

**SAMSUNG**



## 37x/30x Network PTZ Camera **SNP-3370/3301** User Guide

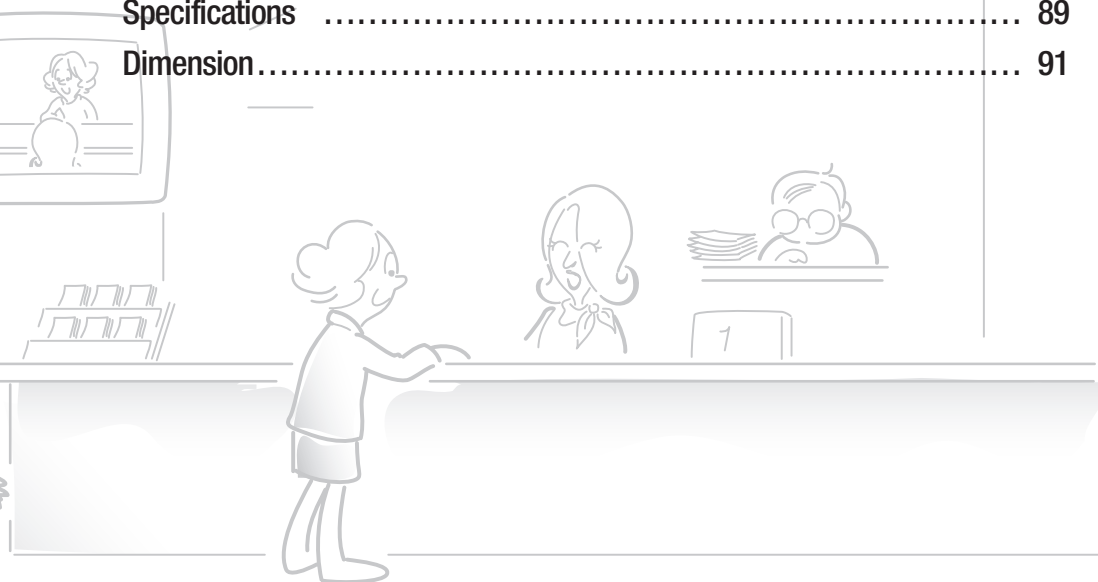
Before installing and operating this product,  
please read this manual thoroughly.

English

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**Notes** For more detailed instructions on using the SVM-S1 program, please refer to the enclosed SVM-S1 Quick Guide and the instruction file in the CD.

# iPOLiS

**iPOLiS** is a brand integrated into Samsung's network products, it stands for a convenient world (Polis) made safe (Police) through Samsung's superior network performance (Internet Protocol). iPOLiS network cameras and servers are our advanced security systems providing versatile network options by default, including an Ethernet interface for easy internet connection, high-quality image transfer options using H.264, MPEG-4, M-JPEG a Web Viewer, two-way audio, and remote control capacity.

## FCC Compliance Statement

**NOTE :** This equipment has been tested and found to comply with the limits for a Class A digital device, pursuant to part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference when the equipment is operated in a commercial environment. This equipment generates, uses, and can radiate radio frequency energy and, if not installed and used in accordance with the instruction manual, may cause harmful interference to radio communications. Operation of this equipment in a residential area is likely to cause harmful interference in which cause the user will be required to correct the interference at his own expense.

## Correct Disposal of This Product

*(Waste Electrical & Electronic Equipment)*



(Applicable in the European Union and other European countries with separate collection systems) This marking on the product, accessories or literature indicates that the product and its electronic accessories (e.g. charger, headset, USB cable) should not be disposed of with other household waste at the end of their working life. To prevent possible harm to the environment or human health from uncontrolled waste disposal, please separate these items from other types of waste and recycle them responsibly to promote the sustainable reuse of material resources. Household users should contact either the retailer where they purchased this product, or their local government office, for details of where and how they can take these items for environmentally safe recycling. Business users should contact their supplier and check the terms and conditions of the purchase contract. This product and its electronic accessories should not be mixed with other commercial wastes for disposal.

## Correct Disposal of Batteries in this Product

*(Applicable in the European Union and other European countries with separate battery return systems.)*



This marking on the battery, manual or packaging indicates that the batteries in this product should not be disposed of with other household waste at the end of their working life. Where marked, the chemical symbols Hg, Cd or Pb indicate that the battery contains mercury, cadmium or lead above the reference levels in EC Directive 2006/66. If batteries are not properly disposed of, these substances can cause harm to human health or the environment. To protect natural resources and to promote material reuse, please separate batteries from other types of waste and recycle them through your local, free battery return system.



Samsung Techwin cares for the environment at all product manufacturing stages, and is taking measures to provide customers with more environmentally friendly products.

The Eco mark represents Samsung Techwin's devotion to creating environmentally friendly products, and indicates that the product satisfies the EU RoHS Directive.

## ■ Preface

Thank you for purchasing this SNP-3370/3301 camera.

This user's manual describes how to use the high-resolution network camera. Also 'product' in this document indicates high-resolution network camera. The user who installs and operates the product shall be aware of this manual and other manuals referenced by this manual before the installation and operation and use it properly. Copyright law protects the manual, software and hardware explained here. All copying, reprinting and translating to other languages of part of or all of its contents without permission of Samsung Techwin Co., Ltd. are not allowed, except for fair use within the scope of copyright law.

## ■ Product Warranty and Limited Liability

The manufacturer of this product is not responsible for the sale of the product, nor does the manufacturer delegate such responsibility to a third party.

The product warranty does not cover accidents, negligence, abuse, or improper use for the item in whole or in any part. Additionally, the manufacturer does not provide warranty for any additional part or piece that was not supplied by the manufacturer.

The product warranty period is for 3 years from the purchase date. However, the warranty does not cover any of the following problems, and a nominal service fee will be charged if:

- Product has been improperly used or handled by user.
- Product has been disassembled and/or altered by user.
- Product has been damaged by connecting a power supply with improper specifications.
- Product has been damaged due to an "Act of God" (fire, flood, tsunami, natural disaster, etc.).
- To replace expendable components.
- Product is malfunctioning due to an unstable network connection.

**■ This instruction manual is based on the product installed with the firmware version at 1.0.0.**

## Cautions & Warnings

The following section contains vital information that helps protect the safety of the user and prevent property damage/loss. Please read it carefully for safe and proper use of your product.

- ※ If you have questions about the product, please contact your local vendor. Please note that no ancillary costs occurring during the service of your product (hiring a ladder car, for example) are covered by the warranty.
- ※ Please disconnect the plug from the outlet during electrical storms. (To avoid product damage and prevent fire.)
- ※ This product is a supplementary security device; the manufacturer will not be held liable for any damage to property, personal injury, and/or death caused by theft, fire, or natural disaster that may occur during the use of this product.

### Legend: Warning and Caution Symbols



This warning symbol indicates potential death, grave personal injury, and/or damage to property as consequences for failure to comply.



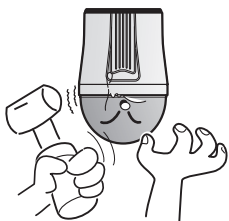
This caution symbol indicates damage to the equipment, installed programs, and/or contained data as consequences for failure to comply.



This symbol indicates an informative appendix to a certain section of this user's manual.

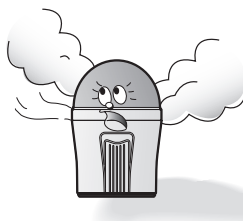
## Warning ⚡

**This product must be installed only by specially-trained personnel.**



Installing this product requires experience and specialized skills; attempting to install the product by yourself exposes you to the risk of fire and/or electric shock. Please contact your vendor for installation.

**Stop using the product immediately if smoke or an unusual amount of heat is emanating from your camera.**



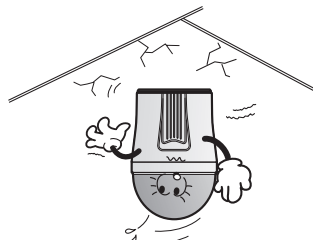
It may result in fire.

**Do not install the product in a damp area, or where it may be exposed to flammable liquids and/or gas.**



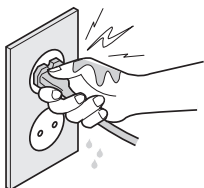
The product malfunctions, electric shock, and/or fire may occur.

**Do not install the product on a structurally unsound surface.**



The product may become detached and fall.

**Do not handle the power plug with wet hands.**



It may cause electric shock.

**Do not install the product where it may be exposed to rain, water, and/or radioactivity.**



Water may enter the product and cause malfunctions.

## Caution

Do not install the product in a location where it may be exposed to extreme heat or cold.



Using the product in extremely hot (over 50°) or extremely cold (under -10°) environments may degrade picture quality and/or cause product malfunctions.

When using the product in hot areas, be sure to provide adequate ventilation for the product.

Do not drop the product, or subject it to strong shocks or vibration.



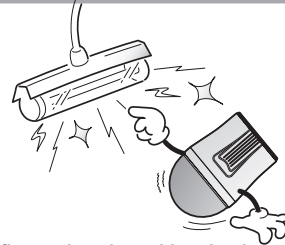
It may damage the product.

Do not touch the camera lens.



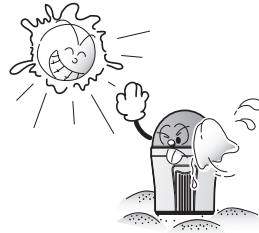
It is the most important component of your product. Avoid contaminating the lens with fingerprints or other pollutants.

Do not install the product in areas with flickering illumination.



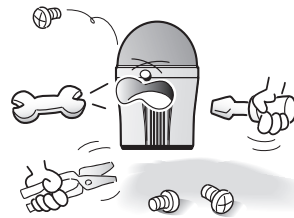
Severe fluctuations in ambient luminance, such as flickering of old fluorescent lights, may cause the product to malfunction.

Never point the camera directly at the sun, or other powerful sources of light.



You may severely damage the charge-coupled device (CCD).

Do not disassemble the product or allow foreign objects to get into the product.



Product damage and/or fire may occur.

## Detailed Warnings and Cautions

- Avoid operating the camera for long durations under high temperatures and in high humidity. Excessive heat can shorten the lifespan of the camera components.  
Do not install or place the camera near any heat sources.
- Subjecting the dome cover to physical shock may damage the camera and cause water leakage into it.
- Do not place the camera facing direct sunlight or other intense light sources. Strong lights such as spotlights can cause distortions—blooming and smear—as well as discolorations on the screen by heating up the color filter of the camera. They also may cause reflections inside the camera, leading to operational malfunctions.
- Do not drop the camera or subject it to physical shock or vibration; this can cause serious damage to the camera.
- When installing the camera near a power line, make sure to keep at least 1 meter distance from the power line, or earth an additional metal pipe to separate the camera from the power source.
- This camera is for installation on a ceiling. Installing it on the ground or in a location that is not level may cause product malfunctions and shorten its lifespan.
- When installing it in an outdoor environment, use the outdoor housing.
- Avoid installing and operating the camera in the following places.
  - Places where the temperature exceeds the camera's recommended range. (Indoors: -10° ~ 50°, Outdoors: Refer to the housing manual)
  - Places where drastic temperature changes occur: e.g. Near an air conditioner.
  - Places that are exposed to steam, oil, and flammable substances: e.g. Inside a kitchen.
  - Places that are exposed to radioactivity, X-rays, strong electric waves, and electro-magnetic waves.
  - Places that are exposed to outdoor air contaminants: e.g. Dust and car exhaust.
  - Places where there is high humidity.
  - Places that are exposed to corrosive gas: e.g. Near the sea.
- Covers that are dusty or smeared decrease the picture and video quality. Clean the dome cover and camera lens on a regular basis.
- Remove the plastic wrap on the dome cover only after the camera installation is complete.
- This camera is not equipped with a power switch. Plug in the camera only after the installation is complete.
- The main unit has a large and a small door.  
A large door has a 24-pin connector and a small one has a 4-pin connector. Because these are not used for the product operation, do not connect cables to them. It may result in malfunction.



### Caution

- Risk of Explosion if Battery is replaced by an Incorrect Type.  
Dispose of Used Batteries According to the Instructions.(See 4 page)

# Chapter 1. Product Introduction

## 1.1. Introduction

The SNP-3370/3301 37x/30x PTZ network camera is based on H.264, MPEG-4 codec technology, which achieves both a high data compression rate and high image quality. This advanced network camera is capable of transferring high quality image data at a high frame rate and in real time over a network. It is easy to install and use; you only need a network cable to install and connect it to your network, and you can remote-control, monitor, command it online from anywhere, at anytime.

The SNP-3370/3301 37x/30x PTZ network camera is provided with our proprietary embedded software solutions (Embedded Web Server, Embedded Streaming Server, and Network Protocol) to guarantee optimal performance and stability through various internet-integrated services.

## 1.2. Features

### 37x/30x Zoom Lens with Autofocus Capacity

The built-in 37x/30x optical zoom lens with autofocus capacity is combined with a 12x digital zoom, providing a maximum of 444x/360x zoom.

### High Data Compression Rate

Based on the H.264, MPEG-4 high data compression rate, this camera has a comparatively high data transfer rate; images are transferred at a high frame rate over a network.

### Wide Range Auto Security Functions

- Individual Preset Mode  
To achieve optimum video quality, each preset can be saved with up to 7 different control options in the camera OSD.
- Image Hold  
When moving between presets, the camera can hold the image status, which helps the screen observer relieve visual fatigue.
- PTZ Trace  
Up to 4 custom network patterns can be saved and replayed.
- Auto Swing  
You can command the camera to perform the Pan or Tilt operation repeatedly between 2

locations.

- Group Monitoring  
The camera can monitor up to 255 preset locations at a time in the order that they are selected.
- Tour Search  
Using the Tour Search function calls up to 6 groups at a time to call and monitor the presets programmed into the groups.

### Smart P/T

The Pan and Tilt speed compensation option allows detailed manual control even when the camera zooms in on an object.

### Day & Night Technology

With its daytime & nighttime switch and Sens-Up functions based on the ICR (Infrared Cut filter Removal) method, the camera provides high-quality pictures regardless of whether it is day or night.

- ※ Sens-Up increases the CCD sensitivity by electrically extending the camera's exposure time.
- ※ Day & Night enables you to select between color and B/W modes depending on the lighting conditions.



### **Preset Position Saving and Loading**

Up to 255 preset positions can be set and loaded at any time.



### **Digital Flip**

Use the Digital Flip option in the webpage or Web Viewer to monitor an object moving under the camera. You can monitor it easily without inverting the screen from top to bottom or from left to right.



### **Area Zoom**

Area Zoom allows the operator to zoom in on a specific spot by drawing a box on the screen. This option is simple to use via the mouse. In the Area Zoom mode, PTZ operations can be controlled with a single mouse click.



### **Real-Time Multi-Channel Multi-Encoding**

This camera can encode images simultaneously at different resolutions (4CIF, CIF, QCIF) with two different codecs (H.264, MPEG-4, JPEG) and transfer them in real time.



### **SD Memory Card Slot for Local Storage**

SD memory cards can be used to store event data.



### **Privacy Protection**

You can mask up to 8 desired areas on the screen for privacy protection.



### **Supports RTSP, RTP/UDP, RTP/Multicast**



### **Alert Options**

The camera's motion detection is integrated with various alert options; you can set it up to transfer a still image via FTP or e-mail, or store the image to an SD memory card upon detecting movement.



### **Two-Way Audio**

Audio data can be transferred both ways in real time.



### **Supports RS-485**

This camera supports the RS 485/RS 422 long-distance communication protocols for remote control via our controller.

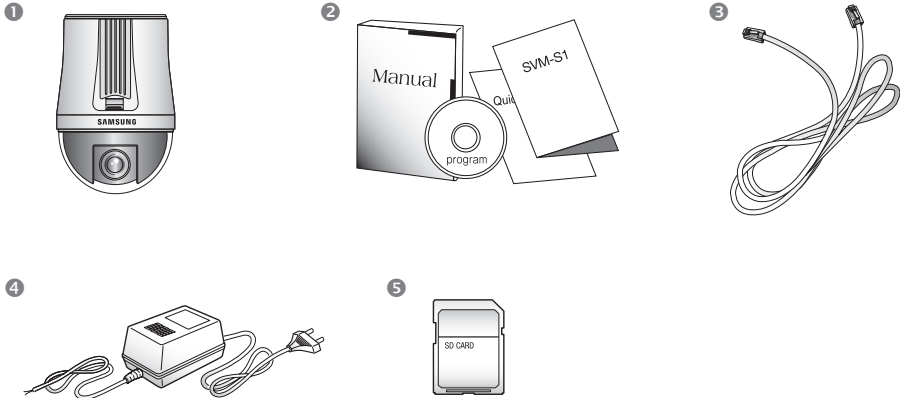


### **Supports Analog Output**

For enhanced installation convenience, this camera supports analog output.

## Chapter 2. Part Names & Functions

### 2.1. Package Contents



- ① Camera Body  
⑤ SD Card (2GB)

- ② User's Manual/CD/Quick Guide

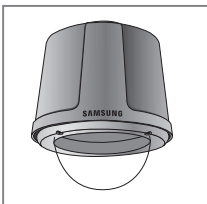
- ③ Cross Cable

- ④ AC 24V Adapter

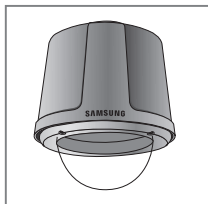
#### \* Accessories

The following items are sold separately from the camera.

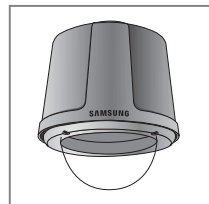
#### Housing



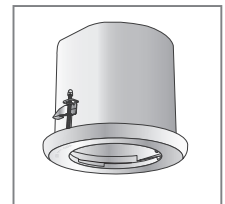
**STH-380NPO**  
Outdoor Housing for Very Low  
Temperature Environments  
(-40°~50°)



**STH-370NPI**  
Indoor Housing  
(-10°~50°)



**STH-360NPO**  
Lightweight Outdoor  
Housing  
(-20°~50°)

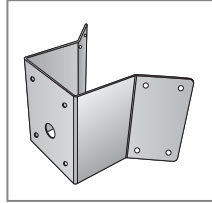


**STH-370NPE**  
Flush-Mount Indoor Housing  
for PTZ Dome Camera  
(-10°~50°)

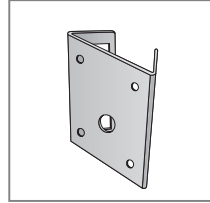
## Brackets



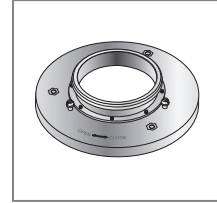
**STB-350PPM**  
Parapet Mount



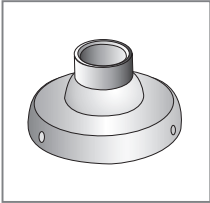
**STB-340PCM**  
Corner Mount



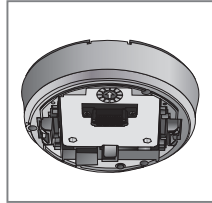
**STB-330PPM**  
Pole Mount



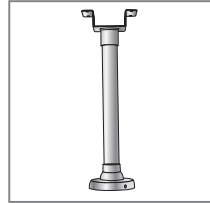
**STB-25PF**  
Indoor Flange



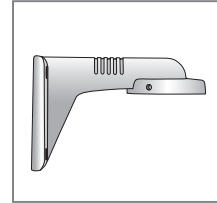
**STB-30PF**  
Indoor Flange



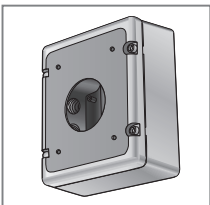
**STB-370NPC**  
Ceiling Installation Base



**STB-496PPV**  
Ceiling Bracket



**STB-270PWV**  
Wall Bracket

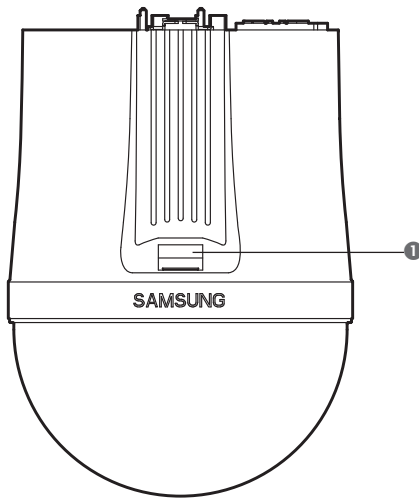


**STB-270B**  
Setup Box

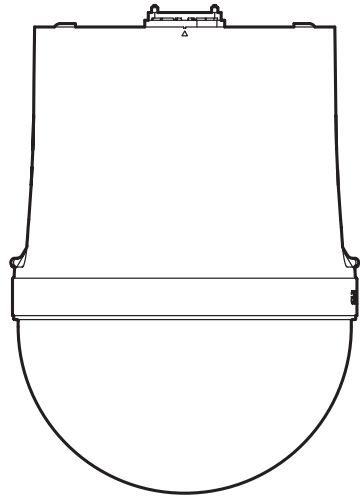
## Chapter 2. Part Names & Functions

### 2.2. Camera Body

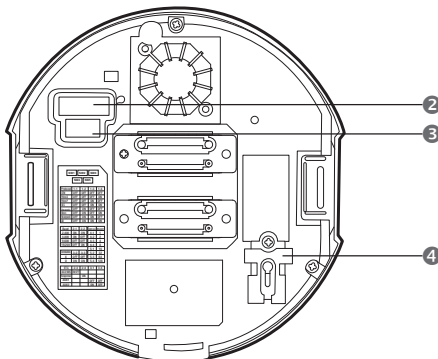
Front



Side



Bottom

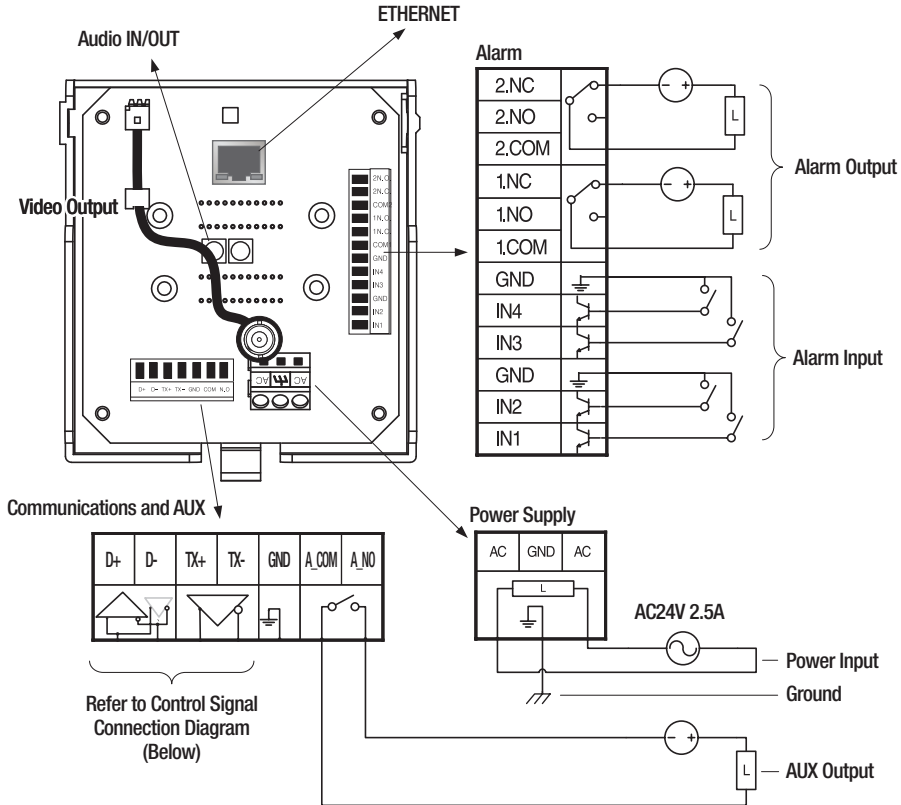


- ① Unlock Button
- ② SW1, SW2, SW3: Communication Switch
- ③ SW4, SW5: ID Switch
- ④ Safety Cable Hook

\* For instructions on configuring the switches, please refer to Page 16: 3.2 DIP Switch Settings.

### 2.3. Camera Wiring Interface Board (Sold Separately)

For the camera wiring, please refer to the picture below. The camera's wiring interface board is equipped in a housing and bracket that are sold separately.

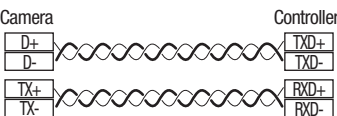


#### Control Signal Connection

##### RS485 Communications



##### RS422 Communications



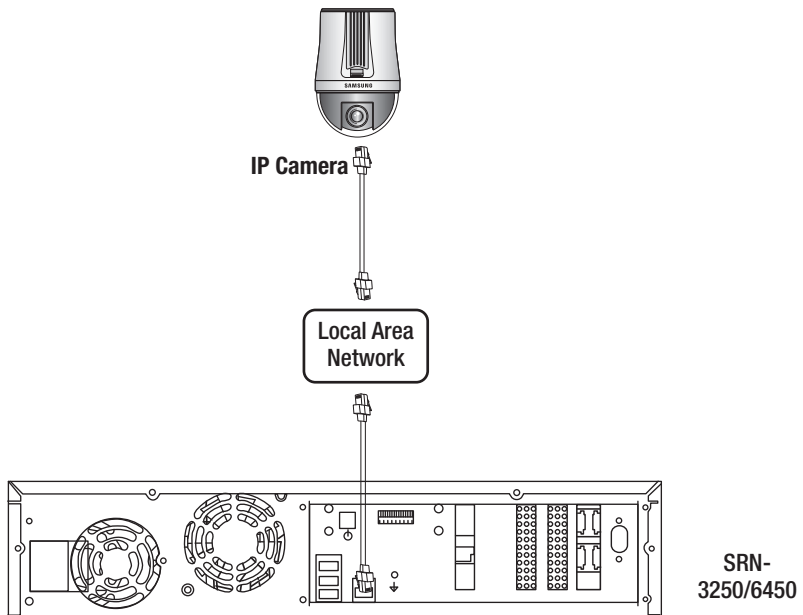
#### Caution

- The maximum power capacity of the alarm and AUX outputs is 30VDC/2A, 125VAC/0.5A, and 250VAC/0.25A.
- To connect products over the camera's capacity, please use an additional relay device.
- Connecting the power connector and GND incorrectly to the NC/NO and COM ports can cause a short circuit which may lead to fire and damage the camera.

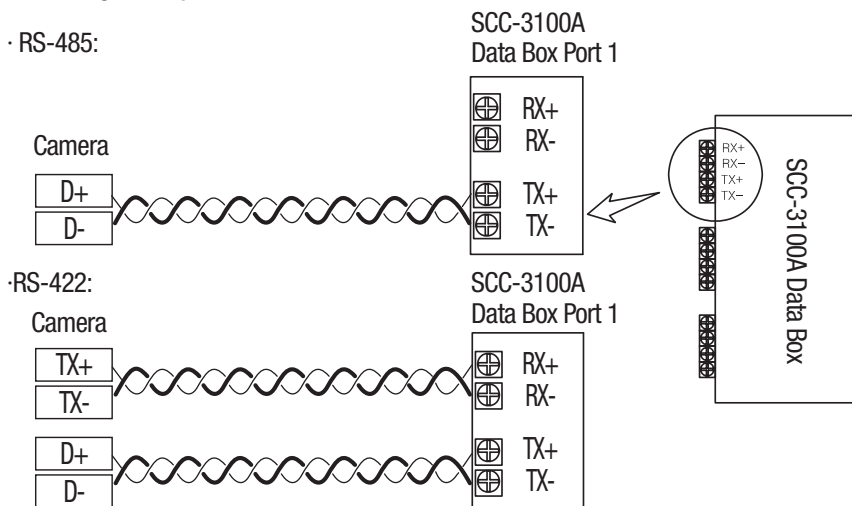
# Chapter 3. Installing Camera & Network Setup

## 3.1. PTZ Dome Camera and Accessory Wiring Diagrams

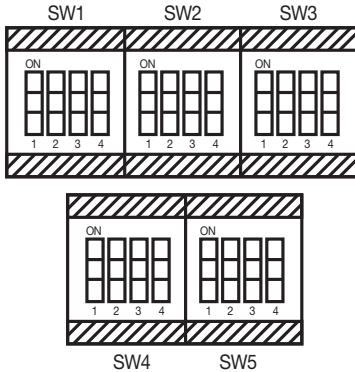
Connecting to the NVR (SRN-3250/6450)



Connecting directly to the SCC-3100A controller



### 3.2. DIP Switch Settings



SW (Pin No.)	Purpose
SW1 (1~4)	Protocol Settings
SW2(1~2)	Baud Rate Settings
SW2(3)	Transfer Method Settings
SW2(4)	Response Mode Settings
SW3(1)	TBD
SW3(2~3)	Termination Settings
SW3(4)	TBD
SW4, SW5	Camera ID Setup

#### • Protocol Settings

Select a communication protocol for the camera.

No	Protocol	SW1-#1	SW1-#2	SW1-#3	SW1-#4
1	STW	OFF	OFF	OFF	OFF
2	Pelco-D	OFF	OFF	OFF	ON
3	Pelco-P	OFF	OFF	ON	OFF
4	SEC	OFF	OFF	ON	ON
5	Panasonic	OFF	ON	OFF	OFF
6	Vicon	OFF	ON	OFF	ON
7	Honeywell	OFF	ON	ON	OFF
8	AD	OFF	ON	ON	ON
9	Reserved	ON	OFF	OFF	OFF
10	Reserved	ON	OFF	OFF	ON
11	Reserved	ON	OFF	ON	OFF
12	Reserved	ON	OFF	ON	ON
13	Reserved	ON	ON	OFF	OFF
14	Reserved	ON	ON	OFF	ON
15	Reserved	ON	ON	ON	OFF
16	Reserved	ON	ON	ON	ON

※ Factory Release Mode: STW (OFF/OFF/OFF/OFF)

#### • Baud Rate Settings

Select the transfer speed for a selected communication protocol.

No	Baud Rate(BPS)	SW2-#1	SW2-#2
1	2,400	ON	ON
2	4,800	ON	OFF
3	9,600	OFF	OFF
4	19,200	OFF	ON

※ Factory Release Mode: 9,600BPS

## Chapter 3. Installing Camera & Network Setup

### • Communication Method Settings

Select a communication method for the camera.

	Function	ON	OFF
SW2- #3	Transfer Mode Switch	RS-422(4Wire)	RS-485(2Wire)

※ Factory Release Mode: RS-485(OFF)

### • Communication Response Settings

Select a communication response method for the camera and controller: Response or No Response.

	Function	ON	OFF
SW2- #4	SW2- #4	Response Mode Switch	No Response

※ Factory Release Mode: No Response(OFF)

### • Termination Settings

To prevent the attenuation of communication signals between the camera and controller, cameras that are a long distance from the camera and controller communication loop must be set up with the proper termination settings.

Camera Input Position	SW3- #2	SW3- #3
Longest Distance Terminal	ON	ON
In the Middle of the Loop	OFF	OFF

※ Factory Release Mode: In the Middle of the Loop (OFF/OFF)

### \*Note

- To use a third party controller with this product, please contact our After-Sales Service or Technical Department.
- AD Protocol Control Method
  1. Input Camera OSD: 3+Auxiliary ON
  2. Output Camera OSD: 3+Auxiliary OFF
  3. Enter: IRIS Open
  4. Esc: IRIS Closed
- For more information about the protocols, please refer to our official website.

• Camera ID Chart

ID	SW4-#1	SW4-#2	SW4-#3	SW4-#4	SW5-#1	SW5-#2	SW5-#3	SW5-#4
1	ON/OFF	OFF	OFF	OFF	OFF	OFF	OFF	OFF
2	OFF	ON	OFF	OFF	OFF	OFF	OFF	OFF
3	ON	ON	OFF	OFF	OFF	OFF	OFF	OFF
4	OFF	OFF	ON	OFF	OFF	OFF	OFF	OFF
5	ON	OFF	ON	OFF	OFF	OFF	OFF	OFF
6	OFF	ON	ON	OFF	OFF	OFF	OFF	OFF
7	ON	ON	ON	OFF	OFF	OFF	OFF	OFF
8	OFF	OFF	OFF	ON	OFF	OFF	OFF	OFF
9	ON	OFF	OFF	ON	OFF	OFF	OFF	OFF
10	OFF	ON	OFF	ON	OFF	OFF	OFF	OFF
11	ON	ON	OFF	ON	OFF	OFF	OFF	OFF
12	OFF	OFF	ON	ON	OFF	OFF	OFF	OFF
13	ON	OFF	ON	ON	OFF	OFF	OFF	OFF
14	OFF	ON	ON	ON	OFF	OFF	OFF	OFF
15	ON	ON	ON	ON	OFF	OFF	OFF	OFF
16	OFF	OFF	OFF	OFF	ON	OFF	OFF	OFF
17	ON	OFF	OFF	OFF	ON	OFF	OFF	OFF
18	OFF	ON	OFF	OFF	ON	OFF	OFF	OFF
19	ON	ON	OFF	OFF	ON	OFF	OFF	OFF
20	OFF	OFF	ON	OFF	ON	OFF	OFF	OFF
21	ON	OFF	ON	OFF	ON	OFF	OFF	OFF
22	OFF	ON	ON	OFF	ON	OFF	OFF	OFF
23	ON	ON	ON	OFF	ON	OFF	OFF	OFF
24	OFF	OFF	OFF	ON	ON	OFF	OFF	OFF
25	ON	OFF	OFF	ON	ON	OFF	OFF	OFF
26	OFF	ON	OFF	ON	ON	OFF	OFF	OFF
27	ON	ON	OFF	ON	ON	OFF	OFF	OFF
28	OFF	OFF	ON	ON	ON	OFF	OFF	OFF
29	ON	OFF	ON	ON	ON	OFF	OFF	OFF
30	OFF	ON	ON	ON	ON	OFF	OFF	OFF
31	ON	ON	ON	ON	ON	OFF	OFF	OFF
32	OFF	OFF	OFF	OFF	OFF	ON	OFF	OFF
33	ON	OFF	OFF	OFF	OFF	ON	OFF	OFF
34	OFF	ON	OFF	OFF	OFF	ON	OFF	OFF
35	ON	ON	OFF	OFF	OFF	ON	OFF	OFF
36	OFF	OFF	ON	OFF	OFF	ON	OFF	OFF
37	ON	OFF	ON	OFF	OFF	ON	OFF	OFF
38	OFF	ON	ON	OFF	OFF	ON	OFF	OFF
39	ON	ON	ON	OFF	OFF	ON	OFF	OFF
40	OFF	OFF	OFF	ON	OFF	ON	OFF	OFF
41	ON	OFF	OFF	ON	OFF	ON	OFF	OFF

## Chapter 3. Installing Camera & Network Setup

ID	SW4-#1	SW4-#2	SW4-#3	SW4-#4	SW5-#1	SW5-#2	SW5-#3	SW5-#4
42	OFF	ON	OFF	ON	OFF	ON	OFF	OFF
43	ON	ON	OFF	ON	OFF	ON	OFF	OFF
44	OFF	OFF	ON	ON	OFF	ON	OFF	OFF
45	ON	OFF	ON	ON	OFF	ON	OFF	OFF
46	OFF	ON	ON	ON	OFF	ON	OFF	OFF
47	ON	ON	ON	ON	OFF	ON	OFF	OFF
48	OFF	OFF	OFF	OFF	ON	ON	OFF	OFF
49	ON	OFF	OFF	OFF	ON	ON	OFF	OFF
50	OFF	ON	OFF	OFF	ON	ON	OFF	OFF
51	ON	ON	OFF	OFF	ON	ON	OFF	OFF
52	OFF	OFF	ON	OFF	ON	ON	OFF	OFF
53	ON	OFF	ON	OFF	ON	ON	OFF	OFF
54	OFF	ON	ON	OFF	ON	ON	OFF	OFF
55	ON	ON	ON	OFF	ON	ON	OFF	OFF
56	OFF	OFF	OFF	ON	ON	ON	OFF	OFF
57	ON	OFF	OFF	ON	ON	ON	OFF	OFF
58	OFF	ON	OFF	ON	ON	ON	OFF	OFF
59	ON	ON	OFF	ON	ON	ON	OFF	OFF
60	OFF	OFF	ON	ON	ON	ON	OFF	OFF
61	ON	OFF	ON	ON	ON	ON	OFF	OFF
62	OFF	ON	ON	ON	ON	ON	OFF	OFF
63	ON	ON	ON	ON	ON	ON	OFF	OFF
64	OFF	OFF	OFF	OFF	OFF	OFF	ON	OFF
65	ON	OFF	OFF	OFF	OFF	OFF	ON	OFF
66	OFF	ON	OFF	OFF	OFF	OFF	ON	OFF
67	ON	ON	OFF	OFF	OFF	OFF	ON	OFF
68	OFF	OFF	ON	OFF	OFF	OFF	ON	OFF
69	ON	OFF	ON	OFF	OFF	OFF	ON	OFF
70	OFF	ON	ON	OFF	OFF	OFF	ON	OFF
71	ON	ON	ON	OFF	OFF	OFF	ON	OFF
72	OFF	OFF	OFF	ON	OFF	OFF	ON	OFF
73	ON	OFF	OFF	ON	OFF	OFF	ON	OFF
74	OFF	ON	OFF	ON	OFF	OFF	ON	OFF
75	ON	ON	OFF	ON	OFF	OFF	ON	OFF
76	OFF	OFF	ON	ON	OFF	OFF	ON	OFF
77	ON	OFF	ON	ON	OFF	OFF	ON	OFF
78	OFF	ON	ON	ON	OFF	OFF	ON	OFF
79	ON	ON	ON	ON	OFF	OFF	ON	OFF
80	OFF	OFF	OFF	OFF	ON	OFF	ON	OFF
81	ON	OFF	OFF	OFF	ON	OFF	ON	OFF
82	OFF	ON	OFF	OFF	ON	OFF	ON	OFF
83	ON	ON	OFF	OFF	ON	OFF	ON	OFF
84	OFF	OFF	ON	OFF	ON	OFF	ON	OFF

ID	SW4-#1	SW4-#2	SW4-#3	SW4-#4	SW5-#1	SW5-#2	SW5-#3	SW5-#4
85	ON	OFF	ON	OFF	ON	OFF	ON	OFF
86	OFF	ON	ON	OFF	ON	OFF	ON	OFF
87	ON	ON	ON	OFF	ON	OFF	ON	OFF
88	OFF	OFF	OFF	ON	ON	OFF	ON	OFF
89	ON	OFF	OFF	ON	ON	OFF	ON	OFF
90	OFF	ON	OFF	ON	ON	OFF	ON	OFF
91	ON	ON	OFF	ON	ON	OFF	ON	OFF
92	OFF	OFF	ON	ON	ON	OFF	ON	OFF
93	ON	OFF	ON	ON	ON	OFF	ON	OFF
94	OFF	ON	ON	ON	ON	OFF	ON	OFF
95	ON	ON	ON	ON	ON	OFF	ON	OFF
96	OFF	OFF	OFF	OFF	OFF	ON	ON	OFF
97	ON	OFF	OFF	OFF	OFF	ON	ON	OFF
98	OFF	ON	OFF	OFF	OFF	ON	ON	OFF
99	ON	ON	OFF	OFF	OFF	ON	ON	OFF
100	OFF	OFF	ON	OFF	OFF	ON	ON	OFF
101	ON	OFF	ON	OFF	OFF	ON	ON	OFF
102	OFF	ON	ON	OFF	OFF	ON	ON	OFF
103	ON	ON	ON	OFF	OFF	ON	ON	OFF
104	OFF	OFF	OFF	ON	OFF	ON	ON	OFF
105	ON	OFF	OFF	ON	OFF	ON	ON	OFF
106	OFF	ON	OFF	ON	OFF	ON	ON	OFF
107	ON	ON	OFF	ON	OFF	ON	ON	OFF
108	OFF	OFF	ON	ON	OFF	ON	ON	OFF
109	ON	OFF	ON	ON	OFF	ON	ON	OFF
110	OFF	ON	ON	ON	OFF	ON	ON	OFF
111	ON	ON	ON	ON	OFF	ON	ON	OFF
112	OFF	OFF	OFF	OFF	ON	ON	ON	OFF
113	ON	OFF	OFF	OFF	ON	ON	ON	OFF
114	OFF	ON	OFF	OFF	ON	ON	ON	OFF
115	ON	ON	OFF	OFF	ON	ON	ON	OFF
116	OFF	OFF	ON	OFF	ON	ON	ON	OFF
117	ON	OFF	ON	OFF	ON	ON	ON	OFF
118	OFF	ON	ON	OFF	ON	ON	ON	OFF
119	ON	ON	ON	OFF	ON	ON	ON	OFF
120	OFF	OFF	OFF	ON	ON	ON	ON	OFF
121	ON	OFF	OFF	ON	ON	ON	ON	OFF
122	OFF	ON	OFF	ON	ON	ON	ON	OFF
123	ON	ON	OFF	ON	ON	ON	ON	OFF
124	OFF	OFF	ON	ON	ON	ON	ON	OFF
125	ON	OFF	ON	ON	ON	ON	ON	OFF
126	OFF	ON	ON	ON	ON	ON	ON	OFF
127	ON	ON	ON	ON	ON	ON	ON	OFF

## Chapter 3. Installing Camera & Network Setup

ID	SW4-#1	SW4-#2	SW4-#3	SW4-#4	SW5-#1	SW5-#2	SW5-#3	SW5-#4
128	OFF	OFF	OFF	OFF	OFF	OFF	OFF	ON
129	ON	OFF	OFF	OFF	OFF	OFF	OFF	ON
130	OFF	ON	OFF	OFF	OFF	OFF	OFF	ON
131	ON	ON	OFF	OFF	OFF	OFF	OFF	ON
132	OFF	OFF	ON	OFF	OFF	OFF	OFF	ON
133	ON	OFF	ON	OFF	OFF	OFF	OFF	ON
134	OFF	ON	ON	OFF	OFF	OFF	OFF	ON
135	ON	ON	ON	OFF	OFF	OFF	OFF	ON
136	OFF	OFF	OFF	ON	OFF	OFF	OFF	ON
137	ON	OFF	OFF	ON	OFF	OFF	OFF	ON
138	OFF	ON	OFF	ON	OFF	OFF	OFF	ON
139	ON	ON	OFF	ON	OFF	OFF	OFF	ON
140	OFF	OFF	ON	ON	OFF	OFF	OFF	ON
141	ON	OFF	ON	ON	OFF	OFF	OFF	ON
142	OFF	ON	ON	ON	OFF	OFF	OFF	ON
143	ON	ON	ON	ON	OFF	OFF	OFF	ON
144	OFF	OFF	OFF	OFF	ON	OFF	OFF	ON
145	ON	OFF	OFF	OFF	ON	OFF	OFF	ON
146	OFF	ON	OFF	OFF	ON	OFF	OFF	ON
147	ON	ON	OFF	OFF	ON	OFF	OFF	ON
148	OFF	OFF	ON	OFF	ON	OFF	OFF	ON
149	ON	OFF	ON	OFF	ON	OFF	OFF	ON
150	OFF	ON	ON	OFF	ON	OFF	OFF	ON
151	ON	ON	ON	OFF	ON	OFF	OFF	ON
152	OFF	OFF	OFF	ON	ON	OFF	OFF	ON
153	ON	OFF	OFF	ON	ON	OFF	OFF	ON
154	OFF	ON	OFF	ON	ON	OFF	OFF	ON
155	ON	ON	OFF	ON	ON	OFF	OFF	ON
156	OFF	OFF	ON	ON	ON	OFF	OFF	ON
157	ON	OFF	ON	ON	ON	OFF	OFF	ON
158	OFF	ON	ON	ON	ON	OFF	OFF	ON
159	ON	ON	ON	ON	ON	OFF	OFF	ON
160	OFF	OFF	OFF	OFF	OFF	ON	OFF	ON
161	ON	OFF	OFF	OFF	OFF	ON	OFF	ON
162	OFF	ON	OFF	OFF	OFF	ON	OFF	ON
163	ON	ON	OFF	OFF	OFF	ON	OFF	ON
164	OFF	OFF	ON	OFF	OFF	ON	OFF	ON
165	ON	OFF	ON	OFF	OFF	ON	OFF	ON
166	OFF	ON	ON	OFF	OFF	ON	OFF	ON
167	ON	ON	ON	OFF	OFF	ON	OFF	ON
168	OFF	OFF	OFF	ON	OFF	ON	OFF	ON
169	ON	OFF	OFF	ON	OFF	ON	OFF	ON
170	OFF	ON	OFF	ON	OFF	ON	OFF	ON

ID	SW4-#1	SW4-#2	SW4-#3	SW4-#4	SW5-#1	SW5-#2	SW5-#3	SW5-#4
171	ON	ON	OFF	ON	OFF	ON	OFF	ON
172	OFF	OFF	ON	ON	OFF	ON	OFF	ON
173	ON	OFF	ON	ON	OFF	ON	OFF	ON
174	OFF	ON	ON	ON	OFF	ON	OFF	ON
175	ON	ON	ON	ON	OFF	ON	OFF	ON
176	OFF	OFF	OFF	OFF	ON	ON	OFF	ON
177	ON	OFF	OFF	OFF	ON	ON	OFF	ON
178	OFF	ON	OFF	OFF	ON	ON	OFF	ON
179	ON	ON	OFF	OFF	ON	ON	OFF	ON
180	OFF	OFF	ON	OFF	ON	ON	OFF	ON
181	ON	OFF	ON	OFF	ON	ON	OFF	ON
182	OFF	ON	ON	OFF	ON	ON	OFF	ON
183	ON	ON	ON	OFF	ON	ON	OFF	ON
184	OFF	OFF	OFF	ON	ON	ON	OFF	ON
185	ON	OFF	OFF	ON	ON	ON	OFF	ON
186	OFF	ON	OFF	ON	ON	ON	OFF	ON
187	ON	ON	OFF	ON	ON	ON	OFF	ON
188	OFF	OFF	ON	ON	ON	ON	OFF	ON
189	ON	OFF	ON	ON	ON	ON	OFF	ON
190	OFF	ON	ON	ON	ON	ON	OFF	ON
191	ON	ON	ON	ON	ON	ON	OFF	ON
192	OFF	OFF	OFF	OFF	OFF	OFF	ON	ON
193	ON	OFF	OFF	OFF	OFF	OFF	ON	ON
194	OFF	ON	OFF	OFF	OFF	OFF	ON	ON
195	ON	ON	OFF	OFF	OFF	OFF	ON	ON
196	OFF	OFF	ON	OFF	OFF	OFF	ON	ON
197	ON	OFF	ON	OFF	OFF	OFF	ON	ON
198	OFF	ON	ON	OFF	OFF	OFF	ON	ON
199	ON	ON	ON	OFF	OFF	OFF	ON	ON
200	OFF	OFF	OFF	ON	OFF	OFF	ON	ON
201	ON	OFF	OFF	ON	OFF	OFF	ON	ON
202	OFF	ON	OFF	ON	OFF	OFF	ON	ON
203	ON	ON	OFF	ON	OFF	OFF	ON	ON
204	OFF	OFF	ON	ON	OFF	OFF	ON	ON
205	ON	OFF	ON	ON	OFF	OFF	ON	ON
206	OFF	ON	ON	ON	OFF	OFF	ON	ON
207	ON	ON	ON	ON	OFF	OFF	ON	ON
208	OFF	OFF	OFF	OFF	ON	OFF	ON	ON
209	ON	OFF	OFF	OFF	ON	OFF	ON	ON
210	OFF	ON	OFF	OFF	ON	OFF	ON	ON
211	ON	ON	OFF	OFF	ON	OFF	ON	ON
212	OFF	OFF	ON	OFF	ON	OFF	ON	ON
213	ON	OFF	ON	OFF	ON	OFF	ON	ON

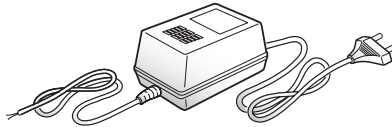
## Chapter 3. Installing Camera & Network Setup

ID	SW4-#1	SW4-#2	SW4-#3	SW4-#4	SW5-#1	SW5-#2	SW5-#3	SW5-#4
214	OFF	ON	ON	OFF	ON	OFF	ON	ON
215	ON	ON	ON	OFF	ON	OFF	ON	ON
216	OFF	OFF	OFF	ON	ON	OFF	ON	ON
217	ON	OFF	OFF	ON	ON	OFF	ON	ON
218	OFF	ON	OFF	ON	ON	OFF	ON	ON
219	ON	ON	OFF	ON	ON	OFF	ON	ON
220	OFF	OFF	ON	ON	ON	OFF	ON	ON
221	ON	OFF	ON	ON	ON	OFF	ON	ON
222	OFF	ON	ON	ON	ON	OFF	ON	ON
223	ON	ON	ON	ON	ON	OFF	ON	ON
224	OFF	OFF	OFF	OFF	OFF	ON	ON	ON
225	ON	OFF	OFF	OFF	OFF	ON	ON	ON
226	OFF	ON	OFF	OFF	OFF	ON	ON	ON
227	ON	ON	OFF	OFF	OFF	ON	ON	ON
228	OFF	OFF	ON	OFF	OFF	ON	ON	ON
229	ON	OFF	ON	OFF	OFF	ON	ON	ON
230	OFF	ON	ON	OFF	OFF	ON	ON	ON
231	ON	ON	ON	OFF	OFF	ON	ON	ON
232	OFF	OFF	OFF	ON	OFF	ON	ON	ON
233	ON	OFF	OFF	ON	OFF	ON	ON	ON
234	OFF	ON	OFF	ON	OFF	ON	ON	ON
235	ON	ON	OFF	ON	OFF	ON	ON	ON
236	OFF	OFF	ON	ON	OFF	ON	ON	ON
237	ON	OFF	ON	ON	OFF	ON	ON	ON
238	OFF	ON	ON	ON	OFF	ON	ON	ON
239	ON	ON	ON	ON	OFF	ON	ON	ON
240	OFF	OFF	OFF	OFF	ON	ON	ON	ON
241	ON	OFF	OFF	OFF	ON	ON	ON	ON
242	OFF	ON	OFF	OFF	ON	ON	ON	ON
243	ON	ON	OFF	OFF	ON	ON	ON	ON
244	OFF	OFF	ON	OFF	ON	ON	ON	ON
245	ON	OFF	ON	OFF	ON	ON	ON	ON
246	OFF	ON	ON	OFF	ON	ON	ON	ON
247	ON	ON	ON	OFF	ON	ON	ON	ON
248	OFF	OFF	OFF	ON	ON	ON	ON	ON
249	ON	OFF	OFF	ON	ON	ON	ON	ON
250	OFF	ON	OFF	ON	ON	ON	ON	ON
251	ON	ON	OFF	ON	ON	ON	ON	ON
252	OFF	OFF	ON	ON	ON	ON	ON	ON
253	ON	OFF	ON	ON	ON	ON	ON	ON
254	OFF	ON	ON	ON	ON	ON	ON	ON
255	ON	ON	ON	ON	ON	ON	ON	ON

### 3.3. Preparing Adapter and Cable

#### - Power Adapter

The SNP-3370/3301 uses an AC24V 2.5A power adapter for the power supply.



Plug the power adapter into a power outlet.

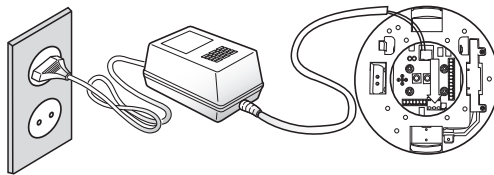


Chart 3-1. Electrical Resistance of Copper Wire at [20° (68°)]

Copper Wire Gauge (AWG)	#24(0.22°)	#22(0.33°)	#20(0.52°)	#18(0.83°)
Resistance ( $\Omega$ /m)	0.078	0.050	0.030	0.018
Drop Voltage (V/m)	0.028	0.018	0.011	0.06

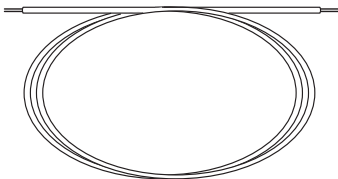
• As shown in Chart 3-1, voltage drop may occur depending on the length of the copper cable: excessively lengthening the adapter cable may decrease the performance of the camera.

※ Camera Operating Voltage: AC 24V±10%

※ Voltage drop measurements on the chart above may vary depending on the type and manufacture of the copper cable.

#### - Communications Cable

For the camera to communicate with the controller, a RS-485/422 communications line is required.



#### Caution

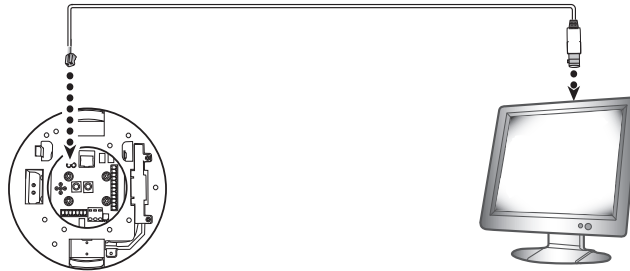
- A 30m or shorter length is recommended for the connection.

\* The communication cable is not enclosed with the camera.

## Chapter 3. Installing Camera & Network Setup

### 3.4. Connecting Monitor

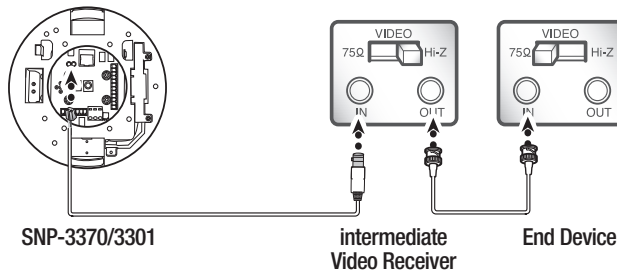
Connect the cable to the camera's rear video output terminal and the monitor's video input terminal.



37x/30x PTZ Network Camera  
SNP-3370/3301

Monitor

- The wiring varies depending on your monitor type and peripheral devices; please refer to the user manual for each device.
- Please make sure the monitor and camera are turned off when connecting them.
- As shown in the picture below, set the 75Ω/Hi-Z switch of each device to Hi-Z for the intermediate video receiver and to 75Ω for the end device.



SNP-3370/3301

intermediate  
Video Receiver

End Device

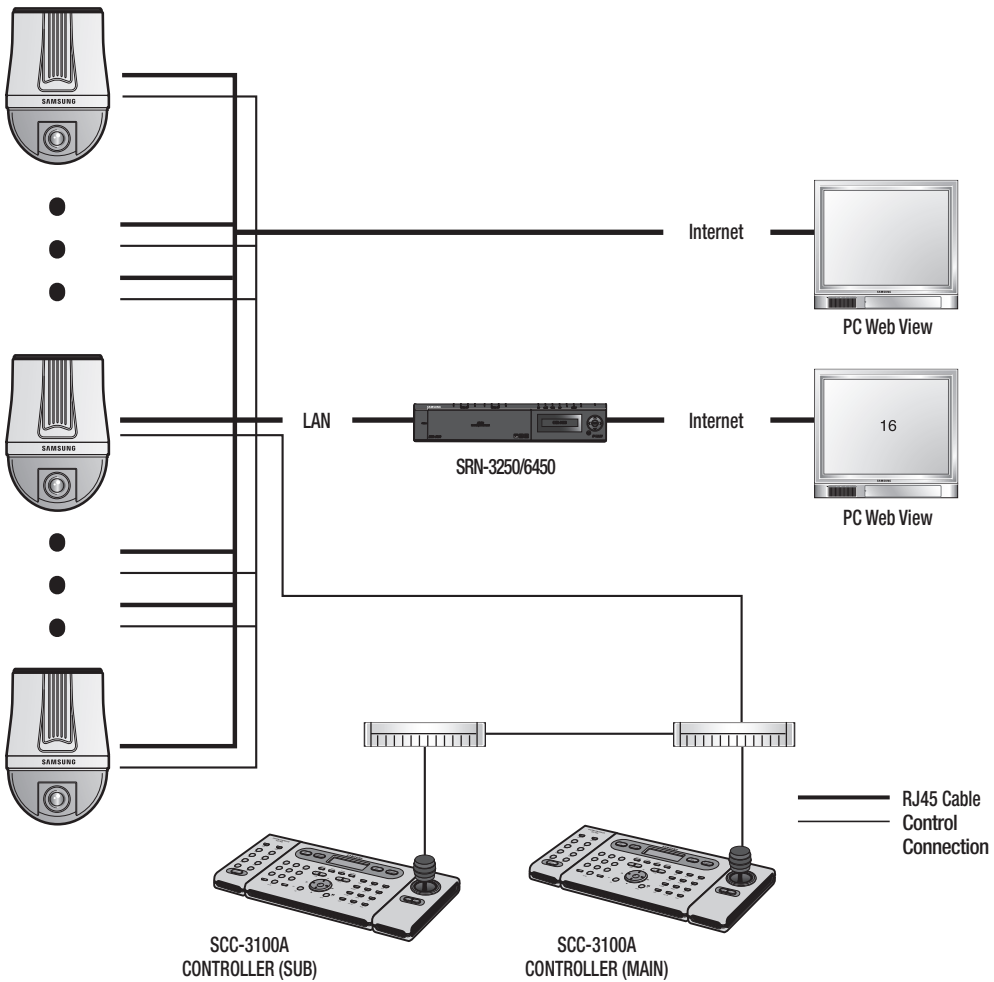


#### **Caution**

- This product is a network camera that transfers video over a network; the video output terminal is used to set the imaging range of the camera at installation.
- Using the terminal for monitoring purposes may cause problems such as degradation in video quality.

### 3.5. Preparing & Installing Camera Bracket

For installation guidelines for brackets and housings, refer to the installation manual that is enclosed with the bracket or housing.



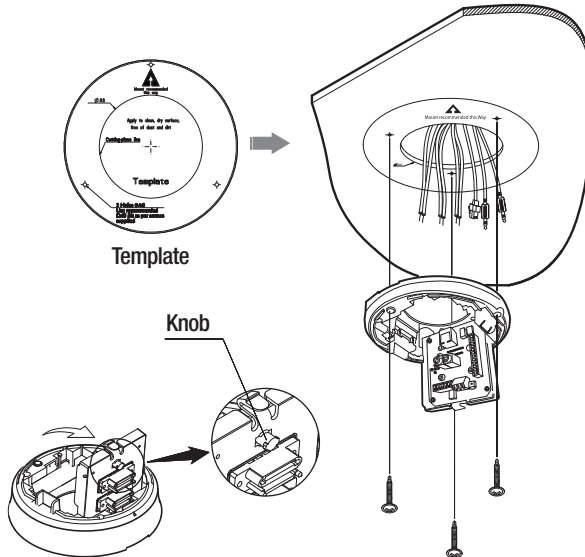
## Chapter 3. Installing Camera & Network Setup

### 3.6. Ceiling Installation Example

#### - Attaching Template & Installing STB-370NPC

Attach the enclosed template to the ceiling, then drill a hole in the ceiling according to the 88mm diameter hole marked on the template. Drop the camera cables down from the ceiling through the hole. Next, install the base, STB-370NPC, to the ceiling as shown in the picture.

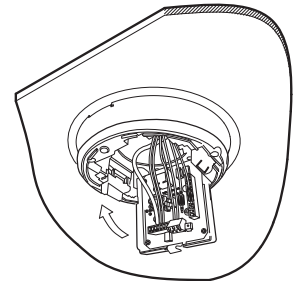
Before installing the exposed bracket, open the hinged door at the bottom of the bracket as shown in the picture. Hold the knob on the hinged door to open it.



#### - Connect Terminal Wires

Connect the cables to the terminal block on the hinged door.

When connecting, please refer to 2.2 Camera Wiring Interface Board. Once the wiring is complete, close the hinged door.

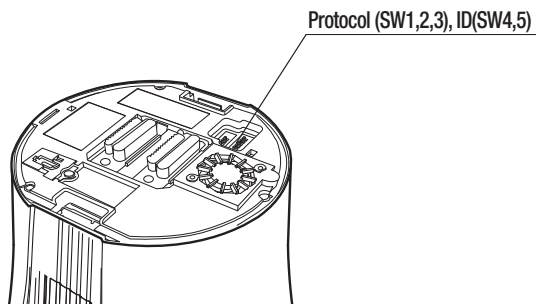


### Caution

- Do not connect the camera to a power outlet until the installation is complete. Supplying power while the installation is in progress may cause fire or damage the product.

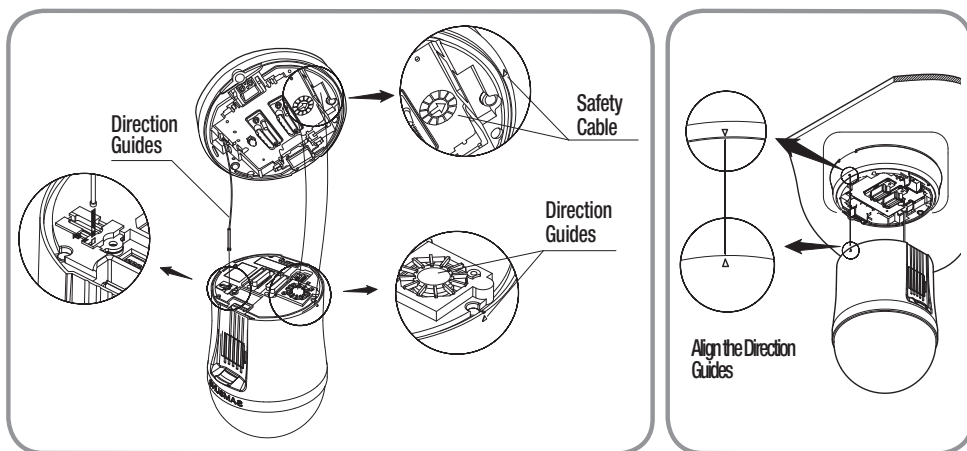
### - Configuring Camera DIP Switches

DIP switches for communication and ID protocols are located on the bottom of the camera. For more instructions, please refer to 3.2 DIP Switch Settings(Page 25).



### - Connecting Camera Safety Cable and Attaching Camera

Carefully attach the camera to the mount following the alignment guide marks as shown in the picture. First, hook the camera's safety cable on the mount, and then attach the camera. The safety cable is coiled inside the base. As shown in the left hand picture, pull out the safety cable from the base and then hook it to the mount.



※ To attach the camera to the mount, refer to the alignment guide marks as shown in the picture.

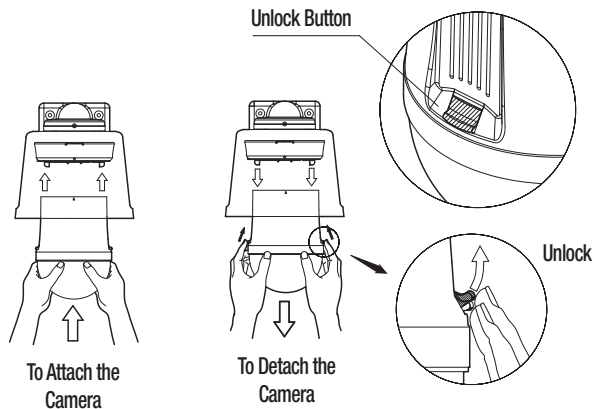


### **Caution**

- Make sure to hook the camera's safety cable to the mount before proceeding. Otherwise you may be exposed to serious injury caused by the camera falling.

## Chapter 3. Installing Camera & Network Setup

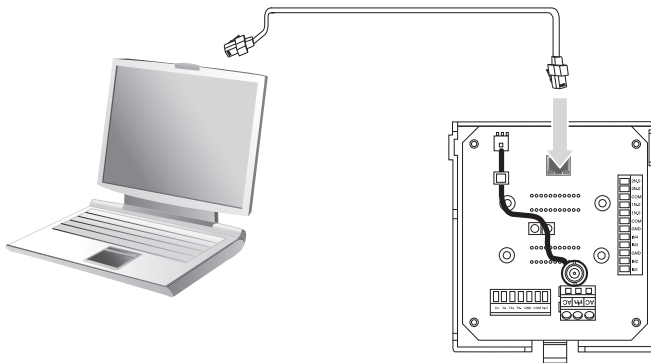
- ※ To attach or detach the camera, refer to the picture.
- \* Attaching the Camera: Hold up the camera and push it to the mount as shown in the picture. Push the camera until you hear a "click".
- \* Detaching the Camera: To detach the camera, pull the camera downward while pushing up the unlock buttons on the camera.



### 3.7. Network Configuration & Connection via Website

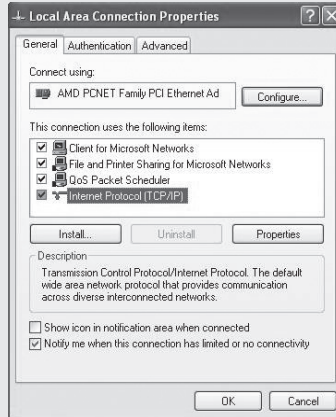
Use these instructions if you are using a single SNP-3370/3301 37x/30x PTZ network camera.

1. Connect the SNP-3370/3301 37x/30x PTZ network camera to a computer with a cross cable.

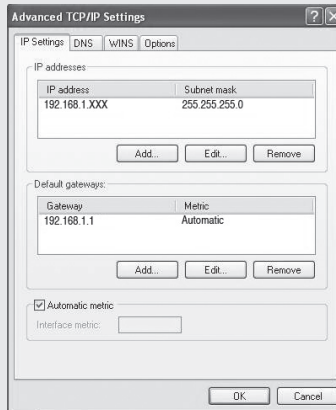




**Notes** For the network settings, you must register the internal IP of your computer. To register the IP, go to My Network Environment → Properties → Local Area Connection → Properties.



Next, select Internet Protocol (TCP/IP) and click the "Properties" button below, then press "Advanced . . ." to set advanced options for your product.



- 192.168.1.XXX as the internal IP of your computer. (XXX: 0 ~ 255)



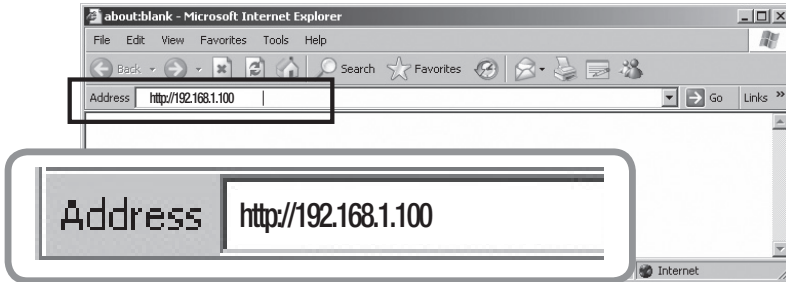
### Caution

- 192.168.1.100 is the IP address for the camera and will be unavailable as the internal IP address for your computer.

## Chapter 3. Installing Camera & Network Setup

2. Open the internet browser on your computer, enter [192.168.1.100] in the address bar, and then press <Enter>.

You will be connected to the Web Viewer login page for the SNP-3370/3301 37x/30x PTZ network camera.

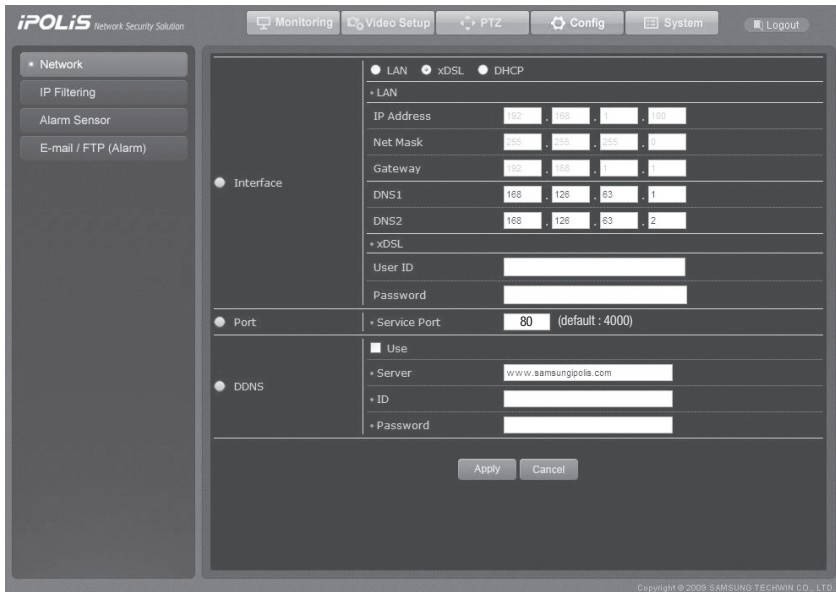


3. Log in with an administrator account, and then move to the "Config → Network" page.



**Notes** The default administrator login information is ID: admin, and PW: 4321.

4. Once you have moved to the "Config → Network" page, configure the network settings for the SNP-3370/3301 network camera. To save the new settings, press <Apply>.



### ① LAN / xDSL / DHCP Setup

Category	Description
LAN	Enter the network information of the camera to connect it to a local network or assign it to a static IP.
xDSL	When using xDSL, enter the xDSL ID and password.
DHCP	If the camera receives an IP address automatically from a DHCP server, use this DHCP option. "DHCP" is used in an LAN environment with a DHCP server. Generally, medium to large networks run a DHCP server on a LAN while small networks use the DHCP function of IP routers.

## Chapter 3. Installing Camera & Network Setup

### ② Port Setup

Port	Service Port	80
------	--------------	----

Category	Description
Port Setup	Select a service port; the default is 80.



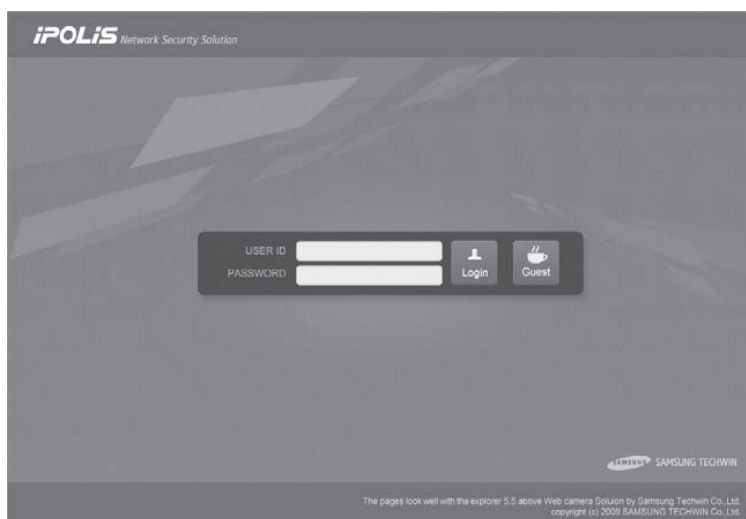
**Notes** When a device is connected to a cable or xDSL modem, its IP address keeps changing each time it attempts to connect to the ISP (Internet Service Provider) so you cannot check the new IP address of the device. DDNS is useful for situations like this, involving products with dynamic IPs. You can easily check the new IP address of your products by registering them to our DDNS server at [www.samsungipolis.com](http://www.samsungipolis.com). To use the DDNS service, first register the product to the DDNS server. Come back to this page, select Enable under the Use DDNS option, and then enter the ID and password that was submitted to the DDNS server. For more information, please refer to Page 50: “Using DDNS.”

## Chapter 4. Using Web Viewer

### 4.1. Using Web Viewer

#### 4.1.1. Login

Enter the IP address of your camera in an internet browser, and then press Enter to connect to the Web Viewer login page.



Enter your user ID and password, and then click <Login> to move to the next page.



**Notes** The default administrator login information is ID: admin, and PW: 4321.

The <Guest> button can be used for access only if the Guess Access option is checked in System → User → Guest Setup.



**Notes** Please change the password of your administrator account upon the first login. It helps you prevent unauthorized users from connecting to the administrator page.

# Chapter 4. Using Web Viewer

## 4.1.2. Monitoring Screen

The monitoring screen consists of a menu area for the camera and video settings and a display area for the video feed from the camera.



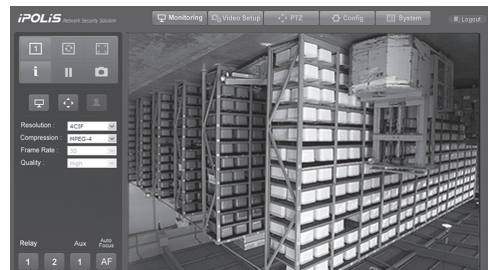
### 1Ch Display

Displays only one video in the display area; the SNP-3370/3301 supports only one channel at this time.



### Flip Image

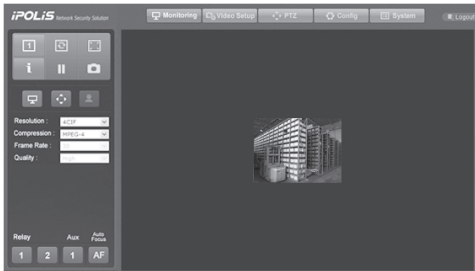
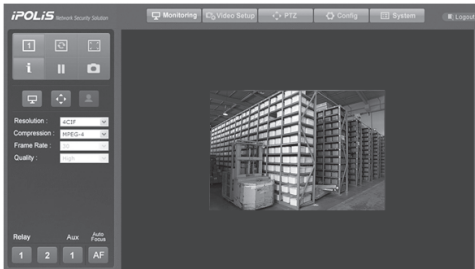
Inverts the screen from top to bottom.





## Stretch Image

Expands the screen to the size of 4CIF when selecting CIF and QCIF for resolution.



## Caution

- This Stretch Image option is not available at 4CIF resolution.



## Information

Displays information about the current channel: name, time, date, etc.



## Chapter 4. Using Web Viewer



### Save Image

Saves the channel screen as a JPEG file.



### Basic

Select a screen resolution and image compression type.


- Resolution  
(For more instructions on selecting a resolution, please refer to the Video Setup → Video/Audio page.)
  - 4CIF
  - CIF
  - QCIF
- Compression Types
  - MPEG-4 / H.264
  - M-JPEG
- Frame Rate
  - A maximum number of frames to transfer per second.
- Video Quality
  - Displays the video quality.

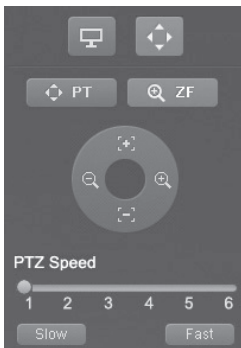






### PTZ

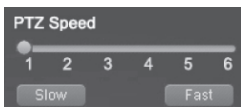
Controls the PTZ operation of the camera.





 **PT** Changes the direction to which the camera faces. Clicking the button displays a circular button as shown below. Click an arrow on the circular button to rotate the camera in that direction.



 **ZF** Adjusts the zoom and focus of the camera. Clicking the button displays a circular button as shown below.   Click a symbol on the circular button to zoom the camera in or out, or  adjust the focus.



You can adjust the PTZ speed with the slider at the bottom of the page. A total of 6 different PTZ speed levels are available. Click  to decrease the PTZ speed by one step, and  to increase it by one step. 1 is the slowest PTZ speed setting while 6 is the fastest.



### Video Analytics

Controls the Video Analytics operation of the camera.

## Chapter 4. Using Web Viewer



α

### Alpha Blending

Makes changed parts appear half-transparent.

RESET

### Reset

Select the current screen as the background image.

※ For more information about "Video Analytics" please refer to 4.2.1.4 Video Analytics.

Relay

1

### Relay

Turns a connected relay on or off.

Aux

1

### Aux

Turns a connected AUX on or off.

Auto  
Focus

AF

### Auto Focus

Automatically adjusts the camera's focus on the current screen.



### Caution

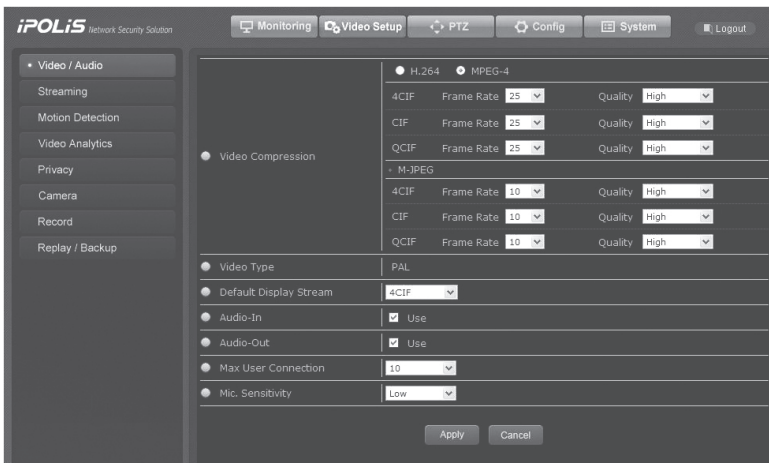
- If neither a relay nor an AUX is connected to the camera, clicking this button does not turn the relay/AUX on or off, even if the button turns blue when pressed.

## 4.2. Administrator Page

### 4.2.1. Video Setup

The following page appears when selecting **Video Setup** at the top of the screen. Buttons on the left side of the screen move to the relevant menu page.

#### 4.2.1.1 Video / Audio



Category	Description
Video Compression	Select a resolution according to a video format: H.264/MPEG-4 or M-JPEG. You can also adjust the frame rate and quality of each video format.
Video Type	Displays the current video type: NTSC or PAL.
Default Display Stream	You can select Default as the resolution at the Monitoring page.
Audio - In	Check to use an audio input channel.
Audio - Out	Check to use an audio output channel.

## Chapter 4. Using Web Viewer

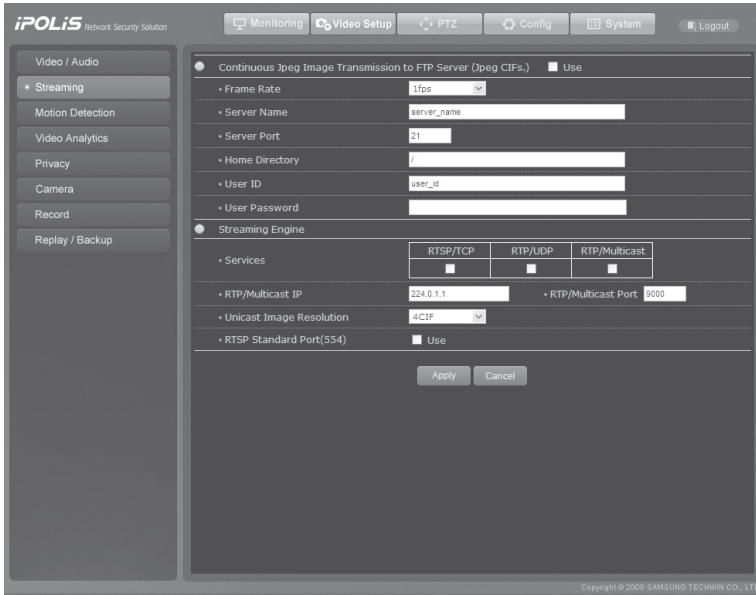
Max User Connection	Select a number to limit the concurrent users.
Mic. Sensitivity	Adjusts the sensitivity of an audio mic. Set this to Low for an amplifiable mic and High for others. (Set to Low for non-mic line-in signals.)



### **Caution**

- New settings are saved only if you click the **Apply** button at the bottom of the screen. The **Cancel** button cancels new settings.

## 4.2.1.2 Streaming



### ■ Continuous JPEG Image Transmission

Category	Description
Use	Check to use the Continuous JPEG Image Transmission option.
FrameRate	Select a number of frames per second.
Server Name	Enter the domain name or IP address of your FTP server.
Server Port	Enter the port number of your FTP server.
Home Directory	Enter a home directory in the FTP server to save data. Make sure to enter "/" to save the data directly to the FTP server's home directory.
User ID	Enter an ID to log in to the FTP server.
User Password	Enter the password for the ID that is entered above.

## Chapter 4. Using Web Viewer

### ■ Streaming Engine

Configure the RTP/RTSP streaming service.

Category		Description
Services	RTSP/TCP	Check to use RTSP/TCP.
	RTP/UDP	Check to use RTP/UDP.
	RTP/Multicast	Check to use RTP/Multicast.
RTP/Multicast IP		Enter an IP address for RTP Multicast.
RTP/Multicast Port		Enter a port number for RTP Multicast.
Unicast Image Resolution		Select a resolution for the RTSP/TCP and RTSP/UDP streaming services.
RTSP Standard Port(554)		Check to use the RTSP standard port, 554.

- Multicast RTP is effective to transfer video to multiple users as it uses a very low amount of network bandwidth.
- Multicast RTP, however, uses UDP that transfers the latest video but may also incur the risk of data loss.
- Multicast requires an authorization from the server router; multicast over the internet is not available.
- Streaming resolution for Multicast is fixed as CIF.



**Notes** Unicasting is suitable for VOD (Video on Demand) services as it does not transfer video data unless a user connects and requests data transfer.



#### **Caution**

- New settings are saved only if you click the **Apply** button at the bottom of the screen. The **Cancel** button cancels new settings.

## ■ How to Use The Streaming Engine

Please follow the instructions below to use the streaming engine.

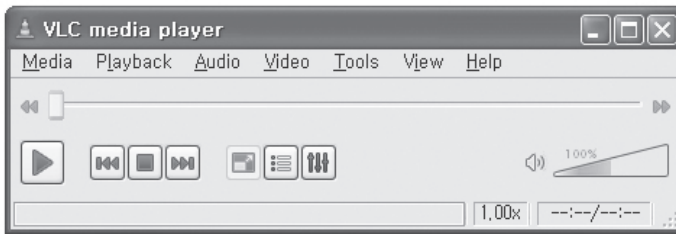
We recommend using VLC Media Player for the streaming engine. (Version: 1.0.1 or higher)

### ○ Step 1) Set Up Streaming Page

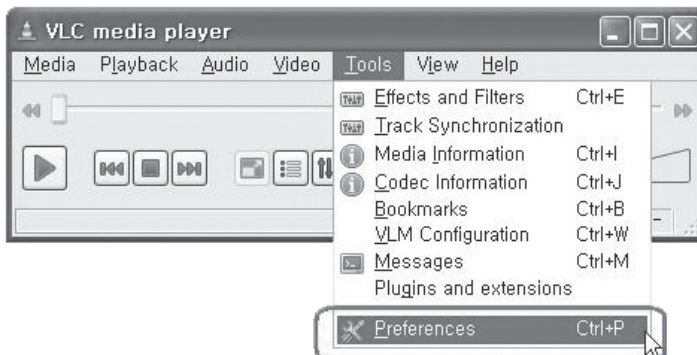
Select a desired function on the streaming engine, and then press <Apply>.

### ○ Step 2) Run VLC Media Player

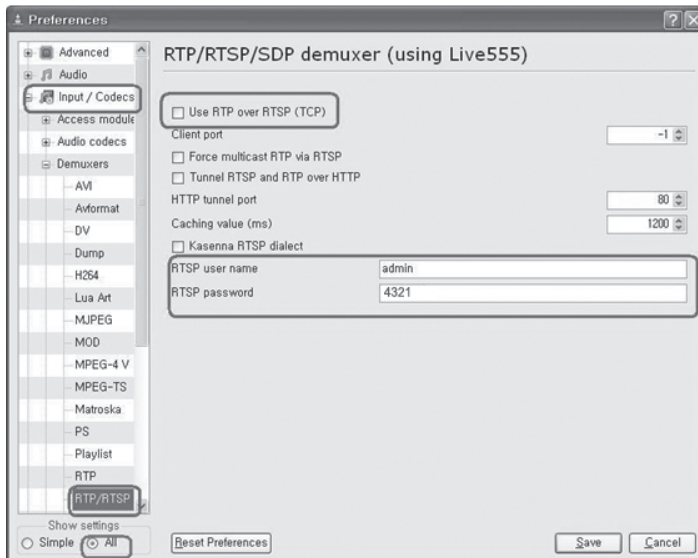
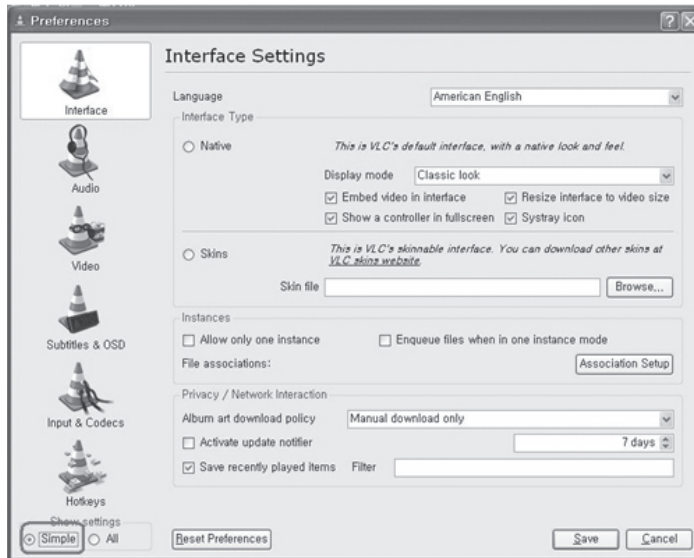
The following window appears when you open VLC media player in your computer.



- Enter the camera ID and PW into the menu highlighted in the picture below.



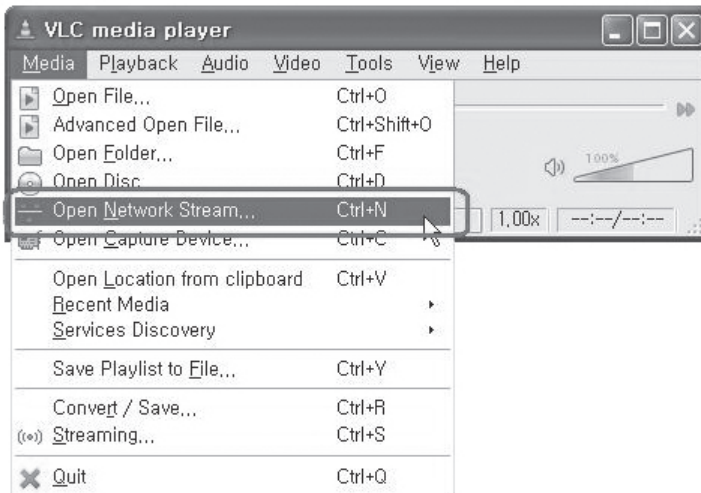
# Chapter 4. Using Web Viewer





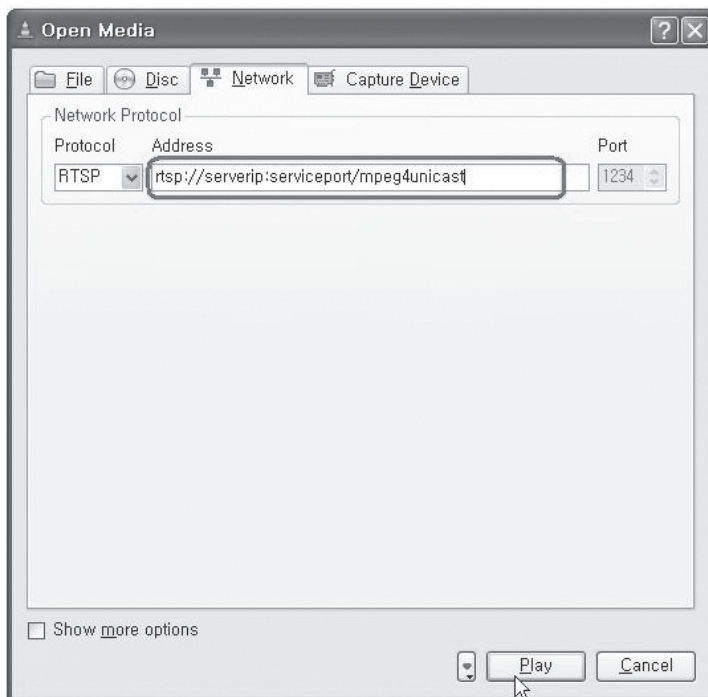
**Notes** Checking Use RTP Over RTSP (TCP) activates RTSP/TCP Connection in the Streaming Engine → Services menu. To use RTP/UDP and RTP/Multicast, do not check the box.

- In the menu bar, select Media (M), and then Open Network Stream (N).



## Chapter 4. Using Web Viewer

- Depending on the type of video, enter an address similar to the examples shown in the following chart, and then click Play (P). (When using the default RTSP port number, 554, you may skip entering the port number.)



The followings are examples of addresses for network streaming.

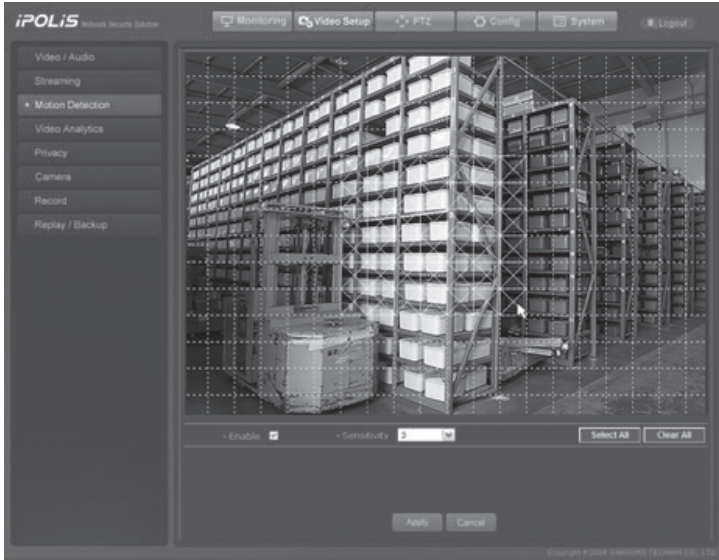
Address	Streaming Engine Settings
rtsp://<IP>:<SERVICE PORT>/mpeg4unicast	For RTSP/TCP and RTP/UDP
rtsp://<IP>:<SERVICE PORT>/mpeg4multicast	For RTSP/Multicast



- Notes** <IP> : The current camera IP  
<Service Port> : The number of the service port +1 that is selected at the Config Setup → Network menu.  
ex) default port : 80 → <SERVICE PORT> : 81  
※ When using the default RTSP port number, 554, you may skip entering the port number.

### 4.2.1.3 Motion Detection

Configure the camera's Motion Detection operation.



#### Notes



: Selected Area,



: Other Areas.

Category	Description
Enable	Check to enable Motion Detection.
Sensitivity	Select a sensitivity level for motion detection according to the video display settings. 5 levels are available, and 5 is the most sensitive.



#### Caution

- New settings are saved only if you click the **Apply** button at the bottom of the screen. Apply The **Cancel** button cancels new settings.

## Chapter 4. Using Web Viewer

### 4.2.1.4. Video Analytics



Category	Description
Enable	Check to enable Video Analytics.
Sensitivity	Select a sensitivity level for motion detection according to the video display settings. 5 levels are available, and 5 is the most sensitive.
Transition Time	Shows the period of time maintaining a changed screen for detection.
Reset Time	Resets the current screen to a selected point of time.

## 4.2.1.5. Privacy

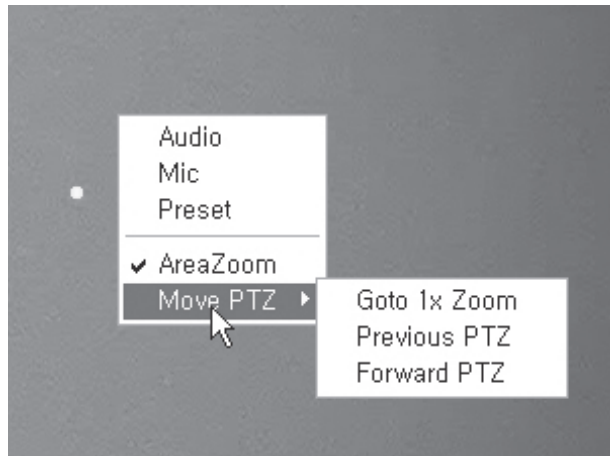
For privacy protection, you can specify areas to hide. When selecting an area on the screen, the area is masked in gray.



Category	Description
Privacy zone	Indicates the number of the Privacy Zone.
Enable	Select On or Off to apply the selected Privacy Zone on the screen.
Set Privacy	Defines a selection as a Privacy Zone.
Start	Starts selecting an area.
End	Finishes selecting an area.
Privacy Limit	Select an area for which the Pan and Tilt operations of the camera are limited. Pan Limit limits the Pan operation while Tilt Limit limits Tilt.
Enable	Select On or Off to use Privacy Limit.
Set Limit	Defines a selection as a Privacy Limited area.
Start	Starts selecting a Privacy Limited area.
End	Finishes selecting a Privacy Limited area.

## Chapter 4. Using Web Viewer

When right-clicking on the screen, the following menu appears. Descriptions for each menu are as below :



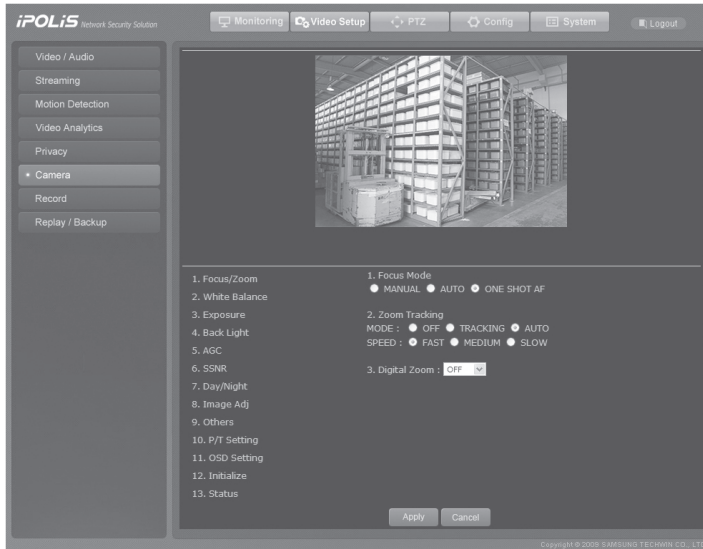
Category		Description
Audio		Turns on audio.
Mic		Use a mic.
Preset		Sets the selected area as a preset.
Area Zoom		Zooms in on a selected area.
Move PTZ	Goto 1x Zoom	Changes the current zoom power to 1x.
	Previous PTZ	Moves to the previous area and its settings.
	Forward PTZ	Moves to the next area and its settings.



### Caution

- Set Pan and Tilt range to be within 30 degree when selecting a Privacy area.

## 4.2.1.6. Camera



### ■ Focus / Zoom

#### ① Focus Mode

- Auto : Performs continuous autofocus.
- Manual : Changes the camera mode to Manual Focus.
- One Shot AF : Performs auto-focusing one time only immediately after the Pan/Tilt/Zoom operation.

#### ② Zoom Tracking

##### • Mode

- Auto : Performs zoom operations in the Autofocus mode.
- Tracking : Performs zoom operations in Manual Focus mode.
- Off : Disables the focus modes when zooming. (Full manual mode)

##### • SPEED

- Slow/Medium/Fast: Adjusts the zoom operation speed.

##### • Digital Zoom

Enables the maximum digital zoom. Up to 12x digital zoom can be selected to achieve a maximum combined zoom of 444x (SNP-3370) or 360x (SNP-3301).

## Chapter 4. Using Web Viewer

### ■ White Balance

#### ① Mode

The White Balance settings adjust the balance of the screen colors under different lighting conditions.

- ATW : Adjusts the screen color automatically.
- MANUAL : Enables customization of the Red and Blue gains.
- AWC : Adjusts the screen color to be optimized to the current lighting and monitor conditions. Using this setting may require a readjustment if the lighting conditions change.
- Indoor : Optimizes the screen colors automatically for indoor environments.
- Outdoor : Optimizes the screen colors automatically for outdoor environments.

### ■ Exposure

The Exposure settings are for controlling the camera's exposure meter.

#### ① Brightness : Adjusts the screen brightness. (Over 50: Brighter, Under 50: Darker)

#### ② Iris

- Auto : Automatically adjusts the exposure meter.
- Manual : Enables manual adjustment of the exposure meter.

#### ③ Shutter : Controls the camera's electronic shutter.

- ESC : Adjusts the shutter speed automatically according to the screen brightness.
- A.FLK : Select this setting when you experience picture flickering. Flickering can happen when artificial lighting frequencies clash with camera frame rates.
- Manual : Enables manual adjustment of the shutter speed.

#### ④ Sens-Up : Controls the camera's electronic shutter.

- Auto : Automatically detects light levels and maintains a clear picture at night or under low-light conditions.

### ■ Back Light

This feature is achieved by our innovative SV-IV DSP chipset. Unlike other cameras, this SNP-3370/3301 enables you to see clearly both an object and the background, even when the object is in extreme backlight .

#### ① Back Light Mode :

- Off : Disables the Backlight mode.
- WDR : Use the WDR (Wide Dynamic Range) mode.
  - WDR Setting : Three WDR sensitivity levels are available: Low, Medium, and High. Note that the higher the sensitivity level, the lower the contrast in the light and dark areas becomes.
  - WDR Level : Adjusts the overall brightness of the screen in WDR mode.



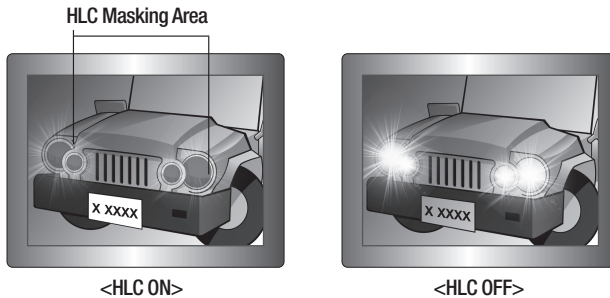
### Caution

- WDR is disabled if the shutter is in Manual mode.
- During WDR operation, noise, discoloration, spots, and snow may occur depending on lighting conditions. If they occur, stop using WDR.
- When selecting WDR, AGC Manual is disabled.

- USER : Select an area for which to use the Backlight feature.
  - WINDOW ON : Select to use the Area Selection window.
  - DIRECTION : ALL – Moves the Area Selection window in a desired direction.  
Detail – Adjusts the shape of the Area Selection window.

- HLC : Activates the Highlight Compensation mode.

The HLC settings selectively eliminate highlights in a restricted environment such as the entrance to an apartment parking lot or gas station, and is useful to detect small objects like car license plates. HLC is disabled during the daytime. While monitoring nighttime car traffic, if car headlamps reflect too brightly on the screen, the camera automatically eliminates the headlamp lights and adjusts the colors of the license plate accordingly.



- Adjusts the HLC sensitivity level.
- Color : Adjusts the mask color on the highlighted area.



### Caution

- Even if HLC is on, car license plates may not be detectable depending on the location and angle of the camera as well as the lighting conditions.

### ■ AGC (Auto Gain Control)

AGC (Automatic Gain Control) adjusts the camera's gain control and the screen brightness if the camera has captured an object under low-light conditions.

## Chapter 4. Using Web Viewer

### ■ SSNR (Samsung Super Noise Reduction)

Reduces background noise in low-light images.

- OFF : Disables the noise reduction function.
- LOW : Reduces only a small amount of noise, but generates almost no afterimage.
- Medium : The most commonly used mode. Reduces a suitable amount of noise while generating only a faint afterimage.
- HIGH : Reduces noise significantly, but generates obvious afterimages.



#### Caution

- SSNR is disabled when the AGC mode is turned off.

### ■ Day & Night Mode (DAY/NIGHT)

This feature changes the mode of the camera between Color and B/W (Black and White).

#### ① MODE :

- AUTO : Operates in Color mode most of the time, and switches to B/W mode if a low light level is detected during nighttime.
- COLOR : Always displays video in color.
- B&W : Always displays video in black and white.

#### ② Duration : The camera's light sensitivity is adjustable as in the chart below. The camera's ambient light switching performance may vary depending on its environment.

	Color → B&W	B&W → Color
Early	2.5 lux	4 lux
Late	0.8 lux	6 lux

#### ③ Dwell Time : You can select day/night switching delay time from.



#### Caution

- Auto mode is disabled when AGC is turned off. This function is only available when Color or B/W mode is selected.
- Using B/W mode under sunlight or in halogen lighting may decrease the focusing performance.

### ■ Image Adj (DAY/NIGHT)

- ① Sharpness : Sharpens image outlines.
- ② Color : Adjusts the color density of an image.



### **Caution**

- This function uses the digital zoom; it causes degradation in video quality.
- The stabilizer does not activate at low light levels.
- The stabilizer does not activate when the camera is capturing an area with a monotonous pattern, such as the sky or a white wall.

#### ■ Others

- ① Stabilizer : The stabilizer compensates for camera vibration as a result of wind and other causes.
- ② Dome Cover  
These settings are to optimize the camera's focused object position according to the dome cover type.
  - Inner : Select when using the camera without a housing. (Factory Release mode)
  - Outer : Select when using this camera with a housing.
  - None : Select when using the camera without the dome cover.

#### ■ P/T Setting

- ① Prop. P/T  
This commands the camera to change the Pan and Tilt speed automatically according to the current zoom position. Moving the joystick clockwise (Tele) slows down and counterclockwise (Wide) accelerates the Pan and Tilt speed, allowing detailed adjustments. Turning this "OFF" executes the optical 1x zoom speed regardless of the zoom position.
- ② Digital Flip  
Digital Flip is useful to monitor a moving object or a person passing directly under the camera.  
When an object or a person passes directly under the camera, the camera's tilt angle automatically adjusts and follows the object or person over 100 degrees to the other side of the tilt area without panning. The screen inversion occurs at 100 degrees or higher and is digitally adjusted.
- ③ Image Hold  
While the camera is operating in the Group or Tour Search mode, this feature pauses the monitoring screen at a previous preset until the camera reaches the next preset location. This is useful to help the screen observer maintain a constant watch and to monitor multiple locations within a network.
- ④ Power On Resume  
This is useful when the power is disconnected and reconnected due to power failures or other power interruptions.

## Chapter 4. Using Web Viewer

### ⑤ Turbo Enable

This function accelerates the speed of the PTZ operations in proportion to the period for which the PTZ button is pressed.

For example, hitting the PTZ button once activates the operation at slow speed, but the speed increases so long as you are holding down the button.

### ■ OSD Setting

- ① Camera ID : Displays or hides the ID of the current camera on the screen.
- ② Sequence Status : Displays or hides the status of a sequence action that is in progress.
- ③ PTZ Position : Displays or hides the status of the Pan, Tilt, and Zoom operation that is in progress.

### ■ Initialize

- ① Camera Default : Use this function when replacing the camera's zoom module; uploads the settings of the previous module to a new module. Make sure to keep the camera turned off while replacing the module and then use this function.
- ② Auto Refresh : Optimizes the electronic circuits and components of the camera on a regular basis. This function is useful to maintain and restore the current settings of the camera. Use it after the camera has been facing a strong light source directly for a long time, or when the settings have changed after the camera has repeatedly rotated to capture the video of an area over a long period.
  - OFF, 1~7 Days : OFF disables Auto Refresh while 1 to 7 Days performs it at selected intervals.
  - ※ Auto Refresh takes approximately 10 seconds to finish. If Auto Refresh activates in the middle of a sequence action, the camera pauses the sequence action and performs an Auto Refresh, then resumes the sequence action once the refresh is complete.

### ■ Status

Displays the settings and version of the dome camera.

- Cam Model : Indicates the model name of the camera.
- Protocol : Indicates the type of protocol that is used for the camera.
- Duplex : Supports one- and two-way communications.
- Baud Rate : Displays the selected baud rate.

- Data Bits : Displays selected data bits.
- Stop Bits : Displays selected stop bits.

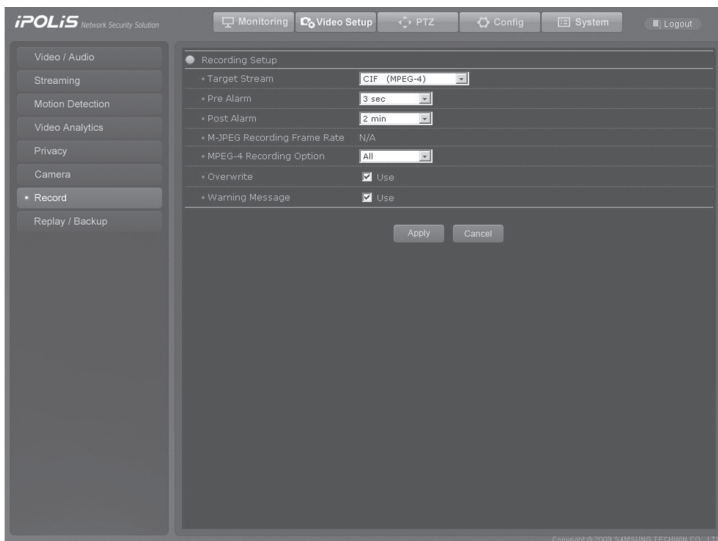


### Caution

- New settings are saved only if you click the **Apply** button at the bottom of the screen. The **Cancel** button cancels new settings.

## 4.2.1.7. Record

Use this menu to save image data to an SD memory card.



### ■ Record Setup

Category	Description
Target Stream	Select a stream to save.
Pre alarm	Select a time to start saving an event prior to its occurrence.
Post alarm	Select a time to finish saving an event after its occurrence.
M-JPEG Recording Frame Rate	Selecting ALL saves all frames while 1fps saves only 1 frame per second.
H.264, MPEG-4 Recording Option	Selecting ALL saves all frames while 1fps saves only 1 frame per second.
Overwrite	Deletes the oldest file and saves a new file when no free space remains in an inserted memory device.
Warning Message	If an inserted SD memory card is not working or becomes full—because the Overwrite option is not used, selecting this option displays a warning message on the screen.

## Chapter 4. Using Web Viewer



### Caution

- If Overwrite is not checked and the SD memory card is full, the camera stops recording data.
- This camera is compatible only with SD cards; MMC cannot be used. Do not insert an SD card the wrong way round; it may damage the slot.
- Only 1GB to 2GB SD and 4GB SDHC cards are supported.
- We recommend the FAT32 format.
- Please turn off the camera before removing the SD card; the data may be damaged otherwise.
- If using 4CIF resolution, the camera saves only 1fps for both H.264, MPEG-4 and M-JPEG.

### 4.2.1.8. Replay / Backup

Configure this menu to record Motion Detection and Sensor events upon their occurrence. You can also watch a recorded event using this menu.

Ch	Event	Time
1	MD	2009/08/21 13:53:47
1	MD	2009/08/21 13:53:43
1	MD	2009/08/21 05:24:56
1	MD	2009/08/21 05:24:52
1	MD	2009/08/18 13:52:06
1	MD	2009/08/18 13:52:02
1	MD	2009/08/18 13:51:58
1	MD	2009/08/18 13:51:55
1	MD	2009/08/18 13:51:52
1	MD	2009/08/18 13:51:47
1	MD	2009/08/18 13:51:40
1	MD	2009/08/18 13:51:37
1	MD	2009/08/18 13:51:31
1	MD	2009/08/18 13:51:26
1	MD	2009/08/18 13:51:13



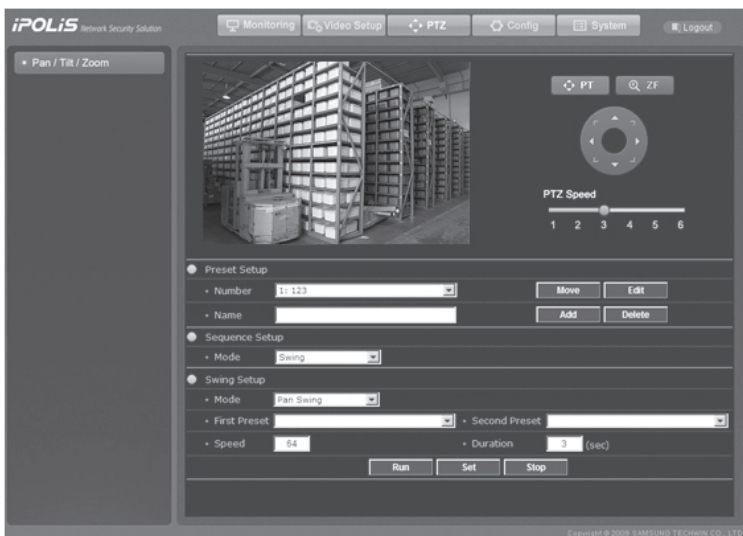
### Caution

- For the Backup operation, only 1 file can be backed up at a time.

Category		Description
Storage Information	Storage Size	Total: Indicates the total capacity of an SD memory card. Free: Indicates the free space of an SD memory card.
	Total Clips	Event Type: Displays the number of available files per event type: MD (Motion Detection), SD (Sensor Detection), and VA (Video Analytics).
Replay/backup	Event Type	When selecting MD or Sensor, displays only the selected type of event files when searched.
	Search	Lists files of a selected event type.
>>, >		Moves to a page that contains a list of older files. > : Moves to the next page. >> : Moves to the last page.
<<, <		Moves to a page that contains a list of newer files. < : Moves to the next page. << : Moves to the last page.
Goto		Enter a page number to go directly to it.
		Plays a saved video.
		Stops the video.
		Pauses the video.
		Save the video image as a JPEG file.
Backup		Saves the video to your computer.
		Downloads SLiM Player in your computer.

## 4.2.2 PTZ Page

The following page appears when selecting PTZ at the top of the screen.



## Chapter 4. Using Web Viewer

### ■ Preset Setup

To save a desired location for the Pan/Tilt or Zoom/Focus operation along with detailed camera settings for the location, configure the following options.

Category	Description
Number	Select a number to identify a preset. (Preset numbers 1 to 255 are available.)
Name	Name a preset.
Move	Moves to a selected preset when its number is selected.
Edit	Enables detailed camera settings to be configured for a preset.
Add	Saves a preset; move to a desired location for the Pan/Tilt or Zoom/Focus operation, enter a preset number and name, and then press the Add button to save the location as a preset.
Delete	Deletes an existing preset; select a preset number, and then press the Delete button.



### Caution

- New settings are saved only if you click the **Add** button on the right of the screen. To configure detailed camera settings for a preset, select a preset number, and then move the camera to the preset before pressing the **Edit** button.

### ■ Sequence Setup

You can configure detailed sequence settings for each camera mode. Available camera modes are Swing, Group, Tour, Trace, and Auto Run, and they are described in the chart below.

Category	Description
Swing	Commands the camera to move between 2 selected presets, monitoring the route.
Group	Recalls groups of multiple preset locations consecutively. A group can contain up to 255 presets.
Tour	Recalls groups of presets consecutively in an orderly manner. Up to 6 groups can be listed for this function.
Trace & Auto Run	Trace saves and reactivates patterns of custom camera movements. Up to 4 movement patterns can be memorized. Auto Run commands the camera to automatically perform a preset sequence action if no command has been entered via the controller for a while.

## 4.2.2.1. Swing

### ■ Swing Setup

Category		Description
Sequence Setup	Mode	3 modes are available: Pan Swing, Tilt Swing, and P&T Swing.
	Pan Swing	Activates only the Pan operation for Swing monitoring.
	Tilt Swing	Activates only the Tilt operation for Swing monitoring.
	P&T Swing	Activates both the Pan and Tilt operations for Swing monitoring.
First Preset		Select the first preset for a route consisting of 2 presets.
Second Preset		Select the second preset for a route consisting of 2 presets.
Speed		Select the camera's movement speed between the first and second presets. (Levels 1 to 64 are available.)
DWT(Dwell Time)		Select the number of seconds to keep the PTZ camera on a preset location for monitoring.



### Caution

- New settings are saved only if you click the **Set** button at the bottom of the screen. The **Run** button operates the camera with the selected settings.

## Chapter 4. Using Web Viewer

### 4.2.2.2. Group

No.	Preset	Speed	Dwell
-----	--------	-------	-------

#### ■ Group Setup

Category	Description
Group No.	Information on a maximum of 6 groups can be saved.
Preset No.	Select a preset number to add the preset to a selected group.
Speed	Select the camera speed to move between presets. (Levels 1 to 64 are available.)
DWT(Dwell Time)	Select the number of seconds to keep the PTZ camera on a preset location for monitoring.



#### Caution

- A preset is added in the Preset No. if you click the **Add** button at the bottom of the screen. The **Clear** button deletes all the presets in a selected group. To apply new settings, please make sure to press the **Set** button.

### 4.2.2.3. Tour

The screenshot shows a web interface for 'Sequence Setup'. Under the 'Tour Setup' section, there is a 'Mode' dropdown set to 'Tour'. Below it, 'Group No.' is set to '1' and 'DWT' is set to '3 (sec)'. There are 'Run' and 'Stop' buttons under 'Execute'. At the bottom, there are 'Add', 'Set', and 'Clear' buttons. On the right, a table with columns 'NO.', 'GROUP', and 'DWT' is visible, currently empty.



#### Caution

- A preset is added in the Preset No. if you click the **Add** button at the bottom of the screen. The **Clear** button deletes all the Group No. in a selected the Tour No. To apply new settings, please make sure to press the **Set** button.

#### ■ Tour Setup

Category	Description
Group No.	Up to 6 group numbers can be saved.
DWT(Dwell Time)	Select the number of seconds to keep the PTZ camera on the last preset of a group before moving to the next group.

## Chapter 4. Using Web Viewer

### 4.2.2.4. Trace & Auto Run

The screenshot shows a web interface for PTZ Trace Setup and Auto Run Setup. The PTZ Trace Setup section includes a Mode dropdown menu set to 'Trace & Auto Run', a Trace No. dropdown menu set to '1', and three buttons: 'Replay', 'Memorize', and 'Stop'. The Auto Run Setup section includes a Mode dropdown menu set to 'OFF', a Time dropdown menu set to '30' with a unit dropdown set to 'SEC', a Number input field set to '1', a Tilt Angle input field set to '25', and a 'Set' button.

#### ■ PTZ Trace Setup

Category	Description
Trace No.	Up to 4 traces can be saved.
Replay	Replays a route saved by the Trace function.
Memorize	Pressing the Memorize button starts saving the route of the Pant/Tilt or Zoom/Focus operation automatically.
Stop	During Replay mode, press the Stop button to abort the Trace operation. During Memorize mode, press the Stop button to finish memorizing a route.

#### ■ Auto Run Setup

Category	Description
Mode	8 modes are available: OFF, HOME, Preset, Swing, Group, Tour, Trace, and A.Pan.
Time	Select time to activate Auto Run. (1 to 60 seconds and 1 to 60 minutes are available.)
Number	In the HOME and Preset modes, Number is used to set up preset numbers. In the Swing mode, Number is used to set up the Pan, Swing, and P&T modes. In the Group and Trace modes, Number is used to set up groups and trace numbers. In the A.Pan mode, Number is used to adjust the Pan speed.
Tilt Angle	Available only in the A.Pan mode; enables a tilt angle to be set up for the Pan operation.
Speed	Available only in the A.Pan mode; enables to set the Pan operation speed.



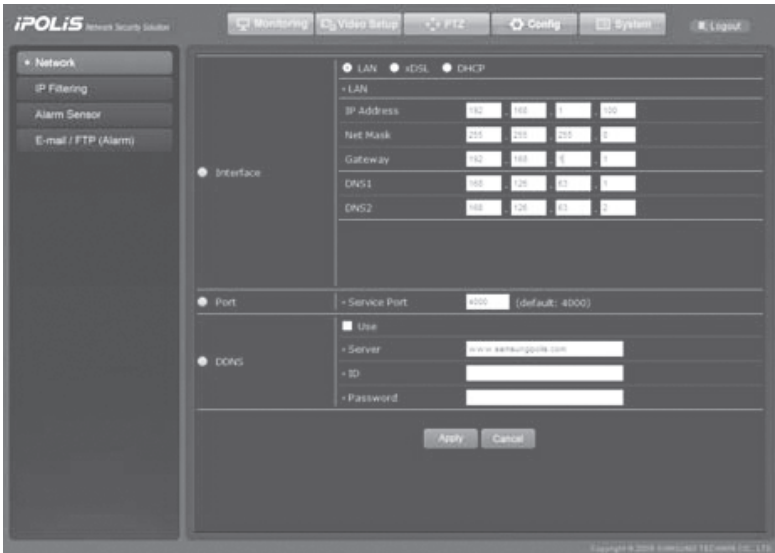
#### **Caution**

- Pressing the Set, Clear, or Stop button aborts sequence action, for example, PTZ operations of the camera like Preset, Group, Tour, etc.

### 4.2.3. Config Page

The following page appears when selecting  at the top of the screen. Buttons on the left side of the screen move to the relevant menu page.

#### 4.2.3.1. Network



#### ■ Interface

LAN, xDSL, and DHCP options are available depending on your network environment.

Category	Description
LAN	If the camera uses a static IP, enter the network information of the camera.
xDSL	Enter the ID and password of your xDSL server.
DHCP	Select this option when the camera receives an IP from a DHCP server.

## Chapter 4. Using Web Viewer

### ■ Port

Enter a port number to connect the camera to the network.

### ■ DDNS

Check to use the DDNS service.

Category	Description
Use	Check to use the DDNS service.
Server	Enter a DDNS server address; our DDNS server is at <a href="http://www.samsungipolis.com">www.samsungipolis.com</a> .
ID	Enter the ID (domain name) of the camera that is registered to the DDNS server.
Password	Enter the password for the ID entered above.

### ■ How to Use DDNS

Our DDNS server registration procedures are as follow:

- Step 1) Sign up for membership on the iPOLiS website at:  
[www.samsungipolis.com](http://www.samsungipolis.com)

HOME | LOGIN | SIGNUP | SITEMAP | KOREAN | ENGLISH

**iPOLiS** WHAT IS IPOLIS PRODUCT DDNS SERVICE SUPPORT MY IPOLIS

**iPOLiS**  
SAMSUNG NETWORK SECURITY SOLUTION

Go to the list of registered IPs

SNP-3750/3350 SNR-6400/3200 SNC-1300

**SNP-3750/3350**  
3703x HIGH-RESOLUTION NETWORK PTZ ICRIC CAMERA  
• MPEG-4/JPEG dual codec  
• Maximum 3703x optical zoom (3.5-115.5mm)  
• Real-time multi-streaming  
• SD memory card, Various Exclusive Accessories

**SAMSUNG CCTV SYSTEM**  
The frontier in digital image security!

**DOWNLOAD CENTER**  
We will provide you with information about the products available.

**REMOTE SERVICE**  
One click remote call Service

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Pic 4-1. iPOLiS Website

**Welcome to IPOLIS**

We provide real-time online video service for IPOLIS products through this web browser.  
We recommend strongly every purchaser of IPOLIS products sign up for IPOLIS online.

**LEGAL NOTICE**

Legal Notice

NO. 1

NO. 2

 Agree

NEXT

Pic 4-2. Membership Signup : Agree to the Terms of Service

SIGNUP + My IPOLIS > Signup

**Welcome to IPOLIS**  
We provide real-time online video service for IPOLIS products through this web browser.  
We recommend strongly every purchaser of IPOLIS products sign up for IPOLIS online.

**Manage your account**

+ ID  AVAILABILITY

+ PASSWORD  \* Create password of 6 to 12 characters in length containing letters A-Z or numbers 0-9

+ PASSWORD Check

+ NAME

+ JOB

+ E-mail

+ ADDRESS  POSTAL CODE

+ TEL

+ MOBILE PHONE  -  -

**Manage company account**

+ COMPANY

+ TEL

+ FAX

+ ADDRESS  POSTAL CODE

SIGN UP BACK

Pic 4-3. Membership Signup : Enter Personal and Company Information

## Chapter 4. Using Web Viewer

- Step 2) Log in to the website, and then register your camera.

WELCOME to IPOLIS !



The login form features a 'Login' icon on the left. It includes two input fields: 'ID' with the value 'andy' and 'PASSWORD' with masked characters. A 'LOGIN >' button is positioned to the right of the password field. Below the input fields, there are two sections: 'MEMBER JOIN' with a 'SIGN UP >' button, and 'ID/PW SEARCH' with an 'ID/PW SEARCH >' button. A message 'User ID and password don't match' is displayed below the search button.

Pic 4-4. Login

Product List My IPOLIS > Product List

Current product list is displayed.  
If wanted product is not in the list, click 'Product Registration' at the bottom.

NO	ID	Model	Location	Status	View	Information	Management
1	andy3300	SNP-3300	AMBASSADOR HOTEL	OFF	<a href="#">View</a>	<a href="#">Check</a>	<a href="#">Edit</a> <a href="#">Delete</a>
2	andy550	SNP-3750	Lab	OFF	<a href="#">View</a>	<a href="#">Check</a>	<a href="#">Edit</a> <a href="#">Delete</a>

[Product Registration](#)

Pic 4-5. Registered Device List

**Product Registration** My IPOLIS > Product Registration

---

**Mandatory Information**

http://www.samsungipolis.com/

**ID(domain) \*** 

- Create an ID of 4 to 12 characters in length containing letters A-Z or numbers 0-9.
- You should have exactly same ID with the item (product) ID to log on DDNS online service.
- Make sure the correct ID and click the item (product) ID.
- You may not able to change the initial domain name.

**PASSWORD \***

**PASSWORD CHECK \***

**CLASSIFICATION \***  - Choose product category.

**MODEL NUMBER \***  - Choose product model.

**LOCATION \*** 

- Determine the location to install the system (or camera).
- Designate the installation location within 10 alphabet letters.

**DESCRIPTION** 

- Describe product for management purpose.

Pic 4-6. Register Camera (Check the availability for your desired domain name.)

**ipolis** HOME | SITEMAP | **KOREAN** | ENGLISH

WHAT IS IPOLIS    PRODUCT    DDNS SERVICE    SUPPORT    MY IPOLIS

---

Samsung Network Surveillance system  
*An Idea. Anywhere. In Real-time.*

**MY IPOLIS**

List of registered IPs

- 
- 
-

**Product List** My IPOLIS > Product List

Current product list is displayed.  
If wanted product is not in the list, click 'Product Registration' at the bottom.

NO	ID	Model	Location	Status	View	Information	Management
1	andy1000	SNP-1000	The RITZ-CARITON Seoul	OFF	<input type="button" value="View"/>	<input type="button" value="Check"/>	<input type="button" value="Edit"/> <input type="button" value="Delete"/>
2	andy9900	SNP-3900	AMBASSADOR HOTEL	OFF	<input type="button" value="View"/>	<input type="button" value="Check"/>	<input type="button" value="Edit"/> <input type="button" value="Delete"/>
3	andy9900	SNP-3750	Lab	OFF	<input type="button" value="View"/>	<input type="button" value="Check"/>	<input type="button" value="Edit"/> <input type="button" value="Delete"/>

PRIVACY / LEGAL NOTICE / CONTACT US    **SAMSUNG TECHNET**    FAMILY SITE   

Pic 4-7. Device List (The camera will be listed if it is successfully registered.)

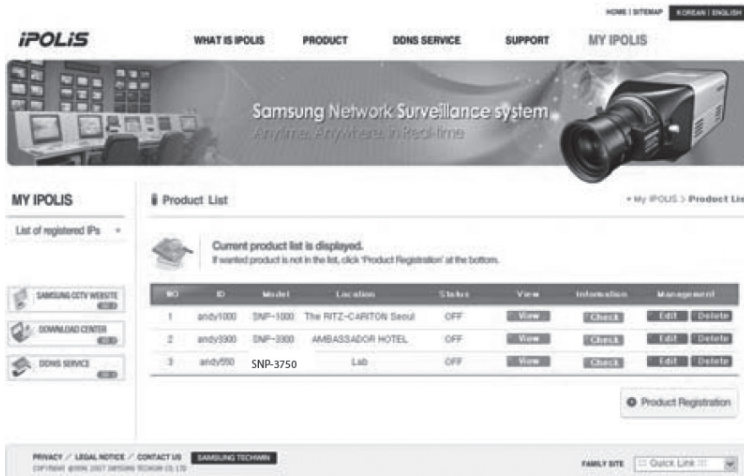
## Chapter 4. Using Web Viewer

- Step 3) Configure the camera with the DDNS information.
  - Select [Config → Network] on the network camera webpage.
  - Click on Use under the DDNS options to enable the service, and then enter the address of the DDNS server.
  - Enter the ID (Domain Name) and password used to register the camera on the iPOLiS website into ID and PW.

The screenshot shows the iPOLiS Network Security Solution web interface. The top navigation bar includes 'Monitoring', 'Video Setup', 'PTZ', 'Config', 'System', and 'Logout'. The left sidebar has 'Network' selected, with sub-items 'IP Filtering', 'Alarm Sensor', and 'E-mail / FTP (Alarm)'. The main content area is titled 'Interface' and has three radio buttons: 'LAN' (selected), 'xDSL', and 'DHCP'. Under the 'LAN' section, there are input fields for IP Address (192.168.23.55), Net Mask (255.255.255.0), Gateway (192.168.23.1), DNS1 (168.126.83.1), and DNS2 (168.126.83.2). Below this is the 'Port' section with a 'Service Port' field set to 85 (default: 80). The 'DDNS' section has a 'Use' checkbox checked, a 'Server' field with 'www.samsungpolis.com', and empty fields for 'ID' and 'Password'. 'Apply' and 'Cancel' buttons are at the bottom. A copyright notice 'Copyright © 2006 SAMSUNG TECHWIN CO., LTD.' is visible at the bottom right.

Now the SNP-3370/3301 is set up with the DDNS service.

- Step 4) Log in to the iPOLiS website and check the connection status of the camera in your Product List.



Pic 4-8. Product List

Press <Check> next to the “Product Information” to check the information for a connected device.

### Product Information

• ID(domain)	test3750
• PRODUCT	IP Camera
• MODEL NUMBER	SNP-3750
• CLASSIFICATION	Shop security
• LOCATION	Laboratory
• REGISTRATION DATE	2009-10-13
• MAC ADDRESS	

**×** CLOSE

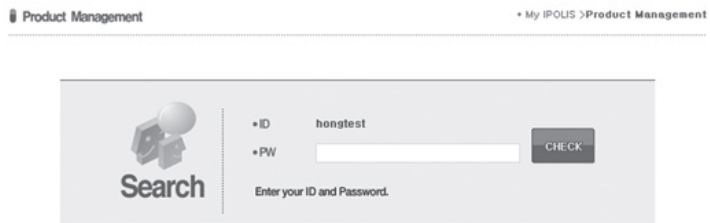
Pic 4-9. Product Information

## Chapter 4. Using Web Viewer

Click the <Shortcut> button under “View Video” to move to the login page of a selected product.

The <Modify> and <Delete> buttons under “Product Management” are to modify and delete the information for a device that is registered on your Product List. They move to corresponding pages, however, only if you enter the correct password.

The “Product ID (Domain)” cannot be modified; you must first delete the current Product ID and then create a new one.



Product Management My IPOLIS > Product Management

Search

ID hongtest

PW

CHECK

Enter your ID and Password.

Pic 4-10. Delete/Modify

### 4.2.3.2. IP Filtering

You can allow or deny certain IPs.



Category	Description
IP filtering	Check on Use to enable IP Filtering.
Default policy	Determines action on an IP displayed in the Filtering Rules pane. Allow: Allows connections for the IP. Deny: Rejects connections for the IP.
Filtering Rules	Use : Activates the Default Policy for an IP next to the checkbox; check to apply the policy to the IP. IP Range: Indicates a range of IPs to which to apply IP Filtering. e.g.) 192.168.30.4 ~ 100 Apply IP Filtering to IPs from 192.168.30.4 to 192.168.30.100.



#### Caution

- New settings are saved only if you click the **Apply** button at the bottom of the screen. The **Cancel** button cancels new settings.

# Chapter 4. Using Web Viewer

## 4.2.3.3. Alarm Sensor

Configure the options to use the Alarm services by attaching a sensor to the camera.



### ◇Digital In(Sensor) Setup

Category	Description
Use.	Check to use a sensor.
Type	"Normal Open" and "Normal Close" are available choices when selecting the type for a connected sensor.

※ S1: Sensor 1, S2: Sensor 2, S3: Sensor 3, S4: Sensor 4

### ◇Digital Out(Relay/Alarm) Setup

Category	Description
Relay	Select a digital output (Relay1 or Relay2) when certain events are detected: sensor (S1~4), motion detection (MD), or video analytics(VA). For Dur (Duration), select a duration for which to activate a selected relay upon the occurrence of an event.
Sequence	Mode
	NUM
	FTP
	Mail
Recording	
FTP	In the Preset mode, Number is used to set up preset numbers.
FTP	Check to transfer information about certain events to your FTP server: sensor (Sensor 1 ~4), motion detection (MD), or video analytics(VA).

E-mail	Check to send out information about certain events via e-mail: sensor (Sensor 1~4), motion detection (MD), or video analytics(VA).
Recording	Check to save the video file of certain events to an SD memory card: sensor (Sensor 1~4), motion detection (MD), or video analytics(VA).

#### ◇Aux Setup

Category	Description
Duration	Select a duration for which to activate a connected Aux.



#### **Caution**

- New settings are saved only if you click the **Apply** button at the bottom of the screen. The **Cancel** button cancels new settings.

## Chapter 4. Using Web Viewer

### 4.2.3.4. E-mail-FTP (Alarm)

Enter the information for your FTP server and e-mail address to transfer data to when the alarm activates.

The screenshot shows the 'E-mail / FTP (Alarm)' configuration page in the iPOLIS Network Security Solution web interface. The page is divided into two main sections: 'FTP Setup' and 'E-mail Setup'. The 'FTP Setup' section includes fields for 'Server Name', 'Server Port', 'Home Directory', 'User ID', and 'User Password'. The 'E-mail Setup' section includes fields for 'Recipient E-mail Address 1', 'Recipient E-mail Address 2', 'SMTP Server Name', 'Authentication' (checked), 'ID', 'PW', 'Mail Subject', and 'Mail Body'. The 'Mail Subject' and 'Mail Body' fields have '(English Only)' next to them. There are 'Apply' and 'Cancel' buttons at the bottom of the form.

#### ■ E-mail/FTP Setup

Enter the information for your FTP server and e-mail address to transfer data to when the alarm activates.

Category	Description	
FTP	Server Name	Enter the domain name or IP address of your FTP server.
	Server Port	Enter the port number of your FTP server.
	Home Directory	Enter a home directory in the FTP server to save data. Make sure to enter "/" to save the data directly to the FTP server's home directory.
	User ID	Enter an ID to log in to the FTP server.
	User Password	Enter the password for the ID that is entered above.

E-mail	Recipient E-mail Address 1 Recipient E-mail Address 2		Enter a maximum of 2 e-mail addresses to transfer data to when the alarm activates.
	SMTP Server Name		If you use an e-mail server, enter the name of the e-mail SMTP server.
	Authentication	Use	Check to use an e-mail server; it requires an ID and password.
		ID	Enter an ID to connect to your e-mail server.
		Password	Enter the password for the ID that is entered above.
	Mail Subject		Enter the subject for an e-mail.
Mail Body		Enter contents for the e-mail.	



**Notes** Upon the occurrence of an event, a JPEG image is sent via e-mail or uploaded to the FTP server.



**Caution**

- New settings are saved only if you click the **Apply** button at the bottom of the screen. The **Cancel** button cancels new settings.
- These settings do not apply to the Continuous Jpeg Image Transmission to FTP Server option at the Video Setup → Streaming menu.

# Chapter 4. Using Web Viewer

## 4.2.4. System

The following page appears when selecting **System** at the top of the screen. Buttons on the left side of the screen move to a relevant menu page.

### 4.2.4.1. Product Info

The screenshot shows the iPOLiS Network Security Solution web interface. At the top, there is a navigation bar with tabs for Monitoring, Video Setup, PTZ, Config, System (selected), and Logout. On the left side, there is a sidebar menu with options: Product Info (selected), User, Time, Log message, and Upgrade / Reboot. The main content area displays the Product Info configuration page with the following fields:

- Model: SNP-3370
- Mac Address: 00:09:18:FF:01:45
- Device Name: hgfbjh (English only)
- Channel Name: 7654467 (English Only)
- Location: location
- Description: description
- Memo: 메모

At the bottom of the form, there are 'Apply' and 'Cancel' buttons. The footer of the page reads 'Copyright © 2009 SAMSUNG TECHWIN CO., LTD.'

#### ■ Product Info

Category	Description
Model	Displays the model name of the camera.
MAC Address	Displays the MAC address of the camera.
Device Name	Name the camera to distinguish it when using multiple cameras. (English Only)
Channel Name	Name the channel 1. When playing multiple video feeds on the screen using a multi-channel device such as a video recorder, naming a channel helps you to distinguish it from others. (English Only)
Location	Enter the installed location for the camera.
Description	Add a description for the camera.
Memo	Memo

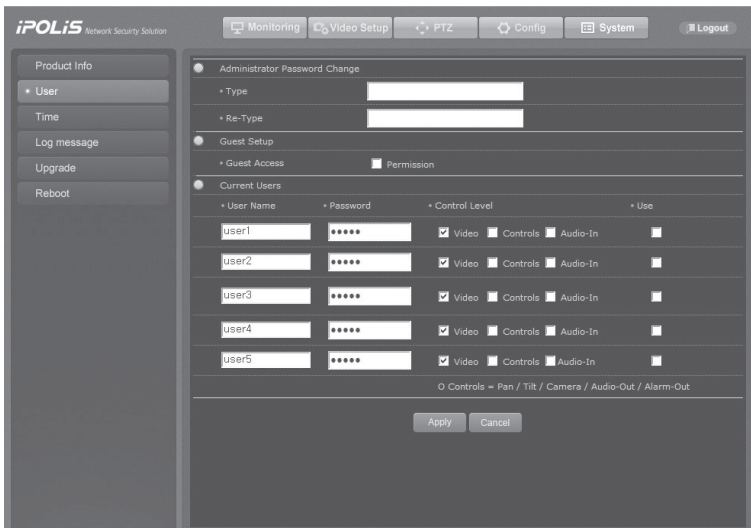


### Caution

- New settings are saved only if you click **Apply** button at the bottom of the screen. The **Cancel** button cancels new settings.

## 4.2.4.2. User

You can change the password of the administrator ID and configure user accounts on this page.



Category	Description
Administrator Password Change	Change the password for the administrator account.
Guest Setup	Check on or off to allow guest access to the main viewer; enable or disable the Guest Access button.
Current User	You can add and delete users, and configure permissions for each user.

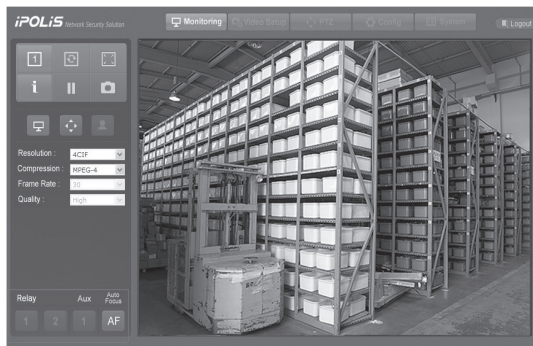
### ■ User Permissions

Available user permissions in the [Current User] menu are as follows.

## Chapter 4. Using Web Viewer

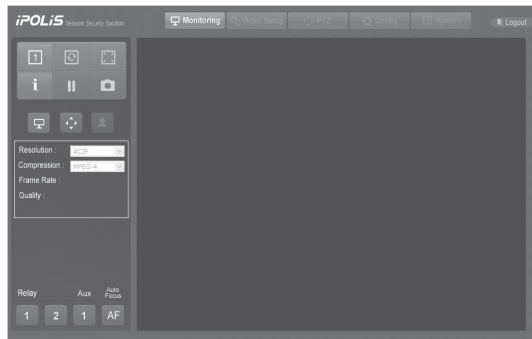
Category	Description
Video	Allows using video-related options: compression and resolution.
Control	Allow outputting audio, alarms, and controlling the camera PTZ operation.
Audio	Allows inputting audio.
Use	Check to activate an account. (Unchecked users are not allowed to log in.)

- e.g.1) To restrict a user from controlling the camera: uncheck Control.



※ The Pan, Tilt, Zoom, Audio, and Alarm icons are grayed out and disabled.

- e.g.2) Restrict a user from using video-related options: uncheck Video.



※ The Compression and Resolution settings areas are grayed out and disabled.



### Caution

- New settings are saved only if you click the **Apply** button at the bottom of the screen. The **Cancel** button cancels new settings.

## 4.2.4.3. Time

The screenshot shows the 'Time' configuration page in the iPOLiS Network Security Solution interface. The page is divided into three main sections:

- Current Time:** Displays the current date and time as '2009-04-05 23:57:19 (+00:00)'.
- Time Zone:** Includes a dropdown menu for selecting a GMT city (currently '(GMT) Greenwich Mean Time: Dublin, Edinburgh, Lisbon, London'), a checkbox for 'Use Daylight Saving Time', and fields for 'Start' and 'End' dates.
- Time Setup:** Contains two sub-sections:
  - Set Manually:** Features input fields for 'Date' (format: yyyy/mm/dd) and 'Time' (format: hh:mm).
  - TimeServer:** Lists five server addresses:
    - Server 1: pool.ntp.org
    - Server 2: asia.pool.ntp.org
    - Server 3: europe.pool.ntp.org
    - Server 4: north-america.pool.ntp.org
    - Server 5: time.nist.gov

Buttons for 'Apply' and 'Cancel' are located at the bottom of the Time Setup section.

### ■ Current Time

Displays the current time.

### ■ Time Zone

Select the GMT and city of the camera.

Check Use Daylight Saving Time to apply DST according to your city and country.

### ■ Time Setup

Category	Description
Date	Configures the current date of the camera.
Time	Configures the current time of the camera.

### ■ Time Server

Enter the address of your NTP (Network Time Protocol) server. NTP (Network Time Protocol) synchronizes the time among the various devices and systems connected to a network; the NTP client automatically communicates with other servers to adjust its time setting. If you want to use an NTP server other than the default, change the address of Server1 to Server5.

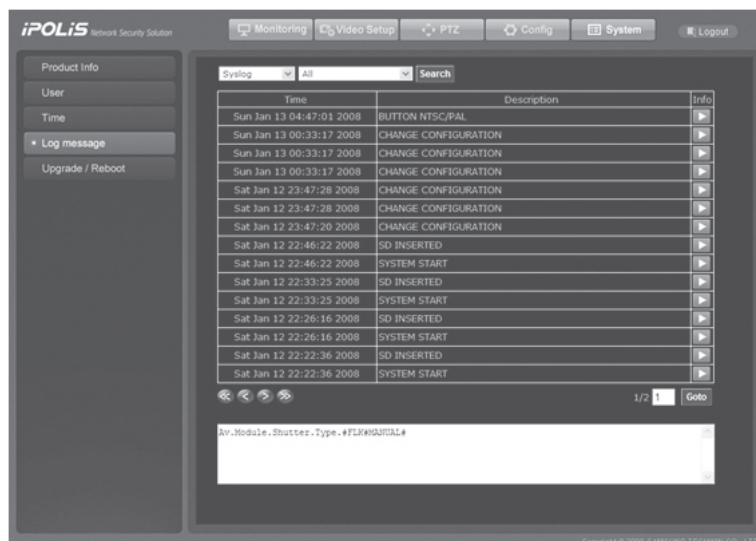


### Caution

- To change time by using the Set Manually option, you must fill out all fields.

## Chapter 4. Using Web Viewer

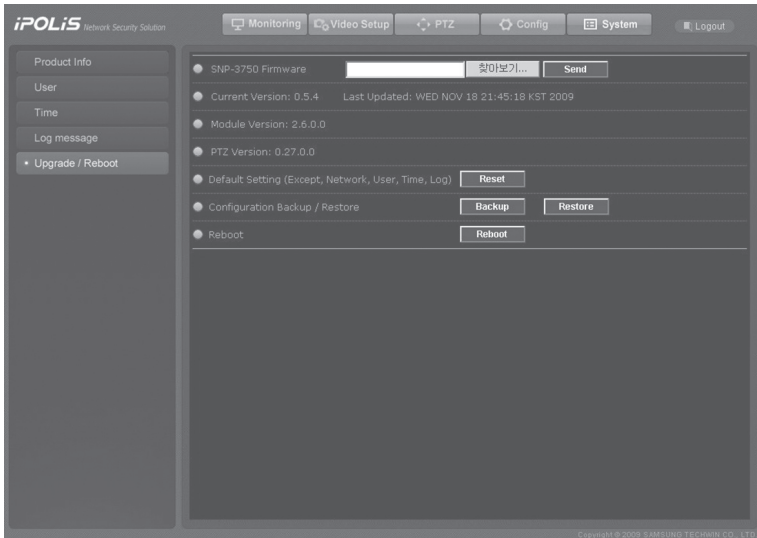
### 4.2.4.4. Log Message



Category	Description
Syslog (System Log)	Displays system logs in 5 different categories: Device, Network, User, Configuration, and Etc. Select a category and then press Search to display logs. Selecting All displays all available information regarding System Log.
Evtlog (Event Log)	Displays event logs in 5 different categories: Motion Detection, Sensor Input, Relay Output, and Etc. Select a category and then press Search to display logs. Selecting All displays all available information regarding Event Log.
Time	Displays the time when the event is logged.
Description	Displays the description of a log.
Info	Displays the details of a log on a window at the bottom.
⏪	Moves to the first page.
⏩	Moves to the previous page.
⏪	Moves to the next page.
⏩	Moves to the last page.
Goto	Enter a page number, and then press the Goto button to move to the page directly.

## 4.2.4.5. Upgrade

Updates the program of the SNP-3370/3301 network camera.



### ■ System Upgrade Configuration

Category	Description				
SNP-3370/3301 Firmware	Upgrades the firmware of the network camera.				
Current Version Last Updated	Displays the current firmware version of the camera along with the latest updated date and time.				
Module Version	Indicates the version of the camera module.				
PTZ Version	Indicates the version of the Motion module.				
Default Setting	<p>When pressing the Reset button, existing data apart from the settings below are reset completely.</p> <table border="1"> <thead> <tr> <th>Exceptions</th> </tr> </thead> <tbody> <tr> <td>Settings on the Config → Network page</td> </tr> <tr> <td>Settings on the System → Log page</td> </tr> <tr> <td>Settings on the System → Time page</td> </tr> </tbody> </table>	Exceptions	Settings on the Config → Network page	Settings on the System → Log page	Settings on the System → Time page
Exceptions					
Settings on the Config → Network page					
Settings on the System → Log page					
Settings on the System → Time page					
Configuration Backup	Saves the current camera settings as a file.				
Configuration Restore	Restores the previous camera settings using a backup file.				
Reboot	Reboots the camera.				

## Chapter 5. Troubleshooting

If you are having problems with the product, please consult the following information first. If the problem persists, contact your vendor.

Problem	Cause and Solution
The controller does not control the camera.	<ul style="list-style-type: none"> <li>▶ Make sure the camera is connected to a network.</li> <li>▶ Verify the settings for ID, protocol, and baud rates. (Refer to Chapter 3. Installing Camera &amp; Network Setup)</li> </ul>
No video is displayed on the monitor.	<ul style="list-style-type: none"> <li>▶ Check if the power cable is securely connected to the camera and the monitor. Check if the video cable is properly connected. Consult the operation manual for the system controller connected to the camera.</li> <li>▶ Check the camera's fixed shutter speed. Adjust the camera's shutter menu.</li> </ul>
The picture is too dark/bright.	<ul style="list-style-type: none"> <li>▶ Check the camera's Brightness menu. Adjust the camera's Brightness menu.</li> </ul>
The monitor displays nothing but a white image.	<ul style="list-style-type: none"> <li>▶ Check the WDR settings.</li> </ul>
The monitoring screen is out of focus.	<ul style="list-style-type: none"> <li>▶ Check if the dome cover or the camera lens is dirty or smudged. If it is, clean the dirt off.</li> <li>▶ Verify the distance between the camera and the subject, as well as the subject's surroundings. The camera may have difficulty focusing on a subject against a white background.</li> <li>▶ If the camera is having difficulty auto-focusing on a particular subject, set the Focus mode to Manual and adjust the focus manually.</li> <li>▶ Use the camera reset menu to restore the camera settings to default.</li> </ul>
The monitoring screen is out of focus.	<ul style="list-style-type: none"> <li>▶ Adjust the Sharpness level.</li> </ul>
Digital noise appears on the screen.	<ul style="list-style-type: none"> <li>▶ Check if the video cable is properly connected.</li> <li>▶ Make sure that the power cable and video cable do not exceed the recommended maximum lengths.</li> <li>▶ Adjust the Sharpness level.</li> </ul>
The monitoring screen is flickering.	<ul style="list-style-type: none"> <li>▶ Check if the camera is pointing directly at a fluorescent light or sunlight. If so, change the camera's direction to remove the flickering.</li> </ul>

Afterimages appear on the screen.	▶ Check the Sens-Up settings.
The camera switches between color and B&W modes too frequently.	▶ Adjust Duration and Dwell Time in the Day & Night menu.
Pan, tilt, zoom, and/or focus do not work.	▶ Check if the power cable is securely connected to the camera and the monitor. Check if the video cable is properly connected. Consult the operation manual for the system controller connected to the camera.
	▶ Check if Pan Limit and/or Tilt Limit are configured. If so, remove the limit(s).
	▶ A motor or the lens may be overheating. If so, contact your service personnel or system provider for assistance.
The camera's position differs from the position defined in a preset.	▶ This phenomenon may happen, since the motors have a margin of error of $\pm 0.1^\circ$ .
The Sequence configuration for the camera does not work.	▶ Check if Preset or another operation mode are configured.
	▶ Check the Auto Refresh settings.
The upper portion of the picture is dark when the camera is at a horizontal reference point.	▶ You are seeing the camera's internal cover; the camera is functioning normally.
The camera suddenly turns on or moves to a preset position by itself.	▶ Check the Auto Run settings. This function commands the camera to automatically perform a preset sequence action if no command has been entered via the controller for a while.
	▶ Check the Auto Refresh settings. This function optimizes the camera's circuitry and components according to a predefined schedule.
Cannot see a video image sent to the FTP server or via e-mail.	▶ If your computer is not installed with the Divx codec for decoding H.264, MPEG-4 compressed images, the image may not display properly. Download and install the latest DivX file, and then check the image again. <a href="http://www.divx.com/divx/download">http://www.divx.com/divx/download</a>

## Chapter 5. Troubleshooting

<p>Saved contents is not displayed in the SD memory card.</p>	<ul style="list-style-type: none"> <li>▶ Make sure that you do not remove the memory card while contents are being saved.</li> <li>▶ Check if the SD memory card is properly inserted.</li> <li>▶ Check if the capacity on the card is correct on the Record page.</li> </ul>
<p>Product information is not displayed on the local network.</p>	<ul style="list-style-type: none"> <li>▶ Check if the network cables are properly connected.</li> <li>▶ Reset the camera to the factory defaults by pressing the RESET switch on the back of the camera for 5 seconds, and then check again.</li> </ul>
<p>Sudden video pause</p>	<ul style="list-style-type: none"> <li>▶ Check if the SNP-3370/3301 network camera is connected properly using a network cable.</li> <li>▶ When using an extra network device such as a hub or IP router, check if the device is in operation.</li> <li>▶ Open a command prompt and check if the SNP-3370/3301 network camera is connected to the network.</li> </ul>
<p><b>Regular Power Cord Check</b></p>	
<ul style="list-style-type: none"> <li>• The power cord's coating has been damaged.</li> <li>• The power cord is hot to touch when the product is in operation.</li> <li>• The power cord gets hot it has been bent or pulled.</li> </ul>	<p>Continuing to use the product when its power cord is damaged constitutes an electrical and fire hazard. The power plug must be removed from the outlet immediately, and qualified service personnel or your system provider should be contacted for assistance.</p>

## PC Requirements

Category	Minimun Requirements	Recommended Requirements
CPU	Intel Core 2 Duo E4300 or better	Intel Core 2 Duo E7400 or better
Main Memory	1GB or more	2GB or more
Video Memory	256MB or more	512MB or more
Display	1024 x 768 (with 32bit color) or higher / OpenGL compatible	
Hard Disk	80GB or more	
Operating System	Windows XP Professional / Windows Vista	
Network	10/100 Base-T Ethernet	
Internet Explore	6.0 or better	
etc	DirectX 9.0 or higher	

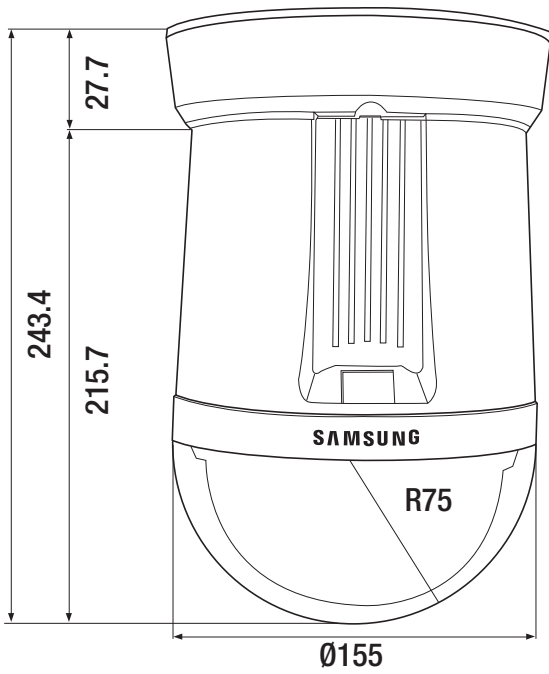
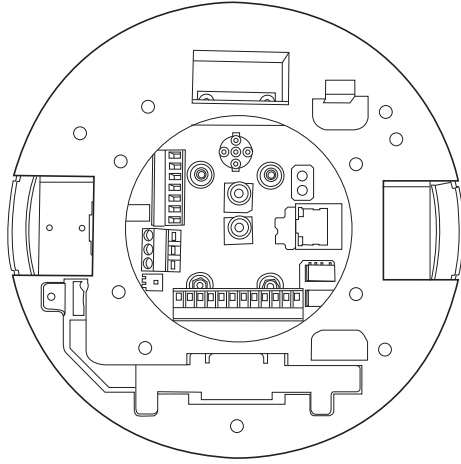
## Specifications

Model Name	SNP-3370	SNP-3301
<b>Camera</b>		
Imaging Device	1/4 inch, Color Vertical Double Density Interline Transfer CCD	
TV Standard	NTSC / PAL	
Total Pixels	NTSC:811(H) x 508(V) / PAL:795(H) x 596(V)	
Effective Pixels	NTSC:768(H) x 494(V) / PAL:752(H) x 582(V)	
Synchronization	Internal	
Imaging Frequency	H:15.734 KHz / V:59.94 Hz	
Horizontal Scan Rate	NTSC:15.734 KHz / PAL:15.625 KHz	
Vertical Scan Rate	NTSC:59.94 Hz / PAL: 50 Hz	
Horizontal Resolution	Color: 550TVL (Min.) , B/W: 680TVL (Min.)	
Minimum Luminance	0.7 Lux @ F1.6 ( Color ) 0.0001Lux @ F1.6 (Sens-up 256X)	
S/N Ratio (AGC Off)	50 dB	50 dB
OSD	Embedded	
Camera ID	1~255	
Day & Night	AUTO / COLOR / BW	
Backlight	WDR / BLC / HLC / OFF	
Dynamic Range	52dB	
DIS (Digital Image Stabilization)	ON / OFF	
Privacy Protection	ON / OFF(8 Areas)	
SSNR	LOW / MIDDLE / HIGH / OFF	
Sens-up	AUTO / Off (Selectable limit ~ 256X )	
Gain Control	LOW / MEDIUM / HIGH / OFF	
White Balance	ATW / AWC / MANUAL /INDOOR / OUTDOOR	
Electronic Shutter	AUTO(NTSC:1/60~120,000sec, PAL:1/50~120,000sec)/MANUAL/A.FLK	
<b>Lens</b>		
Zoom Ratio	37X (Optical) , 12X (Digital)	30x(Optical) ,12X(Digital)
Focal Length	3.5 ~ 129.5mm (F1.6 to 3.9)	3.5~105mm (F1.6 to 3.3)
Max. Aperture Ratio	1:1.6(Wide) ~ 3.9(Tele)	1:1.6(Wide) ~ 3.6(Tele)
Min. Object Distance	1.8m	
Angle of View	Horizontal	55.5°(Wide) ~ 1.59°(Tele)
	Vertical	42.5°(Wide) ~ 1.19°(Tele)
Focus	Horizontal	55.5°(Wide) ~ 1.77°(Tele)
	Vertical	42.5°(Wide) ~ 1.33°(Tele)
Focus	AUTO / MANUAL / ONE-SHOT	
Zoom Movement Speed	2.5 sec	2.2 sec
IRIS Control	AUTO/MANUAL	
Lens Initialization	Built-In	
<b>Pan / Tilt</b>		
Pan Angle	360°	
Pan Speed	Preset	500°/sec
	Manual	0.024°~120°/sec (Proportional Zoom Ratio)
Tilt Angle	-5° ~ 185°	

# Specifications

Tilt Speed	Preset	500°/sec
	Manual	0.024°~120°/sec (Proportional Zoom Ratio)
Preset		255
Preset Accuracy		±0.1°
PTZ Mode		Preset, Swing, Group, Tour, Trace, Auto Run
<b>Performance</b>		
Encoding	Resolution	4CIF, CIF, QCIF
	Compression Method	H.264/MPEG-4/JPEG Dual Codec
	Compression Rate	Up to 30fps @ 4CIF
	Image Quality	5 levels Very High, High, Middle, Low, Very Low
Network	Data Transfer Speed	Up to 100Mbps
	Concurrent Users	Max. 10
	Protocol	RTP/UDP, RTP/Multicast, RTSP, TCP/IP, DHCP, DNS, DDNS, HTTP, SMTP, FTP, PPPoE, NTP, STW, Pelco-D, Pelco-P, Panasonic, Honeywell, AD, Vicon, SEC
	Area Zoom	Web viewer, SVM - S1(CMS)
Security	Password Authorization	5 User Levels
Intelligence Feature		Motion Detection / Appear-Disappear
<b>Interface</b>		
Monitor	Output	1 Video Out (BNC, for Installation)
Audio	Input	1 Phone Jack, Line in (1Vpp) / MIC in (2K ohm)
	Output	1 Phone Jack, Line out (1Vpp) / Speaker out (16 ohm)
	Compression Method	ADPCM
	Sampling Rate	8 KHz
Alarm	Input	Terminal 4 Input, NO/NC
	Output	Terminal 2 Output, NO/NC
	Remote Alert	E-Mail, FTP Notice
Connection	Ethernet Port	RJ-45 10/100 Base-T
Storage	SD (SDHC) Memory	Event Image Storage & Backup: 1G~2G SD Card, 4G SDHC Card
<b>General</b>		
Input Voltage		24V AC ±10%
Power Consumption		Max. 16W
Operating Temperature		-10° ~ +50° / 20% ~ 80% RH
Dimensions (W×H)		Ø155×243.4mm
Weight		2.1Kg
IP		IP67 ( Optional Housing )

## Dimension



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Version 2.1, February 1999

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This option is useful when you wish to copy part of the code of the Library into a program that is not a library.

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If distribution of object code is made by offering access to copy from a designated place, then offering

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- b) Use a suitable shared library mechanism for linking with the Library. A suitable mechanism is one that (1) uses at run time a copy of the library already present on the user’s computer system, rather than copying library functions into the executable, and (2) will operate properly with a modified version of the library, if the user installs one, as long as the modified version is interface-compatible with the version that the work was made with.

- c) Accompany the work with a written offer, valid for at least three years, to give the same user the materials specified in Subsection 6a, above, for a charge no more than the cost of performing this distribution.
- d) If distribution of the work is made by offering access to copy from a designated place, offer equivalent access to copy the above specified materials from the same place.
- e) Verify that the user has already received a copy of these materials or that you have already sent this user a copy.

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