3 Trio32/64 🔻	
Resolution:	1120 × 658 -			
			Advanced setting	5
Make text and oth	er items larger or smaller			
What display sett	ngs should I choose?			
		ОК	Cancel Apply]

iii. Change color to True Color (32bit).

(Default Monitor) and Virtual PC Integration Components S3 Trio32
Adapter Monitor Troubleshoot Color Management
Monitor Type
Default Monitor
Properties
Monitor Settings
Screen refresh rate:
75 Hertz ▼
Hide modes that this monitor cannot display
Clearing this check box allows you to select display modes that this monitor cannot display correctly. This may lead to an unusable display and/or damaged hardware.
Colors: True Color (32 bit)
OK Cancel Apply

B. Hardware Installation Assignment

- i. Connect power adaptor.
 Connect IP Cam to PC or network with Ethernet cable.
 Set up the network configurations according to the network environment.
 For further explanation, please refer to chapter VI, "Network
 Configuration for IP CAMERA".
- ii. PoE (Power Over Ethernet)(Optional) 802.3af, 15.4W PoE Switch is recommended

Power over Ethernet (PoE) is a technology that integrates power into a standard LAN infrastructure. It enables power to be provided to the network device, such as an IP phone or a network camera, using the same cable as that used for network connection. It eliminates the need for power outlets at the camera locations and enables easier application of uninterruptible power supplies (UPS) to ensure 24 hours a day, 7 days a week operation.



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".

\checkmark		protect your compu atures of this progra		rewall has blocker
Do yo	u want to	keep blocking this p	program?	
0	Name: Publisher	IPInstaller V2.1 No Unknown	etwork Device So	can
		Keep Blocking	Unblock	Ask Me Later

vi. IP Installer configuration:

IP_Camera	192.168.001.200	Nane		IP_Ca	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	:23:38	: A 5
	Search Device	•			Subr	nit
To Change Device Name, IP a 1.Select the device on the left		r.				

- 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.

IPInstallerENG X	J
Rebooting,Please wait	
確定	

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.

 區域連線 Properties 区 	Internet Protocol Version 4 (TCP/IPv4) Properties
Networking Sharing	General
Connect using:	You can get IP settings assigned automatically if your network supports this capability. Otherwise, you need to ask your network administrator for the appropriate IP settings.
Configure	Obtain an IP address automatically Ose the following IP address:
Client for Microsoft Networks	IP address: 192 . 168 . 1 . 100
File and Printer Sharing for Microsoft Networks	Subnet mask: 255 . 255 . 255 . 0
Internet Protocol Version 6 (TCP/IPv6) Internet Protocol Version 4 (TCP/IPv4)	Default gateway: 192 . 168 . 1 . 254
Image: Second secon	Obtain DNS server address automatically Output to the following DNS server addresses: Preferred DNS server: 192,168,1,2
Description	Alternate DNS server: 168 . 95 . 192 . 1
Transmission Control Protocol/Internet Protocol. The default wide area network protocol that provides communication across diverse interconnected networks.	Validate settings upon exit Advanced
OK Cancel	OK Cancel

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 92.168.001.165	Nane		atic	ənera	
	32.100.001.105			_		
		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		8	0	
		MAC	00 :	0F:0D	:00:21	: 0F
	Search Device	1		[Subr	nit
o Change Device Name, IP add .Select the device on the left si .Change network parameter on ' .Press Submit button. .Press "Search Device" to re .Double click the device to oper	ress, and Gateway: ie. the right side. -search again.]	,	[

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

Windows Security	y 📃
The server 192.	168.1.200 at IP_Camera requires a username and password.
	server is requesting that your username and password be cure manner (basic authentication without a secure
	admin ••••• Remember my credentials
	OK Cancel

D. Install ActiveX control:

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



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.









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**".



When connect to the IP CAMERA • The following program interface shows.





: Get into the administration page

	E C
<u>^</u>	
2.	

Video Snapshot

- 3. Show system time, video resolution, and video refreshing rate
- 4. Select video streaming source (When streaming 2 setting in "Video Setting is closed, this function will not display)
- 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. Shows how many people connect to this IP camera
- 7. Select to enable or disable the relay.

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
Zoom

- 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.

^r Enable digital zoom	
Zoom Factors: 16	8 %
<u> </u>	

V. Configuration



to get into the administration page. Click to go back to the live



video page.

	Network		/ Setting	Event
		System Infor	mation	
Server Information MAC Address:	00:0F:0D:23:38	· A.		
Server Name:	IP_Camera		_	
		Status		
Language :	English	◎ 繁體中文	-	
	Russian	Italian	Spanish	German
	Portuguese	Polish) Japanese	
OSD Setting	-			
Time Stamp:	_	Disabled		
Text:	🗇 Enabled 🔘			
	OSD_Displa	Y Text Edit		
Time Setting	1070/1/1 0 10 50			
Server Time: Date Format:	1970/1/1 8:18:53			
Time Zone:	GMT+08:00		commyy	
Enable Day				
	light Saving.			
NTP:	198.123.30.132	2		
Update :	6 ▼Hour			
Time Shift		es [-14401440	0]	
Synchronize				
Date :	2012/4/6			
Time :	13:39:27			
Manual				
Date :	2012/4/6			
Time :	13:39:16			
The date ar	id time remain the	e same		
				[Ap

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.
 - 2. 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	💿 Disabled		
Text:	🔵 Enabled	💿 Disabled		
	Test _{Tex}	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".

Time Setting				
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 :				
🔘 Synchronize	GMT-05:00			
Date :	GMT-04:00 GMT-03:30			
Time :	GMT-03:00 GMT-02:00			
🔘 Manual	GMT-01:00			
Date :	GMT-00:00 GMT+01:00			
Time :	GMT+02:00 GMT+03:00			
🔘 The date and	GMT+03:30 GMT+04:00		e same	
	GMT+04:30			Apply
	CMT+05-00			

ii 🗸 User Management

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

	User Man	agement	
Anonymous User	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.

🏉 User_Setting - Windows Inte 👝 🔳	—
e http://192.168.1.200/muser.html	
User Setup	
Username: admin	
Confirm:	OK
😜 Internet Protected N 🆓 👻 🍕 80%	•

iii • System update :

	System Update
Firmware Upgrade	
Firmware Version:	V1.0.20_Y
New Firmware:	潮覽
	Upgrade
Reboot System	
	Start
Factory Default	
	Start
Setting Management	
Save As a File:	Right click the mouse button on <u>Setting Download</u> 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 Settin	g
IP Assignment		
O DHCP		
 Static 		
IP Address:	192.168.1.202	
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	
HTTPS Port:	443	HTTPS Setting
UPnP	318 	
UPnP:	Enabled) <mark>D</mark> isabled
UPnP Port Forwarding:	O Enabled) Disabled
External Web Port:	80	
External https Port:	443	
External RTSP Port:	554	

- 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. HTTPS Port: setup port for HTTPS transmitting (Default: 443)

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
- 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

Rtsp Setting		
Rtsp Server:	💿 Enabled	🔿 Disabled
RTSP Port :	554	
RTP Start Port:	5000	[10249997]
RTP End port:	9000	[102710000]
Multicast Setting (Ba	sed on the Rtsp Se	rver)
Streaming 1:	12	
IP Address:	234.5.6.78	[224.3.1.0 ~ 239.255.255.255]
Port:	6000	[1 ~ 65535]
TTL:	15	[1 ~ 255]
Streaming 2:		
IP Address:	234.5.6.79	[224.3.1.0 ~ 239.255.255.255]
Port:	6001	[1 ~ 65535]
TTL:	15	[1 ~ 255]
onvif		
ONVIF:	🔿 v1.02 🤇	v1.01 ODisabled
Security:	O Enabled	💿 Disabled
RTSP Keepalive:	• Enabled	O Disabled

e. RTSP Setting

Enable or disable RTSP server first and can setup RTSP port and the start and end port of RTP

- f. Multicast Setting (Based on the RTSP Server) There are two multicast streaming can be setup. Each streaming can key in the IP Address, port and TTL.
- g. ONVIF

- ii · Advanced :
 - a. Https (Hypertext Transfer Protocol Secure) : Https can help protect streaming data transmission over the internal on the higher security level.

	Https Setting			
Created R	lequest			
Subject:	C=TW , ST= , L= , O= , OU= , CN=			
Date:	2011/Sep/22 08:26:18			
	Content			
Installed (Certificate			
Subject:	C=TW, ST=, L=, O=, OU=, CN=			
Date:	Apr 23 09:05:24 2011 GMT			
	Content			
	Connection Types			
Http&Http	os 🔻			

Https setting : Before setting new request, please remove old secure identification identification at Http connection type.

	Https Setting
Created F	Request
Subject:	C=TW , ST= , L= , O= , OU= , CN=
Date:	2011/Sep/23 10:04:17
	Content Remove
Installed	Certificate
Subject:	C=TW , ST= , L= , O= , OU= , CN=
Date:	Apr 23 09:05:24 2011 GMT
	Content Remove
	Connection Types
Http	•

- 1. Created Request: remove secure identification in Created request mode. There is a warning message showing. Please set "Yes" to remove secure identification.
- 2. Setting the secure identification and apply it.

	Https Setting
Create Request	
Country:	
State or province:	
Locality:	
Organization:	
Organizational Unit:	
Common Name:	
	Apply

- 3. Installed Certificate: remove Certificate in .Installed Certificate mode. There will be a warning message to check again.
- 4. There are two ways to set Certificate- Install Signed Certificate and Create Self-Signed Certificate.

Install Signed Certifica	te	
Signed Certificate:		瀏覽
		Apply
Create Self-Signed Ce	rtificate	
Country:		
State or province:		
Locality:		
Organization:		
Organizational Unit:		
Common Name:		
Validity:	Days	
		Apply

- b. SNMP(Simple Network Management Protocol) :
 - 1. Enable SNMPv1 or SNMPv2 and write the name of Write Community and Read Community.
 - 2. Enable SNMPv3, please set Security Name, Authentication Type, Authentication Password, Encryption Type, Encryption Password of Write mode and Read mode.
 - Enable SNMPv1/SNMPv2 Trap can detect the Trap server.
 Please set what event need to detect.

SNMPv1/v2c Trap	
Trap Address:	
Trap Community:	public
Trap Event:	🔲 Cold Start 🔲 Warm Start 🔲 Link Up
	Authentication Failed SD Detect

c. Access list : "Enable IP address filter" can set IP address which can allow or deny to this camera. There are two options, single and range, for user to set the IP address.

ADDRES	S S FIL	IP FILTER TER Setting		
Pv4 Settin		dress filter		
Pv4 List:		single address:		
	No.	IP Address	Filter	Action
	1			remove
	2			remove
	3			remove
	4			remove
	5			remove
	6			remove
	7			remove
	8			remove
	9			remove
	10			remove

d. QoS/DSCP(Quality of Server/Differentiated Services Code-point) :
 DSCP specifies a simple mechanism for classifying and managing network traffic and provide QoS on IP networks. DSCP is a 6-bit in the IP header for packet classification purpose. Please define the reserve for Live Stream, Event / Alarm and Management.

		QoS/DSCP	
QoS/DSCP Setting			
Enable QoS/DSC	CP		
Live Stream:	0	(0~63)	
Event / Alarm:	0	(0~63)	
Management:	0	(0~63)	
			Apply

e. IEEE 802.1x :

IEEE 802.1x is an IEEE standard for port-based Network Access Control. It provides an authentication mechanism to device wishing to attach to a LAN or WLAN. The EAPOL protocol support service identification and optional point to point encryption over the local LAN segment.



Please check what version of the authenticator and authentication server support. This camera supports EAP-TLS method. Please enter ID, passwoard issued by the CA, then upload related certificates.

IEEE 802.1x	/EAP-TLS
IEEE 802.1x Setting	
Enable IEEE 802.1x	
Eapol version:	© v1 ─ v2
Identity:	
Private key password:	
	Apply
CA certificate:	Upload 瀏覽
Status:	Remove
Client certificate:	Upload 瀏覽
Status:	Remove
Client private key:	Upload 瀏覽
Status:	Remove

iii、 PPPoE:

	PPPoE	
PPPoE Setting		
O Enabled Username: Password:	Disabled	
Send mail after d	lialed	
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.

- iv 、 DDNS:
 - It supports DDNS (Dynamic DNS) service.
 - a. DynDNS :

	DDNS	
DDNS Setting		
🔘 Enabled 🛛 💿 D	lisabled	
Provider:	dyndns.org	*
Hostname:		
Username:		
Password:		
Schedule Update:	1440	Minutes
State		
ldle		Apply
Note:		
IP products which in	nstalled behind the l	dule update is designed for CS or NAT devices. Update hinutes) and 0 remain to
	more than once eve	locked by DynDNS.org if :ry 5 minutes to 60 minutes. 40 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 :

	DDNS	
DDNS Setting		
🔘 Enabled 🛛 💿 D	lisabled	
Provider:	ddns.camddns.com	n 🕶
Username:]
Schedule Update:	1440	Minutes
State		
ldle		Apply
IP products which in	nstalled behind the K	lule update is designed for CS or NAT devices. Update inutes) and 0 remain to
schedule update is		ocked by DynDNS.org if ry 5 minutes to 60 minutes. 0 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.

v · 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:	1	Арр

vi 、 Wireless Setting (Wireless Network Optional)

Supports 802.11 b/g wireless connection.

Notice : Wireless network and Ethernet network use the same IP, the user has to unplug Ethernet cable, if Ethernet cable is not unplug, wireless setting can not be executed.

	Wireles	s Setting	
tatus of Wireless	Networks		
SSID	Mode	Security	Signal strength
Default	Infrastructure	WPA	79
3Com	Infrastructure	WEP	16
Taipei	Infrastructure	OFF	16
World Gym	Infrastructure	WEP	11
Taoyuan	Infrastructure	WEP	12
LINSANITY	Infrastructure	WEP	56
iPad	Infrastructure	WEP	48
iPhone	Infrastructure	OFF	43
android	Infrastructure	WPA	74
Nireless Setting			
MAC Address:	00:16:16:16:DD:E1	_	
Mode:	Infrastructure 🔽		
Operation Mode:	Auto 🔽		
SSID:	allan		
Security:	None 🔽		
			Apply

a. Status of Wireless Networks ;

scan all wireless services.

- b. Wireless Setting :
 - Mode: There are Infrastructure and Ad-hoc. Infrastructure is for connecting with the router. Ad-hoc is for connecting with PC. There is "Channel" to select only when user uses Ad-hoc mode.

e.g. If one PC's channel is 1, the other's channel has to 1, too.

Wireless Setting	
MAC Address:	00:11:E2:03:37:48
Mode:	Ad-hoc 🖌 🖌
Operation Mode:	Auto 🔽
SSID:	Default
Channel:	6 🛩
Security:	None 🖌

- 2. **SSID** : Based on AP setting.
- 3. **Channel** : This is only be used when the user selects Ad-hoc mode in order to avoid conflict.
- 4. **Security** : It supports "None", "WEP", "WPA-PSK" security encryption based on the setting of the Router.
- 5. **WEP**:

Security:	WEP 🔽
WEP Setting	
Authentication:	Open System 🔽
Encryption:	64 bit 🔽
Кеу Туре:	HEX 🛛 (10 character max)
Key 1:	۲
Key 2:	0
Key 3:	0
Key 4:	0

- Authentication : There are Open System and Shared Keys, it is based on different encryptions. This has to be the same as the Router's setting.
- Encryption : There are 64 bits and 128 bits. This is based on Key Type based on the Router's setting.
- Key Type: There are HEX and ASCII. When selecting HEX, the user only can input 0~9 characters and use A, B, C, D, E, and F.
- When selecting ASCII, the user can input any character. (Case sensitive)

- Key 1~4 : Based on Key Type to input characters.
- 6. **WPA-PSK** :

Security:	WPA-PSK 🛩
WPA-PSK Setting	
Encryption	ткір 💌
Pre-Shared Key:	(ASCII format, 8~63)
	· There are TKID and AEC

- Encryption : There are TKIP and AES.
- Pre-Shared Key : Allow any characters .(Case sensitive)

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.

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

User may select the camera system type,

/ideo Setting	
Video System:	PAL 🗸

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. Streaming 1 Basic Mode :

Streaming 1 Setting			
💿 Basic Mode 🛛 🔿	Advanced Mode		
Resolution:	VGA - 640x480	~	
Quality:	High 🔛 🔽		
Video Frame Rate:	30 FPS 💌		
Video Format:	H.264 🗸		
RTSP Path:		ex:rtsp://IP_Adress/ Audio:G	.711

1. Resolution :

There are 5 resolutions can be chosen. 1280x800, 1280x720, 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, MPEG4 or JPEG
- 5. RTSP Path: RTSP output name

b. Streaming 1 Advanced Mode :

Streaming 1 Setting	
🔘 Basic Mode 🛛 💿 A	dvanced Mode
Resolution:	VGA - 640x480
Bitrate Control Mode:	
Video Quantitative:	8
Video Bitrate:	1Mbps 😪
Video Frame Rate:	30 FPS 💌
GOP Size:	1 X FPS 🛛 GOP = 30
Video Format:	H.264 💌
RTSP Path:	ex:rtsp://IP_Adress/ Audio:G.711

1. Resolution :

There are 5 resolutions can be chosen.

1280x800, 1280x720, 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 30 frames/second

- GOP Size It means "Group of Pictures". The higher the GOP is, the better the quality is.
- 5. Video Format : H.264, MPEG4 or JPEG
- 6. RTSP Path: RTSP output connecting route

c. Streaming 2 Basic Mode :

Streaming 2 Setting			
💿 Basic Mode 🛛 🛛	Advanced Mode 🔘	Close	
Resolution:	QVGA - 320x240	~	
Quality:	Medium ⊻		
Video Frame Rate:	15 FPS 💌		
Video Format:	H.264 💌		
RTSP Path:	v2	ex:rtsp://IP_Adress/v2	Audio:G.711

1. Resolution :

There are 5 resolutions can be chosen.

1280x800, 1280x720, 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, MPEG4 or JPEG
- 5. RTSP Path: RTSP output connecting route
- d. Streaming 2 Advanced Mode :

Streaming 2 Setting	
🔘 Basic Mode 💽 Ac	vanced Mode 🔘 Close
Resolution:	QVGA - 320x240 🛛 🖌
Bitrate Control Mode:	● CBR ○ VBR
Video Quantitative:	7 🗸
Video Bitrate:	512Kbps 😪
Video Frame Rate:	15 FPS 😒
GOP Size:	1 X FPS 🛛 GOP = 15
Video Format:	H.264 💌
RTSP Path:	v2 ex:rtsp://IP_Adress/v2 Audio:G.711

1. Resolution :

There are 5 resolutions can be chosen.

1280x800, 1280x720, 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, MPEG4 or JPEG
- 5. RTSP Path: RTSP output connecting route
- e. 3GPP Streaming mode:

3GPP Streaming	g 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 Built-in mic 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 and also can select the audio type.

	Audio	
IP Camera to PC		
💿 Enabled	O Disabled	
Audio Type:	G.711 (64Kbps) 💉	
	G.711 (64Kbps)	Apply
	G.726 (24Kbps) G.726 (32Kbps)	Libba

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 Se	tting	
Motion Detection		Station II.		
Area Setting:	Area 1	Area 2	Area 3	
Sensitivity:	5 🚽	5 🗸	5 👻	
Area 1:	E-mail FI	P 🖸 Out1 🔲 Save	e to SD card 📃 Samba	
Area 2:	E-mail EFT	"P 📃 Out1 📃 Save	e to SD card 📃 Samba	
Area 3:			e to SD card 📃 Samba	
Subject:	IP Camera Warr	iing!		
Interval:	10 sec 🔻 a	period of time betwee	en every two motions detected.	
Based on the				
Record File				
File Format:	AVI File(with Re	cord Time Setting)		
Record Time Sett	ing			-
Pre Alarm:	5 sec 👻	Post Alarm:	5 sec 🔻	
Network Dis-conr	nected			
Dis-connected:	Save to SD (card 📕		
Network IP Check	C.			
IP Check:	Enabled	Disabled		
IP Address:	www.google.com			
Interval:	30 sec 🔻			
IP Check:	Save to SD	card		
				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 Micro 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、 Log List

0		
	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. Factory Default

- i
 To recover the default IP address and password, please follow the following steps.
- ii Remove power, and press and hold the button in the back of IP CAMERA.



- iii > Power on the camera. Don't release the button during the system booting.
- iv > It will take around 30 seconds to boot the camera.
- $v \sim \ \mbox{Release}$ the button when camera finishes proceed.
- vi
 Re-login the camera using the default IP (<u>http://192.168.1.200</u>), and user name (admin), password (admin).

VIII.Package contents

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