

IP Kamera 9070IR-PoE

User Manual



Release Date: 10/20/2009
Manual Version: 1.1

Warning: Any changes made to this equipment without permission may cause damages to the device!

IMPORTANT NOTICE

1. IP Kamera 9070IR-PoE was designed for indoor use, the manufacturer responsibility for possible damages caused by outdoor use, especially in the rain.
2. Please use the power adapter provided by the dealer, the manufacturer is not responsibility for the possible damage from using power adapters.
4. Do not shake the IP Kamera 9070IR-PoE in any fashion
5. Please contact the dealer If IP Kamera 9070IR-PoE is not working properly.

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1.) Introduction



The IP Kamera 9070IR-PoE provides reliable, high quality solution to IP Kameras. Its distinctive 720P HD quality picture, Tri-mode video capability, built in SD memory storage, RTSP broadcasting capability, internal microphone and many more functions makes this small device very powerful and unique. The built in web server of the IP Kamera 9070IR-PoE will allow the IP Kamera to be viewed from any remote locations around the world while bringing ease of mind. Furthermore, with CNT technology the 9070IR-PoE is easy to setup & use, simply just plug and play.



Minimum System Requirements

CPU Minimum Requirements

- Intel(R), Pentium(R), DUAL Core (D), CPU 3.0GHz or equivalent
- Operating Systems: WINDOWS Operating Systems (IE5.0+SPI)
- 512 MB system memory or above
- Video Card: 3D hardware accelerator card required – 100% DirectX 9.0c compatible
- 10/100 Ethernet switch/hub
- Sound Card: DirectX 9.0c compatible sound card
- Ethernet network port/card
- Network cable
- Internet (For remote access) or Ethernet Network (Internal Network use) with some type of Internet connection, (i.e. ADSL, Cable, Dial up or any other forms of Internet service)

Software

- VLC media player 0.8.6b or above.
- Windows XP Service Pack 2 or above.
- Resolution of screen setting: 1280x960 or higher for the display of 720.

2.) Product Overview

Features

1. Tri-Mode Camera (MPG4-1/MPEG4-2/M-Jpeg)
2. Advance Motion detection trigger AVI /Jpeg save on FTP / SD card or Email
3. 3 layers (Admin, Operator, and User) Password protected
4. Resolution from CIF 352x192 up to **HD 1280x720P**
5. Supports NTP protocol to get correct time schedule.
6. 1/2.5" Advance CMOS sensor, with highly sensibility for quick response insufficient lighting.
7. Infrared for Indoor / Outdoor use
8. Waterproof Design
9. Supports HTTP CGI command set. Easy for system integration
10. IP Service Search utility, to find the IP Kamera on internet with ease
11. Watchdog / Event log design
12. Adjustable frame-rate, bit-rate, rate-control type, quality factor for best image quality and speed.
13. Supports date and time marking on the captured video, and also inserted streamed data.
14. Measured End-to-End latency is less than 150ms
15. Supports adjustable backlight, brightness, contrast, saturation & sharpness
16. TV Output capabilities
17. Automatic alarm recording buffer
18. CNT Technology – Just Plug and Play no need to port forward
19. EPTZ – Electronic Pan, Tilt, and Zoom
20. SD Memory Storage – Add convenience and storage
21. Scheduler recording capabilities
22. Email Capabilities
23. Alarm Recording Buffer
24. Supports: HTTP Web Server (HTTP), SSL, FTP client, SMTP client, NTP client, DHCP client, UPnP client, RTSP over UDP, RTP

Specification

Casing: Reinforced Aluminum

Case Color: Pearl White



Weight with outer case: 743.0 g

Dimensions (W x L x H): 8.5cm x 13cm x 10cm

Dimensions with outer case (W x L x H): 8.6cm x 17.5cm x 11cm


Power: AC Adaptor

PoE Specifications: 802.3af PoE

Package Contents	
1.) 9070IR-PoE Unit x 1 with Lid	
3.) 9070IR-PoE Installation CD	
4.) AC Adaptor	<p>(AC adaptor will be included and will correspond to the countries power standards)</p> <p>Specs: Input: 100-250Vac /47-63Hz, 1A Output: 12Vdc/1A Max: 12W</p>
5.) Camera Mounting Bracket	

3.) Interface Description

Cable Description

Cables	
	
DC 12 V Power Input:	Plugs in the Power Adapter to the DC 12V Card
PoE RJ45 Ethernet:	Plug in the RJ45 Ethernet cable to the Ethernet PoE Specifications: 802.3af PoE
Reset Button:	Reset to Manufacturer Default: Hold Reset button for 5-10 Seconds and the device will reset to manufacturer default.
Video Out:	The Video out requires a BNC connector to output video to a different source.
Embedded SD Card	Built in 2 GB SD Memory Card.

4.) Hardware Setup

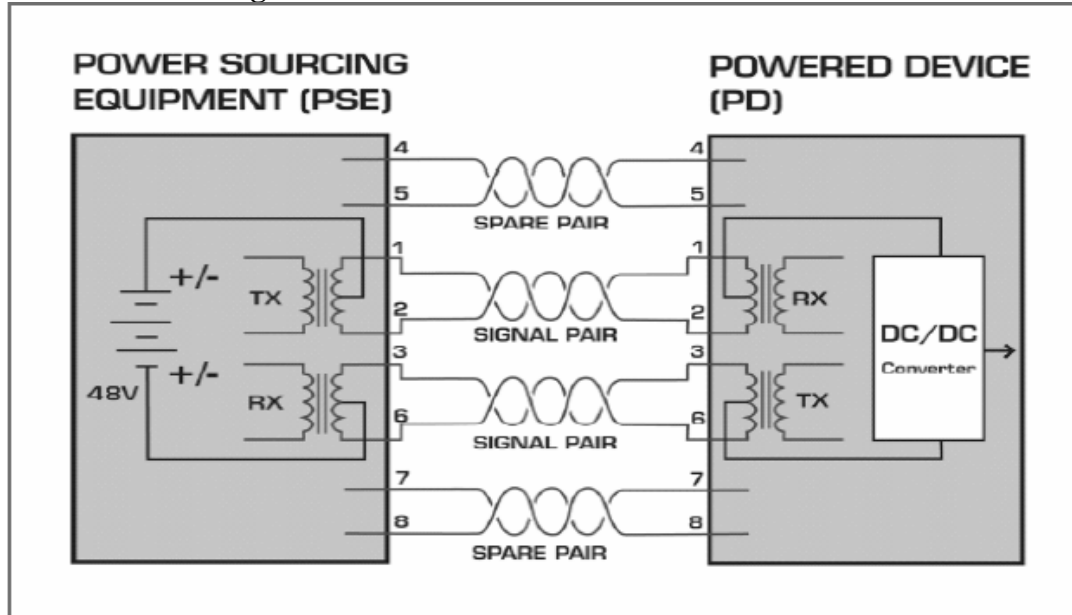
*Before setup the device make sure of the following:

- 1.) Make sure that all the package contents are all included if anything is missing please contact the store or your distributor.
- 2.) Make sure the power adaptor is the correct specification.
- 3.) Make sure that all the cables are working correctly

PoE Router Type

To use the 9070IR-PoE, the correct PoE router standard must be used. The type of PoE router that must be used will have to be designed so that power can be sourced from the PSE through the data lines via data transformer center taps.

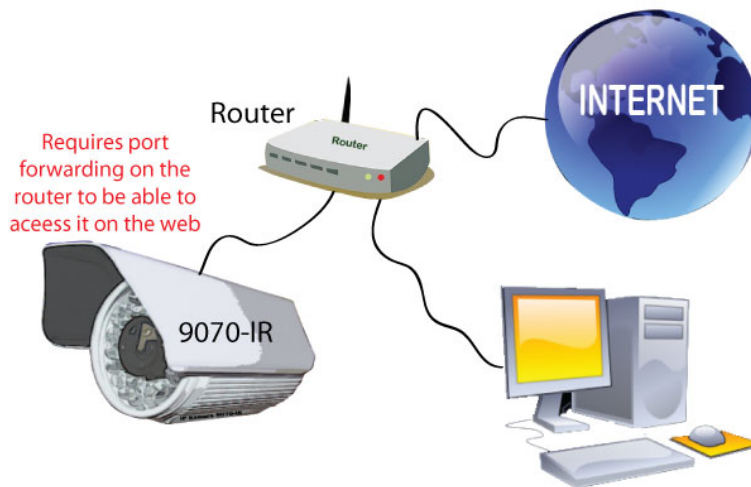
Please see the image below for reference.



Internet Accessible Setup

The internet connection can be setup in two main ways so that the 9070IR-PoE can be accessed through the internet

The network uses a Router/Firewall to connect each device to the internet



In this case, the 9070IR-PoE will need to be port forwarded on the router so that it can accessed by the internet.

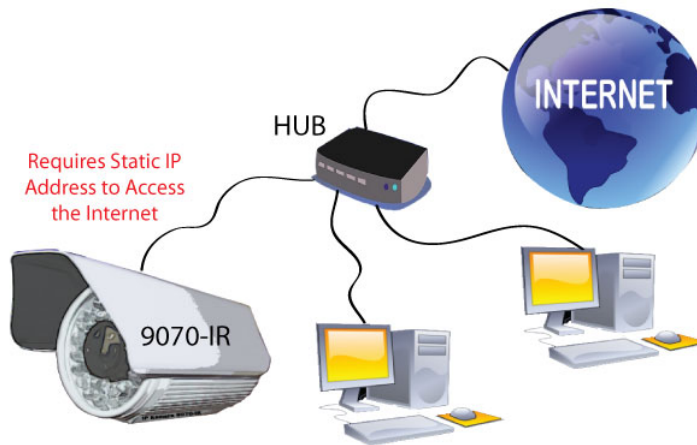
For example

9070IR-PoE IP Address: 192.168.1.882

9070IR-PoE Port: 9070

On the router that is being used port forwarded (port triggered) IP Address 192.168.1.882 and port 9070. For this section you may be required to refer the user manual for the router due to the fact that each router has a different way of setting up the device.

By using static IP Address provided by the ISP.



In this case, the 9070IR-PoE is being connected to the internet through a hub, which is different from a router. The hub does not provide DHCP, and therefore would require that this setup have a static IP Address that is provided by the ISP.

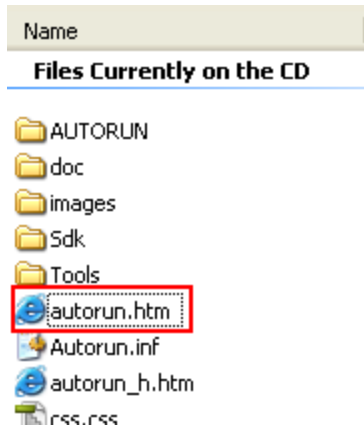
Contact the ISP to find out the static IP address so that your device can be accessed through the internet. Once a Static IP has been assigned the device will be able to automatically go onto the internet. .

5.) Software Setup

The software for the device is located on the **Media Link-IP Family CD** that came with the device. IP Kamera Pack is located on the main page of the CD. Please follow the directions carefully and install the necessary files

Software for IP Kamera 9070IR-PoE

- 1.) First place the **Media Link-IP Family CD** that came with the device into a CD/DVD Rom drive. The CD should auto run but if it does not go to the CD/DVD Rom drive and select the file "autorun.html".



- 2.) Once the CD has started go to the IP Kamera & IP Video Server section. Then under IP Kamera 9070IR-PoE download the two software.
 - a. **IPEdit** - Device search tool
 - b. **Surf 16 CH** – 16 Channel DVR, Monitoring, & Recording Software

IP Kamera & IP Video Server

NEW IP Kamera 9070
IPEDIT - IP Family Program used to search, access, modify basic configurations of Aviosys IP Family products.
[Download](#)

SURF16 - 16CH, DVR, Recording, Multi Channel Monitoring Software
[Download](#)

IP Kamera 9060 Series & IP Video Series
 (IP Kamera 9060 Series, IP Video 9100 Series, IP Video 9310, IP Video 9360 Series) Software required

IP KamVid (Kamera and Video) Installation Package Program [Download](#)

Software contains :

- + **IPEdit** - IP Family Program used to search, access, modify basic configurations of Aviosys IP Family products.
- + **Surf16CH +CNT** - 16 channel multi-windows DVR software
 (For 9060 , 9100, 9310 / 9360 series only)
- + **AMCAP and VIDCAP.**
- + **Supports** MSN , Yahoo Message , QQ 2005.

(NOTE: After clicking on the download icon for the IP KamVid, choose "run" file button. Then read the instructions carefully and begin the installation process)

- 3.) Once installation is complete please double click the **IPEdit** to configure and search for the device.

Installing VLC Codec

The files that are recorded by the 9070IR-PoE requires VLC codec to be able to view the recordings. Download the latest version of the VLC codec and install. The latest version of the codec can be found here. <http://www.videolan.org/>

Using IP Edit

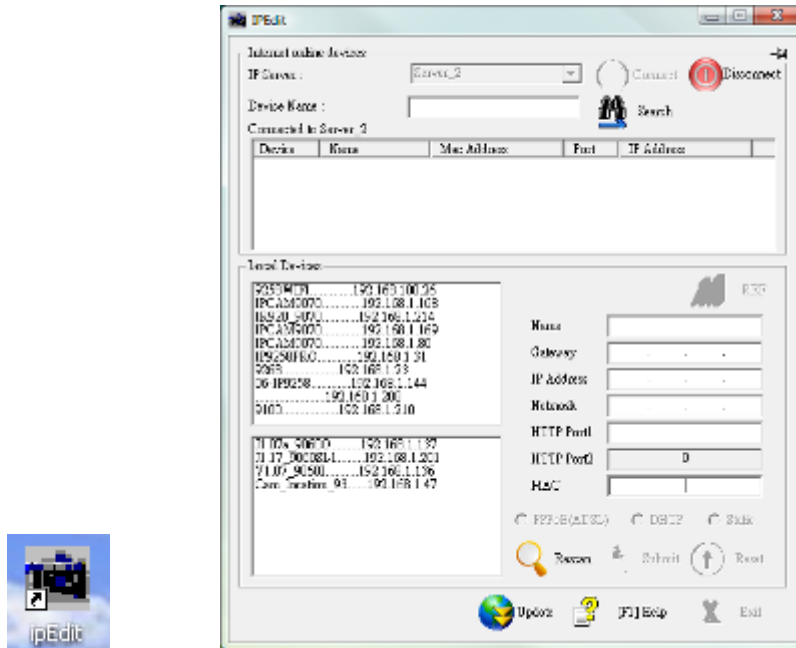
IPEdit is a search tool designed to setup and access the IP Kamera 9070IR-PoE. IP Service is an additional feature which searches for the device easily without having to remember long complicated IP addresses. Instead, this technology allows the user find his or her device through the internet just by device name.

Note: The IP Kamera 9070IR-PoE takes 1 minute to load before using.

Default IP: 192.168.1.168 (When 9070IR-PoE is connected to PC directly)
Default Login: Admin

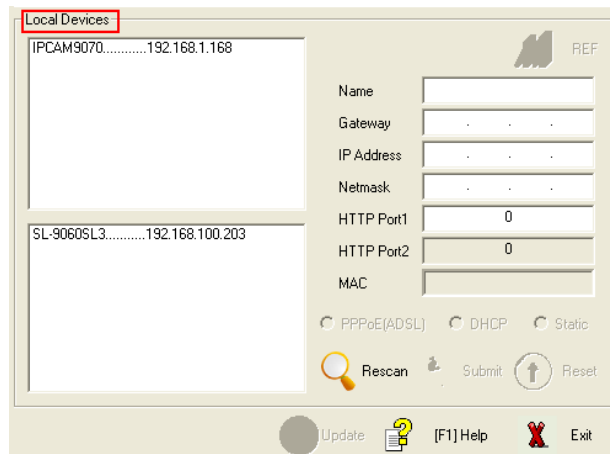
Default Password: 12345678

- 1.) Double click on the IPEdit icon to run the program.



- 2.) Open IPedit and any device in the same network should automatically be detected and listed in the **local devices** sections.

Note: Hit the Rescan button and wait about 1 minute, if the device is not showing up.



Setup the Device:

All devices will need to be on the same network if not the device cannot be accessed and will not be detected.

Quick Easy Setup (Recommended)



- 1.) Click on the REF button, and wait a few seconds. IPEdit will automatically detect the network settings and setup the device.
- 2.) Once settings have been detected hit the apply button to apply the new settings.

REF Setting

Name: IPCam_9070

Gateway: 192.168.100.1

IP Address: 192.168.100.2

Netmask: 255.255.255.0

APPLY **CANCEL**

- 3.) Hit yes to confirm and Enter the login and password for the Device to Approve changes

REF

Yes / No !!

OK **Cancel**

User Name & Password

User Name : admin

Password :

OK **Cancel**

- 4.) Then hit the rescan button on IPEdit to confirm the changes have been made.

REF

Name: IPCam_9070

Gateway: 192 . 168 . 100 . 1

IP Address: 192 . 168 . 100 . 2

Netmask: 255 . 255 . 255 . 0

HTTP Port1: 80


HTTP Port2: 0


MAC: 00:90:70:66:66:66

Custom Setup (Advance Users)

- 1.) Highlight the device on the local devices section and on the right side of IPEdit all network information on the device will be displayed.

If the device is not on the same network a Red Exclamation mark will appear in the IP Network information section

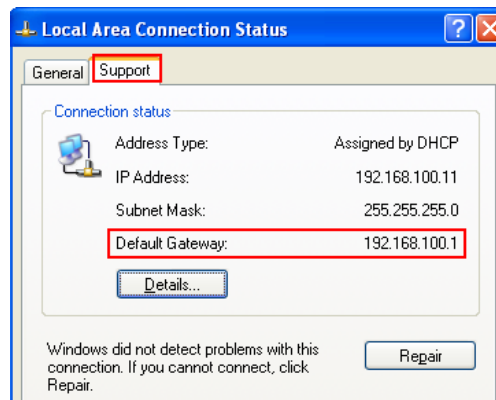
Input Ref Button  REF

Name	IPCam_9070
Gateway	192 . 178 . 100 . 1
IP Address	192 . 178 . 100 . 2 
Netmask	255 . 255 . 255 . 0
HTTP Port1	80
HTTP Port2	0
MAC	00:90:70:66:66:66

☐ PPPoE(ADSL)
 ☐ DHCP
 ☒ Static

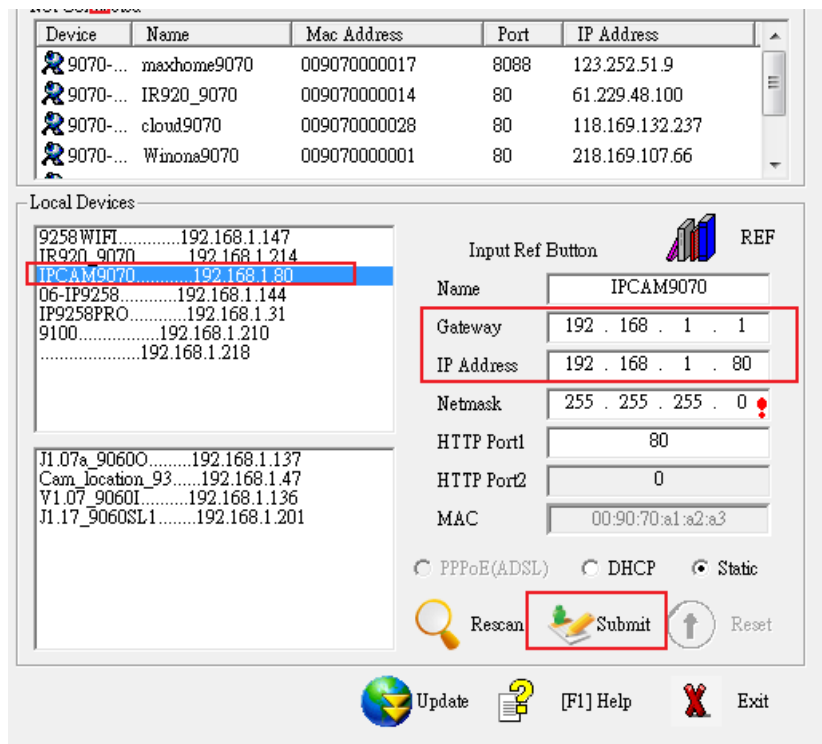
2.) To setup the device, type in the correct **Gateway** and **IP Address**.

The Gateway Address: The gateway address can be obtained in Windows under the network connections page



IP Address: Make sure the first 3 sections of the IP Address matches the gateway address.
Example: Gateway Address – 192.168.1.1 IP Address – 192.168.1.xxx

3.) Once the Default Gateway information has been obtained, enter the correct information into IPEdit and hit the submit button.



- 4.) Then hit the rescan button on IPEdit to confirm the changes have been made.

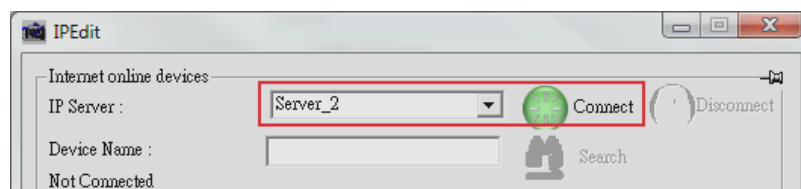
IP Service

How to use IP Service on IPEdit:

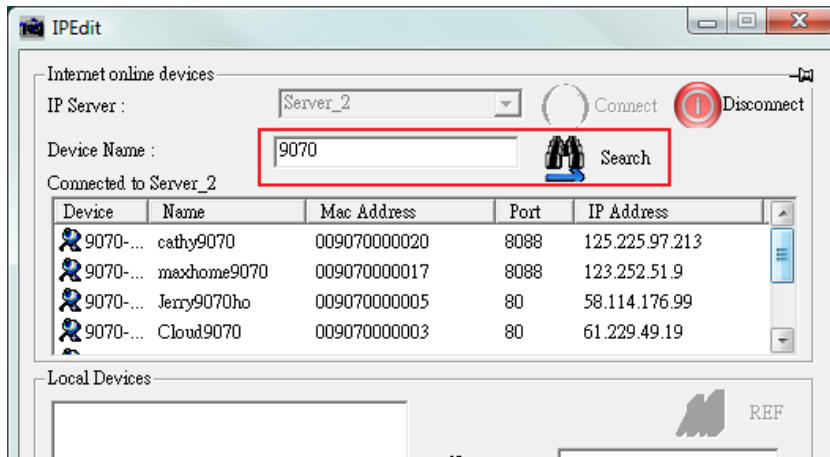
IP service allows the user to directly connect to the device through the internet without having to remember long confusing IP Address. Instead the user only needs to remember the name of the device. Then connect to IP Service, type in the device name, and directly connect to the device.

Note: To find IP Kamera 9070IR-PoE select Server 2 on IP Service

- 1.) Open IPEdit, the device will show up in the Local Device Section. To find the device easier on IPEdit select a name for the device.
- 2.) To start IP Service, **Hit the green connect button on the top of IPEdit.**



- 3.) Once connected search for the device by typing in at least the first 3 letters of the device name. Then hit the search button.



4.) Double click on the device name and an Internet Explorer window will appear directly to the device.

Note: It is crucial to have the IP Address of the device port forwarded from the router that is being used so the device can be connected from any location. Refer to the routers user manual on how to port forward devices.

6.) Web Interface

Connecting to the 9070IR-PoE

Once the 9070IR-PoE has been setup correctly, connect to the login page.
An Internet Explorer browser screen pop up with the login screen.

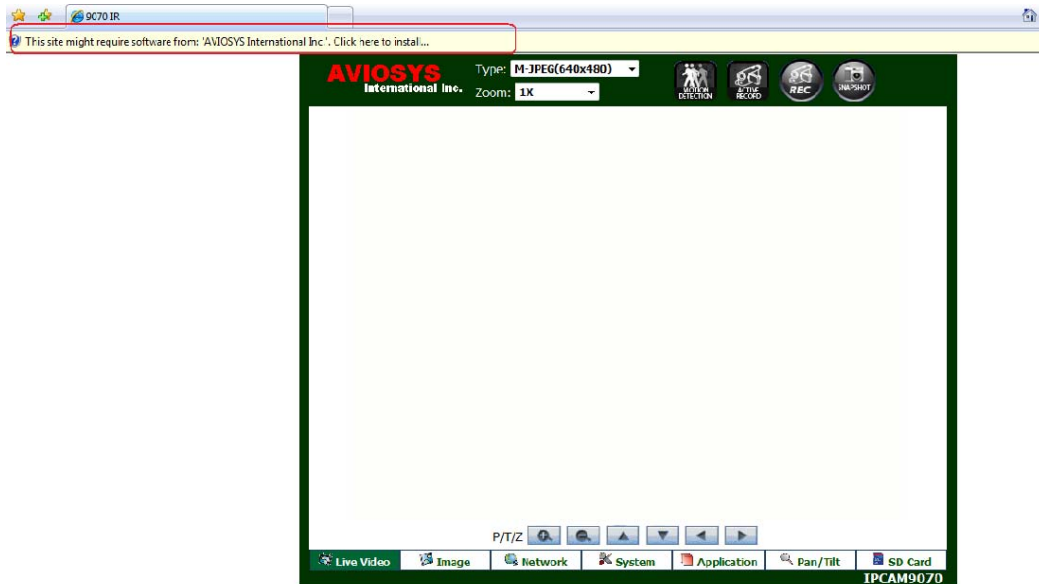


Default IP: 192.168.1.168 (When 9070IR-PoE is connected to PC directly)

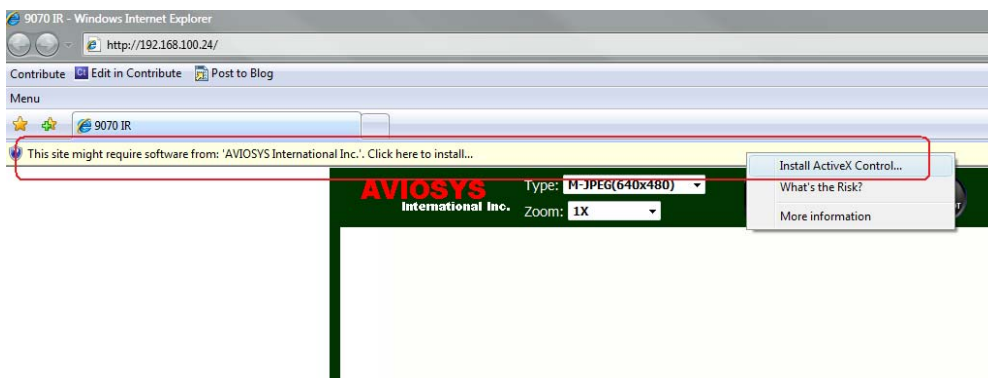
Default Login: Admin

Default Password: 12345678

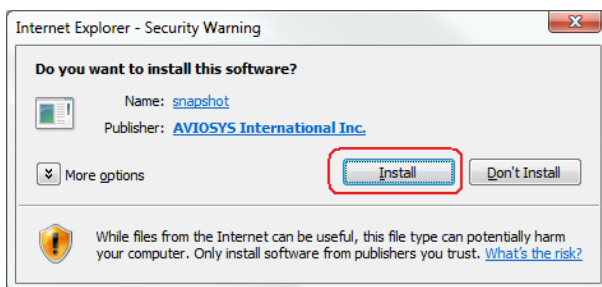
- 1.) After logging into the device active x controls will be required to be installed. If this screen does not appear make sure that active x has been allowed in internet explorer.

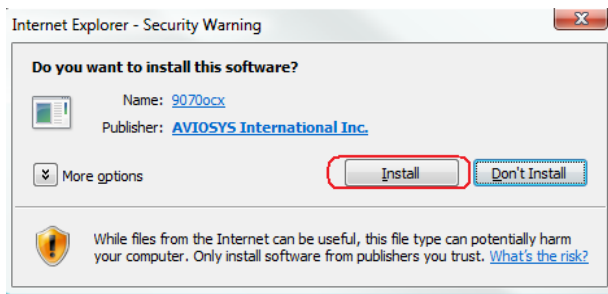


2.) Right click on yellow bar and install the activeX controls.

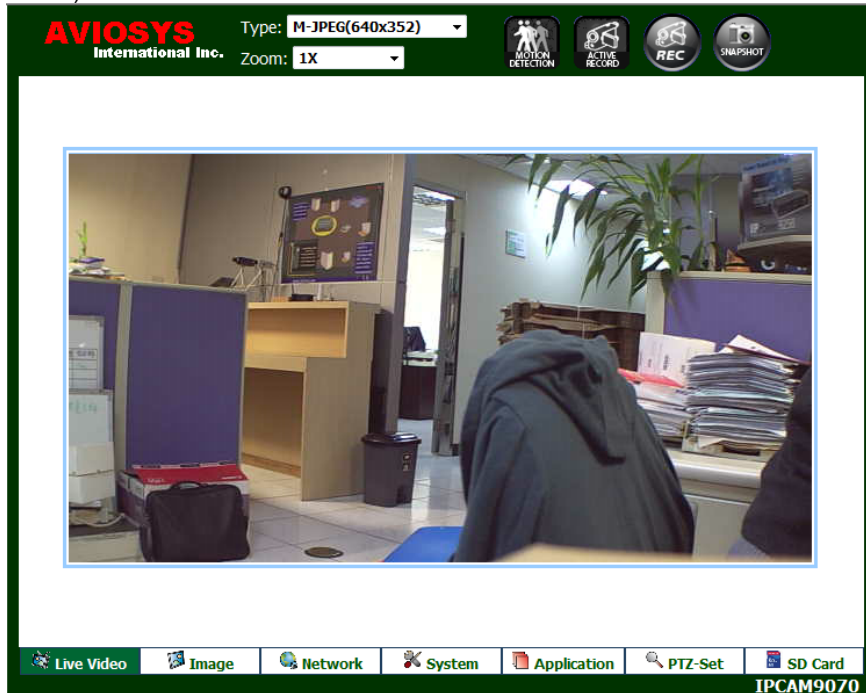


3.) Then click the install button and install the active X controls.

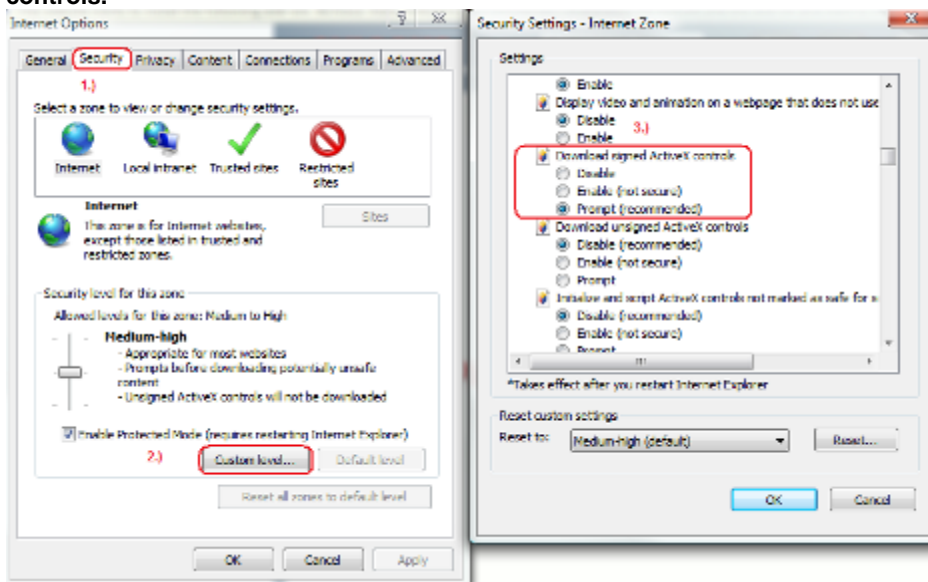




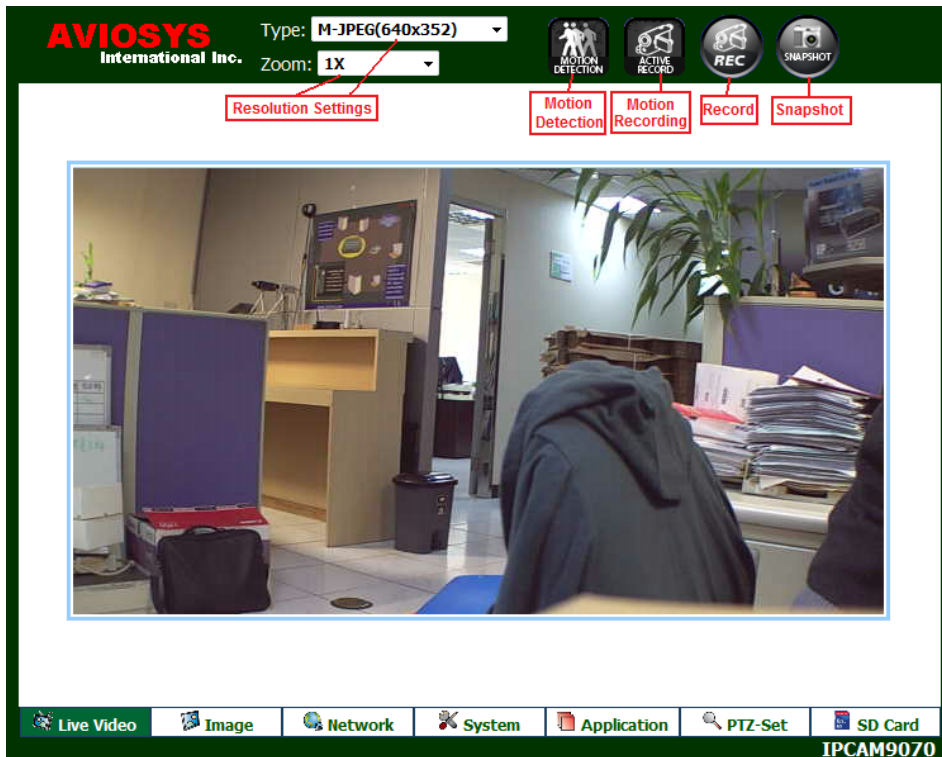
4.) Once activeX controls have been installed the video feed will show on the screen



Note: If no active x controls are showing up, please go to internet explorer and enable activeX controls.



The Control Console



The IP Kamera 9070IR-PoE Control Console starts in the [Live Video](#) Section of the webpage. In this section navigate to the other options and settings of the 9070IR-PoE

Live Video

Live Video: The Live Video section allows the user to view the camera, change resolution views,

Image

Image: The Image section allows the user to adjust the image settings, including recording / viewing codec, frame rate, image tuning, brightness, contrast, saturation, and etc.

Network

Network: The network section allows the user to change the devices network settings, ftp settings, smtp (email) settings, snmp settings, and IP service settings.

System

System: The system section allows the user to change the devices date and time, set time stamp for video, users, audio settings, update, and event log.

Application **PTZ-Set**

Application: The application section allows the user to change the video recording format, ftp storage settings, SD Card settings,

EPTZ-Set: The EPTZ allows the user to zoom into the cameras image using digital zoom with pan & tilt.

SD Card

SD Card: The built SD Card allows the user to access the SD card capability of the IP Kamera 9070IR-PoE.

Live Video

The Live video section of the IP Kamera 9070IR-PoE is where the user can view the video of the device. From here resolution, record onto current pc, take a snapshot, zoom, and detect motion detection settings can be changed.

Type and Zoom

Type: The type function sets the streaming format for the IP Kamera 9070IR-PoE. Select from the following type of resolutions depending on the format type set in the image settings.

Type:	M-JPEG(640x352) ▼
Zoom:	M-JPEG(640x352)
	MPEG4-1(1280x720)
	MPEG4-2(352x192)

M-JPEG (640x 352)
MPEG4-1 (1280x720)
MPEG4-2 (352x192)

Zoom: The zoom function selects the screen size of the stream. Depending on the type mode selected there will be different zooms that will be available.

Type:	MPEG4-1(1280x720) ▼
Zoom:	1X ▼
	scaled 720
	1X
	Screen Size

Type:	MPEG4-2(352x192) ▼
Zoom:	1X ▼
	1X
	2X
	Screen Size

1X zoom: The 1X zoom is the normal view for each type.

2X zoom: This 2X zoom is 2 times the normal view for that type.

Scaled 720: Is a resolution only available in MPEG-4-1, which sets the picture at 720P.

Screen Size: Enlarges the image to the whole size of the screen. This function is very useful when trying to display on larger monitors.

Motion Detection

Motion Detection: The motion detection icon will display when motion has been detected. This setting must be activated in the application section

When no motion is detected the motion detection icons will look like the following.



But, in the case that motion is detected and recording has started, the icon will look will light up blue.



Active Record

Active Record: Active record will show up when the device is actively recording. Active recording functions like motion detection, scheduler, or an alarm will set off this automatic recording.

When active recording is not activated it will look like the picture below



When the active recording function is activated it will light up in red.



Record

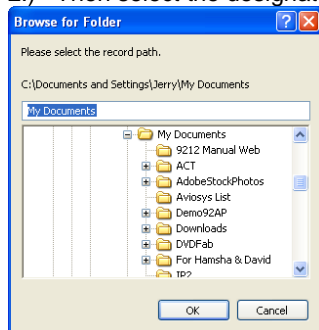
Record: The record button on the 9070IR-PoE when pressed will record the live video feed and save the video into the computer viewing.

To record follow the following steps:

- 1.) Click on the record button



- 2.) Then select the designated folder to store the file. Then hit okay.



- 3.) Once the folder has been selected the device will start to record.



To stop recording click on the red icon and it will return to the original state.

Note: Remember VLC codec is required to play the video files that are recorded

Snapshot

Snapshot: Snapshot mode takes pictures of the current video and save them. The picture will appear in another internet browser window, so it is necessary to turn off pop up blockers which will prevent the picture from appearing.

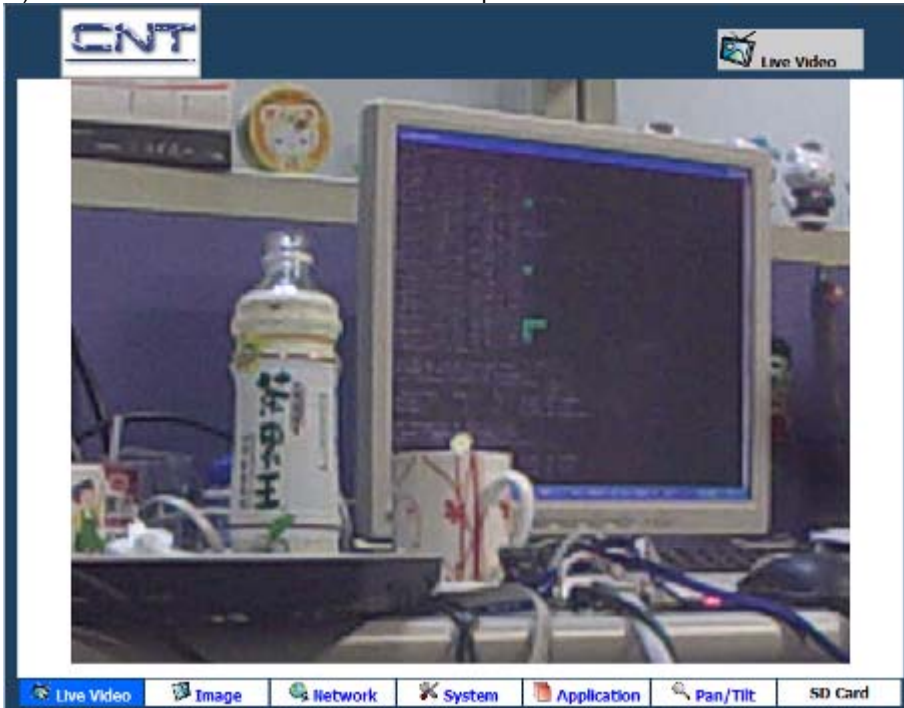
Note: Make sure that popup blockers are disabled when using this function.

To use the snapshot function:

- 1.) Click on the snapshot button



- 2.) The live view mode will switch to the snapshot mode and the current screen will be displayed



- 3.) To save the picture right click on the picture and select the option **save picture as**. Then browse the computer and save the picture to the directory of choice.
- 4.) To return to live video mode click on the live 

Image

The image section changes the Image settings for the device and tunes the image of the IP Kamera 9070IR-PoE

Image Settings

The Image settings section changes the video settings and the Name of the Kamera.

Camera Name: Select a camera name for the device and then hit submit Camera Name:

Video Codec:

Video Codec:

- MPEG4+JPEG
- MPEG4+MPEG4+JPEG
- MPEG4+JPEG
- MPEG4+MPEG4
- Single MPEG4

Resolution:

Resolution	
(MPEG4+MPEG4+JPEG):	M4:720P,M4:CIF,JPG:352
(MPEG4+JPEG):	M4:VGA,JPEG:VGA
(MPEG4+JPEG):	M4:720,JPEG:352
(MEG4+MPEG4):	M4:720,M4:CIF
(Single MPEG4):	M4:720

Color System: Select the broadcasting color system that pertains the country.

NTSC/60Hz

PAL/50Hz

Rate Control: Select the most suitable Bit Rate Control.

CVBR: Constrained Variable Bit Rate

CBR: Constant Bit Rate

M-JPEG Settings: The available Quality settings and FPS for the M-JPEG settings are shown below

M-JPEG Quality Settings
High
Medium
Low

M-JPEG Frame Rate Settings
30 FPS
15 FPS
7.5 FPS
3 FPS
1 FPS

MPEG4-1

Bit Rate: Select a value from 64~8000.

FPS: Select a FPS from 30fps, 15fps, or 7.5fps

MPEG4-2

Bit Rate: Select a value from 64~8000.

FPS: Select a FPS from 15fps or 7.5fps

Enable EPTZ: The EPTZ on the IP Kamera 9070IR-PoE a virtual EPTZ function. This function allows the user to control the video on the Live Video mode by moving left or right, zooming in and zooming out.

To use the EPTZ mode:

1.) Enable the EPTZ function and then hit the submit button.

Enable PTZ: ☒ Enable ☐ Disable

2.) Click on Live Video Mode 

3.) Click on EPTZ-Set and a new control window will pop out.



From here control the live view Zoom Function and direction.

Also once EPTZ is enabled, in the Live View Screen buttons will appear on the bottom with the pan, tilt, and zoom button

Note: PTZ is only available in the mode below. When PTZ is enabled, it will automatically jump into that mode.

Video Codec: MPEG4+JPEG
Resolution: M4:VGA,JPG:VGA

Tune Image

The tune image settings section controls and tunes the picture quality of the image. Keep in mind, the quality of the picture will also be affected by the quality of the lens that is being used.





Image Fine Tune

Image Settings

Tune Image



White Balance: auto

Day and Night: day

TV Output: ☐ Enable ☒ Disable

Binning / Skipping mode: binning

BLC: ☒ ON ☐ OFF

Backlight: < 128 > (0~255)


Brightness: < 128 > (0~255)

Contrast: < 128 > (0~255)

Saturation: < 128 > (0~255)

Sharpness: < 128 > (0~255)

Default
Submit



Live Video
Image
Network
System
Application
PTZ-Set
SD Card

IPCAM9070

White Balance: Select from the following options **auto, indoor, or outdoor**

Day and Night: Select the mode Day or Night

TV Output: Select the mode **enable or disable** to output to a T.V

Binning / Skipping mode: Binning enables low light-light performance. Select Binning, Skipping, 4x Binning mode (default is Binning)

BLC (Backlight control): Select from one of the options on or off to control the

Backlight: Select a value between (0~255)

Brightness: Select a value between (0~255)

Contrast: Select a value between (0~255)

Saturation: Select a value between (0~255)

Sharpness: Select a value between (0~255)

Default
 (Default Values)

Default: To Return all values to normal default click on this button.

Note: Make sure to click on the Apply button to save any changes made Submit

Network

Network

Network

When the network settings have been changed, please restart the web browser and reconnect to the newly configured network information. Network settings can be modified below. Static IP addressing is enabled

IP Address: 61 . 229 . 52 . 193

Local IP Address: 192 . 168 . 100 . 24

Subnet Mask: 255 . 255 . 255 . 0

Default Gateway: 192 . 168 . 100 . 1

DNS Server: 192 . 168 . 1 . 1

HTTP Port: 80 (80 or 1025~65535)

MAC: 009072000045

Submit

Live Video Image Network System Application PTZ-Set SD Card IPCAM9070

The network section sets up the network information for the IP Kamera 9070IR-PoE.

IP Address: Actual IP Address of the device can be found here

LAN IP Address: Local Area Network Address.

Subnet Mask: Subnet Mask information

Default Gateway: Default Gateway Address

DNS Server: Domain Name System Address

Http Port: Enter the port that will be accessed

MAC: The Mac Address information can be found here

Note: Make sure to click on the Apply button to save any changes made

FTP

Network

FTP

SMTP

SNTP

IP Service

FTP Server Setting

FTP is a network protocol used to transfer data
please setup the correct server setting.

FTP Server: 192.168.1.1 Port: 21

User Name: sample

Password:

File Upload Path: root

Submit

Submit

The FTP section of the IP Kamera 9070IR-PoE setups the FTP saves video clips on FTP.

FTP Server: Enter the FTP server address here

User Name: Enter the FTP Username

Password: Enter the FTP Password

File Upload Path: Enter the upload path of the FTP Server

SMTP (Outgoing E-mail Server)

Network

FTP

SMTP

SNTP

IP Service

SMTP Server Setting

To use to E-mail function
please enter Outgoing Mail Server (SMTP) of your E-mail Address.

☒ My Server Requires Authentication

Account Name: sample

Password:

Sender: sample@aviosys.com

SMTP Server: smtp.aviosys.com

Email Address: receiver@aviosys.com

Submit

Enter the SMTP E-mail server information here.

My Server Requires Authentication: Check this section the email server requires Server Authentication

Account Name: Enter then login of the mail account

Password: Enter the password of the E-mail account

Sender Email: Enter the Sender Email Address

SMTP Server: Enter the SMTP Outgoing mail address

Email Address: Enter the Receiving Email address

SNTP

The SNTP is a protocol for synchronizing the clocks of computer systems over packet-switched, variable-latency data networks please setup the correct SNTP server information. Enter the SNTP information here

SNTP Server Setting

- Network
- FTP
- SMTP
- SNTP**
- IP Service

SNTP is a protocol for synchronizing the clocks of computer systems over packet-switched, variable-latency data networks
please setup the correct SNTP server information.

SNTP Server:

Time Zone:

☐ Automatically Adjust for Daylight Saving Time Changes.

SNTP Server: Enter the SNTP server address

Time Zone: Enter the corresponding time zone

Automatically adjust for daylight saving time: Check this section for daylight saving time to be implemented automatically.

IP Service

IP Service

- Network
- FTP
- SMTP
- SNTP
- IP Service**

IP Service Server Information below

☒ Enable IP Service

IP Service Server :

MAC:

Note: Use the MAC address value when using CNT

IP service allows connects to the device directly without having to remember a long IP Address. Enter the device name into IP Service and anyone can find their device as long as the port forwarding has been setup. In the IP service section this feature can be disabled.

By default IP service is enabled. Click disable to close this feature.

System

System

- Date and Time**
- Time stamp
- Users
- IR Controls
- Update
- Events

Date and Time

The Local Time

Date: Time:

The Desired Time

☐ Set Manually

Date: / / (YYYY/MM/DD)

Time: : : (HH:MM:SS)

☐ Synchronize with Computer Time

Date: Time:

☐ Synchronize with SNTP Server

SNTP Server:

Time Zone:

Date Format:

Live Video

Image

Network

System

Application

PTZ Set

SD Card

9070 IR

IPCAM9070

The system section set ups the IP 9070IR-PoE system configurations. This includes the following.

Date and Time

Date and Time

Date and Time

- Date and Time**
- Time stamp
- Users
- IR Controls
- Update
- Events

The Local Time

Date: Time:

The Desired Time

☐ **Set Manually**

Date: / / (YYYY/MM/DD)

Time: : : (HH:MM:SS)

☐ **Synchronize with Computer Time**

Date: Time:

☐ **Synchronize with SNTP Server**

SNTP Server: tw.pool.ntp.org

Time Zone:
GMT+08 Taipei, Beijing, Chongqing, Urumqi, Hong Kong, Perth, Singapore

Date Format:

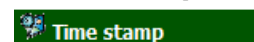
Set the date and Time of the device here.

The Local Time: The local time corresponds to the current time of the IP Kamera 9070IR-PoE.

Time Setup: Setup the current time of the device here

- 1.) **Set Manually:** Set the time manually
- 2.) **Synchronize with Computer Time:** Synchronize the time with the current computers time
- 3.) **Synchronize with SNTP:** Synchronize with SNTP

Time Stamp



The time stamp adds a time to the live video. When a recording is made this time stamp will show up with in the video file as well.

To enable the Time Stamp check the enable box.

Date and Time stamp


- Date and Time
- Time stamp**
- Users
- IR Controls
- Update
- Events


☐ Enable Date and Time stamp


Date Format:


User





 Date and Time

 Time stamp

 **Users**

 IR Controls

 Update

 Events

User List:

admin:Admin

Delete User

Add/Modify User

User Name:

Password:

Confirm:

Authority: ☐ Admin ☐ Operator ☐ Viewer

Submit

The user setting creates and removes users for access to the IP Kamera 9070IR-PoE.

Authority: Select one of the following options:

Admin: Admin can operate all functions in Web interface. As well as, add or delete any user's account.

Operator: Operator can operate all functions in Web interface except user Add/Delete.

Viewer: Viewer can only monitor the Web interface, but cannot operate all function and set parameters.

Light



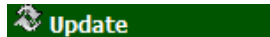
To disable the IR lighting check in the disable IR box.

Light

☐ Disable IR - Note:Checked would disable the IR

Submit

Update



Date and Time

Time stamp

Users

IR Controls

Update

Events

Current Version Description

Kernel Version:Linux version 2.6.10_mvl401_IPNC-1.1.0

UBoot Version:U-Boot 1.2.0 (Apr 21 2008 - 18:41:45) IPNC-U-1.0.2

Software Version:IPNC_APP v1.2.0.9

HTML Version:1.2.23

ActiveX Version:1,0,2,15

Device Version:9070 IR

Update the device with the latest firmware.
Specify the firmware to update :

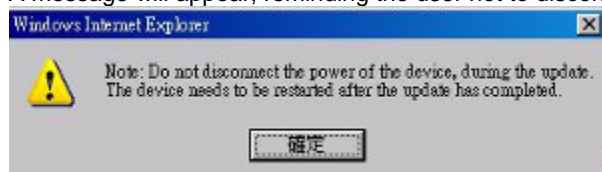
and click

Note: Do not disconnect the power of the device, during the update.
The device needs to be restarted after the update has completed.

Warning:IPCAM will restart immediately!!

To update the device go to the update section. Here the Current Version description is available.
To update the device:

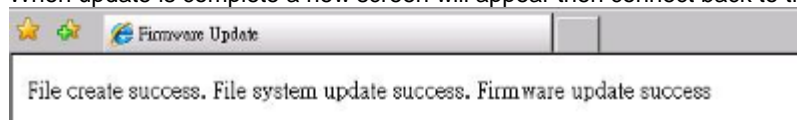
- 1.) Browse for the correct update file.
- 2.) Hit the update button.
- 3.) A message will appear, reminding the user not to disconnect when updating.



- 4.) Please view the bar on the bottom of internet explorer to make sure that the device is updated.



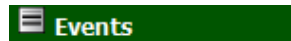
- 5.) When update is complete a new screen will appear then connect back to the device.



- 6.) Log back into the device go to the update page, then hit the restart button.

Warning: Before going to the next step make sure that all setting information are written down. The device will reset back to manufacturer default values after restarting the device. Reconfigure the IP Kamera 9070IR-PoE, including Email, FTP, IP Address, Gateway, and etc.

Event Log



Event Log

Date and Time

Time stamp

Users

IR Controls

Update

Events

Item	Date and Time	Events
1.	2000-01-20 07:01:41	admin login on 192.168.1.23
2.	2000-01-20 02:54:21	admin login on @ @ @

First Page

Previous 20

Next 20

Application

Snapshot Path

Setting

SnapShot Path

SnapShot Path: D:\

Get Folder Path

Video File

FTP

SD Card

SMTP

Record

Schedule

Schedule Record

Alarm

Enable Alarm

Motion Detection



The Application Section setups the Video File information, FTP, SD Card, SMTP


Setting

Snapshot Path

Setting

SnapShot Path:

Get Folder Path

 SnapShot Path

Select the snapshot path to the destination where snapshots will be saved.

Video File Video File

Video File

AVI Duration: Second(s)

AVI Format:

Submit

Select the Video File format that the device will record in.

1.) **Avi Duration:**

From the drop-down list, select the length of an AVI file.

2.) **Avi Format:**

MPEG4 (720)

MPEG4 (CIF)

3.) Hit the submit button to confirm new settings.

FTP FTP

FTP Application Setting

FTP Networking

FTP Server: 192.168.1.1 Port:21

User Name:

File Upload Path: default_folder

Storage Setting

File Format:

Lefted the SD Card or Select other image Setting than you can select more option. [Image Settings](#)

Beacuse at the same time ,MPEG recorder only can work in the SD card.


If you want to save MPEG on the FTP or SHTTP,please remove SD card.

Submit

In the FTP section, select the file format that will be used for FTP transfer.

Note:

1.) Before using the FTP function, set the FTP server information. Click on the

 [FTP Networking](#) link to go to the FTP setup section.

2.) If the SD Card is inserted into the device, the 9070 will only be able to record in M-Jpeg mode to the FTP.

SD Card SD Card

SD Card Application Setting

Split Filename Type:

Split File Size (MB) :

File Format:

☒ **Enable Auto Overwrite**
(When SD card is full, Auto Overwrite will replace oldest file.)

SD Card Capacity: 477.88 MB
SD Card Usage: 0 %

(Storage Disk Format) (Storage Disk Unmount) (Save Changes)

File Format: Select the video format to save into the SD card

Split Filename Type: Select the format to save the files in the SD card.

Select from:

Name by Index: Creates file names according to index.

Name by Time: Creates file names according to time.

Split File Size: Select the size of each file that will be saved into the SD.

Select from the following:

None, 10mb, 25mb, 50mb, & 100mb.

Enable Auto Overwrite: Auto Overwrite allows the device to automatically replace the oldest file on the SD card when it is full.

SD Format: SD format will format the entire SD card

SD Unmount: Click the SD unmount button when the SD card is being removed this will safely remove the card without any damages.

SMTP

SMTP Application Setting

SMTP Networking


SMTP Server: 192.168.1.1

Email Address:

Storage Setting

Attached File Numbers: (1 ~ 20)

Attached File Format :

Lefted the SD Card or Select other image Setting than you can select more option.  **Image Settings**
Beacuse at the same time ,MPEG recorder only can work in the SD card.
If you want to save MPEG on the FTP or SMTP,please remove SD card.

In the settings section, find the SMTP information by clicking on the SMTP tab.
Here the current SMTP Server information and email address are available.

Storage Settings

Select the file format for IP Kamera 9070IR-PoE to send in.
Select from **MPEG4** or **MJPEG**.

Record

Schedule

Schedule

<input checked="" type="checkbox"/>	Monday	From	10	:	30	To	22	:	35
<input checked="" type="checkbox"/>	Tuesday	From	03	:	39	To	11	:	51
<input checked="" type="checkbox"/>	Wednesday	From	03	:	23	To	19	:	23
<input checked="" type="checkbox"/>	Thursday	From	00	:	00	To	00	:	00
<input checked="" type="checkbox"/>	Friday	From	00	:	00	To	00	:	00
<input checked="" type="checkbox"/>	Saturday	From	00	:	00	To	00	:	00
<input checked="" type="checkbox"/>	Sunday	From	00	:	00	To	00	:	00

	0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23
SUN																								
MON																								
TUE																								
WED																								
THU																								
FRI																								
SAT																								



The schedule allows the user to select days and times to schedule for automatic recording. Pick a day from (Sunday – Saturday) and also a option for Everyday.

To schedule automatic recording:

- 1.) Select the day to start recording.
- 2.) Select the **From time** and the **To time**.
- 3.) Once the schedule has been created hit the submit button to apply the new settings.

Schedule Record Schedule Record

Schedule Record Application Enable Setting

- ☐ Schedule Record - Upload Via  FTP
- ☐ Schedule Record - Save Into  SD Card

Schedule Record allows selects where the schedule will record the video files to.

Schedule Record – Upload via FTP: Saves schedule recordings into FTP


Schedule Record – Save into SD Card: Saves schedule recordings into SD Card

Alarm




Enable Alarm Enable Alarm

Alarm Application Enable Setting

Connection Lost

- ☐ Enable Alarm - Save Into  SD Card

Motion Detection

- ☐ Enable Alarm - Upload Via  FTP
- ☐ Enable Alarm - Save Into  SD Card
- ☐ Enable Alarm - Upload Via  SMTP

Recording Time:


- ☐ Enable Alarm Recording Buffer

Buffer Time :

(Note: For Alarm Recording Buffer to work correctly an alarm above must be activated.)

Enable Alarm – Lost Ethernet Connection: Save into  SD Card:


When Ethernet connection is lost the device will automatically save into the SD card.

Enable Alarm - Upload  FTP

When motion is detected, the IP Kamera 9070IR-PoE will upload the video file to the selected FTP server.

Enable Alarm - Save Into  SD Card

When motion is detected, the IP Kamera 9070IR-PoE will upload the video file to the SD card.

Enable Alarm – Save  SMTP

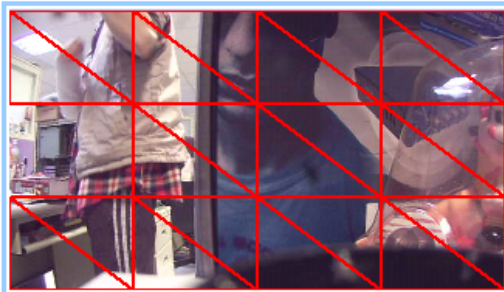
When motion is detected, the IP Kamera 9070IR-PoE will send the video file to in a E-mail format.

Recording Time: Set the duration of time for the IP Kamera 9070IR-PoE to record when alarm is set off.

Enable Alarm Recording Buffer: The alarm recording buffer allows the camera to the selected amount of buffer time before an alarm has been detected. This allows the IP Kamera 9070IR-PoE to start recording before any incident has occurred.

Motion Detection

Motion Detection



Click the right mouse button to show the popmenu.
Save the setting after you finish editing.

Motion Detection: ☐ Enable ☒ Disable

Sensitivity : ☒ Lowest ☐ 50 (Customized Threshold)

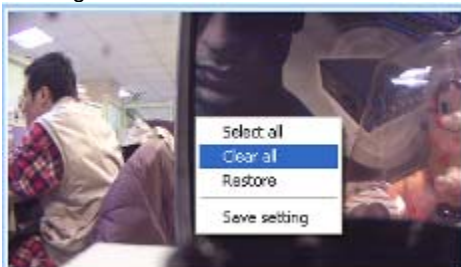
Submit

To enable motion detection:

- 1.) Select Enable in the motion detection option.
- 2.) Select the desired sensitivity of choice
 - a. Pick from Lowest, Low, Medium, High, Highest
 - b. The threshold can be selected from (1-99)
- 3.) Once the settings are set, on the window screen click on the picture where motion will be detected. Double click on the selected areas to remove the choice.



Right click on the window screen for more options



- 4.) Once settings have been set hit the submit button to save all changes.

EPTZ-Set

The EPTZ allows the viewed image to be Pan, Tilt, & Zoom.

To activate this feature EPTZ must be enabled in the Image section of the 9070IR-PoE.

Enable PTZ: ☒ Enable ☐ Disable



Submit

Note: When EPTZ Controller is activated Video Codec mode will be switched to MPEG4 & M-Jpeg when disabled the codec will be set on Mpeg1, Mpeg2, & M-Jpeg.

How to use EPTZ with the mouse

On the Live view Video screen the EPTZ controls are:

Zoom In: Click and Hold the left mouse in the live view then release when zoomed to preferred point

Zoom into highest: Double click left mouse

Zoom out: Click and Hold the right mouse in the live view then release when zoomed to preferred point

Zoom out to screen fit: Double click right mouse

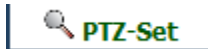
Note: When using the mouse to zoom in the snapshot function will not take a picture of the zoomed picture but the resolution size.

How to Enable and Use EPTZ Controller

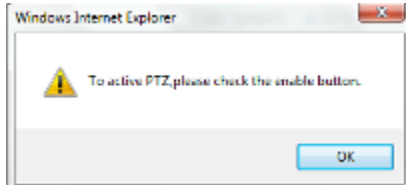
Note: When EPTZ is activated Video Codec mode will be switched to MPEG4 & M-Jpeg when disabled the codec will be set on Mpeg1, Mpeg2, & M-Jpeg.

Also snapshot function works only with the EPTZ controller and not when using the mouse to EPTZ.

- 1.) Click on the EPTZ button located on the bottom of the screen of the 9070IR-PoE.



- 2.) If the EPTZ has not been enabled a notification will notify the user that it must be enabled.

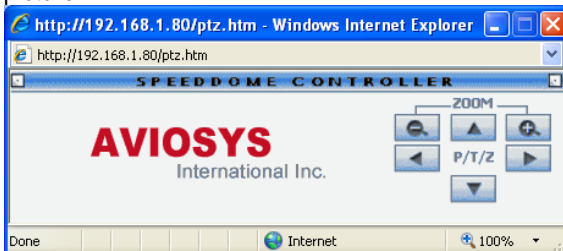


- 3.) Select Enable on the EPTZ function then hit the submit button

Enable PTZ: ☒ Enable ☐ Disable

Submit

Once the Speed dome controller is activated click on left, right, up, down, and zoom buttons to view the picture.




Note: To use EPTZ without activating

SD Card

Filelist of Memory Card

Filename	Date	Time	Size
20090330.avi	2009/03/30	17:25:51	43K
Delete			
1 file and 489408 KBytes free			
HTTP Server at IPCAM9070_burn9070			

To access the files on the SD card simply press the SD Card button  **SD Card** on the live view screen.

To play the file directly: Simply just press on the file of choice.

To Delete: Simply press the delete link on the SD card section

7.) Controlling the Device

CGI HTTP Commands

Http commands are command lines that execute commands to the device from a web browser, software, or code. The basic commands are provided below.

There are two ways to input http commands with authorization required

Password in http:

`http://login:password@ipaddress:port/command`

Password not in http:

`http://ipaddress:port/command`

Note: If using password not in http: command the browser asks for the login and password.

Snapshot Command:

The snapshot command takes a snapshot of the camera in the current view.

`http://ipaddress:port/snapshot.cgi`

Ex. http command:

<http://192.168.100.50:85/snapshot.cgi>

Change Name:

This command changes the name of the IP Kamera 9070IR-PoE

`http://ipaddress:port/vb.htm?cameratitle=name`

Ex. http command:

http://192.168.1.192/vb.htm?cameratitle=test_907011

Change IP Address:

This command changes the IP Address of the IP Kamera 9070IR-PoE

<http://ipaddress:port/vb.htm?internetip=ipaddress>

Ex. http command:

<http://192.168.1.192/vb.htm?internetip=192.168.1.191>

Change Port:

This command changes the Port of the IP Kamera 9070IR-PoE

<http://ipaddress:port/vb.htm?httpport=portnumber>

Ex. http command:

<http://192.168.1.192/vb.htm?httpport=1025>

Change Subnet Mask:

This command changes the Subnet Mask of the IP Kamera 9070IR-PoE

<http://ipaddress:port/vb.htm?subnetmask=subnetmask>

Ex. http command

<http://192.168.1.192/vb.htm?subnetmask=255.255.0.0>

Note: Default subnet mask is 255.255.0.0

Change Gateway:

This command changes the gateway the IP Kamera 9070IR-PoE.

<http://ipaddress:port/vb.htm?gateway=gatewayaddress>

Ex. http command

<http://192.168.1.192/vb.htm?gateway=192.168.1.1>

Change DNS:

This command changes the gateway the IP Kamera 9070IR-PoE.

<http://ipaddress:port/vb.htm?dnsip=dnsipaddress>

Ex. http command

<http://192.168.1.192/vb.htm?dnsip=168.95.1.1>

MJPEG Streaming

This command integrates streaming data into a software, website, or any other application.

<http://ipaddress:port/ipcam/mjpeg.cgi>

Ex. http command

<http://192.168.1.192/ipcam/mjpeg.cgi>

8.) Using RTSP with VLC

Before Setting up VLC: Make sure that the 9070-Lite is set to be the DMZ host on the router that you are using, please refer to the routers manual on how to accomplish this.

How to setup VLC media player & Open a network stream

Note: Before using RSTP you must port forward your router to the following port numbers.

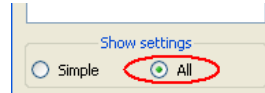
For 1280 x 720P (Mpeg4-1): **Port forward to 554**

If Port forwarding (Mpeg4-2): **Port forward to 8554**

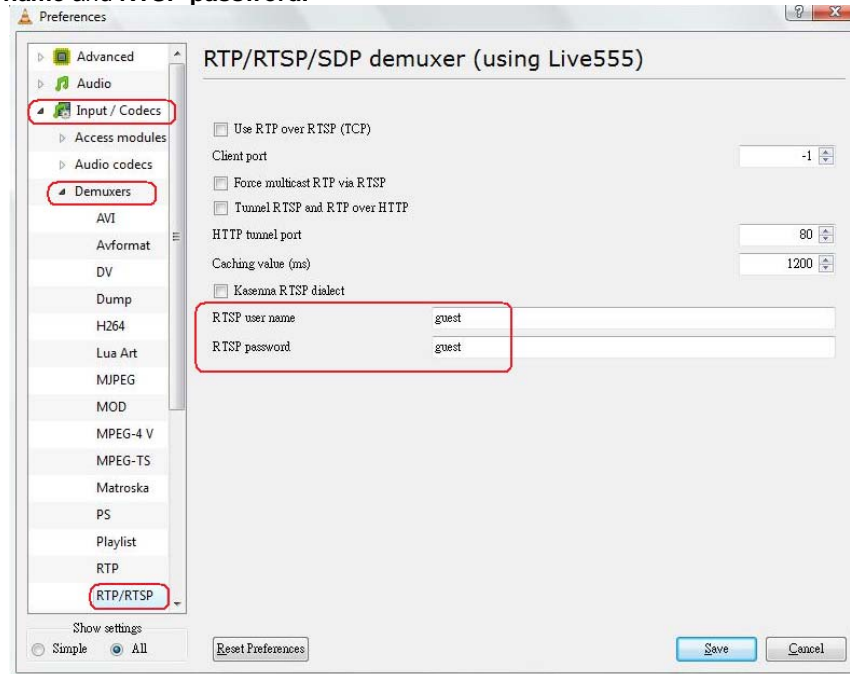
- 1.) Open VLC media Player
- 2.) Click on Tools > Preference
- 3.) On the bottom of the screen click the Reset preference button.



- 4.) On the bottom left hand side of VLC select the all under the show settings area.

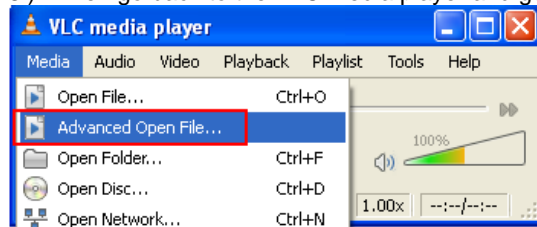


- 5.) Then in the left panel select Input / Codecs > Demuxers > RTP/RTSP and type in the **RTSP user name** and **RTSP password**.

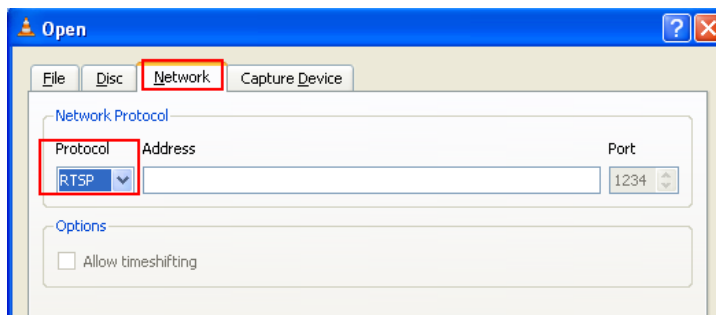


- 6.) Check the Cache value. *For low latency, it should be 70~80 based on PC's performance.*
Note: If the video is not smooth, set the caching value from 150~1200. This problem could be due to too much congestion, busy pc, and etc.
- 7.) Save the new settings

- 8.) Then go back to the VLC media player and go to Media > Advance Open File

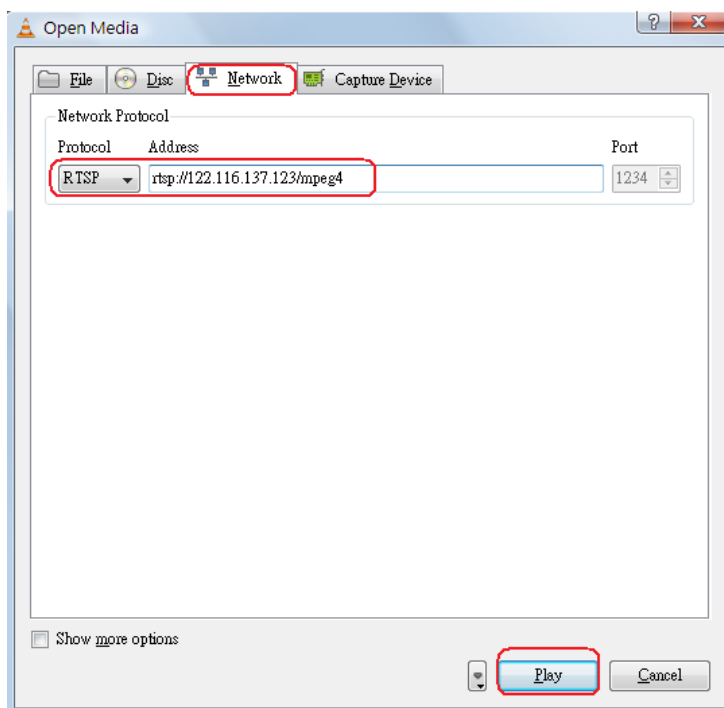


- 9.) Next select the network tab and under the protocol select RTSP.

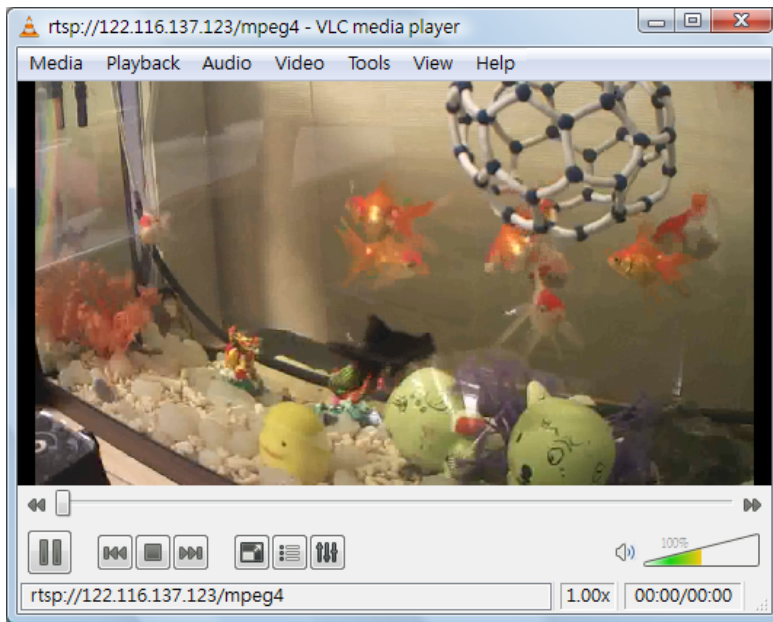


- 10.) Type in the RTSP address of your device
For Mpeg4 Stream1 : rtsp://<IP Address>/mpeg4
For Mpeg4 Stream2 : rtsp://<IP Address>:8554/mpeg4

Example: rtsp://122.116.137.123/mpeg4



Hit the play button and wait a few seconds for the program to start streaming.



9.) Using CNT with Surf16 CH

CNT makes connecting to the IP Kamera 9070IR-PoE a very simple task. Surf 16 CH a multi-device DVR monitoring software easily allows the user view the 9070IR-PoE. Follow these simple steps:

Finding the MAC Address

There are two ways to find the MAC address in IPedit.

***Note: IP Server must be enabled on the device's webpage. By default IP Server is enabled.**

Find MAC Address in LAN Using IPedit

- 1.) In IPedit, highlight the device that is being used. On the right side of IPedit the MAC Address for CNT will be listed.

***Note: Make sure when typing in the MAC address to leave out the “:”**

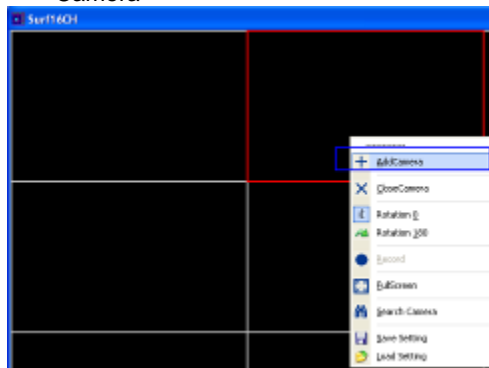
Local Devices	
Sample Name.....192.168.100.20	REF
Name	Sample Name
Gateway	192 . 168 . 100 . 1
IP Address	192 . 168 . 100 . 20
Netmask	255 . 255 . 255 . 0
HTTP Port1	80
HTTP Port2	0
MAC	00:92:d0:d0:12:08

Find MAC Address in WAN Using IPService on IPedit

- 1.) Find the MAC Address through the internet, Open IPedit and hit the connect button on IP Service.
- 2.) Then Type in the name of the device, in this case it is "Sample Name", then hit the search button.
- 3.) Device will be listed and the MAC address should be displayed on the screen. Copy down the MAC address and use it to connect via CNT.

Add device using CNT

- 1.) On Surf 16 Ch DVR software, right click on the screen on one of the windows and select Add Camera



- 2.) Then under the section labeled **MAC:** Type in the MAC address.

3.) Do not forget to enter the password and login.

10.) Frequently Asked Questions (F.A.Q)

Q1: Why can't I view the video files that I have recorded, nothing is playing?

Ans: VLC Codec, download VLC Codec from their website at: <http://www.videolan.org/>

Q2: How do I reset the device to manufacturers default values?

Ans: On the back of the device there is a reset button, hold down the reset button for more than 7 seconds. Then give the 9070IR-PoE a 1 minute to restart. Once the device has restarted it will be set back to manufacturer default settings.

Default Values

Default IP: 192.168.1.168 (When 9070IR-PoE is connected to PC directly)

Default Login: Admin

Default Password: 12345678

Q3: Why does the device on EPTZ change my video mode?

Ans: When EPTZ is activated Video Codec mode will be switched to MPEG4 & M-Jpeg when disabled the codec will be set on Mpeg1, Mpeg2, & M-Jpeg.

Q4: How do I take snapshots using the EPTZ function?

Ans: When using EPTZ function remember that only the snapshot functions works with the EPTZ controller. When using the mouse to Pan Tilt and Zoom into the picture the snapshot button will not capture the screen correctly. A way to take a picture of the screen using the EPTZ with the mouse is to click on the print screen button on the computer being used.

Q5: Why is the RTSP not connecting to my VLC player or Quick time Player?

Ans: To use the RTSP functionality it is necessary to first set your 9070-Lite to be the DMZ host in your network. Also be sure to port forward your device at the following ports.

Port 554 for 1280 x 720P

Port 8554 for CIF format

Please refer to the routers manual on how this is setup

Q6: How do I improve the image quality on this device?

Ans: The Image quality of the 9070 is dependent on the bit rate of the device. With a larger bit rate the device will naturally create higher quality image, but this will affect the smoothness of the streaming when accessed through the internet. To find the most optimal settings for image quality and streaming smoothness, try different bit rate settings to achieve the best fit settings. .