

# 15 meter IR Dome Internet Camera

# ICA-530

# **User's Manual**

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#### Federal Communication Commission Interference Statement

This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to Part 15 of FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses, and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

- 1. Reorient or relocate the receiving antenna.
- 2. Increase the separation between the equipment and receiver.
- 3. Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
- 4. Consult the dealer or an experienced radio technician for help.

#### FCC Caution

To assure continued compliance. (example-use only shielded interface cables when connecting to computer or peripheral devices). Any changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment. This device complies with Part 15 of the FCC Rules. Operation is subject to the Following two conditions: (1) This device may not cause harmful interference, and (2) this Device must accept any interference received, including interference that may cause undesired operation.

#### Federal Communication Commission (FCC) Radiation Exposure Statement

This equipment complies with FCC radiation exposure set forth for an uncontrolled environment. In order to avoid the possibility of exceeding the FCC radio frequency exposure limits, human proximity to the antenna shall not be less than 20 cm (8 inches) during normal operation.

#### Safety

This equipment is designed with the utmost care for the safety of those who install and use it. However, special attention must be paid to the dangers of electric shock and static electricity when working with electrical equipment. All guidelines of this and of the computer manufacture must therefore be allowed at all times to ensure the safe use of the equipment.

#### **CE Mark Warning**

This is a Class B product. In a domestic environment, this product may cause radio interference, in which case the user may be required to take adequate measures.

#### WEEE Regulation



To avoid the potential effects on the environment and human health as a result of the presence of hazardous substances in electrical and electronic equipment, end users of electrical and electronic equipment should understand the meaning of the crossed-out wheeled bin symbol. Do not dispose of WEEE as unsorted municipal waste and have to collect such WEEE separately.

Revision

User's Manual for PLANET 15 meter IR Dome Internet Camera Model: ICA-530 (for F/W v 3.0 or above) Rev: 2.0 (June, 2008) Part No. EM-ICA530v2

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# 1. Introduction

The PLANET ICA-530 is 15 meter IR Dome Internet Camera. The ICA-530 has built-in 24 LEDs that array of infrared illuminators can easily distinguish objects at a distance of 15 meter and beyond. It contains excellent panning feature 360 degrees, tilting feature 180 degree and rotating feature 360 degrees.

The ICA-530 can send video and audio via the internet to a web browser anywhere in the world. The ICA-530 takes surveillance to use 2-way audio. It can remotely talk to anyone at ICA-530 site when adding a speaker on ICA-530.

Multi-profile stands for video stream simultaneously. The ICA-530 can generate MPEG-4 and M-JPEG streaming to different users in the meantime. Moreover, the resolution can differ from one user to another. This state-of-art design is considerable to fit in various network environments. Up to 10 users can have access to the ICA-530 simultaneously at any point in time.

# 1.1 Overview

This user's manual explains how to operate the 15 meter IR dome internet camera from a computer. Basically, the user's manual is written to be read on the computer display. However, users might consider printing it out to access easily and read it before you operate the Network Camera.

## 1.2 Features

- AXIS compatible SDK
- High quality of 1/3" SONY CCD
- Clear and high resolution quality pictures for day and night
- LED used on ICA-530 are 4 times brighter than ordinary IR LED and visible distance up to 15 meter
- 3GPP for 3G mobile remote applications
- Multi-profile encoder supports MPEG-4 and M-JPEG video compression simultaneously and 30fps for all resolution
- Plug-N-Watch is able to simplify system integration in existing network environment
- Because of supporting TCP/IP networking, SMTP e-mail and HTTP public network standards, ICA-530 can be applied and utilized to a mixed IP network environment
- Easy configuration: Network administrators can configure and manage ICA-530 via Windows-based utility or web interface
- DDNS, PPPoE and FTP uploading supports more alternatives in surveillance network
- Motion Detection: the motion detection feature can monitor any suspicious movement in specific area
- 2-way audio supported
- Supports 3-axis camera cradle

• Night & Day switch with IR-cut filter, ICA-530 can get better video quality even in the nighttime.

# **1.3 Package Contents**

User can find the following items in the package for ICA-530:

ICA-530 x 1 Power Adapter x 1 Wrench x 1 Telephone box x 1 CD Disk x 1 Quick Installation Guide x 2 Software CD x 1

- **NOTE :** 1. If any of the above items are missing, please contact your dealer immediately.
  - 2. Using the power supply that is not the one included in ICA-530 packet will cause damage and void the warranty for this product.

# 2. Basic Setup

This chapter provides details of installing and configuring the ICA-530

# 2.1 System Requirements

Network Interface	10/100MBase-TX Ethernet
Monitoring System	Recommended for Internet Explorer 6.0 or later
Basic System Hardware	· CPU: Pentium 4, 3.0GHz or above
	Memory Size : 512 MB (512 MB or above Recommended )
	· VGA card resolution : 1024 x 768 or above
	• VGA card memory : 64 MB or above
	Sound card: Necessary
	<ul> <li>Network bandwidth: In VGA resolution mode, minimum upload bandwidth is 1Mbps.</li> </ul>

**NOTE:** The listed information is minimum system requirements only. Actual requirement will vary depending on the nature of your environment.

# 2.2 Physical Details



#### 1. RJ45 LAN socket:

Connect to PC or Hub/Switch. For connections to 10Base-T Ethernet or 100Base-TX Fast Ethernet cabling. This Ethernet port built N-Way protocol can detect or negotiate the transmission speed of the network automatically. Please use Category 5 "straight through" cable to connect the ICA-530 to a 100Mbps Fast Ethernet network switch or hub.

**Note** that, in case you need to connect the device to PC or notebook directly, you should use cross over cable instead.

#### 2. RS-485 & DI/DO:

Connect to a local keyboard controller and connect to sensor in and alarm out devices

Inside	the	TEI	hox.
IIISIUC	uie		<b>DUX</b> .

Name	Function
12VDC	DC 12V (50mA maximum)
GND	GND
D+	RS485 data +
D-	RS485 data -
DI	Digital signal input
DO	Digital signal output



**NOTE:** The RS-485 of ICA-530 is master that can control external scanner.

#### 3. Local Video output (BNC port)

The Network Camera also provides composite video output. User can use BNC video cable to connect the Network Camera with a TV monitor or VCR.

#### 4. DC-in Jack

The input power is 12VDC. Note that supply the power to the Network Camera with standard power adapter included in package. Otherwise, the improper power adapter may damage the unit and result in danger.

#### 5. Line in (audio in)

Connect an audio input source to the ICA-530.

#### 6. Line out (audio out)

Connect a loud speaker to the ICA-530. This function is for voice alerting and two-way audio.

## 2.3 Hardware Installation

1. Drill 20mm (3/4") holes in the ceiling or wall and then align the mounting plate to the holes you have made as below.

Ceiling Top Plate	Directly install on any horizontal or vertical surface
	Same

2. Camera Adjustment:

Tilting View	Rotating View	Panning View
Angle range is 0°~180°	Angle range is 0°~360°	Angle range is 0°~360°
JRANS	ARHE	JARNES CONTRACTOR

3. Connect the necessary cables and connectors, for examples, Ethernet cable and power jack.

4. Done.

# 2.4 Initial Utility Installation

This chapter shows how to quick set up your ICA-530. The ICA-530 is with the default settings. However to help you find the networked camera quickly the windows utility-IP Wizard can search the cameras in the network that shall help you to configure some basic setting before you started advanced management and monitoring.

- 1. Insert the bundled CD into the CD-ROM drive to launch the autorun program. Once completed, a welcome menu screen will appear.
- 2. Click the "IP Wizard" hyperlink; you will see the InstallShield Wizard dialog box as below.
  - **NOTE:** If the welcome screen does not appear, click "Start" at the taskbar. Then, select "Run" and type "D:\Utility\setup.exe", assume D is your CD-ROM drive.



3. The "Welcome to the InstallShield Wizard for IP Wizard" will display on the screen and click "Next" to continue.



4. Please click "Next" to install with original settings, or you may click "Change..." button to modify the install folder then press "Next" to continue.

🙀 IPWizar	d - InstallShield Wizard	
285451-2859	<b>on Folder</b> At to install to this folder, or click Change to install to a different folder.	
	Install IPWizard to: C:\Program Files\IP Wizard\	⊆hange
InstallShield -	< <u>Back</u> Next >	Cancel

5. Please click "Install" to start the installation.

🥵 IPWizard - InstallShield Wizard	×
Ready to Install the Program The wizard is ready to begin installation.	3
If you want to review or change any of your installation settings, click Back. Click Cancel to exit the wizard. Current Settings:	
Setup Type:	
Destination Folder:	
C:\Program Files\IP Wizard\	
User Information:	
Name: AmatsukaV2	
Company:	
InstallShield	
< <u>B</u> ack Install Cancel	

6. Please click "Finish" to complete the installation





7. Please double-click the utility icon utility.

on the desktop then you will see the ICA-530

# 2.5 IP Wizard

When you installed the ICA-530 on a LAN environment, you may execute IP Wizard to discover ICA-530's IP address and set up related parameters in the ICA-530.

#### Search Button:

When click **Search** button, a searching window will pop up. IP Wizard is starting to search ICA-530 on the LAN. The message "No Network Devices Is Found" will appear on this window if IP Wizard cannot find any camera on the LAN. Otherwise, existed cameras will be listed. If total quantity is over, please move the cursor to Information Box. Click on the left button of the mouse and the Information Box of the Listing Window will roll upward automatically; on the contrary, move the cursor to the Information Box on the top of Listing Window and click on the left button of the mouse and Listing Window will roll downward.

Search	Device Title	IP Address	Port	MAC Address
Wizard	IP Wiz	ard		
About		Search	ing	
Exit				1

#### Wizard Button:

When IP Wizard finds your camera, **Wizard** button will become available. Please select the device you would like to configure in the Information Box. The device will turn into yellow which means this device is selected; please press "**Wizard**" button. Or you could double click the mouse left key on the selected camera. Relative settings will be carried out. Details of Install Wizard will be specified as Section 2.6.

Wizard				_
Search	Device Title	IP Address	Port	MAC Address
	ICA-530	192.168.0.20	80	00-30-4F-A0-00-06
Wizard				
About				
Exit				
LAIT	6			
	40			

#### About Button:

When click "About" button, you will see the version information of IP Wizard shown in the pop-up dialog box.

😚 IP Wizard					×
Search	Device Title	IP Address	Port	MAC Address	
Wizard	ICA-530 About IP Wizard	192.168.0.20	80 0 ×	00-30-4F-A0-00-06	
About	IPWizar	d Ver 2.0.1.	2		
Exit		ОК			

#### Exit Button:

Click "Exit" button will close the IP Wizard Program.

# 2.6 Configure With IP Wizard

After pressing Installation Wizard, please key in Username and Password of the device when login dialog box appears on the screen. You can login the setup page if authorized name and password is correct. Default **username/password** for machine login: **admin**/<no password>

Login	
Administrater: Password:	
	Submit Cancel

#### Wizard Page 1: Username and Password

This page is about the change of the authorized user name and password of the selected device. If you don't want to change them, please click "Next" to move to the next page. Press "Exit" button if you don't want to set up right now. If you want to change authorized name or password, you have to check the box in front of **ID** or **New Password**. Authorized Username should contain at least 5~ 20 characters and New Password should contain at least 4~8 characters.

P Wizard	
Next	ID Administrater: admin
Exit	New Password
	Password:
	Verify Password:
-	Page: 1/1

### Wizard Page 2: LAN Setting

This page is about the select of Static IP or DHCP ON.

	🕸 IP Wi	zard						
	Pre	lext -View	LAN: IP Address: Subnet Mask: Def. Gateway: DNS1: DNS2:	tatic IP 192.168.0 255.255.2 192.168.0 0.0.0.0	255.0			
						Pag	je: 1/1	
LAN		assign. If " <b>DHCP(</b> have DH	configure this ICA- f there is a DHCP <b>DN</b> ", ICA-530 can CP server or you ill in the following fi	server in ye automatic want to use	our network ally obtain a e fixed IP ac	environme an IP addi Idress, plea	ent and you ress. If yo	u select u don't
IP Addre	ess	These n	ss is a unique nun lumbers are usua : 192.168.0.200					
Subnet I	Mask	network's subnets organizin usually a common 1111111	allow network tra- s configuration. In advance network ng hosts into logic appear in the sar subnet mask in 1 0000000 will form as 255.255.2	IP network security al groups. me "dotted its binar usually be	ing, traffic ta and perfor Subnet ma I decimal" o y demonstr	akes the formance to sks contai data. For ation 111	rm of pack some le n four byt example, 11111 11	kets. IP evel by es and a very 111111
Def. Gat	eway	networks	ay is a piece of soft 5. You'll see this te hen you're transier	rm most of	ten when yo	u either lo	g in to an l	
DNS1		xxxxx.co The term	bu send email or p m, the domain nar n refers to two thin es are control acros	ne system gs: the cor	translates th	ne names i	nto IP add	resses.
DNS2		The sam	e function as DNS	1. It is option	onal, not neo	cessary		
Note: If	no IP ad	dress is a	assigned after 30	seconds, tl	he ICA-530	will work	with its de	fault IP

address **192.168.0.20**. User may now open your web browser, and key in <u>http://192.168.0.20</u> in the address bar of your web browser to logon ICA-530's web configuration page.

### Wizard Page 3: Confirmation

This page shows the new configurations. If it is correct, please press "Submit" icon and the setting information will be save to your ICA-530. Click on "Exit" to close this window.

Pre-View	Please mak Administrater:	e sure all para admin	ameters bef Wireless:	ore submit. Disable
	Password:		SSID:	
ReStart	IP Address:	192.168.0.20	Channel:	1
Restart	Subnet:	255.255.255.0	Key1:	*
	Def. Gateway:	192.168.0.1	Key2:	*
	DNS1:	0.0.0	Key3:	*
Exit	DNS2:	0.0.0.0	Key4:	*

## 2.7 UPnP Function

**NOTE:** Windows 2000 does not support UPnP feature.

### 2.7.1 Windows XP

UPnP<sup>™</sup> is short for Universal Plug and Play, which is a networking architecture that provides compatibility among networking equipment, software, and peripherals. This device is an UPnP enabled device. If the operating system, Windows XP, of your PC is UPnP enabled, the device will be very easy to configure. Use the following steps to enable UPnP settings only if your operating system of PC is running Windows XP.

#### Go to Start > Settings, and Click Control Panel



The "Control Panel" will display on the screen and double click Add or Remove Programs to continue

) Back 🕥 - 🍠 🔎 S Iress 🕞 Control Panel							-
Control Panel 🛞	Accessibility Options	Add Hards re	Remover	A inistrative Tools	Date and Time	Skaplay Display	Folder Options
See Also 🉁	Fonts	Game Controlers	Internet Options	Keyboard	Mouse	Network. Connections	Phone and Modern
<ul> <li>Help and Support</li> </ul>	Power Options			Scamers and	Scheduled	Sounds and	speech
	3	Faxes	Language	Cameras	Tasks	Audio Devices	
	System	Taskbar and Start Menu	User Accounts				

The "Add or Remove Programs" will display on the screen and click **Add/Remove Widows Components** to continue.

扇	Currently installed programs:	Sort by: Name		*
Change or Remove	a DameWare NT Utilities	Ste	15.7250	P
Programs	Click here for support information.		ccasionally	
	To change this program or remove it from your computer, click Change or Remove.	Last Used On Change	1/18/2003 Remove	
Artici News	Internet Explorer Q828750			1
and one	IP surveillance	Size	3.30MB	
B	Outlook Express Update Q330994			
Add/Remove	Windows Media Player Hotfix [See wm820026 for more information]	Size	0.13MB	
Windows Components	Windows 39 Hotfix - 188821557			
Components	Windows 10 Hotfix - KB823182			
	Windows XP Hotfix - KB823559			
Set Program	Windows XP Hotftx - K8824105			
Access and Defaults	Windows XP Hotfix - KB024141			
Longues	Windows XP HotFix - KB024146			
	19 Windows XP Hotfix - K8825119			
	Windows XP Hotfix - K8828035			
	Windows XP HotFix (SP2) [See Q329048 for more information]			
	Windows XP Hotfix (SP2) [See Q329115 for more information]			
	B Windows XP Hotfix (SP2) [See Q329390 for more information]			5

The following screen will appear, select Networking Services and click Details to continue

Windows Components Wizard			
Windows Components You can add or remove comp	onents of Windows XP	14	<b>B</b>
To add or remove a componer part of the component will be i Details. <u>C</u> omponents:			
🗌 🜌 Message Queuing		0.0 MB	~
MSN Explorer		13.2 MB	
🗷 📩 Networking Services		0.3 MB	
🗆 🚉 Other Network File an	d Print Services	0.0 MB	
California Cutlook Express		0.0 MB	~
Description: Contains a variel	y of specialized, netwo	rk-related services and protoc	ols.
Total disk space required:	54 7 MB	6	
Space available on disk:	1926.8 MB	<u>D</u> etails.	<u> </u>
	< <u>B</u> a	ack <u>N</u> ext>	Cancel

The "Networking Services" will display on the screen, select **Universal Plug and Play** and click **OK** to continue.



#### Please click Next to continue

indows Components Wizard	Ĵ		
Windows Components You can add or remove comp	onents of Windows XP.		R
To add or remove a compone part of the component will be i Details.			
Components:			
🗌 🚅 Message Queuing		0.0 MB	<u>^</u>
MSN Explorer		13.2 MB	
Networking Services		0.3 MB	
🔲 불 Other Network File an	d Print Services	0.0 MB	1000
California Cutlook Express		0.0 MB	×
Description: Contains a varie Total disk space required: Space available on disk:	ty of specialized, network- 54.7 MB 1926.8 MB	related services and protoc	
	< <u>B</u> ack	<u>N</u> ext >	Cancel

The program will start installing the UPnP automatically. You will see the below pop-up screen, please wait while Setup configures the components.

equested. components. This r ponents selected. mation Services (IIS	
ponents selected.	
mation Services (IIS	5)
	,

Please click **Finish** to complete the UPnP installation

Windows Components Wiz	car d	
	Completing the Windows Components Wizard You have successfully completed the Windows Components Wizard.	
A M	To close this wizard, click Finish.	
	K Back Finish	

Double-click **My Network Places** on the desktop, the "My Network Places" will display on the screen and double-click the UPnP icon with ICA-530 to view your device in an internet browser.

2 My Network Places	
Elle Est yew Favorites Icols (Help 🔇 Fock - 🚫 - 🏂 🔎 Search 🌔 Folders 🛄 •	
Agdress 🗐 My Network Places	so 💽 💌
Network Tasks	
Add a network date     Vew network connections     Set up how or small     critice network     vitre sentropic computers	
Other Places	
Desitop     My Computer     My Documents     Shared Documents     Shined Parameters	
Details	

### 2.7.2 Windows Vista

UPnP<sup>™</sup> is short for Universal Plug and Play, which is a networking architecture that provides compatibility among networking equipment, software, and peripherals. This device is an UPnP enabled device. If the operating system, Windows Vista, of your PC is UPnP enabled, the device will be very easy to configure. Use the following steps to enable UPnP settings only if your operating system of PC is running Windows Vista.

Go to Start > Control Panel > Network and Internet > Network and Sharing Center, and turn on Network Discovery.

Tasks	Network and Sharing Co	enter	
View computers and devices Connect to a network Set up a connection or network Manage network connections Diagnose and repair	10FLABBBB2-P (This compute		View full map
	💐 Unidentified network (Pa	ublic network)	Customize
	Access	Local only	
	Connection	Local Area Connection	View status
		Local Area Connection	View status
	Connection	Local Area Connection	
			View status
	Network discovery	© On	Ø
	Network discovery	© On © Off	©
	Network discovery Rie snanng Public folder sharing	© On © Off	· · · · · · · · · · · · · · · · · · ·

Double-click **My Network Places** on the desktop, the "My Network Places" will display on the screen and double-click the UPnP icon with ICA-530 to view your device in an internet browser.



### 2.8 Setup ActiveX to use the ICA-530

The ICA-530 web pages communicate with the ICA-530 using an ActiveX control. The ActiveX control must be downloaded from the ICA-530 and installed on your PC. Your Internet Explorer security settings must allow for the web page to work correctly. To use the ICA-530, user must setup his IE browser as follows:

### 2.8.1 Internet Explorer 6 for Windows XP

From your IE browse  $\rightarrow$  "Tools"  $\rightarrow$  "Internet Options..."  $\rightarrow$  "Security"  $\rightarrow$ "Custom Level...", please setup your "Settings" as follow.

Set the first 3 items

- Download the signed ActiveX controls
- Download the unsigned ActiveX controls
- Initialize and script the ActiveX controls not masked as safe to Prompt



By now, you have finished your entire PC configuration for ICA-530.

### 2.8.2 Internet Explorer 7 for Windows XP

From your IE browse  $\rightarrow$  "Tools"  $\rightarrow$  "Internet Options..."  $\rightarrow$  "Security"  $\rightarrow$  "Custom Level...", please setup your "Settings" as follow.

Set the first 3 items

- Allow previously unused ActiveX control to run...
- Allows Script lets
- Automatic prompting for ActiveX controls

Security Settings - Internet Zone	×
Settings	
ActiveX controls and plug-ins     Allow previously unused ActiveX controls to run without prov     Disable     Enable     Allow Scriptlets     Disable     Enable     Prompt     Automatic prompting for ActiveX controls     Disable     Enable     Binary and script behaviors     Administrator approved     Disable     Enable     Enable     Enable	
Display video and animation on a webpage that does not use	
*Takes effect after you restart Internet Explorer	
Reset custom settings	
Reset to: Medium-high (default)	
OK Cancel	

By now, you have finished your entire PC configuration for ICA-530.

### 2.8.3 Internet Explorer 7 for Windows Vista

From your IE browse  $\rightarrow$  "Tools"  $\rightarrow$  "Internet Options..."  $\rightarrow$  "Security"  $\rightarrow$  "Internet"  $\rightarrow$ "Custom Level...", please setup your "Settings" as follow.

- Enable "Automatic prompting for ActiveX controls"
- Prompt "Initialize and script active controls not marked...."

ActiveX controls and plug-ins     Alow previously unused ActiveX controls to run without pror     Disable     Alow previously unused ActiveX controls to run without pror     Disable     Disable	ettings	Settings
Image: with the set of the	ActiveX controls and plug-ins Alow previously unused ActiveX controls to run without pron Enable Enable Alow Scriptets Enable Enable Enable Enable Enable Bable Enable Enable Enable Enable Enable Enable Disable Enable	
	Takes effect after you restart Internet Explorer	

From your IE browse  $\rightarrow$  "Tools"  $\rightarrow$  "Internet Options..."  $\rightarrow$  "Security"  $\rightarrow$  "Trusted Sites"  $\rightarrow$  "Custom Level...", please setup your "Settings" as follow.

- Enable "Automatic prompting for ActiveX controls"
- Prompt "Initialize and script active controls not marked...."

Settings  ActiveX controls and plug-ins  Allow previously unused ActiveX controls to run without pror  Disable  Allow Scriptets  Disable  Automatic prompting for ActiveX controls  Disable  Automatic prompting for ActiveX controls  Disable  Autimistrator approved  Disable  Circlaw uidea and animation on a webrane that does not yet  Takes effect after you restart Internet Explorer	Settings
Reset custom settings	Reset custom settings
Beset to: Medium (default)   Reset  OK Cancel	Beset to: Medium (default)   Reset  OK Cancel

By now, you have finished your entire PC configuration for ICA-530.

# 3. Web-based Management

This chapter provides setup details of the ICA-530's Web-based Interface.

## **3.1 Introduction**

The ICA-530 can be configured with your Web Browser. Before configure, please make sure your PC is under the same IP segment with ICA-530.

# 3.2 Connecting to ICA-530

- Use the following procedure to establish a connection from your PC to the ICA-530.
- Once connected, you can add the ICA-530 to your Browser's Favorites or Bookmarks.

Start the web browser on the computer and type the IP address of the ICA-530. The Default IP: <u>http://192.168.0.20</u> "



The login window of ICA-530 will appear, Default login username/password is :

admin/ <no password>



**NOTE:** If the User name and Password have been changed with IP Wizard, please enter the new User name and Password here.

Web browser may display the "Security Warming" window, select "Yes" to install and run the ActiveX control into your PC.



After the ActiveX control was installed and run, the first image will be displayed.



**NOTE:** If you log in the ICA-530 as an ordinary user, setting function will be not available. If you log in the ICA-530 as the administrator, you can perform all the settings provided within the device.

# 3.3 Live View

Start-up screen will be as follow no matter an ordinary users or an administrator.



Monitor Image Section	The image shot by the ICA-530 is shown here. The date and time are displayed at the top of the window.
Video Profile	The ICA-530 support multi-profile for both MEPG-4 and M-JPEG simultaneously. User can chose the proper and/or preferred profile here.
ActiveX Control	The plug-in ActiveX control supports a lot of functions by clicking the left mouse button. Note that this feature only supports on the ActiveX control within Microsoft® Internet Explorer.
2-Way Audio	The ICA-530 supports 2-way audio function. User can chose to enable or disable this function by toggling the icon below

De-Interlace	The device also supports de-interlace function inside ActiveX. User can chose to enable or disable this function by toggling the icon below.
	: Disable de-interlace function.

Enable de-interlace function.

### Setting Menu

This function is detail setting for ICA-530 that only available for user logged into ICA-530 as administrator.

	Item Action			
	NetworkConfigureNetworksettingssuchasDHCP,DDNS, 3GPP, PPPoE and UPnP			
	Camera	Adjust camera parameters		
	System	Configure system information, date & time, maintenance, and view system log file.		
	Video         Configure bit rate and frame rate of video profiles			
	Audio Configure audio parameters			
	User Setup user name, password and login privilege			
	E-Mail Setup E-Mail configuration			
	Object Detection	Setup Object detection		
	Event ServerThis device is a client site and configure information to upload images to server			
	Event Schedule         Configure the schedule while event triggered			
Streaming Protocol	User can select proper streaming protocol according to networking environment.			
Language	The device could provide multiple languages to meet customer's requirement.			
Video Information	Display video information including video format, resolution, frame rate and bit rate.			



Auto Pan Execute the auto pan of camera. While auto pan is running, the camera will swing the camera automatically. Note that the speed of auto pan is fixed and cannot be adjustable.

# **3.4 ActiveX Control**

The plug-in ActiveX control supports a lot of functions by clicking the left mouse button. Note that this feature only supports on the ActiveX control within Microsoft® Internet Explorer.

On the ActiveX control icon, click the LeftMouseButton, then a menu pop-up. This menu provides features that are unique to the ActiveX control. These features include:

- "Digital Zoom",
- "Record",
- "Snapshot",
- "Voice",
- "Statistics",
- "About"



### 3.4.1 Digital Zoom

Click **Digital Zoom** to active this function as above. User can drag or scale the box over the video to adjust zoom ratio and position.



### 3.4.2 Record

Click **Record** to activate this function. Press **Record** button to start recording. The video file is saved as ASF format into your local PC. While you want to stop it, press **Stop** to stop recording. Select **Browser**, the pop-up window to select the save path and file name prefix, select **OK** to continue.

After stop recording, list the files, this file is named as Video\_yyyymmddhhmmss.asf

The ASF files can be display by the standard Windows Media Player, but it needs the DixectX 9.0 or later version to be installed.



NOTE: Default save path is "C:\Documents and Settings\All user\Desktop

### 3.4.3 Snapshot

Click **Snapshot** to activate this function. Press **Snapshot** button to take a picture. The image file is saved as JPEG format into your local PC. Select **Browser**, the pop-up window to select the save path and file name prefix, select **OK** to continue.

If you like to retrieve the saved image, select the file to display the saved image by using any one of graph editing tools.



NOTE: Default save path is "C:\Documents and Settings\All user\Desktop

### 3.4.4 Voice

Click Volume to activate this function. These have two control bars for speaker and microphone volume. Scroll this control bar to adjust the audio attribute. Check the volume mute will mute the speaker output.



### 3.4.5 Statistics

Click **Statistics** to activate this function. A window will be popup to show the statistics information of the streaming status. **Note** that this information is the statistics between the device and your local PC.

Statistics	Inform	ation	×
-Video-			_
Forma	t:	MP4V	
Resolu	ution:	640×480	
Disp V	-FPS:	28.854	
Data-ra	ate:	256.39 Kbps	
- Audio -			
Forma	t:	G.726	
Bit-rate	e:	32000 bps	
Netwo	rk —		
Pkts re	cv:	13512	
-Time-			
Elapso	ed:	OD 00:03:06	
L			

### 3.4.6 About

Click About to show the ActiveX information


# 3.5 Network

Use this menu to configure the network to connect the device and the clients.

# 3.5.1 Network

This section provides the menu of connecting the device through Ethernet cable.

N	letwork DDNS	S PPPoE	Streaming	UPNP	IP Filter	IP Notification		
	MAC Address	00:3	D:4F:A0:00:A3					
	🗹 Obtain IP ad	dress automati	cally (DHCP)					
	IP Address	192	.168.0.20	Tes	t			
	Subnet Mask	255	.255.255.0					
	Gateway	192	.168.0.254					
	🗹 Obtain DNS	from DHCP						
	Primary DNS							
	Secondary DNS							
	HTTP Port	80		(1~6	65535)			
MAC Add	ress	Display t change it		et MAC	c addres	s of the devic	e. Note tha	t user can
Obtain an			Stands fo	r Dyna	mic Ho	st Configuratio	n Protocol	Enable t

Obtain an IP address automatically (DHCP)	DHCP: Stands for Dynamic Host Configuration Protocol. Enable this checked box when a DHCP server is installed on the network to issue IP address assignment. With this setting, the IP address is assigned automatically. If this device cannot get an IP address within limited tries, the device will assign a default IP address, 192.168.0.20, by itself as the default IP address.
IP address, Subnet mask, Gateway, 1st DNS, 2nd DNS server	If you do not select Obtain an IP address automatically, then you need to enter these network parameters by yourself.
IP Address	This address is a unique numbers that identifies a computer or device on the WAN or LAN. These numbers are usually shown in groups separated by periods, for example: 192.168.0.200
Subnet Mask	Subnets allow network traffic between hosts to be separated based on the network's configuration. In IP networking, traffic takes the form of packets. IP subnets advance network security and performance to some level by organizing hosts into logical groups. Subnet masks contain four bytes and usually appear in the same "dotted decimal" data. For example, a very common subnet mask in its binary demonstration 1111111

11111111 00000000 will usually be shown in the corresponding, more readable form as 255.255.255.0.

- **Gateway** A gateway is a piece of software or hardware that passes information between networks. You'll see this term most often when you either log in to an Internet site or when you're transient email between different servers.
- **Primary DNS** When you send email or position a browser to an Internet domain such as xxxxx.com, the domain name system translates the names into IP addresses. The term refers to two things: the conventions for naming hosts and the way the names are control across the Internet.
- **Secondary DNS** The same function as DNS1. It is option not necessary

**Note:** need to reboot the device to take this setting effect.

**HTTP Port** The device supports two HTTP ports. The first one is default port 80 and this port is fixed. This port is very useful for Intranet usage. The second HTTP port is changeable. Users could assign the second port number of http protocol, and the WAN users should follow the port number to login. If the http port is not assigned as 80, users have to add the port number in back of IP address. For example: <u>http://192.168.0.20:80</u>.

If multiple devices are installed on the LAN and also required to be accessed from the WAN, then the **HTTP Port** can be assigned as the virtual server port mapping to support multiple devices.

When the configuration is finish, please click "OK" to save and enable the setting.

# 3.5.2 DDNS server

DDNS: Stands for Dynamic Domain Name Server

The device supports DDNS. If your device is connected to xDSL directly, you might need this feature. However, if your device is behind a NAT router, you will not need to enable this feature. Because DDNS allows the device to use an easier way to remember naming format rather than an IP address. The name of the domain is like the name of a person, and the IP address is like his phone number. On the Internet we have IP numbers for each host (computer, server, router, and so on), and we replace these IP numbers to easy remember names, which are organized into the domain name. As to xDSL environment, most of the users will use dynamic IP addresses. If users want to set up a web or a FTP server, then the Dynamic Domain Name Server is necessary. For more DDNS configuration, please consult your dealer.

Your Internet Service Provider (ISP) provides you at least one IP address which you use to connect to the Internet. The address you get may be static, meaning it never changes, or dynamic, meaning it's likely to change periodically. Just how often it changes, depends on your ISP. A dynamic IP address complicates remote access since you may not know what your current WAN IP address is when you want to access your network over the Internet. The solution to the dynamic

IP address problem comes in the form of a dynamic DNS service.

The Internet uses DNS servers to lookup domain names and translates them into IP addresses. Domain names are just easy to remember aliases for IP addresses. A dynamic DNS service is unique because it provides a means of updating your IP address so that your listing will remain current when your IP address changes. There are several excellent DDNS services available on the Internet and best of all they're free to use. One such service you can use is www.DynDNS.org. You'll need to register with the service and set up the domain name of your choice to begin using it. Please refer to the home page of the service for detailed instructions or refer to Appendix D for more information.

Netwo	ork DDNS	PPPoE	Streaming	UPNP	IP Filter	IP Notification	
DI	NS	📀 D	isable 🔍 Enable	÷			
Se	erver Name	dyn	dns . org 🔽				
DI	NS Host			(1 ~ 3	30 Digits)		
	er Name				Digits)		
Pa	issword			(< 21	Digits)		
DDNS	То	enable o	or disable t	he DDI	NS servio	ce here.	
Server Nar	ne Ch	oose the	e built-in D	DNS se	erver.		
DDNS Hos	t The	e domaii	n name is a	applied	of this d	evice.	
User Name	e The	e user n	ame is use	ed to log	g into DD	NS.	
Password	The	e passw	ord is used	d to log	into DDN	NS.	

# 3.5.3 PPPoE

PPPoE: Stands for Point to Point Protocol over Ethernet

A standard builds on Ethernet and Point-to-Point network protocol. It allows ICA-530 connect to Internet with xDSL or cable connection; it can dial up your ISP and get a dynamic IP address. For more PPPoE and Internet configuration, please consult your ISP.

It can directly connect to the xDSL, however, it should be setup on a LAN environment to program the PPPoE information first, and then connect to the xDSL modem. Power on again, then the device will dial on to the ISP connect to the WAN through the xDSL modem.

The procedures are

- Connect to a LAN by DHCP or Fixed IP
- Access the device, enter **Setting > Network > PPPoE** as below

	Network	DDNS	PPPoE	Streaming	UPNP	IP Filter	IP Notification		
	PPPoE		•	Disable 🔍 Enabl	e				
	User Na	ame			(< 21	l Digits)			
	Passwo	ord			(< 21	l Digits)			
	IP Addr	ess							
	Subnet	Mask							
	Gatewa	У							
	Status		Disc	onnect					
PPPoE	=		То	enable or	disable	the PPP	PoE service h	ere	
	_		10		uisabie			010.	

User Name	Type the user name for the PPPoE service which is provided by ISP.
Password	Type the password for the PPPoE service which is provided by ISP.
IP Address, Subnet Mask, and Gateway	Shows the IP information got from PPPoE server site.
Status	Shows the Status of PPPoE connection.

# 3.5.4 Streaming

RTSP is a streaming control protocol, and a starting point for negotiating transports such as RTP, multicast and Unicast, and for negotiating codecs. RTSP can be considered a "remote control" for controlling the media stream delivered by a media server. RTSP servers typically use RTP as the protocol for the actual transport of audio/video data.

	Netw	ork	DDNS	PPPoE	Streaming	UPNP	IP Filter	IP Notific	ation				
	R	ISP Po	ort	554		(554	~ 65535)						
	R	TP Por	t	500	00	~ 50	999	(1	024 ~ 65	535)			
PT	SP Port		Choos	o tha R	TSP port.	The R		tocol all		conner	rtina cli	ont to s	tart a
N IX		•			Enter the								
RTF	P Port				nge of trar 1999. User								range
_			13 500	00 10 50	1333. USEI	can sp	eeny a n		Jeiwe	511 1024		5555.	
					addition t		ous sect	tion, you	ı migł	nt need	more i	nformati	on o
NO					nction, it st address v						tworke	d Device	e with

Port 554 is the default for RTSP service. However, sometimes, some service **RTSP Port** providers change this port number for some reasons. If so, user needs to change this port accordingly.

#### **Dialing procedure**

- 1. Choose a verified player (PacketVideo or Realplayer currently)
- 2. Use the following URL to access: rtsp://host/mpeg4/media.3gp

Where host is the host name or IP address of the camera.

Compatible 3G mobile phone Please contact your dealer to get the approved list of compatible 3G phone.

#### 3.5.5 UPnP

UPnP is short for Universal Plug and Play, which is a networking architecture that provides compatibility among networking equipment, software, and peripherals. This device is an UPnP enabled Network Camera. If your operating system is UPnP enabled, the device will automatically be detected and a new icon will be added to "My Network Places." If you do not want to use the UPnP functionality, it can be disabled

In addition, this device also provides UPnP IGD function for NAT traversal easily. Use NAT

traversal when your device is located on an intranet (LAN) and you wish to make it available from the other (WAN) side of a NAT router. With NAT traversal properly configured, all HTTP traffic to an external HTTP port in the NAT router will be forwarded to the device.

	Network	DDNS	PPPoE	Streaming	UPNP	IP Filter	IP Notificati	ion	
	Port Ra	AT Traversal	ICA-5	isable • Enable 30 - 000EAEA106 isable • Enable 38	525		(1 ~ 6 readonly)	5535)	
UPnP			To e	nable or d	isable t	he UPnF	o service ł	nere.	
Friend	dly Nam	e	Show	ws the frier	ndly na	me of thi	s device ł	nere.	
UPnP	NAT Tra	aversal	NAT		your ne	etwork, u	ising UPn	to configure port mapping in a PTM. Note that UPnPTM must be	
Port F	lange		The	port range	will op	en in NA	T router.		
Exteri	nal IP Ad	ddress	trave		nfigure	d succes		access through Internet. If NAT er can use this IP address and	

# 3.5.6 IP Filter

You can enter different user's IP address which are allowing enter or denying by the device.

	Network	DDNS	PPPoE	Streaming	UPNP	IP Filter	IP Notification		
	IP Filter IP Filter		O D	isable • Enable eny • Allow •	) Filter IP Lis				
IP Filte	ər	-	To enab	le or disab	ole the	IP filter fu	unction here.		
IP Filte	er Policy	/	Choose	the filter p	olicy w	here is d	enying or allo	owing.	

# 3.5.7 IP Notification

In case the IP address is changed, system is able to send out an email to alert someone if the function is enabled.



Proxy Port	Set port number of Proxy.
Proxy Login Name	Type the user name for the HTTP Proxy.
Proxy Login Password	Type the password for the HTTP Proxy.
Custom Parameter	User can set specific parameters to HTTP server.
Message	The message will be sent to HTTP server.

# 3.6 Camera

Use this menu to set the function of the camera of ICA-530

# 3.6.1 Picture

Picture F	PTZ Setting	Preset Setting	Tour Setting	
Brightnes	s	50	(0 ~ 100)	2
Sharpnes	s	50	(0 ~ 100)	
Contrast		50	(0 ~ 100)	
Local vide		● Disable ● Ena	IDIE	
rightness	La	arge value wi	ll brighten ca	mera.
harpness	La	arge value wi	ll sharpen ca	mera.
ontrast	La	arge value wi	Il contrast ca	mera heavily.
ocal Video Ou	itput C	heck this ite	m if a TV or	video monitor has been connected to

Local Video Output Check this item if a TV or video monitor has been connected to video output of the Network Camera. Un-check it if not any device has been connected. Otherwise, the image will be too brightness

# 3.6.2 PTZ Setting

	Picture	PTZ Setting	Preset Setting	Tour Setting				
		ra Protocol ra Address rate	Pelco-D V 1 9600 V					
PTZ	Protocol		he Network ( levice thru RS		connected to	built-in ICA	A-530 and (	controls this
Bauc	l Rate	Ν	This is the con Note that plea purpose. If so,	se DO NOT	C changes th	ne default v	alue excep	t on special
Cam	era ID	Ν	This is the car NOT changes needs to chect	the default	value exce	pt on speci	al purpose.	•

# 3.6.3 Preset Setting

This page provides the edit tool to modify or delete the "Preset Setting" item by item.

Picture	PTZ Setting	Preset Setting	Tour Setting		
Pre	set Number Pre	set Name		Preset List	
			Preset Numbe	r	
			Preset Name		
				Aodify Delete	
			]		

# 3.6.4 Tour Setting

Up to 64 positions can be preset, and the camera can be programming to move to the preset position sequentially.

Tour Number	r Tour Name	Running	Sequence	Preset Name	Wait	lime	
Tour Name			Preset	*			
Running	Enable Oisable			10		Seconds	
	Add Modify Delete	ļ		Add Modify	Delete		

**Tour Name** The group name of the sequence of camera tour. The maximum number of camera tour is 16.

**Running** Enable or disable this camera tour.

- **Preset** Set the sequence of the tour. Maximum 16 points can be assigned. The selected preset position is added in the Sequence list from 1 to 16.
- **Wait Time** Type a period of time during which the camera is to stay at each preset point, between 0 to 36000 seconds.

To use the camera tour function, user must preset some camera positions first. The maximum number of preset points is 64.

# 3.7 System

Use this menu to perform the principal settings of ICA-530.

# 3.7.1 System

	System	Date & T	Time Maintenance
		e Title Pare Version	ICA-530 (0 ~ 30 Digits) 3.0.2.2033 Reload
	Nov Nov Nov Nov Nov Nov Nov Nov Nov Nov	8 20:15: 8 20:15:	<pre>04 ICA-530 syslog.info syslogd started: BusyBox v1.01 (2008.05.09-08:44 004 ICA-530 user.emerg kernel: Linux version 2.4.19-pl1029 (richard@loce 004 ICA-530 user.emerg kernel: CPU: Faraday FA526id(wb) revision 1 04 ICA-530 user.emerg kernel: ICache:16KB enabled, DCache:16KB enabled, 04 ICA-530 user.emerg kernel: Machine: Prolific ARMSv4 - PL1029 04 ICA-530 user.emerg kernel: On node 0 totalpages: 8192 04 ICA-530 user.emerg kernel: zone(0): 8192 pages. 04 ICA-530 user.emerg kernel: zone(1): 0 pages. 04 ICA-530 user.emerg kernel: Zone(1): 0 pages. 04 ICA-530 user.emerg kernel: Kernel command line: root=/dev/norblock/c 04 ICA-530 user.emerg kernel: Relocating machine vectors to 0xffff0000 04 ICA-530 user.emerg kernel: Plser console driver v2.0.0</pre>
Device	Title		You can enter the name of this unit here. It's very useful to identify the specific device from multiple units.
Softwa	re Ver	rsion	This information shows the software version in the device.

Log User can check the system log information of the device, including the Main Info, Appended Info, Operator IP, and so on ...

# 3.7.2 Date & Time

You can setup the time setting of ICA-530, make it synchronized with PC or remote NTP server. Also, you may select the correct time zone of your country.

Server	Date & Time	2007-8-20 00:00:00
PC Tim	е	2008-3-12 14:39:38
Adjust		Synchronize with PC
		● Manual setting : Date : <mark>2007-8-20 Time :</mark> 00:00:00
		• Synchronize with NTP
NTP Se	rver	time.stdtime.gov.tw Test
NTP Sy	nc. interval	24 hour 🔽
Timezo	ne	GMT (Dublin, Lisbon, London, Reykjavik) 🔽
Dayligh	t Saving	● Disable ● Enable
Dayligh	t Saving StartTime	Jan 😪 1 🔽 00:00:00
Dayligh	t Saving StopTime	Jan 🝸 1 🝸 00:00:00
Dayligh	t Saving Offset	01:00:00

Server Date	Displays the date	and time of the device
& Time		
PC Time	Displays the date	and time of the connected PC
Adjust	Manual setting:	Click this option to set time and date manually
	Synchronize with NTP:	Click this option if you want to synchronize the device's date and time with those of time server called NTP server (Network Time Protocol)
	Synchronize with PC:	Click this option to enable time synchronization with PC time
NTP Server Name	Type the host nan	ne or IP address or domain name of the NTP server.
NTP Sync. Interval		between 1 and 23 hours at which you want to adjust referring to NTP server
Time Zone	Set the time differ device is installed	ence from Greenwich Mean Time in the area where the .
Daylight Saving	Check this item to	enable daylight saving adjustment.
Daylight Saving Start Time	Sets up the date a	and time of daylight saving start time.

Daylight Saving Stop Time	Sets up the date and time of daylight saving stop time.
Daylight Saving	Sets up the date of daylight saving offset.
Offset	

# 3.7.3 Maintenance

System	Date & Time	Maintenance	
Hard Fa	actory Default (Inclu	ide the network setting)	Hard Factory Default
Factory	y Default (Except the	e network setting)	Factory Default
Backuj	p Setting	Backup Setting	
Restor	e Setting		Browse Restore Setting Reset
Firmwa	are Upgrade	_	Browse Firmware Upgrade Reset
Systen	n Restart	Restart	

Hard Factory Default (Include the network setting)	Recall the device hard factory default settings. Note that click this button will reset all device's parameters to the factory settings (including the IP address).
Factory Default (Except the network setting)	The unit is restarted and most current settings are reset to factory default values. This action will not reset the network setting.
Backup Setting	To take a backup of all of the parameters, click this button. If necessary, it will then be possible to return to the previous settings, if settings are changed and there is unexpected behavior.
Restore Setting	Click the "Browse" button to locate the saved backup file and then click the "Restore Setting" button. The settings will be restored to the previous configuration.
Firmware Upgrade	<ul><li>The device supports new firmware upgrade.</li><li>1. Close all other application programs which are not necessary for firmware update.</li></ul>
	2. Make sure that only you access this device at this moment

- 3. Disable Motion Detection function.
- 4. Select "Firmware name"
- 5. Select the Firmware binary file. (Note that it must make sure that the Firmware only applies to this device, once update, it will be burned into FLASH ROM of system.)
- 6. Once the firmware file was selected, select "Upgrade".
- 7. The upgrade progress information will be displayed on the screen.
- 8. A message will be shown while the firmware upgraded. Once the upgrading process completed, the device will reboot the system automatically.
- 9. Please wait for 80 seconds, and then you can use IP Wizard to search the device again.

Warning!!! The download firmware procedure cannot be interrupted. If the power and/or network connection are broken during the download procedure, it might possibly cause serious damage to the device.

Please be aware that you should not turn off the power during updating the firmware and wait for finish message.

Furthermore, do not try to upgrade new firmware if it's not necessary.

System Restart

The device is restarted without changing any of the settings.

# 3.8 Video

This device provides more video profiles as below to support different request to each client simultaneously. Each user can choose his preferred video profile as his request independently.

# 3.8.1 Common

	Common	MPEG4/VGA	MPEG4/QVGA	MPEG4/QQVGA	VIDE0/JPEG		
	Text Ove	erlay Setting	Include Date				
		andy octaing	Include Date				
			linclude Text		(0 ~ 20 Digits)		
			<b>T</b> I				
ext O	verlay S	setting	inere are son	ne important	information	can be embedde	a into imad

including date, time, and/or text.

# 3.8.2 MPEG4/VGA

	Common	MPEG4/VGA	MPEG4/QVGA	MPEG4/QQVGA	VIDEO/JPEG			
	Video Type Resolution Rate Contr Max Frame	6 ol	IPEG4 40 x 480 ● Quality <mark>90 ● Bitrate 2048 30 ♥</mark>		100) s (384 ~ 4096)			
Video	Туре	lťs	MPEG4 mod	de in this profi	е			
Reso	lution	lťs '	VGA mode (	640x480) in th	nis profile			
Bit ra	te Control	Cor bit r rate the	nstant Bit Ra rate is betwe to match th quality level	e control met te (CBR) or V een 384kbps a ne limitation o to set the vio 1 and 100. T	ariable Bit F and 4096kbp f bandwidth deo quality i	ate (VBR). os. User car For VBR, u rather than	For CBR, th set the des user should bit rate. The	e video sired bit choose
Mox E	Frama Bate		ince the torg	atad frama ra	to of this pro	filo Eorova	male set the	o fromo

Max Frame Rate Defines the targeted frame rate of this profile. For example, set the frame rate to 15 fps, then the image will be updated for 15 frames per second. User can set the desired max frame rate versus video quality under the limited bandwidth.

# 3.8.3 MPEG4/QVGA

Common	MPEG4/VGA	MPEG4/QVGA	MPEG4/QQVGA	VIDE0/JPEG
Video Ty	pe	MPEG4		
Resoluti		320 x 240		
Rate Cor	itrol	Quality 80	(1 ~	100)
		Bitrate 512	К bp	os (128 ~ 1024)
Max Frai	ne Rate	30 🛩		
Type	lt'e l	MPEG4 mode	in this profile	

Video Type	It's MPEG4 mode in this profile.
Resolution	It's QVGA mode (320x240) in this profile.
Bit rate Control	Defines the rate control method of this profile. There are two options: Constant Bit Rate (CBR) or Variable Bit Rate (VBR). For CBR, the video bit rate is between 128kbps and 1024kbps. User can set the desired bit rate to match the limitation of bandwidth. For VBR, user should choose the quality level to set the video quality rather than bit rate. The quality level is between 1 and 100. The higher value is the better quality.
Max Frame Rate	Defines the targeted frame rate of this profile. For example, set the frame rate to 15 fps, then the image will be updated for 15 frames per second. User can set the desired max frame rate versus video quality under the limited bandwidth

# 3.8.4 MPEG4/QQVGA

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	Common	MPEG4/VGA	MPEG4/QVGA	MPEG4/QQVGA	VIDE0/JPEG
	Video Ty	ре	MPEG4		
	Resoluti		160 x 120		
	Rate Cor	ntrol	Quality 80	(1 ~	100)
			Bitrate 128	К Бр	s (24 ~ 320)
	Max Fra	me Rate	30 💌		
ο	Туре	lt's	s MPEG4 mod	de in this profi	e.
		1.1	001/01	1. (400, 400)	

Dit note Control	Defines the rote control method of this profile. The					
Resolution	It's QQVGA mode (160x120) in this profile.					

Bit rate Control	Defines the rate control method of this profile. There are two options:
	Constant Bit Rate (CBR) or Variable Bit Rate (VBR). For CBR, the video
	bit rate is between 24kbps and 320kbps. User can set the desired bit rate
	to match the limitation of bandwidth. For VBR, user should choose the
	quality level to set the video quality rather than bit rate. The quality level
	is between 1 and 100. The higher value is the better quality.

Max Frame Rate Defines the targeted frame rate of this profile. For example, set the frame rate to 15 fps, then the image will be updated for 15 frames per second. User can set the desired max frame rate versus video quality under the limited bandwidth.

# 3.8.5 VIDEO/JPEG

	Common	MPEG4/VGA	MPEG4/QVGA	MPEG4/QQVGA	VIDEO/JPEG		
	Video Ty Resoluti Rate Cor Max Fra	on itrol	JPEG 320x240 💉 Ourality 90 30 📡	(1 ~ 100	)		
Vide	о Туре	lťs JF	PEG mode in	this profile.			
Reso	olution		can select V S profile.	′GA, QVGA, d	or QQVGA	mode as the re	esolution of this
Rate	Control	The	quality level is	between 1 an	d 100. The ł	nigher value is th	ne better quality.
Max	Frame Ra	rate t can s	o 15 fps, then	the image will	be updated	for 15 frames p	e, set the frame er second. User nder the limited

3.9 At	Audio Audio Mode Input Gain Output Gain	<ul> <li>● Disable ● Enable</li> <li>● Simplex ● Full duplex</li> <li>□ •</li> <li>□ •</li> </ul>	
Audio	To enab	ble or disable audio function	
Audio M	ode	ct Simplex or Full duplex (2-way audio) mode	
Input Ga	in	st gain of input audio	
Output 0	ain To adjus	st gain of output audio	

# 3.10 User

Use this menu to set the user names and password of the Administrator and up to 10 users, and access right of each user.

Setting					
Viewer Login	● Anonymous ● O	only users in databa	ise Save		
User Name	Access Right		User List	٦	
admin	administrator	User Name	(1 ~ 20 Digits)		
		Password	(0 ~ 12 Digits)		
		Verify Password	(0 ~ 12 Digits)		
		Access Right	Administrator O Viewer		
			Add Modify Delete		
				_	
Viewer Login	Anonym	nous Cho	oose this to enable anonyr	nous user login.	
	Only u in datab		oose this to disable anony	mous user login.	
User Name	Enter the	e user's new	v account here which you	want.	
Password	Enter the user's new password here.				
Verify Password	Please e	Please enter the user's new password here again to confirm.			
Access Right		Administrator can access every function in this device. However, Viewers only can view the video and access limited function.			
Add, Update, and Remove	Manage	Manage the user's account of viewer user.			

# 3.11 E-Mail

You may setup SMTP mail parameters for further operation of Event Schedule. That's, if users want to send the alarm message out, it will need to configure parameters here and also add at least one event schedule to enable event triggering.



# 3.12 Object Detection

Use this menu to specify motion detection window 1 to window 4 and set the conditions for detection while observing a captured image.



easier to trigger event.

Sensitivity

Defines the sensitivity value of motion detection. The higher value will be more sensitivity.

# 3.13 Event Server

Setup FTP/TCP/HTTP server configuration

# 3.13.1 FTP Server

You may setup FTP parameters for further operation of Event Schedule. That's, if users want to send the alarm message to an FTP server, it will need to configure parameters here and also add at least one event schedule to enable event triggering as SMTP.

	FTP Server	TCP Server	HTTP Server				
	Name	FT	P Server	FTP Port	FTP Path	٦	
	Name				(<21 Digits)		
	FTP Server				Test	-	
	FTP Login Name				(<21 Digits)	=	
	FTP Login Passwo	ord		21	(<21 Digits)		
	FTP Path			21	(1 ~ 65535) (<64 Digits)	1	
	FTP Passive Mode	;		Disable      Enable		Ť	
Nam	е		loor oon one		CD nothe on wich Therefo	ra usar paada	
				ame for each F	ΓP paths as wish. Therefo TP setting.	re, user needs	
FTP	Server				, i i i i i i i i i i i i i i i i i i i		
		]	Type the serv	ver name or the	IP address of the FTP server	ver.	
Test			Check the FT	P server wheth	er this account is available	or not.	
FTP	Login Name	e _	Type the user name for the FTP server.				
FTP	TP Login Password						
		Type the password for the FTP server.					
FTP	Port	5	Set port number of FTP service.				
FTP	Path		Set working directory path of FTP server.				
FTP	Passive Mo	de	Select passive or active mode connecting to FTP server.				

# 3.13.2 TCP Server

In addition to send video file to FTP server, the device also can send event message to specified TCP server.

FTP Server	TCP Server	HTTP Server			
Name	TC	P Server	TCP Port		
Name		r 361961	(<21 Digits)		
TCP Server TCP Port			Test (1 ~ 65535)		
me			ltiple TCP servers as w ch TCP server setting.	ish. Therefore,	user needs to
P Server	Type the s	erver name	or the IP address of the T	CP server.	
P Port	Set port nu	umber of TC	P server.		

**3.13.3 HTTP Server** The device also can send event message to specified HTTP server.

	FTP Server TC	P Server HTTP Serve	er
	Name	HTTP Server	Proxy Address
	Name		(<21 Digits)
	URL	http://	(<60 Digits) Test
	HTTP Login Name		(<21 Digits)
	HTTP Login Password		(<21 Digits)
	Proxy Address		
	Proxy Login Name Proxy Login Password		(<21 Digits)
	Proxy Port		(<21 Digits) (1 ~ 65535)
		Į.	
an			
			specify multiple HTTP servers as wish. Therefore, use specify a name for each HTTP server setting.
RL	Type the server name or the IP address of the HTTP server.		
est	t	Check the	HTTP server whether it is available or not.
тт	P Login Name	Type the u	iser name for the HTTP server.
ТΤ	P Login Passw	ord Type the p	bassword for the HTTP server.
<b>'O</b> 3	Type the server name or the IP address of the HTTP Proxy.		
·0)	ky Login Name	Type the u	iser name for the HTTP Proxy.
0)	Type the password for the HTTP Proxy.		
0)	ky Port	Set port nu	umber of Proxy.

# 3.14 Event Schedule

This menu is used to specify the schedule of Events and activate the some actions provided by this device.

Name	Enable Type Weekday Start Duration Trigger by Action				
Name					
Enable	O Yes ● No				
Туре	Event Trigger     Schedule Trigger				
Enable Time	Sun Mon Tue Wed Thu Fri Sat Start from 0 0 0, puration 0 0 0 (max 168:00 hours )				
Trigger by	Sensor Active 🔽 🗖 Motion Area 💟				
Action	Go ● Preset ♥ ● Tour ♥ Voice Alert, Duration 5 (Seconds) Alarm Out, Duration 5 (Seconds) Send FTP ♥ Send TCP ♥ Send HTTP ♥ Send HTTP ♥				
me	Name of the Event or Schedule.				
able	Enable or disable this Event or Schedule.				
De	Schedule start with Event trigger or Schedule trigger.				
able Time	Define the feasible time slot.				
gger by	Select the triggered sources with event trigger.				
tion	Define the actions once event triggered.				

**Example.** If you want to upload image from ICA-530 to FTP server periodically. You will need to configure some parameters as below:

Name	FTP Upload
Enable	♥ Yes ● No
Туре	Event Trigger Schedule Trigger
Enable Time	☑ Sun ☑ Mon ☑ Tue ☑ Wed ☑ Thu ☑ Fri ☑ Sat Start from 0 ☑ 0 ☑ , Duration <mark>24 ☑ 0 ☑</mark> (max 168:00 hours )
Trigger by	Motion Area
Action	Go ● Preset ♥ ● Tour ♥     Voice Alert, Duration (Seconds )     Send FTP FTP Server ♥     Send E-Mail

**NOTE:** ICA-530 will send a 15sec recording file to FTP server every min.

# **Appendix A: Reset Factory Default Settings**

This button is used to restore the factory default settings. Sometimes restarting the ICA-530 will make the system back to a normal state. If the system still got problem after reset, user can restore the factory default settings and install it again.

### Restore the ICA-530:

1. Rotate the ceiling top plate to leave from ICA-530.



2. Press and hold the button down continuously.



3. Wait at least 10 seconds and release the button. Then the ICA-530 has been restored to factory default settings and reboot again.

# **Appendix B: PING IP Address**

The PING (stands for Packet Internet Groper) command is used to detect whether a specific IP address is accessible by sending a packet to the specific address and waiting for a reply. It's also a very useful tool to confirm ICA-530 installed or if the IP address conflicts with any other devices over the network.

If you want to make sure the IP address of ICA-530, utilize the PING command as follows:

- Start a DOS window.
- Type ping x.x.x.x, where x.x.x.x is the IP address of the ICA-530.

The replies, as illustrated below, will provide an explanation to the problem.



If you want to detect any other devices conflicts with the IP address of ICA-530, also can utilize the PING command but you must disconnect the ICA-530 from the network first.

# Appendix C: Bandwidth and Video Size Estimation

The frame rate of video transmitted from the ICA-530 depends on connection bandwidth between client and server, video resolution, codec type, and quality setting of server. Here is a guideline to help you roughly estimate the bandwidth requirements for your ICA-530.

The required bandwidth depends on content of video source. The slow motion video will produce smaller bit rate generally and fast motion will produce higher bit rate vice versa. Actual results generated by the ICA-530 may be varying.

Image Resolution	Average range of Data Sizes for JPEG mode	Average bit rate for MPEG4 mode
160 x 120 (QQVGA)	3 ~ 6k byte per frame	64kbps~384kbps @ 30fps
320 x 240 (QVGA)	8 ~ 20k byte per frame	128kbps~768kbps @ 30fps
640 x 480 (VGA)	20 ~ 50K byte per frame	256kbps~4096kbps @ 30fps

**Note:** Audio streaming also takes bandwidth around 5 kbps to 64kbps. Most xDSL/Cable modem upload speeds may not even reach up to 128 kbps. Thus, you may not be able to receive any video while streaming audio on a 128 kbps or lower connection. Even though the upload speed is more than 128kbps, for optimal video performance, disabling audio streaming will get better video performance.

Resolution	Quality setting	fps setting	Current stream	Current fps
320*240 CIF	Best	5 fps	around 2300Kbps	5 fps
320*240 CIF	Best	15 fps	around 6700Kbps	14.7fps
320*240 CIF	Best	25 fps	around 14300Kbps	28 fps
320*240 CIF	Normal	5 fps	around 400Kbps	4.2 fps
320*240 CIF	Normal	15 fps	around 1200Kbps	13 fps - 14 fps
320*240 CIF	Normal	25 fps	around 1700Kbps	30fps
320*240 CIF	Lowest	5 fps	around 350Kbps	4.2 fps
320*240 CIF	Lowest	15 fps	around 1100Kbps	13 - 14fps
320*240 CIF	Lowest	25 fps	around 2000Kbps	25 fps

#### MJPEG

### MPEG4

T		1		
Resolution	Stream setting	fps setting	Current stream	Current fps
640*480 VGA	384Kbps	5 fps	373Kbps - 388Kbps	5 fps
640*480 VGA	1024Kbps	5 fps	1024Kbps - 1036Kbps	5 fps
640*480 VGA	2048Kbps	5 fps	around 1800Kbps	5 fps
640*480 VGA	384Kbps	20 fps	around 550Kbps	22 fps
640*480 VGA	1024Kbps	20 fps	around 1400Kbps	20 fps
640*480 VGA	2048Kbps	20 fps	around 2600Kbps	16 - 17fps
320*240 CIF	200Kbps	5 fps	183Kbps - 200Kbps	5 fps
320*240 CIF	1024Kbps	5 fps	760Kbps - 800Kbps	5 fps
320*240 CIF	2048Kbps	5 fps	around 850Kbps	5 fps
320*240 CIF	200Kbps	25 fps	around 240Kbps	28 fps
320*240 CIF	1024Kbps	25 fps	around 1100Kbps	30 fps
320*240 CIF	2048Kbps	25 fps	around 1600Kbps	30 fps
160*120 QCIF	128Kbps	5 fps	117Kbps - 121Kbps	5 fps
160*120 QCIF	1024Kbps	5 fps	around 176Kbps	5 fps
160*120 QCIF	2048Kbps	5 fps	around 220Kbps	5 fps
160*120 QCIF	128Kbps	25 fps	around 155Kbps	30 fps
160*120 QCIF	1024Kbps	25 fps	around 520Kbps	30 fps
160*120 QCIF	2048Kbps	25 fps	around 1000Kbps	30 fps

# **Appendix D: DDNS Application**

#### 1. Preface

If you have a Cable modem or xDSL, this is a great way to host your own Networked Device or other TCP/IP Service. Get your own domain like www.yourname.com, www.yourname.com.tw etc. (Note: This domain must be registered with Internic via registration authorities such as Network Solutions, DirectNIC, Register.com etc). Your domain name's dynamic IP address is automatically tracked by a DDNS server.

Host your own Networked Device and much more no matter what your computer's IP address may be and even if you have dialup, DSL or cable modem internet connection where your computer's IP address changes all the time!! DDNS service supports all top level domain names including but not limited to .com, .net, .org, .to, .uk etc.

#### 2. Ethernet Network Environment

Normally, DDNS service is only necessary for the users that could only obtain dynamic IP addresses. As to the users that could obtain the static valid IP address, they do not usually have to apply the DDNS service. Before we decide if DDNS is necessary for the users, we have to check what kind of Ethernet network environment we have to install our Networked Device on.

#### (1) Environment of Fixed Valid IP Network

If users could obtain valid IP addresses, they could save the effort to apply DDNS service. Because the IP address in this environment is fixed, users could input the IP address or domain name of demo site directly in the IE browser.

#### (2) Environment of Dynamic IP Network

If users is under an environment of dynamic IP network (Dial-up xDSL), they have to apply a domain name in advance. Then apply DDNS service. Finally setup the necessary information of DDNS and PPPoE of the Networked Device in order to let the outside administrator be able to access through internet.

### 3. Application Steps – DDNS & Domain Name

- (1). Visit the following web site: <u>http://www.dyndns.org/</u>
- (2). Click "Account"



(3). After the columns show up at the left side, click "Create Account".

<b>OynDNS</b> <sup>®</sup>						
	About	Services	Account			
My Account	Login					
Create Account						
Login		It is strongly reco	ommended that you visit this pag			
Lost Password?	⊢Account Login —					
		Usernar	me:			
Search DynDNS						
Search		You n	nust have cookies enabled			

- (4). Fill the application agreement and necessary information.
  - a. Username
  - b. E-mail address and confirmation
  - c. Password and confirmation
  - d. Submit all the input information and finish creating an account

🎯 Dyn E	User: Pass: Pass: Lost Password? - Create Account					
	About	Services	Account	Support	News	
My Account	Create You	r DvnDNS	Account			
Create Account		,				
Login	Please complete the form	m to create your free	DynDNS Account.			
Lost Password?	It is strongly recommended that you visit this page securely. You are not currently visiting this page securely.					
Search DynDNS	E-mail Ad Confirm E-mail Ad	dress: word:			ore than 5 characters a	the e-mail address provided. Ind cannot be the same as your usernam therwise be easily guessed.

Please read the accepatable use policy (AUP) and accept it prior to creating your account. Also acknowledge that you may only have one (1) free account, and that creation of multiple free accounts will result in the deletion of all of your accounts.

olicy Last Modified: February 6, 2006	<u> </u>
ACKNOWLEDGMENT AND ACCEPTANCE OF TERMS OF SERVICE	
All services provided by Dynamic Network Services, Inc. ("DynDNS") are provided to you (the "Member") under the Terms and Conditions set forth in this Acceptable Use Polic: ("AUP") and any other operating rules and policies set fort! by DynDNS. The AUP comprises the entire agreement between the Member and DynDNS and supersedes all prior agreements between the parties regarding the subject matter contained herein. BY COMPLETING THE REGISTRATION PROCESS AND CLICKING THE "Accept" BUTTON, YOU ARE INDICATING YOUR AGREEMENT TO BI BOUND BY ALL OF THE TERMS AND CONDITIONS OF THE AUP.	h
LSCRIPTION OF SEAL SE	
I agree to the AUP:	
I will only create one (1) 🚽 🖊 🖛 Click these two	options
free account:	
-Next Step	
free account:	

account. (This helps prevent unwanted robots on our systems)

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Create Account

(5). Check your e-mail mailbox. There will be an e-mail with a title "Your DynDNS Account Information". Click the hyperlink address to confirm the DDNS service that you just applied. Then DDNS you applied activated.
Click to confirm

Your DynDNS Account 'kkkkk' has been created. You need to visit the confirmation address below within 48 hours to complete the account creation process:

https://www.dyndns.com/account/confirm/oDDGDYN75qTJk\_ICGba6vQ

Our basic service offerings are free, but they are supported by our paid services. See <u>http://www.dyndns.com/services/</u> for a full listing of all of our available services.

If you did not sign up for this account, this will be the only communication you will receive. All non-confirmed accounts are automatically deleted after 48 hours, and no addresses are kept on file. We apologize for any inconvenience this correspondence may have caused, and we assure you that it was only sent at the request of someone visiting our site requesting an account.

Sincerely, The DynDNS Team

<b>⊗</b> DynDNS <sup>°</sup>				User: Pass: Lost Pass: Lost Password? - Create Account			
		About	Services	Account	Support	News	
My Account	Account Confirmed						
Create Account	The account kikkikk has been confirmed. You can now login and start using your account.						
Login							
Lost Password?	Be informed of new services, changes to services, and important system maintenance/status notifications by subscribing to our Once there, you may subscribe to the Announce list by checking the appropriate box and clicking the "Save Settings" button.						

(6). Enter the web page <a href="http://www.dyndns.org/">http://www.dyndns.org/</a> again. Input your username and password that you just applied to login administration interface of DDNS server.



- (7). If the correct username and password are input, you can see the following picture at the top-right of the login page.
- (8). Click the "Services".



### (9). Click the "Dynamic DNS".

	About	Services	Account	Support	News		
Services	Services						
DNS Services							
Domain Registration		DynDNS provides a variety of services that help enhance your home or business Internet experience. V (DNS), high quality domain management, world-class e-mail services, web redirection, and network mor technical support by e-mail or phone where you speak to a highly trained engineer rather than a call ce					
SSL Certificates							
Mail Services	1						
Network Monitoring	DNS Services						
Web Redirection	Custom DNS - Our	dynamic and static I	ONS management to	ol for your own dom	naim		
Account Upgrades	Secondary DNS - Add reliability to your own nameservers						
Pricing	Bosenic DNS     A free DNS service for those with dynamic IP addresses						
My Cart	S		se with static ID ade				
	<ul> <li><u>TLD DNS</u> - DNS for</li> </ul>	operators of ccTLD	s and gTLDs				
0 ihome							

(10). Click the "Create Hosts".



third-party <u>update clients</u> you can keep your hostname always pointing to your IP address, no matter how often your ISP changes it. No more fumbling to find that piece of paper where you wrote down your IP address, or e-mailing all your friends every time it changes. Just tell them to visit yourname.dyndns.org instead! (11). We could create a domain name without any charge at this step. First, we input the host name. (No.1) Then we pick a domain that is easy to remember. Finally (No.2), click the "Add Host" to submit the domain name information. (No.3)

New Dynamic DNS <sup>SM</sup>	Host		
Hostname: 1		Vrdns.org  Vr-o-saur.com ynalias.com ynalias.org yndis.org yndns.biz yndns.info yndns.tv yndns.tv yndns.tv ancess.cc ame-host.org	3 ↓ Add Host Reset Form

#### 4. Setup the DDNS and PPPoE of Network Device

At last, users have to enter the web page of Networked Device and setup the necessary information of DDNS and PPPoE after the application of DDNS service. Please check the user manual to access the DDNS and PPPoE pages. After saving the modification, restart the device. The external users could browse the Networked Device by the input of their domain name.