NETWORK CAMERA User's Manual



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1. Notice of Use

- This manual is designed for administrators and users of the network camera. Please read it carefully before use. All requirements should be followed before using this camera.
- We are not responsible for any technical or typographical errors and reserves the rights to change the product and manuals without notice.
- Keep this document for future reference.
- Please make sure the power source is 12V DC/24V AC. Only connect to the camera to this required power system.
- The camera must be installed on a solid mounting surface.
- Keep the camera and other accessories dry.
- We are not responsible for any damage caused by inappropriate use.

2. Product Overview

Key Features

Exceptional Images

The camera employs a 5MP Lumii sensor that quadruples sensitivity without blurring. The camera utilizes Lumii technology to monitor the surveillance area in great detail in even the most difficult lighting conditions, delivering crisp and detailed images that are perfect for object- and person-recognition. The camera's high resolution also enables it to provide larger overviews, increasing the size of the surveillance area without affecting image resolution.

Smartfocus

A built-in nine-point focus indicator enables the camera to focus precisely and automatically on objects, relieving users of the need to adjust the focus manually.

Powerful IR Illuminator

The powerful IR illuminator lights objects evenly, reducing image noise and storage requirements. The IR illuminator activates automatically when the lighting dims to under 10 lux. In night mode, the illuminator enables the camera to capture images at even 0 lux. To help minimize energy usage, the camera also comes equipped with a high-power LED.

ICR Day/Night Switching

The camera incorporates a mechanical ICR filter to capture perfect pictures at any light level. The camera switches between its day and night modes automatically depending on the lighting conditions, enabling it to capture color video in even 0.3-lux conditions and black/white video in as little as 0 lux, ensuring crisp, clear images at all times. The camera's megapixel resolution and mechanical ICR filter deliver sharp, detailed captures and images of distant objects in even total darkness.

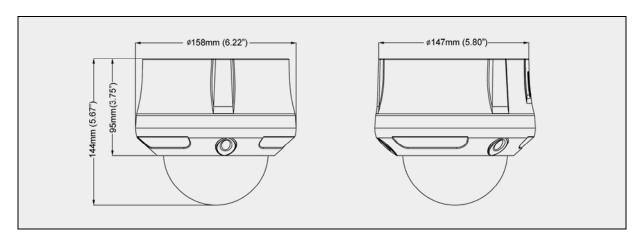
Vandal-Proof Housing Certified to IP66 and IP67

Certified to IP66 and IP67, the die-cast aluminum alloy housing protects the camera against extreme bad weather and vandalism, making it perfect for outdoor surveillance.

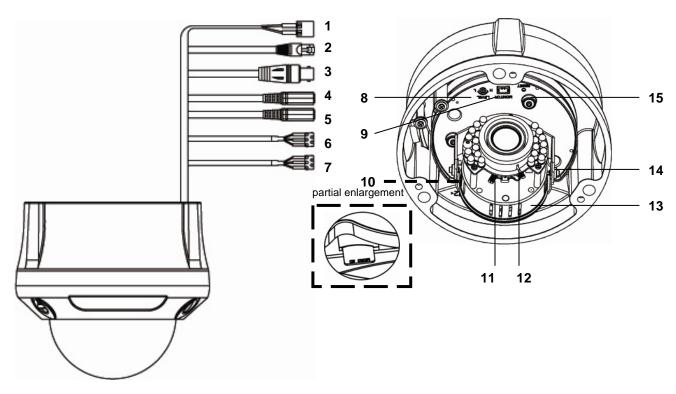
• SD Memory Card Storage

The camera is equipped with an SD card that enables round-the-clock monitoring, ensuring that the camera can store captured images even in the event that its network connection goes down. The camera delivers all-day surveillance and round-the-clock security.

Camera Overview



2.1 Camera Parts and Definition



- 1. Power In (Red+/Black-): power connector, DC12V/AC24V
- 2. RJ-45 Ethernet Connector: network connection. Support PoE (Power over Ethernet)
- 3. BNC: video output
- 4. Audio Out (Green): audio output
- 5. Audio In (Red): audio input
- 6. Alarm Out (Orange): alarm signal output port
 - RS485+(Green): function reserved RS485- (Yellow): function reserved
- 7. **GND**: ground (electricity) in electrical circuits
 - Alarm In (Red): alarm signal input port
 - Alarm Reset (Brown): for resetting an external alarm device
- 8. Level adjustment: for future use
- 9. Monitor: video out
- 10. SD card slot: insert a SD card for image storage
- 11. Zoom lever: adjust the image view
- 12. Focus lever: adjust picture sharpness
- 13. Pan adjustment: adjust the pan/tilt angle
- 14. Main bracket: adjust the pan angle
- 15. Reset: use an appropriate tool to press the button for few seconds to reset the camera

2.2 Specification

Image System				
Image sensor	1/2.5" 5	1/2.5" 5 MP Lumii image sensor optimized for low-light performance		
Effective pixels	2592 (H) X 1944 (V)			
Image Compression		* * * * * * * * * * * * * * * * * * * *		
Method		Triple Streaming: MPEG4 x2/ Motion JPEG x1		
Resolution/ Frame	MPEG4: HD	720P 1280 X 720 @30fp	s, 640 X480@30fps, 352	X192@30fps
rate		·	Ofps, 640 X 352@30fps	
Electric		_		
Sync system		Inte	ernal	
Built-in lens		f=2.7 ~ 9 mm, F1.2	2, Varifocal Megapixel lens	3
built-iii ieris	IF	R-corrected, Angle of view	w: 30° ~ 101° (Horizonta	ıl)
Shutter time		AES 1/10000	to 1/3.75 sec	
Audio	Two-	way Mono Audio, Full-du	plex, G.711 PCM 8kHz 64l	kbit/s
Alarm		Yes; 1x Alarm-	in, 1x Alarm-out	
Motion detection		Yes; 4 x 3 MD windo	w & 5 level sensitivity	
SD Card		Support micro SDH	C card (up to 32 Gb)	
Day & Night Mode		Mechanica	al ICR Filter	
Minimum illumination		IR LED OFF: 0.3l	ux (F1.2, 50 IRE)	
Minimum illumination		IR LED	ON: 0lux	
IR LED		IR LED 24p	ocs(850nm)	
IR distance		25 mete	rs (82 ft.)	
IR turn on status		Under 10 lux	by auto control	
LED life		More than 10,0	00 hours (50°C)	
TV output	NTSC, 720 X 480 @30fps	PAL, 720 X 576 @25fps	NTSC, 720 X 480 @30fps	PAL, 720 X 576 @25fps
Feature				
BLC			/Off	
White Balance			escent/Incandescent	
Sharpness		Low/ Middle/High		
Saturation	Low/ Middle/High Low/ Middle/High			
Brightness Contrast			ddle/High	
Other		•	em log, snapshot	
Power supply		Militor, 1 lip, 3930	em log, shapshot	
Power requirement		DC12V/ AC24V±10%/ PoE(IEEE 802.3af) When using the heater:DC24V/ AC24V±10%		
Power consumption		< 8W (When using the heater: < 18W)		
Power connector		Screwless To	erminal block	
Environment				
Operating temperature	-10°C ~ 50°C (14°F ~ 122 °F)		-40°F ~ 122 °F)	
Operating humidity	10~ 90% RH			
Storage temperature	-20°C ~ 60°C (-4°F ~ 140 °F)			
Network				
Ethernet	10Base-T/100Base-TX			
Internet protocol	TCP/IP, UDP, HTTP, SMTP, DNS, DHCP, NTP, FTP, RTP,RTSP, ICMP, uPNP			
Connectors	RJ-45 Ethernet 10Base-T/100Base-TX			
Browser	IE browser 6.0 or above			
I/O connector	1			
Video port	BNC X1, 1.0Vp-p, 75Ω			
Alarm port	Terminal block			
Audio port	3.5mm Phone Jack			
Mechanism				
Dimensions(øxH)	ø158mmx144mm (ø6.22" x 5.7")			
Weight	1.28 kg (2.82 lb.)			
Protection Class		IP66/IP67, vandal-proof: 1000 kg impact resistance		
Option	Without	Heater	With H	leather

3. Camera Installation

Please use the appropriate brackets or equipment to mount this camera on a desired location. After installing the camera, your network camera should be accessed from your local network. Please configure network routers first.

Package Content:

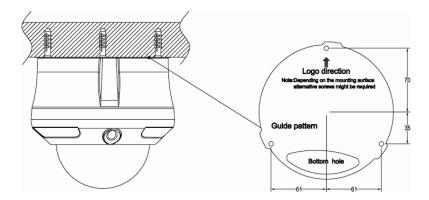
Camera *1 Screwdriver *1

Self-tapping screws (4x31mm)*3 Guide Pattern Sticker *1

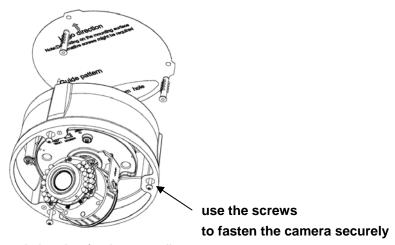
Self-tapping screws (4x45mm)*3 Plastic anchor *3
Cable adaptor * 1 BNC connector * 1
Printed Quick Start Guide *1 Document CD *1

3.1 Installation

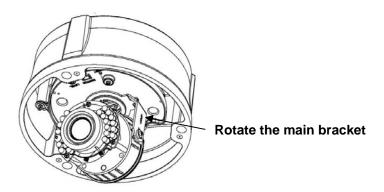
1. Mark hole positions: use the guide pattern sticker to mark hole positions on the desired location. Drill 3 holes according the guide pattern and then insert the plastic anchors into holes which you drill.



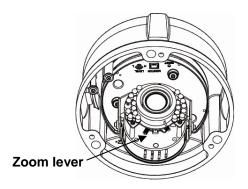
2. Install the camera: install the camera onto the ceiling/wall and fasten securely using the screws provided.



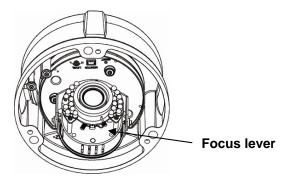
3. Adjust the pan/tilt angle: rotate the main bracket (or the pan adjust the pan adjustment to adjust the tilt angle. Then adjust the camera zoor



4. Adjust zoom lever: loosen the zoom lever counterclockwise, and then rotate the zoom to adjust the image view. To fix the setting, please tighten after adjustment.



5. Adjust focus lever: loosen the focus lever counterclockwise, and then adjust the focus for optimum picture sharpness. To main the setting, please tighten after adjustment.



6. Install the dome cover: place the dome cover to match the screw positions and then tighten 3 screws to lock it securely using the screwdriver provided.

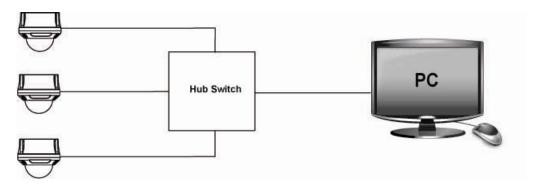


3.2 Network Camera Diagram

Connection type:1



· Connection type 2:



3.3 Hardware/Software Requirement

Computer

- -Windows Vista or XP as OS
- -Internet Explore Version 6.0 or later
- -CPU: Intel Pentium 4.2 GHz or higher
- -Memory: 512 MB or more

Power Supply

This camera requires a DC12V/AC24V /PoE power supply. Please make sure you use the correct power supply before connecting to the camera.

Network Connector

Please use the RJ45 network connector for connecting the camera to your computer or hub switch.

Hub Switch

If you want to monitor many network cameras from the same computer, the hub switch is required.

3.4 Connecting the Camera to Personal Computer

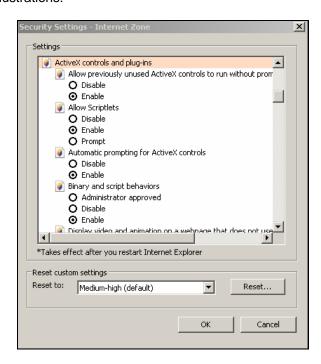
3.4.1Setting IP

This camera is a network-based camera and must be assigned an IP address first.

- Enter a default IP address manually. The camera's default IP address is 192.168.1.30 and submask address is 255.255.255.0.
- Obtain an IP address automatically from the DHCP server. You don't need to change the camera's IP address if your network uses a DHCP server.

3.4.2 Connect the camera to personal computer

- 1. Connect the network cable to the camera and then turn on the camera's power.
- 2. Set the personal computer's IP address, other than the camera's default IP address: 192.168.1.30 and submask as 255.255.255.0.
- 3. To make sure if you have already connected the camera to the personal computer, ping the IP address you set. Start a command prompt and type the IP address you set. If the message of "Reply from..." appears, it means the connection is done.
- 4. Start a browser and enter IP address: http://192.168.1.30. Then a pop-out window comes out and requires you to login into the camera. Enter the default user name: admin and password: 1234 to login into
- Install ActiveX viewer. It is required to monitor both MPEG4 and Motion-JPEG video modes.
- 6. Images of the camera can be viewed through Internet Explorer. Before viewing, follow these steps to enable the display.
 - a. Enable Cookies as shown below:
 - In Internet Explorer, click Internet Options on the Tools menu.
 - On the **Privacy** tab, move the settings slider to **Low** or **Accept All Cookies**.
 - Click OK.
 - b. Set "Browser setting when proxy sever is used" when a proxy server is used.
 - c. Change "security" in Internet options as shown below:
 - On tool menu, click "Internet Option".
 - Press the Security tab.
 - If the camera operates inside the intranet, click the "Intranet" icon. If the camera operates on the Internet, click the "Internet" icon.
 - Click "Custom level". This will open the "Security Settings Internet Zone" screen.
 - Scroll down to the "ActiveX controls and plug-ins" radio buttons and enable all of them as shown in the illustrations:



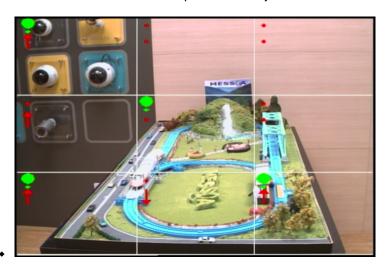
- Press OK to save the settings. Close all Internet Explorer Windows and start a new window. This will allow the new settings to take effect.
- 7. Type your set IP address into the browser.
- 8. Then you should be able to see the camera image screen as follows:



3.5 Use "SmartFocus" to Adjust Focus Quickly and Easily

This network dome camera provides "SmartFocus" to obtain correct focus on a subject, instead of requiring users to adjust focus manually. 9 view zones are provided. When you obtain correct focus on each view zone, the green light will be turned on.

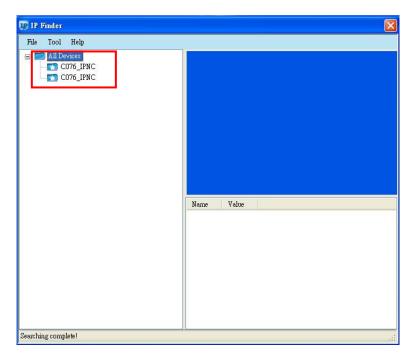
- 1. Directly connect the video output cable to your monitor.
- 2. Press the reset button until the power is on.
- 3. The nine zones will appear in your monitor. Adjust the lens focus and symbols will be displayed on the top left corner of each zone.
 - The green light: it means each view zone's best focus position.
 - ◆ The red arrow: it means it is near the best focus position. You just need to fine-tune it.



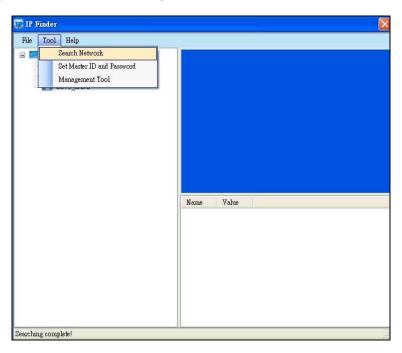
3.6 Using "IPFinder" to Search Camera's IP Address

"IPFinder" is a program which helps users find network cameras Please note that "IPFinder" is only compatible with Windows Vista and Windows XP.

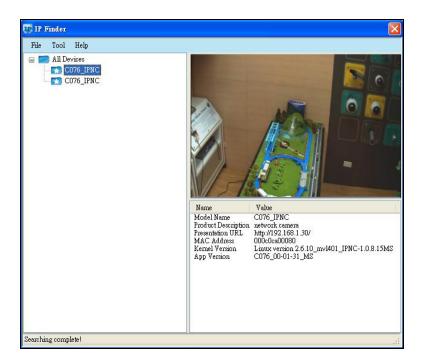
- 1. Insert the CD in the CD-ROM driver.
- 2. Double click "IPFinder.msi" to run the program. Follow the instructions to install,
- 3. After successfully installing "IPFinder", double click the "IPFinder" icon which is displayed in your desktop. A "IPFinder" window will pop out. The window will display a list of net cameras which you are using currently.



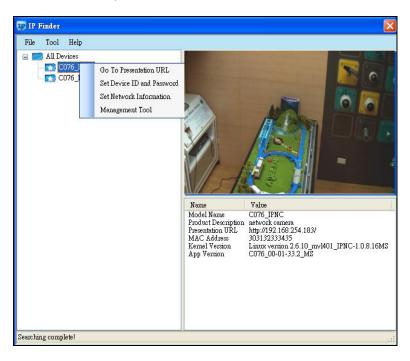
4. Click "Tool" on the tool bar to set related functions. Press "Search Network" to search cameras. Press "Set Master ID and Password" to set a master ID and password for all cameras. Or click "Management Tool" to either restart the camera, update firmware, reset all of the camera settings to default (except network settings) or reset all of the camera parameters to default.



5. After searching cameras, choose one to view detailed information. The top right frame of the "IPFinder" window will display the camera's monitor section and the bottom right frame of "IPFinder" will display the camera's IP address and related information.



6. Right click a camera to set it's related functions. Press "Go to Presentation URL" to access the camera which you want to login. Press "Set Device ID and Password" to set the camera's login ID and password. Click "Network Information" to configure the camera's network settings. Or Press "Management Tool" to either restart the camera, update firmware, reset all of the camera settings to default (except network settings) or reset all of the camera parameter to default.



4. Live View



Live view is designed for general users to control the camera. "Video Format", "Snapshot", "Recording LED", "Live" and "Setup" functions are listed on the live view. Please note, only administrators can access "Setup" to configure camera settings.

4.1 Video Format

Select a resolution type for live view.

4.2 Snapshot

The "Snapshot" function is for snapshot capture. Press the "Snapshot" button to take a picture which will be automatically saved into an IPCAM folder which is created automatically and saved in your computer.

4.3 Recording LED

The recording LED becomes red when the alarm/event function is triggered.

5. Configuration

5 setting categories: Image Settings, Network Settings, System Settings, Application Settings and SD Card Settings are provided for administrator to set up the camera's functionalities.

5.1 Image Settings

In the "Image" page, "Image" and "Advanced" are provided for image settings. Please be sure to click "Save" button to keep your settings.



5.1.1 Image

-Basic Setting

Every parameter of "Basic Setting" affects the displayed image. Specify appropriate parameters in the following section.

- > Camera Name: enter a desired network camera name. The name will be displayed at the top of the Live page.
- Video Codec: select a compression mode to be displayed for general users to choose for live view or compression which include "MPEG4_1+MPEG4_2+MJPEG", "MPEG4_1+MPEG4_1", and "Single MPEG4_1".
 - MPEG4_1 is for high-resolution live view/compression mode.
 - MPEG4_2 is for low-resolution live view/compression mode.
 - MJPEG is for middle-resolution live view/compression mode.
- > Resolution: "Resolution" and "Video Codec" are dependent fields.

- If "MPEG4_1+MPEG4_2+MJPEG" is selected, "1280x720, 352x192, 640x352" can be set
- If "MPEG4 1+MJPEG" is selected, "640x480, 640x480" or "1280x720, 640x352" can be set.
- If "MPEG4_1+MJPEG_2" is selected, "1280x720, 352x192" can be set.
- If "Single MPEG4_1" is selected, "1280x720" can be set.

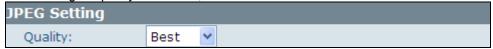
*Note: the corresponding fields are listed below.

Video Codec Field	Resolution	Live View/Compression Selections
MPEG4_1+MPEG4_2+MJPEG	1280x720, 352x192, 640x352	MJPEG (640x352)
		MPEG4_1 (1280x720)
		MPEG4_2 (352x192)
MPEG4_1+MJPEG	640x480, 640x480	MJPEG (640x480)
		MPEG4_1 (640x480)
	1280x720, 640x352	MJPEG (640x352)
		MPEG4_1 (1280x720)
MPEG4_1+MJPEG_2	1280x720, 352x192	MPEG4_1 (1280x720)
		MPEG4_2 (352x192)
Single MPEG4_1	1280x720	MPEG4_1 (1280x720)

- > TV System: "NTSC" and "PAL" are provided for different TV system settings.
- > Mirror: set images as left or right. Select ON or OFF to enable or disable this function.
- > Flip: set images as upside or down. Select ON or OFF to enable or disable this function.

-JPEG Setting

> Quality: set the image's quality as "Basic", "Normal" or "Best".



-MPEG-4_1 Setting

- > Bit Rate: according to your bandwidth, specify a value for data transmission rate (kbit/s).
- ➤ Frame Rate: the frame rate is the image transfer speed. 5 is 5 images transmission per second, 10 is10 images transmission per second...etc. If "Auto" is selected, the camera will decide the image transfer speed automatically.

MPEG-4_1 Setting			
Bit Rate:	4000		(kbit/s) (min=500, max=10000)
Frame Rate:	30	¥	

-MPEG-4_2 Setting

The values contained in the frame rate field are displayed depending on the value you set in the video code field (please note that you have to press the save button to save the value you select in the video code field first and then the corresponding values contained in the frame rate filed will be displayed for selection.) Here lists the corresponding values.

Video Codec Field	Frame Rate Field
MPEG4_1 + MPEG4_2+MJPEG	15, 7.5, 2.5
MPEG4_1+MJPEG	N/A
MPEG4_1+MPEG4_2	30, 15, 5
Single MPEG4_1	N/A

- Bit Rate: according to your bandwidth, specify a value for data transmission rate (kbit/s).
- > Frame Rate: the frame rate is the image transfer speed. 15 is 15 images transmission per second, 7.5 is 7.5 images transmission per second...etc.

MPEG-4_2 Setting		
Bit Rate:	2000	(kbit/s) (min=500, max=10000)
Frame Rate:	N/A 🕶	

5.1.2 Image Advanced Settings

"White Balance", "Day and Night", "AES", "Lumii", "Working Environment", "Lens Format", "BLC", "Brightness", "Contrast", "Saturation" and "Sharpness" are provided for you to set the quality of images. Please click the "Save" button to save your image settings.

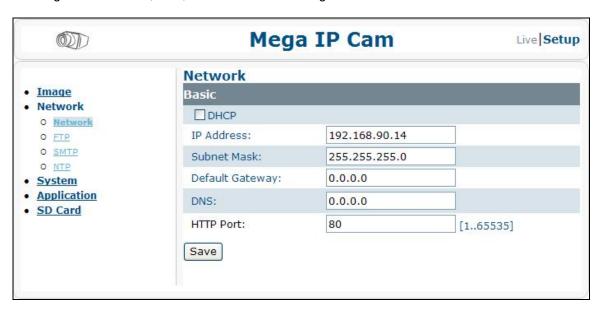
-Advanced settings

- > White Balance: select a white balance mode according to external lighting condition for the best color temperature.
 - Auto: adjust the white balance automatically according to the environment conditions.
 - Daylight: adjust the white balance if the external light source is daylight.
 - Fluorescent: adjust the white balance if the external light source is fluorescent.
 - Incandescent: adjust the white balance if the external light source is incandescent.
- > Day and Night: This function enables this network camera to gain sensibility automatically according to the lighting conditions. This function is always enabled.
 - Auto: enable the auto mode by turning to the black-white function automatically in low light condition.
- > AES: automatic exposure values which determine how much light passes through the camera aperture to the focus. The higher the value, the brighter the images.
- Lumii: this Lumii function increases the sensitivity, reduces video noise in low light conditions, as well as makes night images bright and clear. This function is always active.
 - ON: the Lumii function is always enabled.
- Working Environment:
 - Normal: the camera's color is automatically adjusted for normal environment.
 - Anti-Flicker: reduce color rolling for indoor environment.
- > Lens Format: choose an appropriate lens matching with the lens size which you have installed. The camera's lens format is always "1/3".
- > BLC: the BLC function is to provide clear images under back light circumstances.
 - ON: enable the BLC function.
 - OFF: disable the BLC function.
- > Brightness: adjust the image brightness level, which has "Low", "Middle" and "High". The default is "Middle"
- > Contrast: adjust the image contrast level, which has "Low", "Middle" and "High". The default is "Middle".
- > Saturation: adjust the image saturation level, which has "Low", "Middle" and "High". The default is "Middle".
- > Sharpness: adjust the image sharpness level, which has "Low", "Middle" and "High". The default is "Middle".
- > Default All Image parameters: All image parameters will be set back to default. Further more, you can use the key to fine-tune the pan/tilt degree up to 0.02°.



5.2 Network

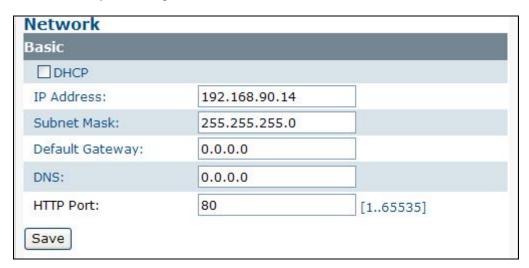
Click the "Network" to view the current network settings, including "Network", "FTP", "SMTP" and "NTP". Please configure all Network, FTP, SMTP and NTP settings in the Network section.



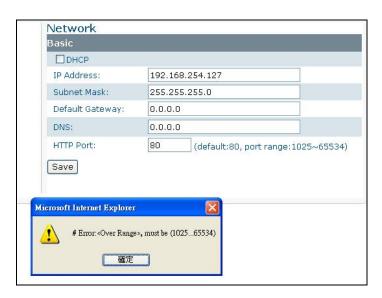
5.2.1 Network

-Basic Setting

- > DHCP: the IP address is automatically obtained when this is checked; otherwise, uncheck it to set up the network settings manually. If you enable the DHCP function, just specify DNS and HTTP Ports in the below fields.
- > IP Address: specify your IP address here if you don't select DHCP.
- > Subnet Mask: use default number: 255.255.255.0.
- > Default Gateway: leave blank as default setting. It is not required if it is not used. Please contact your Network Administrator for Default Gateway information.
- DNS: leave blank as default setting. It is not required if it is not used. Please contact your Network Administrator for DNS information.
- > HTTP Port: We recommend using the default path. Contact your Network Administrator if it needs to be changed.
- > Press "Save" to save your settings.



Network Error



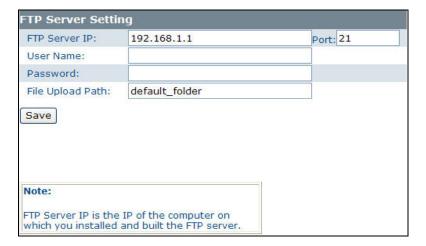
Entering the wrong values can result in a network error.

5.2.2 FTP

-FTP Server Setting

Enable the FTP function and configure FTP settings here.

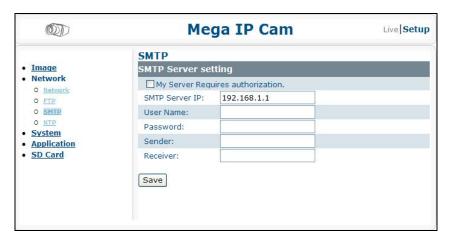
- > FTP Server/ Port: enter your FTP server address. The port default value is 21.
- User Name: input a user login name.
- > Password: enter a user password.
- > File Upload Path: enter a folder path where you'd like to upload files to.



5.2.3 SMTP

-SMTP Server Setting

- > My Server Requires authorization: Check it to enable the server authorization requirement setting.
- > SMTP Server: enter the SMTP server address.
- > User Name: enter a user name.
- > Password: enter a user password.
- > Sender: enter an outgoing mail server in the "E-mail Server (SMTP)" field.
- > Receiver: enter an incoming mail server in the "E-mail Server (POP)" field.



5.2.4 NTP

-NTP Server Setting

- > NTP Server: assign an IP address or domain name for a time server.
- > Time Zone: select a correct time zone.



5.3 System

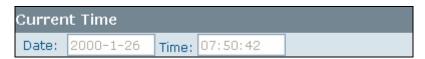
In this section, you can configure the system settings, including "Date Time", "Time Stamp", "Users", "Audio", "Update" and "Information". Please click the "Save" button to save your settings.



5.3.1 DateTime

-Current Time

It displays the current time of the camera. Date and time will be changed after you configure it in the "New Time" section.



-New Time

You can set the camera time by "Set Manually", "Synchronize with Computer Timer" and "Synchronize with NTP Server". Then, select a date format type. "YYYY/MM/DD', "MM/DD/YYYY" and "DD/MM/YYYY" are choices provided.

- Set Manually: set date and time manually.
- Synchronize with Computer Timer: synchronize your camera's date and time with the computer's timer.
- Synchronize with NTP Server: synchronize your camera's date and time with the NTP server's timer.



5.3.2 Time Stamp

- Time Stamp

Enable the "Enable Date and Time Stamp" function to display the current time in the "Live" page.

- > Enable Date and Time Stamp: check "Enable Date and Time Stamp" to activate this function.
- Date Format: select a date format. "YYYY/MM/DD", "MM/DD/YYYY" and "DD/MM/YYYY" are choices provided.



5.3.3 User

- User List

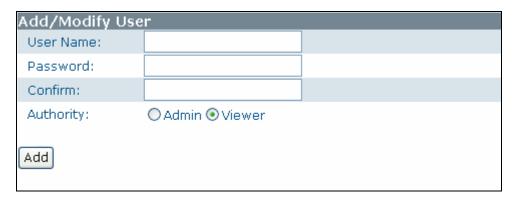
It displays the list of users. Only two roles can be specified, administrator (admin) and guest (viewer). If you want to delete a user, select a user and then press the "Delete User" button.



- Add/Modify User

You can add a new user or modify a user's information or authority.

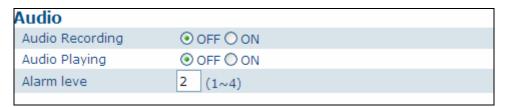
- To add/modify a new user, enter a user name and password. Then, specify his/her role as Admin or Viewer.
- > Press "Add" to add a user or to modify a user's password or authority.



5.3.4 Audio

- > Audio Recording: if the camera is connected to an external microphone, select "ON" to record the external voice or "OFF" to disable the audio recording function.
- > Audio Playing: if the camera is connected to an external speaker, select "ON" to output audio signals from the computer to outside.

- Alarm level: specify a value for voice volume in the "Alarm Level" field. The volume increase in the order of "1", "2", "3" and "4". This function only works when the Audio Playing function is enabled. Audio Recording: if the camera is connected to an external microphone, select "ON" to record the external voice or "OFF" to disable the audio recording function.
- > Audio Playing: if the camera is connected to an external speaker, select "ON" to output audio signals from the computer to outside.
- > Alarm level: specify a value for voice volume in the "Alarm Level" field. The volume increase in the order of "1", "2", "3" and "4". This function only works when the Audio Playing function is enabled.



5.3.5 Update

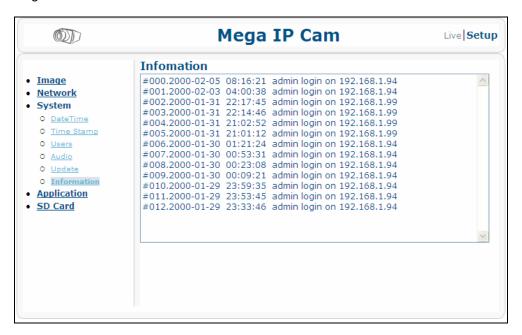
This function is designed to update firmware. Stop all camera operation when you update firmware. Do not turn off power and keep internet connected during the firmware update process. Please restart the camera after you have updated firmware successfully.

- Restart camera: restart the camera that this action will cause disconnection.
- Factory Default: reset all of the camera settings to default, except network settings.
- Hard factory default: reset all of the camera parameters to default.



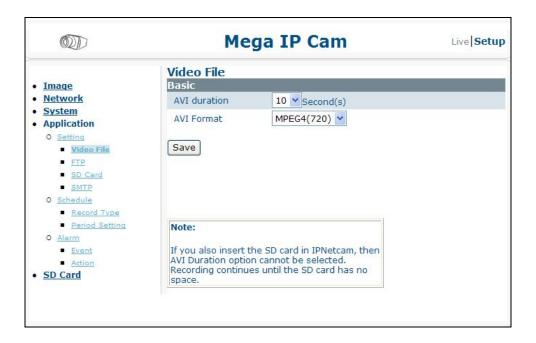
5.3.6 Information

It displays all login and alarm records.



5.4 Application

In this section, you can configure system settings, including "Setting" (Video File, FTP, SD Card and SMTP), "Schedule" (Record Type and Period Setting) and "Alarm" (Event and Action).



5.4.1 Setting

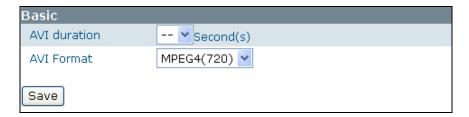
Set video record time by selecting a value in the "AVI duration" field and a video record format when the alarm is triggered. Press the "Save" button to save your settings.

5.4.1.1 Video File

Set video record time by selecting a value in the "AVI duration" field and set a video format when the alarm is triggered. The values contained in the AVI format fields are displayed depending on the values you set in the video code and resolution fields in the image setting page. The corresponding values are listed below.

Video Codec Field	Resolution Field	AVI Format Field
MPEG4_1 + MPEG4_2+MJPEG	1280x720,352x192, 640x352	MPEG4(720) MPEG4(CIF)
	640x480,640x480	MPEG4(VGA)
MPEG4_1 + MJPEG	1280x720,640x352	MPEG4(720)
MPEG4_1+MPEG4_2	1280x720,352x192	MPEG4(720)/ MPEG4(CIF)
Single MPEG4_1	1280x720	MPEG4(720)

- > AVI duration: select video record time by selecting a value in the "AVI duration" field once the alarm is triggered.
- > AVI Format: select a video record format.



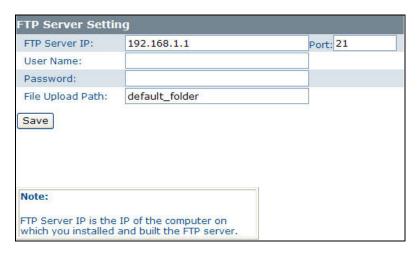
Note: If you insert the SD card in this camera, the AVI Duration function cannot be set.

5.4.1.2 FTP

Set a format of video which is set to be saved to FTP. The values contained in the file format field are displayed depending on the values you set in the video code field of the image setting section. The corresponding values are listed below.

Video Codec Field	File Format
MPEG4_1 + MPEG4_2+MJPEG	MPEG4
MPEG4_1+MJPEG	JPEG
MPEG4_1+MPEG4_2	MPEG4
Single MPEG4_1	
SD card insert	JPEG

- > FTP Networking section: it displays FTP information.
- > File Format: select a format of file which set to be saved to FTP. Please note that if you have inserted a SD card into the camera, only JPEG can be selected.
- > Click "Save" to save your settings.

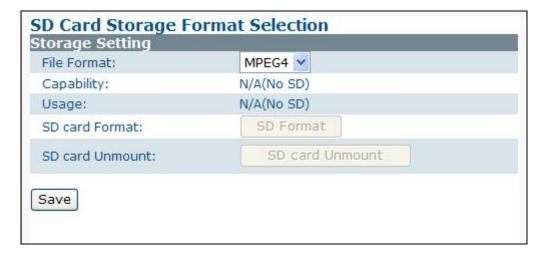


5.4.1.3 SD Card Storage

Set a format of video which is set to be saved on the SD card. Configure related setting in the below section. The values contained in the file format field are displayed depending on the values you set in the video code field of the image setting section. The corresponding values are listed below.

Video Codec Field	File Format
MPEG4_1 + MPEG4_2+MJPEG	MPEG4
MPEG4_1+MJPEG	JPEG
MPEG4_1+MPEG4_2	MPEG4
Single MPEG4_1	

- > File Format: set a saved file's format.
- > Capability: displays the SD card storage capability.
- > Usage: displays information about the SD card usage volume.
- > SD card Format: format the SD card.
- > SD card Unmount: unmount the SD card
- > Press "Save" to save your settings.

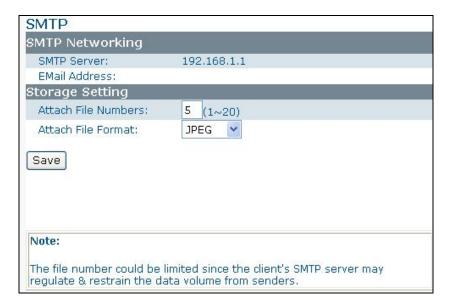


5.4.1.4 SMTP

You can set the number and type of images which you want to receive via e-mail. The values contained in the "Attach File Format" field are displayed depending on the values you set in the video code field in the image setting page. The corresponding values are listed below.

Video Codec Field	File Format
MPEG4_1 + MPEG4_2+MJPEG	MPEG4
MPEG4_1+MJPEG	JPEG
MPEG4_1+MPEG4_2	MPEG4
Single MPEG4_1	
SD card insert	JPEG

- > SMTP Server: displays the SMTP address which can be set in Network>SMTP.
- > Email Address: the receiver's mail address which can be set in Network>SMTP.
- > Attach File Number: specify the number of files which can be attached to a mail.
- Attach File Format: select a format of files which can be attached to a mail. Please note that if you have inserted a SD card into the camera, only JPEG can be selected.

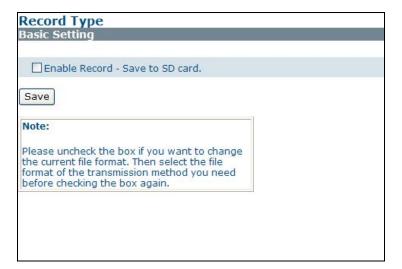


5.4.2 Schedule

This function can be activated at preset times, in a repeating pattern on selected weekdays.

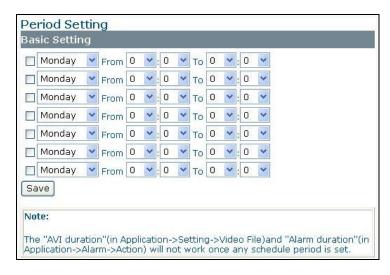
5.4.2.1 Record Type

- > Enable SD card recording to save your images. Enable Record-Save to SD card: save files on the SD card.
- > Press "Save" to save your settings.



5.4.2.2 Period Setting

Store image files based on the schedule you set. Configure settings and then press "Save" to save settings.



Note: if you set up recording schedules, the "AVI duration" function (refer to 5.4.1.1 for related settings) or the "alarm duration" function (refer to 5.4.3 for related settings) can not work.

5.4.3 Alarm

You can set to trigger alarms on the conditions that an event or action signal has been sent to the camera.

5.4.3.1 Event

- > Trigger an Alarm When Ethernet is Lost: set an alarm condition when Ethernet disconnected.
- > Digital Input: send a signal to the camera to trigger an alarm. Check it to enable this function. Then, set digital input as "High" or "Low"
- Motion Detection: this function is designed to record video once the camera detects a motion condition. Select "Disable" to disable this function or "Enable" to enable this function.
- > Sensibility: set sensibility level as "Lowest", "Low", "Medium", "High" or "Highest". Or input a value from 0 to 99 in the customized threshold field. Higher number gets higher sensitivity.
- Press "Save" to save your settings.

Select a motion detection area by clicking squares displayed on the screen to enable a detection area. 12 motion detection areas are choices provided. Then press "Save Motion Window" to save your motion detection area setting.



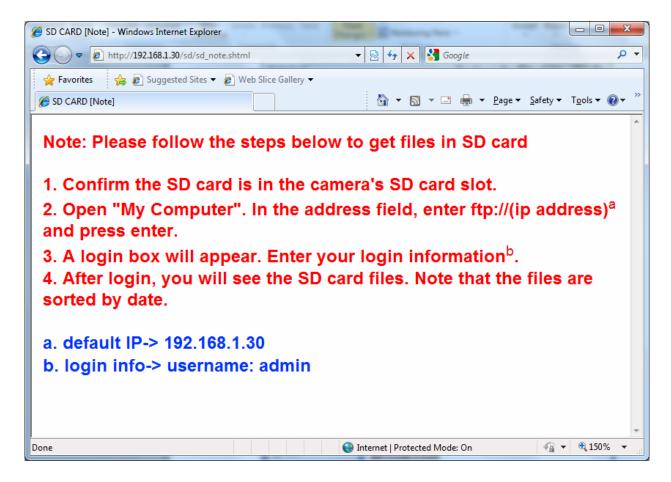
5.4.3.2 Action

Configure image transfer settings after triggering an alarm.

- > Select an image transfer method. You could upload the file via FTP server, save into the SD card, or send via SMTP.
- > Digital Output: select "OFF" to disable this function or "ON" to enable this function. If select "ON", choose an output file's resolution as "Low" or "High".
- Digital Output
 - If you want to set digital output function start, you need to set ON. After that, you need to set "Active Type" (Low or High) about digital output by the hardware.
- Alarm duration
 - The alarm time period of digital output.



5.5 SD Card



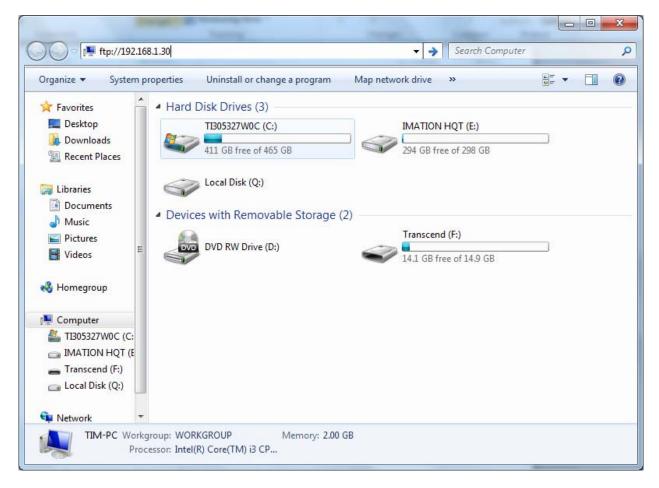
Insert a SD card into camera. Click "SD Card", and you could see a notice that guides you to get the files on the web page in SD card option

View SD Card Files

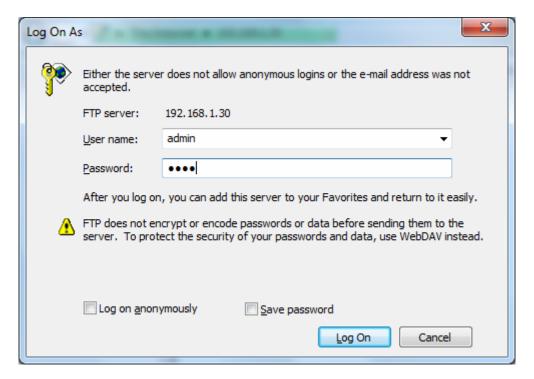
1. Confirm there is a SD card in the camera's SD card slot.



2. Open "My Computer". In the "Address" field enter the current IP address used by the camera (default IP → ftp://192.168.1.30) and press Enter.



3. A login box will appear. Enter your login information.(username: admin)



4. After login, you will see the SD card files. Note that the files are sorted by date.

