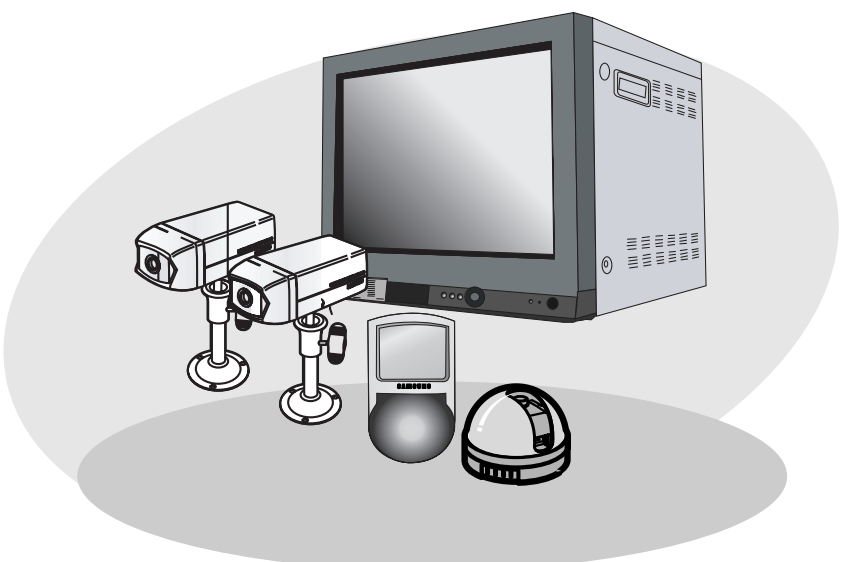
SAMSUNG

EZ View Kit:Remote Monitoring Video Surveillance SYSTEM

SMO-211QN, SMO-150QN

User Guide

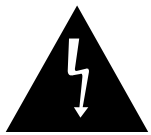


IMPORTANT SAFETY INSTRUCTIONS

1. Read these instructions.
2. Keep these Instructions.
3. Heed all warnings.
4. Follow all instructions.
5. Do not use this apparatus near water.
6. Clean only with dry cloth.
7. Do not block any ventilation openings. Install in accordance with the manufacturer's instructions.
8. Do not install near any heat sources such as radiators, heat registers, stoves, or other apparatus (including amplifiers) that produce heat.
9. Do not defeat the safety purpose of the polarized or grounding-type plug. A polarized plug has two blades with one wider than the other. A grounding type plug has two blades and a third grounding prong. The wide blade or the third prong are provided for your safety. If the provided plug does not fit into your outlet consult an electrician for replacement of the obsolete outlet.
10. Protect the power cord from being walked on or pinched particularly at plugs convenience receptacles and the point where they exit from the apparatus.
11. Only use attachment/accessories specified by the manufacturer.
12. Use only with the cart, stand, tripod, bracket, or table specified by the manufacturer or sold with the apparatus. When a cart is used, use caution when moving the cart/apparatus combination to avoid injury from tip-over.

S 3126 A

13. Unplug this apparatus during lightning storms or when unused for long periods of time.
14. Refer all servicing to qualified service personnel. Servicing is required if the apparatus has been damaged in any way. Such examples include but are not limited to:
    Power Supply cord or plug is damaged
    Liquid spilled or objects have fallen into the unit
    Unit has been exposed to excessive moisture and will not function
    Unit has been dropped.



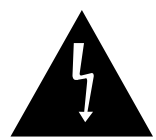
CAUTION

RISK OF ELECTRIC SHOCK
DO NOT OPEN

CAUTION : TO REDUCE THE RISK OF ELECTRIC SHOCK, DO NOT REMOVE COVER (OR BACK). NO USER SERVICEABLE PARTS INSIDE. REFER SERVICING TO QUALIFIED SERVICE PERSONNEL.

Graphic Symbol Explanation

The lightning flash with arrowhead symbol within an equilateral triangle is intended to alert the user to the presence of uninsulated 'dangerous voltage' within the product's enclosure that may be of sufficient magnitude to constitute a risk of electric shock to persons.



The exclamation point within an equilateral triangle is intended to alert the user to the presence of important operating and maintenance (servicing) instructions in the literature accompanying the appliance.

Warning - To Prevent Fire or Shock Hazard, Do Not Expose This Monitor To Rain or Moisture.

IMPORTANT SAFEGUARDS

Caution

Power source is indicated on the rear of the set. It contains high-voltage parts. If you remove the cover, it may cause fire or electric shock. Do not remove the cover by yourself. (Control switches are at the front of the monitor.)

1. **Read Instructions :** All the safety and operating instructions should be read before the appliance is operated.
2. **Retain Instructions :** The safety and operating instructions should be retained for future reference.
3. **Heed Warnings :** All warnings on the monitor and in the operating instructions should be adhered to.
4. **Follow Instructions :** All operating and user instructions should be followed.
5. **Cleaning :** Unplug this monitor from the wall outlet before cleaning. Do not use liquid cleaners or aerosol cleaners. Use a damp cloth for cleaning.
6. **Attachments :** Do not use attachments not recommended by Samsung as they may cause hazards.
7. **Water and Moisture :** Do not use this monitor near water. For example, near a bathtub, wash bowl, kitchen sink or laundry tub, in a wet basement or near a swimming pool.etc.

8. **Accessories :** Do not place this monitor on an unstable cart, stand, tripod, bracket. The monitor may fall causing serious injury to a child or adult and serious damage to the appliance. Use only with a cart, stand, tripod, bracket or table recommended by Samsung or sold with the monitor. Any mounting of the monitor should follow Samsung's instructions and should use a mounting accessory recommended by Samsung.

9. **Ventilation :** Slots and openings in the cabinet are provided for ventilation and to ensure reliable operation of the monitor and to protect it from overheating . These openings should never be blocked by placing the monitor on a bed, sofa, rug, or other similar surface. This monitor should never be placed near or over a radiator or heat register.
This monitor should not be placed in a built-in installation such as a bookcase or rack unless proper ventilation is provided or Samsung's instructions have been adhered to.

10. **Power Sources :** This monitor should be operated only from the type of power source indicated on the making label. If you are not sure of the type of power supply to your installation site consult your Samsung dealer or local power company.

11. **Grounding or Polarization :** For monitors equipped with a 3-wire grounding-type plug having a third(grounding) pin. This plug will only fit into a grounding type power outlet. This is a safety feature. If you are unable to insert the plug into the outlet contact your electrician to replace your obsolete outlet. Do not defeat the safety purpose of the grounding-type plug.

12. **Power :** Cord Protection-Power supply cords should be routed so that they are not likely to be walked on or pinched by items placed upon or against them paying particular attention to cords at plugs convenience receptacles and the point where they exit from the monitor.

13. **Lightning :** For added protection for this monitor during a lightning storm or when it is left unattended and unused for long periods of time, unplug it from the wall outlet and disconnect the cable system. This will prevent damage to the monitor due to lightning and power-line surges.

14. **Overloading :** Do not overload wall outlets and extension cords as this can result in the risk of fire or electric shock.

15. **Object and liquid Entry :** Never push objects of any kind into this monitor through openings as they may touch dangerous voltage points or short-out parts that could result in a fire or electric shock.
    Never spill liquid of any kind on the monitor.

16. **Servicing :** Do not attempt to service this monitor yourself as opening or removing cover may expose you to dangerous voltage or other hazards. Refer all servicing to qualified service personnel.

17. **Damage Requiring Service :** Unplug this monitor from the wall outlet and refer servicing to qualified service personnel under the following conditions.

    a. When the power-supply cord or plug is damaged.

    b. If liquid has been spilled or objects have fallen into the monitor.

    c. If the monitor has been exposed to rain or water.

    d. If the monitor does not operate normally by following the operating instructions. Adjust only those controls that are covered by the operating instructions as an improper adjustment of other controls may result in damage and require extensive work by a qualified technician to restore the monitor to its normal operation.

    e. If the monitor has been dropped or the cabinet has been damaged.

    f. When the monitor exhibits a distinct change in performance-this indicates a need for service.

18. **Replacement Parts :** When replacement parts are required be sure the service technician has used replacement parts specified by Samsung or have the same characteristics as the original parts.
Unauthorized substitutions may result in fire electric shock or other hazards.

19. **Safety Check :** Upon completion of any service or repairs to this monitor ask the service technician to perform safety checks to determine that the monitor is in proper operating condition.

FCC & ICES Information

Warning

This equipment has been tested and found to comply the limits for a class A digital device pursuant to part 15 of the FCC Rules and ICES-003 of Industry Canada. These limits are designed to provide reasonable protection against harmful interference when the equipment is operated in a commercial environment. This equipment generates audio frequencies 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 may cause harmful interference in which case the user will be required to correct the interference at his own expense.

User-Installer Caution

Your authority to operate this FCC verified equipment could be voided if you make changes or modifications not expressly approved by the party responsible for compliance to part 15 of the FCC Rules.

Information to user

Changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment.

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 case the user will be required to correct the interference at his own expense.

This device complies with Part 15 of the FCC Rules. Operation is subject to the following two conditions: (1) this device may not cause harmful interference and (2) this device must accept any interference received including interference that may cause undesired operation.

Changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment. If necessary consult your dealer or an experienced radio/television technician for additional suggestions. You may find the booklet called How to Identify and Resolve Radio/TV Interference Problems helpful. This booklet was prepared by the Federal Communications Commission. It is available from the U.S. Government Printing Office Washington, DC 20402, Stock Number 004-000-00345-4.

The party responsible for product compliance:
SAMSUNG ELECTRONICS CO., LTD.
America QA Lab of Samsung
3351 Michelson Drive,
Suite #290, Irvine, CA92612 USA

IC Compliance Notice

This Class (A) digital apparatus meets all requirements of the Canadian Interference-Causing Equipment Regulations.
Cet appareil numérique de la classe (A) respecte toutes les exigences du Règlement sur le matériel brouilleur du Canada.

This Class A digital apparatus complies with Canadian ICES-003.
Cet appareil numéique de la classe A est conforme à la norme NMB-003 du Canada.

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

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Chapter 1: System Components and Installation

1-1) Environmental requirements for installation and safety

This section describes the environmental requirements for safe installation and use.
Install the product on a flat table or in a rack. It should be used only when level and should not be used when stood vertically or obliquely. The location in which the main system is installed and the configuration of the wiring room are very important for proper operation of the system.
When the products are installed too closely together or the location is poorly ventilated, the system may not operate properly and maintenance of the system may be difficult. Sufficiently circulate the air within the system operating room and tightly fasten the cover of the main system to prevent malfunction and reduce system downs due to environmental causes.
There are high voltage parts inside. Do not open the cover.

Install the product in a place that meets the following environmental conditions. Be sure to maintain the system under the temperatures and humidity conditions given below:

- Operating temperature: 32°F ~ 104°F
- Storage temperature: -4°F ~ 140°F
- Operating humidity: 20% ~ 85% RH
- Storage humidity: 20% ~ 95 RH
- Input voltage: AC 120V
- Power usage: less than 110 Watts
- Frequency: 60Hz

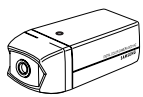
Caution

When operating the product, the fluctuation of input voltage must be within 10% of the rated voltage and the external power outlet must be grounded, otherwise, it may cause electric shock or malfunction of the product. Do not connect heat-generating appliances such as a hair dryer, iron or refrigerator to the same power outlet in which the product is plugged, otherwise it may cause a fire or malfunction of the product. The use of an Automatic Voltage Regulator (AVR) is highly recommended to ensure that stable power is supplied. Be sure to coil CORE-FERRITE on the connector to reduce electro-magnetic interference (EMI).

1-2) System Components

The system consists of the following:

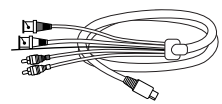
MONITOR



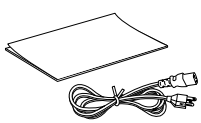
STANDARD CAMERA (SOC-C120)

DOME CAMERA (SOC-D120)

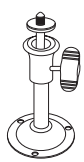
PIR CAMERA (SOC-P120)



VCR CABLE



POWER CORD & INSTALLATION MANUAL



CAMERA BRACKET

CAMERA Corner Mount BRACKET

CAMERA CABLE

SENSOR CONNECTOR

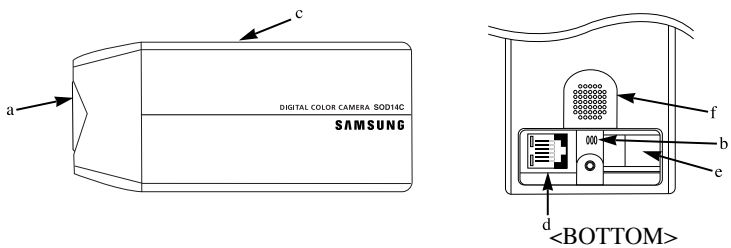
ETHERNET CABLE

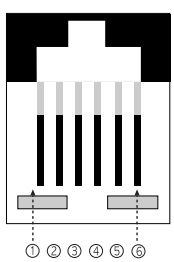
ITEM	MODEL	DESCRIPTION	Q'ty	NOTE	CODE NO.
MONITOR	SMO-211QN	21" FLAT CRT MONITOR	1		AB97-00793A
	SMO-150QN	15" FLAT CRT MONITOR	1		AB97-00787A
CAMERA	SOC-C120	WR(Standard) Camera	2		AB97-00720A
	SOC-D120	DOME Camera	1		AB97-00721A
	SOC-P120	PIR Camera	1		AB97-00722A
CAMERA BRACKET	SBR-110S	STAND TYPE BRACKET	2	Tapping Screw 6	AB97-00712A
CAMERA Corner Mount BRACKET	-	BRACKET FOR PIR CAMERA	1	Tapping Screw 4	AB61-00154A
CAMERA CABLE	MCB-60	6PIN SHIELD CABLE	4	60ft(1ft=0.3048m)	AB39-00044A
INSTALLATION MANUAL	-	-	1		AB68-03602A
POWER CORD	-	-	1		3903-000085
VCR CABLE	-	-	1		AB39-00344A
SENSOR CONNECTOR	-	-	2		3716-001152
ETHERNET CABLE	-	-	1	6ft(1ft=0.3048m)	AA39-00400A

• Check whether all the following devices and accessories are included with the main system.

1-3) STANDARD CAMERA composition and installation method

1) Standard Camera composition (SOC-C120)





PIN NUMBER	SPEC
①	SPEAKER(HOT)
②	VIDEO_OUT
③	GND
④	SPEAKER(COLD)
⑤	AUDIO_OUT/ALARM_OUT
⑥	18V DC

a. Lens

It has a focal length of 3.8mm and makes it possible for you to observe a relatively wide area.

b. Microphone

Capable of picking up all sound in the vicinity of the camera location and transmitting to the monitor.

c. Camera fitting groove

Enables the camera to be fixed onto the bracket. You may install it either above or below the camera if necessary.

d. 6-pin modular jack

Used to connect the camera to the monitor.

e. SENSOR jack

Used to connect the sensor to the camera.

f. Speaker

Outputs the sound signal.

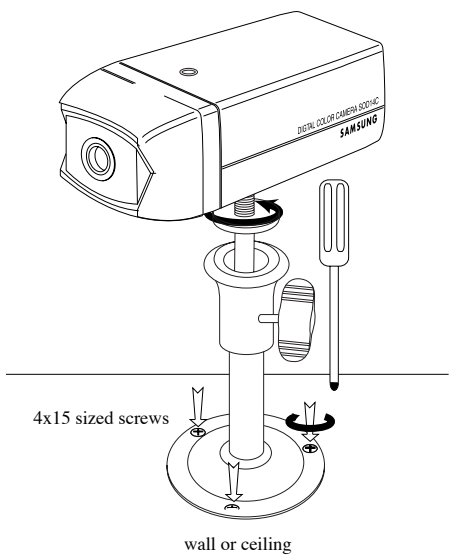
2) INSTALLING STANDARD CAMERA (SOC-C120)

SOC-C120 camera can be attached to the wall, ceiling or shelf using the camera mount bracket (SBR-110S).

Choose an installation site that can sufficiently support the weight of the equipment to be installed.

Attach the camera mount bracket to the wall or ceiling using the supplied three screws (M4 X L15).

Adjust the camera to target the video location and tighten the bracket handle on the camera mount bracket.



3) CAMERA MOUNT BRACKET(SBR-110) & STANDARD CAMERA(SOC-C120)

(1) Overview

CAMERA MOUNT BRACKET (SBR-110S) is used to attach the camera to a wall, ceiling or shelf.

(2) Specifications

Use : Indoor

Installation : Wall or Ceiling

Dimensions : 2.25 (W) X 1.86(H) X 3.95(L) inch

Weight : 0.29 lbs

Operating Temperature : 32°F ~ 104°F

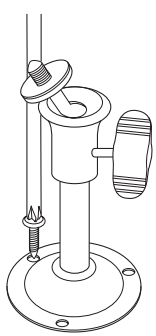
(3) Accessories

SCREW (M4 X L15) : 3 pcs

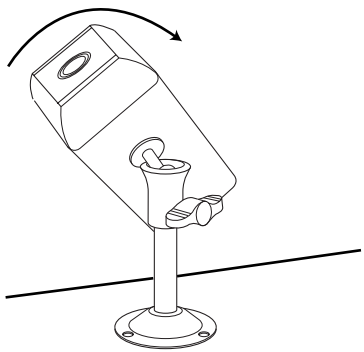
(4) Installation

Explains the installation of CAMERA MOUNT BRACKET as well as the installation of the camera onto the CAMERA MOUNT BRACKET.

- Choose an installation site that can sufficiently support the weight of the equipments to be installed.
- Attach the camera mount bracket to the wall using the supplied screws (M4 X L15).

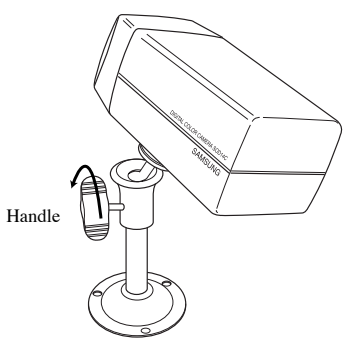


- Adjust the camera to target the video location and tighten the bracket handle on the camera mount bracket. Install the camera on to the male screw of the Camera Mount Bracket by rotating the camera clockwise.



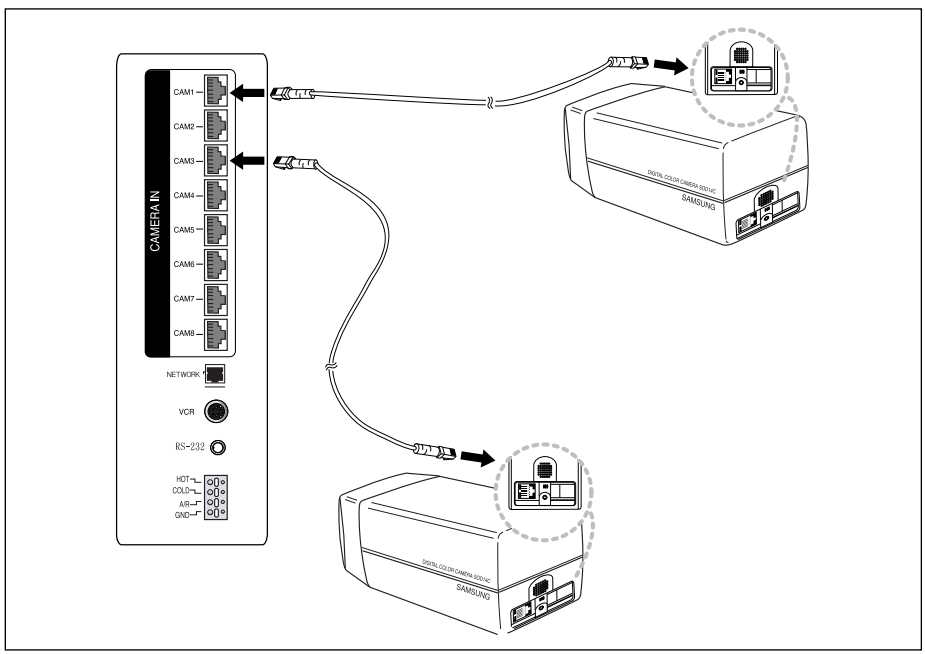
- Loosen the handle by turning it in a counter clockwise direction and then adjust the camera position . Tighten the handle, turning it clockwise, and lock the camera in position.

- Connect the camera cable to the camera.



After positioning the monitor and installing four cameras in the desired location, please connect

the CAMERA to the MONITOR using the CAMERA CABLE (MCB-60) as shown in the figure below.

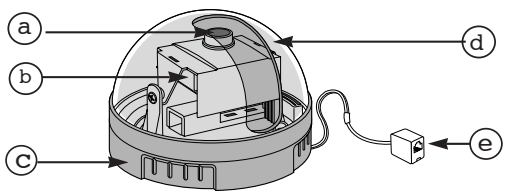


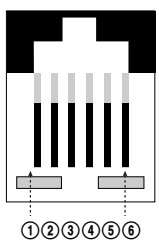
Connection status checking method :

- Turn on the monitor after connecting cameras, and check if camera image is displayed. The monitor's initial screen mode is quad.
- In the monitor and the camera are not connected properly, OSD 'L'(LOSS) will be displayed on screen.

1-4) DOME CAMERA composition and installation method (SOC-D120)

1) Dome Camera composition (SOC-D120)





PIN NUMBER	SPEC
1	N.C
2	VIDEO_OUT
3	GND
4	N.C
5	N.C
6	12V DC

✻ Fixed Dome Camera does not have aspeaker,so the alam and audio features are not supproted.

a **Fixed Focus Lens**
Keeps the camera's lens free from dust and dirt.

b **Lens Assembly**

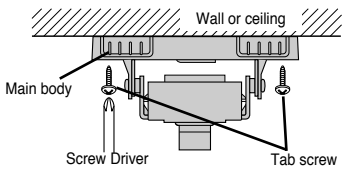
c **Camera Frame**
Supports the camera.

d **Dome Cover**
Clear plastic cover that protects the camera.
Take care not to scratch the cover.

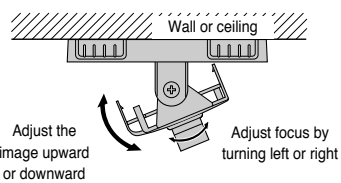
e **6Pin modular jack**
Used to connect the monitor.

2) INSTALLING THE DOME CAMERA (SOC-D120)

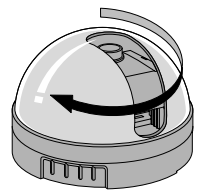
• Attach the camera to the wall or ceiling using the supplied tap screws.



• Adjust the video location by swiveling the camera (Lens assembly) up and down, and adjust the focus by turning the lens clockwise and counter clockwise.



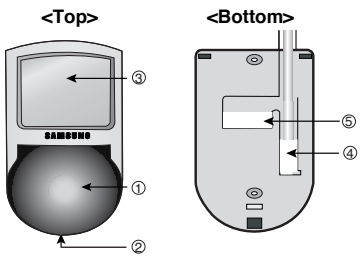
• Put the dome cover back on the camera by rotating the cover clockwise.



Caution : When removing or closing the dome cover,
do not get dirt or dust on the cover.

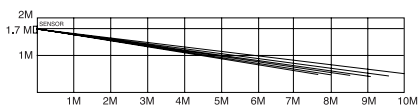
1-5) PIR CAMERA composition and installation method (SOC-P120)

1) PIR Camera composition (SOC-P120)

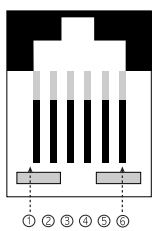


<Sensor Detection Angle & Area>

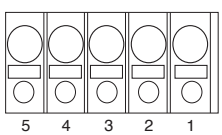
1> Vertical Detection Line



• Please consider the horizontal detection area and the vertical detection line when choosing an installation site.



PIN NUMBER	SPEC
①	SPEAKER(HOT)
②	VIDEO_OUT
③	GND
④	SPEAKER(COLD)
⑤	AUDIO_OUT/ALARM_OUT
⑥	18V DC



PIN	SPEC	
①	Power Input	DC 12 Volts
②	(Back Up)	Ground
③		Not Used
④	Relay Output	COM
⑤	(350V 130mA)	N.C

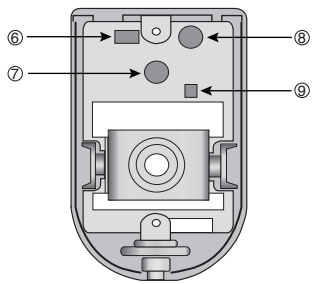
① **Lens**
It has a focal length of 3.8mm and makes it possible for you to observe a relatively wide area.

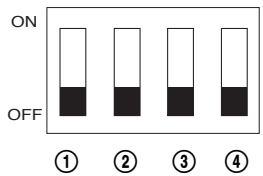
② **Speaker**
It outputs the sound signal which transferred from the monitor.

③ **Fresnel Lens**
An infrared focusing lens for increasing the sensitivity of the built-in PIR sensor.

④ **6-pin modular jack**
Used to connect the camera to the monitor.

<Inside>





PIN	Function
①	Sensor Sensitivity On, On : Low On, Off : Normal Off, On : Normal Off, Off : High
②	
③	Alarm LED On/Off (Sensor On)
④	Sensor On/Off

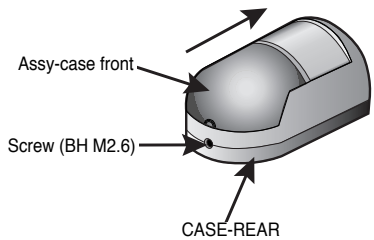
⑥ **Function Switch**
A function switch for the PIR sensor operation.

⑦ **PIR Sensor**
A thermal heat sensor that detects infrared radiation projected by warm objects.

⑧ **Microphone**
Capable of picking up all sound in the vicinity of the camera location and transmitting to the monitor.

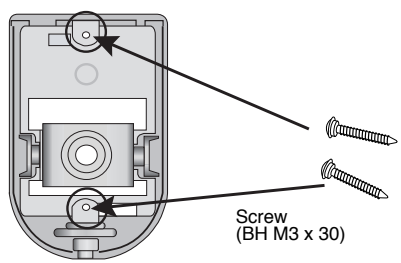
⑨ **Electronic Relay**
Output power is 350V/130mA.

2) INSTALLING THE PIR CAMERA (SOC-P120)



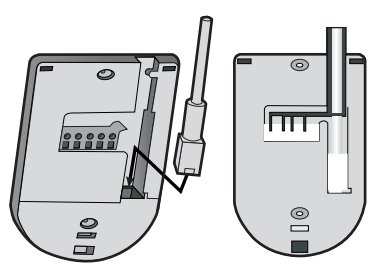
1. Choose an installation site that can sufficiently support 5 times the weight of the equipment to be installed.

2. Remove the screw (BH M2.6) at the bottom of the main unit by turning it counterclockwise, and then lift the assy-case front as you push it upward to detach it from the case-rear. (※ Do not apply excessive force, as doing so may damage the internal assembly.※)



3. Place the case-rear over the installation site and mark screw holes with a pencil (indicated by the circles in the illustration). Drill a pilot hole for each pencil mark (0.2 inch in diameter and at least 1.38 inch in depth), and then fully insert the supplied plastic anchors (HUD 5) into them.

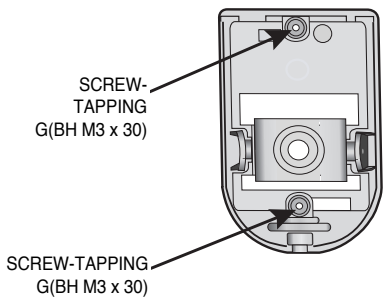
4. Connect the Camera connector(RJ-11) cable to the case-rear as well as the cable to be connected to the terminal.

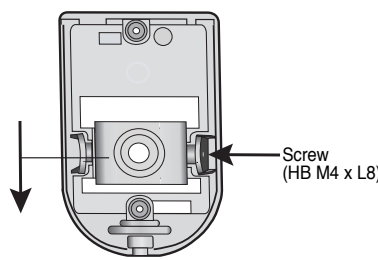


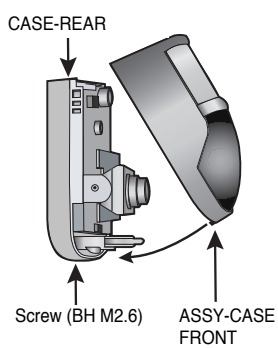
5. Align the two holes of the caserear to the holes of the plastic anchors, and then fasten the screw tappings (BH M3 X 30).

6. Adjust the direction of the lens.
   1) Use a the philips head screwdriver to turn the screw (indicated by the arrow in the illustration) counterclockwise slightly. The lens body will move.
   2) Tilt the lens body down about 10° from the horizontal, and then turn the screw clockwise to fasten it.

7. Assemble the assy-case front onto the case rear as shown in the illustration. Fasten the assy-case front to the case-rear with the screw (BH M2.6) you removed earlier.







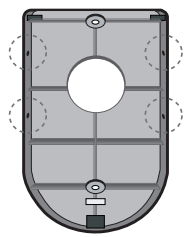
3) INSTALLING THE CAMERA USING THE CORNER MOUNT(SOC-P120)

1. Choose an installation site that can sufficiently support 5 times the weight of the equipment to be installed.

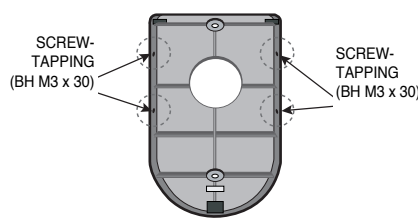
2. Place the corner mount to the corner to which you want to install the camera and mark screw holes with a pencil (indicated by the circles in the illustration). Drill a pilot hole for each pencil mark (0.2 inch in diameter and at least 1.38 inch in depth), and then fully insert the supplied plastic anchors (HUD 5) into them.

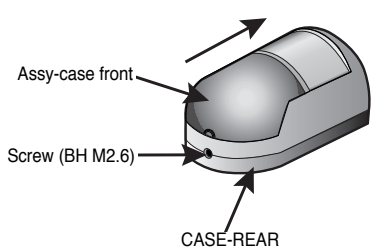
3. Install the corner mount by aligning the four holes of the mount-corner to the holes of the plastic anchors, and then fastening the screw-tappings (BH M3 X 30).

4. Remove the screw (BH M2.6) at the bottom of the main unit by turning it counterclockwise, and then lift the assy-case front as you push it upward to detach it from the case-rear. (※Do not apply excessive force, as doing so may damage the internal assembly.※)

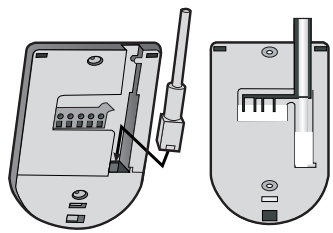


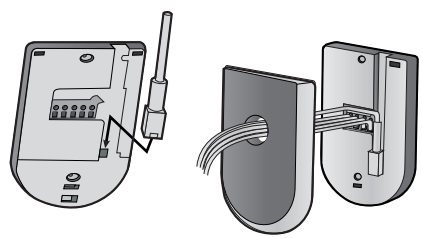
corner mount





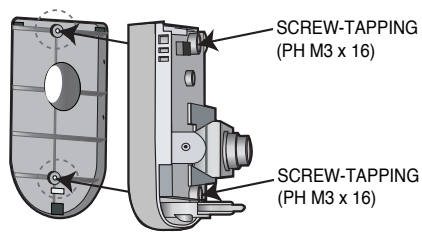
5. Connecting Cables
   1) Connecting the RJ-11 cable to the RJ-11 connector on the case-rear and connect the camera cable to the cable terminal on the case- rear.
   2) Pass the cables through the hole on the corner mount as shown in the picture to the right.

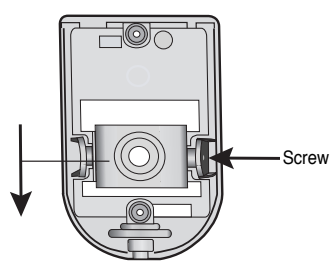




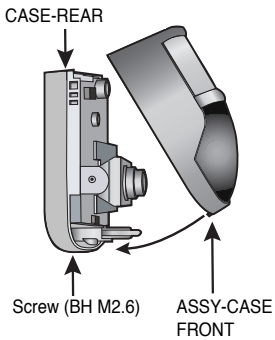
6. Assemble the case-rear onto the corner mount by aligning the two holes of the case-rear to the protrusions of the corner mount and fasten the screw-tappings (PH M3 X 16).

7. Adjust the direction of the lens.
   1) Use a the philips head screwdriver to turn the screw (indicated by the arrow in the illustration) counterclockwise slightly. The lens body will move.
   2) Tilt the lens body down about 10° from the horizontal, and then turn the screw clockwise to fasten it.



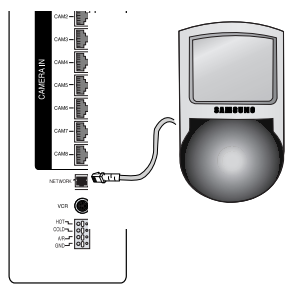


8. Assemble the assy-case front onto the case-rear as shown in the illustration. Fasten the assy-case front to the case-rear with the screw (BH M2.6) you removed earlier.



3) CABLE CONNECTION (SOC-P120)

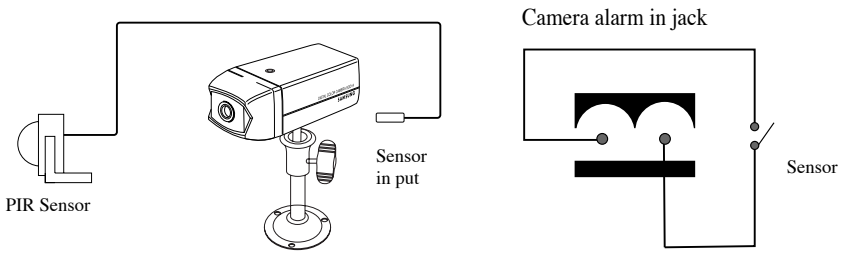
- Connect the camera cable to the camera cable jack on the camera, then connect the other end of the cable to the monitor's channel input jack as shown in the illustration.



- Connect the alarm box to the terminal block, which is located on the bottom of the camera.

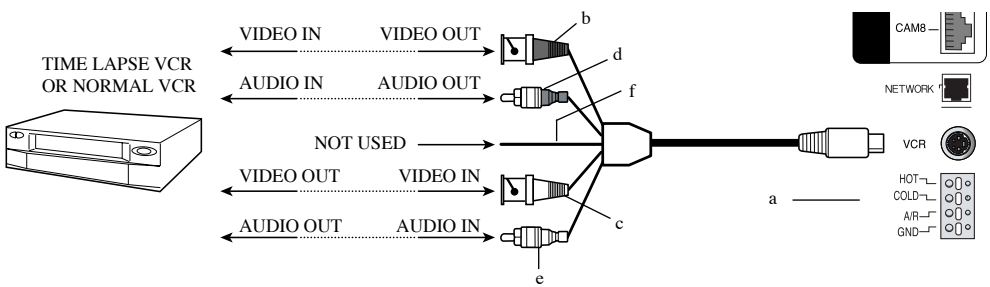
1-6) Camera and Monitor connections

1) External terminal connecting method for CAMERA



- An additional PIR sensor or external sensor can also be connected.
- The additional PIR sensor can be connected as shown in the illustration above.
- Sensor's trigger signal is NO (Normal Open).
- Sensor is not supplied. (Sold separately)

2) VCR or ALARM terminal connecting method



a) Connect the VCR cable to the VCR terminal on the rear panel.

b) Connect the VIDEO OUT plug to the VIDEO IN terminal of the VCR.

c) Connect the VIDEO IN plug to the VIDEO OUT terminal of the VCR.

d) Connect the AUDIO OUT plug to the AUDIO IN terminal of the VCR.

e) Connect the AUDIO IN plug to the AUDIO OUT terminal of the VCR.

f) Not Used

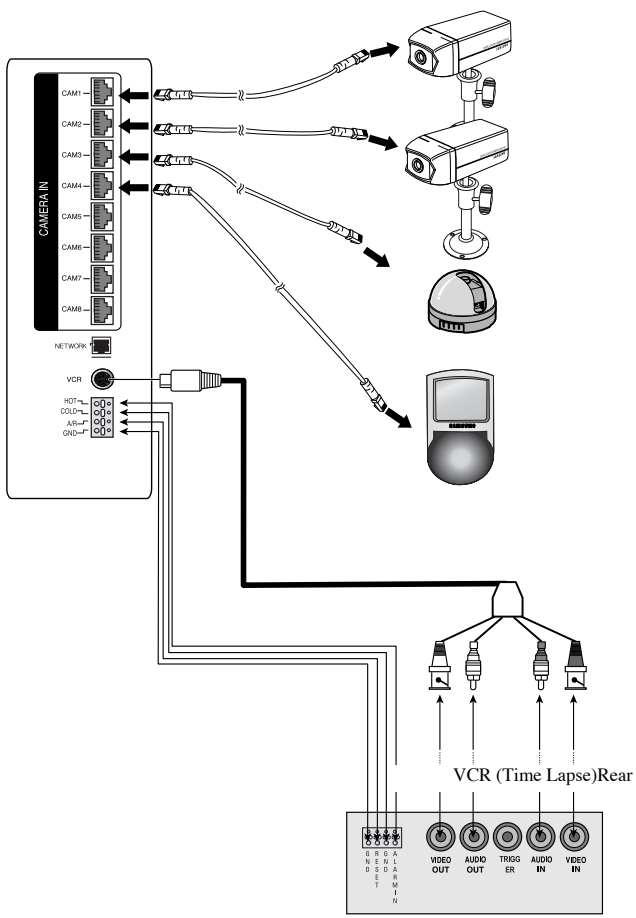
g) Connect the A/O (HOT) terminal on the rear panel to the Alarm IN terminal of the VCR.

h) Connect the A/O (COLD) terminal on the rear panel to the Ground terminal of the VCR.

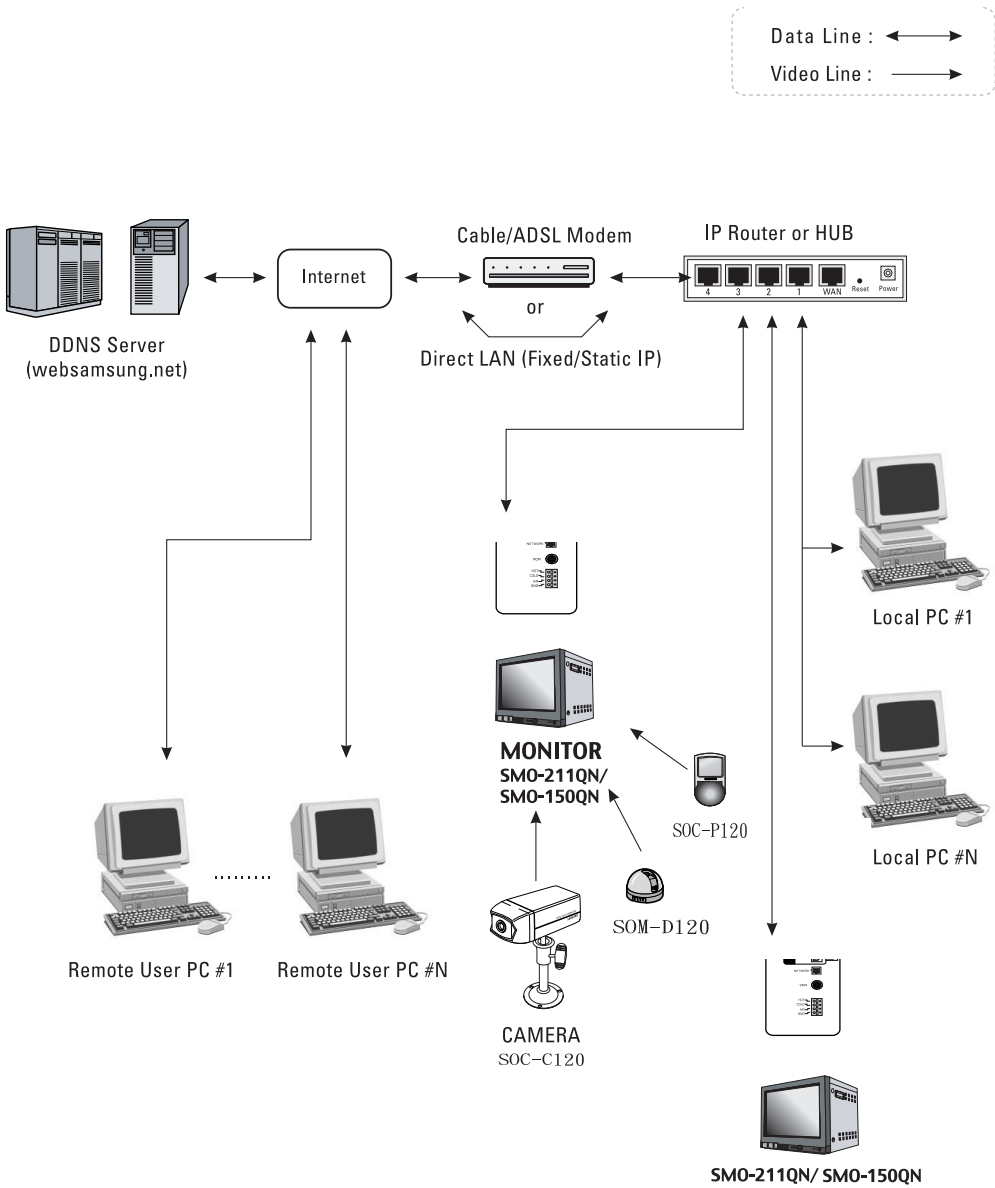
i) Connect the A/R terminal on the rear panel to the Alarm Reset terminal of the VCR.

j) Connect the G (ground) terminal on the rear panel to the Ground terminal of the VCR.

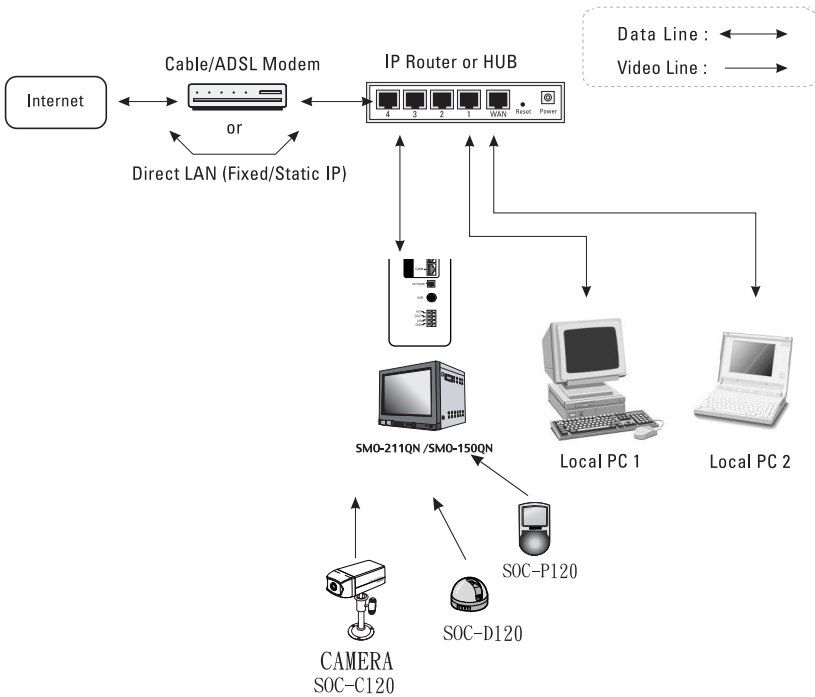
1-7) Whole System connection and configuration



1-8)Total System Configuration



1-9)Local System Configuration



1. Connect LAN cable of Cable/DSL modem or Direct Fixed/Static IP LAN Line to WAN port of IP Router.
2. Connect LAN ports of IP Router(1~4 or 1~8) to Ethernet port SMO-211QN/SMO-150QN to be set up and to Ethernet port of Local PC to use during setup.
3. Connect Video cable of Camera to MONITOR.
4. Turn on the MONITOR power.

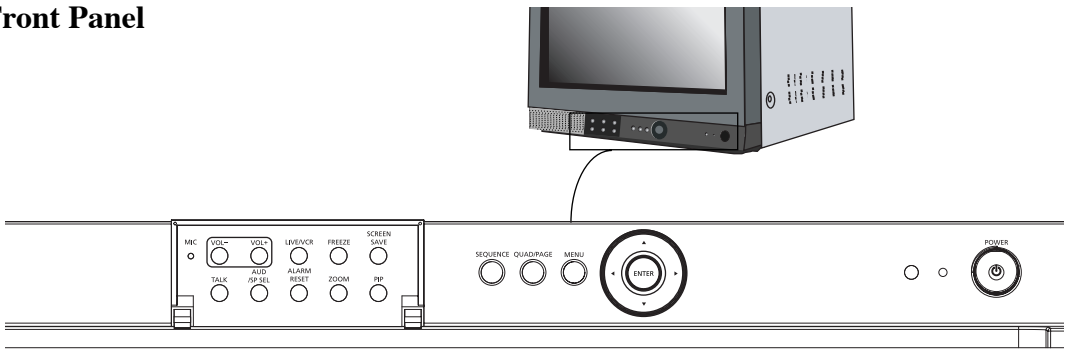
Notice

If you have a Static (Fixed) IP line or Dynamic IP line (Cable Modem or DSL Modem) with one IP address (whether its dynamic or fixed), but have more than one internet device to use (such as a PC and a SMO-211QN/SMO-150QN or several SMO-211QN/SMO-150QN); you must use an IP Router (different from a simple Network Hub); you must set up the Router to work with the SMO-211QN/SMO-150QN; and you must use a network capable PC within the local Router network to do the setup.

If you are using an existing Router which is already set up, you may not need to redo the basic setup of the Router again, but it is highly recommended that you at least read all the instructions below and go through the steps.Whether you are using an existing Router or a new Router, you must go through the Port Forwarding portion of the setup.

Chapter 2: MONITOR FRONT PANEL KEY Function and Operation

Front Panel



2-1) **TALK** KEY

The TALK KEY allows voice signal tobe transmitted to an intended camera with built-in MIC on the front of the monitor. For this function, select a target camera with the ▲/▼ key on the FRONT PANEL, and press AUD/SP SEL KEY. At this time, if a voice signal is generated through the MIC with the TALK KEY pressed, the signal will be transmitted to the camera.

2-2) AUD/SP SEL KEY

AUD/SP SEL KEY allows users to select aStandad(SOC-C120) camera to send/receive voice signals with the monitor in the QUAD DISPLAY MODE(see page 96 for discription). In the QUAD DISPLAY MODE, select target camera by using ▲/▼ , and press AUD/SP SEL KEY. Then “S” OSD will be displayed on the selected screen. If you want to send/receive voice signals with another camera, use▲/▼ key again to select the camera, and press AUD/SEL KEY. Then, “S” OSD will be displayed and you can send/receive voice signals with the monitor.

2-3) **VOL+/VOL-** KEY

VOL+ : Increase sound volume from the monitor.

VOL- : Decrease sound volume from the monitor.

2-4) SCREEN SAVE - KEY

Allows users to set the monitor's SCREEN SAVE MODE. The PICTURE screen is off when the SCREEN SAVE KEY is pressed. Users can exit from the SCREEN SAVE MODE by pressing the SCREEN SAVE BUTTON again. SCREEN SAVE MODE is automatically cancelled and picture is "ON" when an event such as an alarm or video loss in the SCREEN SAVE MODE occurs.

2-5) ALARM RESET- KEY

Alarm function can be cancelled while the alarm is working.

2-6) QUAD/PAGE- KEY

Allows users to display QUAD -A or QUAD - B at QUAD DISPLAY MODE.

- QUAD - A: QUAD DISPLAY MODE from Camera 1 to Camera 4
- QUAD - B: QUAD DISPLAY MODE from Camera 5 to Camera 8

2-7) LIVE/VCR- KEY

Allows users to switch LIVE MODE to VCR MODE and vice-versa. If VCR MODE is cancelled, the QUAD picture of LIVE MODE will be automatically displayed. In case any event happens at VCR MODE such as ALARM, the MODE will be automatically switched to LIVE MODE, and the pre-set operation for the event will be carried out. If there is no external input in VCR MODE, the OSD "NO SIGNAL" will be displayed.

- LIVE MODE: Image and voice signal from CAMERA is displayed.
- VCR MODE: External image and voice signal from VCR terminal from the rear of the monitor is displayed.

2-8) PIP- KEY

Can be used to see the main screen while Single screen is displayed. The main screen can be changed and transfered to another channel while in PIP mode. Please refer to "CHAPTER 4. DISPLAY MODE setting method(Eng-88)" for PIP function and details.

2-9) FREEZE- KEY

This key allows users to see a target camera picture in the PAUSE MODE.Select a camera with the ▲/▼ KEYs and press the FREEZE button. All other controls are disabled while in freeze mode.

2-10) SEQUENCE- KEY

Allows the monitor to display a full screen view of each camera in sequence.The time duration of each view is determined by the DWELL TIME. Refer to 3-3.

2-11) ZOOM- KEY

It zooms a part of the picture in the display. If the ZOOM BUTTON is pressed, zoom area will be displayed. Users can move to a target area by using ▲/▼ KEY at this time. If ◀**ENTER**▶ SWITCH is pressed at the target area, the area will be displayed 2 times larger.

2-12) POWER- KEY

It turns the monitor and camera ON/OFF at the same time. When
the monitor power is ON, the monitor power LED is lit and the monitor displays a color bar pattern. Then, the OSD “SYSTEM INITIALIZING...” will be displayed with a blue pattern for about 13 seconds, then “SYSTEM STAND BY...” will be displayed for about 14 seconds.

2-13) ENTER- KEY

Enter key allows users to:

1.Enter set up menu and setting mode

2.Display single camera picture

2-14) UP/DOWN KEY

Allows users to

1.Change camera channel

2.Select set up menu movement and setting mode

UP: Increase items

DOWN: Decrease items

2-15) LEFT/RIGHT KEY

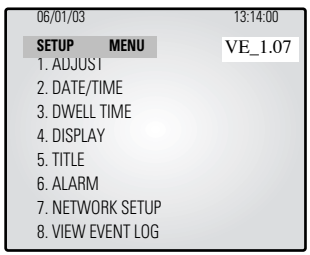
Allows users to set date

LEFT: Decrease Date

RIGHT: Increase Date

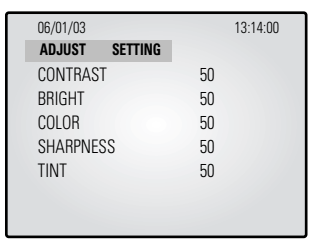
Chapter 3: Setting each item function in the SETUP MENU

Pressing the FRONT PANEL MENU button allows users to enter SETUP MENU and see the following menu OSD box. Setting method of each SETUP MENU function and operation is as follows.



3-1) ADJUST MENU function and setting method

- **Function:** Allows adjustment of the display status
- **Setting method:** Move to #1. ADJUST MENU by using▲/▼ KEY and press the ENTER SWITCH to display the OSD as shown in the figure below. (The figure shows the initial setting status.)



Move to a target item by using ▲/▼ KEY.

Enter the item by pressing the ◀**ENTER**▶ SWITCH.

At this time, set a target value by using ◀ / ▶ KEY.

You can move to another item by using▲/▼ KEY after setting the target value.

(1) CONTRAST : Adjusts the contrast of the picture.

(2) BRIGHT : Adjusts screen luminance.

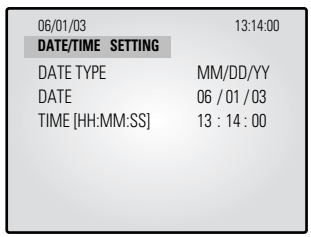
(3) COLOR : Adjusts color intensity.

(4) TINT : Works with the color adjustment to create the correct color imaging.

(5) SHARPNESS : Adjusts the detail of the image.

3-2) DATE/TIME MENU Function setting

- **Function:** Sets the display date format and current time.
- **Setting method:** Move to #2. DATE/TIME MENU by using ▲/▼ KEY at setup menu, then press the ENTER SWITCH to display the OSD as shown in the below figure below. (The figure shows the initial setting status.)



- **Setting method of date display format**

  Move to the item by using ▲/▼ KEY, and press ENTER .

  Select a format by using ◀ / ▶ KEY and then press the

  Enter key to confirm your setting.

  ("YY/MM/DD", "MM/DD/YY", "DD/MM/YY" are available for selectable data format.)

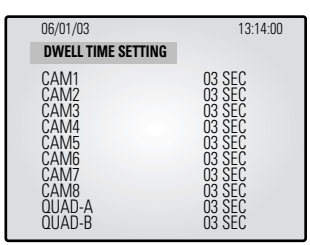
- **Date and current time setting method**

  Repeat the above instruction for moving to each item (MONTH, DAY, YEAR, HOUR, MINUTE, SECOND) and entering the mode. Current date and time to display can be set. (It can be referred to when ALARM or VIDEO LOSS occurs.)

  * Press the ◀ key to return to the previous Menu.

3-3) DWELL TIME MENU function setting

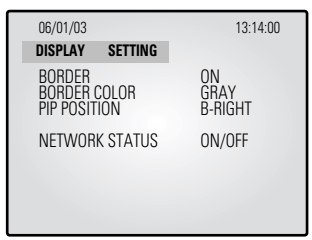
- **Function:** Displays each picture for pre-set time and automatically switches it to the next picture in the SEQUENTIAL DISPLAY MODE.
- **Setting method:** Move to #3. DWELL TIME menu by using ▲/▼ KEY at SETUP MENU, and press the ENTER SWITCH to display the following OSD as shown in the figure below. (The figure shows the initial setting status.)



If the time is set for each camera channel by using ▲/▼ KEY, each camera picture will be displayed for the set time and switched to the next picture automatically.

3-4) DISPLAY MENU function setting

- **Function:** Allows users to select the color and ON/OFF of borderline at QUAD DISPLAY.
- **Setting method:** Move to #4. DISPLAY SETTING MENU by using▲/▼ KEY in the SETUP MENU, then press ENTER to display the OSD as shown in the below figure. (The figure shows the initial setting status.)



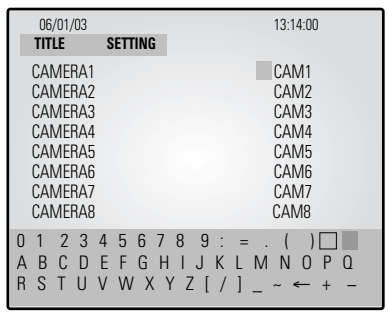
Move to each item by using the ▲/▼ KEY, and using the ◀ / ▶ KEY to set the value.

1) BORDER item determines whether or not border line is displayed in the QUAD DISPLAY MODE. (ON: Displays the border line, OFF: Does not display the border)
2) BORDER COLOR item sets boarder line color among three colors: Black, White, Gray.
3) PIP POSITION item sets the location of sub picture at PIP DISPLAY. (T-LEFT: Upper part of left side, T-RIGHT: Upper part of right side, B-LEFT: Lower part of left side, B-RIGHT: Lower part of right side)
4) NETWORK STATUS determines the [S] - Static (41page), [D] - DHCP (43page), [P] -PPPoE (46page) display at the left of top on the screen.
   Refer to 3-7) NETWORK SETTING function and setting method (Eng-41) for the respective detailed status.

   (ON: Displays the NETWORK STATUS, OFF: Does not display the NETWORK STATUS)

3-5) TITLE MENU Function setting

- **Function:** Set the desired title of each camera.
- **Setting method:** Move to #5. TITLE MENU by using ▲/▼ KEY in the SETUP MENU, and press the ENTER SWITCH to display the OSD as shown in the figure below. (The figure shows the initial setting status.)

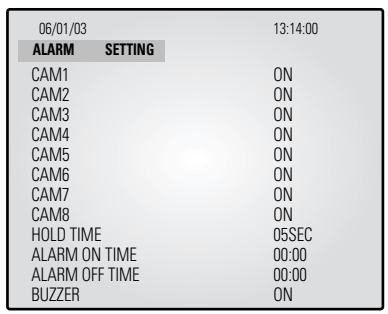


Move to a target camera channel by using▲/▼ KEY then press the ENTER KEY to display a cursor at the space of the first character in the camera title. Move the cursor to a target character in the OSD box lower part by using ▲/▼ KEY, then press the ENTER KEY to set the character. The cursor automatically moves to the next space after one character is set. Set the title of camera by repeating the same method.

(Only eight characters are available for a camera title.)

3-6) ALARM MENU Function setting

- **Function:** Allows users to set the ALARM MODE for each camera.
- **Setting method:** Move to #6. ALARM MENU by using ▲/▼ KEY in the SETUP MENU, and press the ENTER SWITCH to display the OSD as shown in the figure below. (The figure shows the initial setting status.)



(1) CAM1 to CAM8 item sets whether the alarm sensor connected to the camera is used or not. (ON: Alarm function setting, OFF: Alarm function canceling)

(2) HOLD TIME item sets time to freeze alarm operation when alarm occurs. (HOLD TIME to be set: 05SEC ~ 1MIN ~ 30MIN)

(3) ALARM ON/OFF TIME item sets beginning time (ON) and end time (OFF) that monitor recognizes as alarm event.

* Note : Even if CAMERA ALARM is set to ON, alarm operation is not carried at time band except pre-set ALARM ON/OFF TIME.

(4) BUZZER sets whether or not buzzer(high-pitched tone)sounds when an ALARM or VIDEO LOSS occurs.

(ON: BUZZER operation, OFF: Cancel)

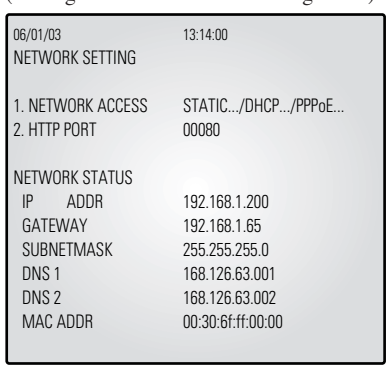
[S] - Static IP (41page) , [D] - DHCP (43page) , [P] - PPPoE (46page)

3-7) NETWORK SETTING function and setting method

This section of the manual is intended for users who will install this security system in a network environment.If you have difficulty setting the network,we recommend contacting your network administrator.

- **Static**
- **DHCP**
- **DSL (PPPoE)**
  - **Function:** Allows users to select the STATIC (fixed) IP, DHCP, PPPoE of Setting.
  - **Setting method:** Move to #7, NETWORK SETUP MENU by using ▲/▼ KEY in the SETUP MENU, then press the ENTER SWITCH to display the OSD as shown in the figure below.

    (The figure shows the initial setting status)



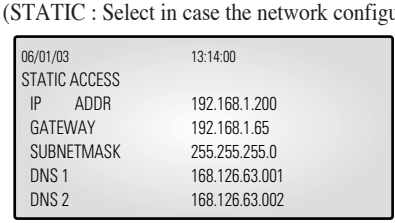
MOVE TO EACH item by using ▲/▼ KEY, and using ◀ / ▶ KEY to change the set value.

Static IP User

- Constituted by Static IP on the TCP/IP network

1) Move to **'STATIC...'** by using ▲/▼ KEY at NETWORK ACCESS, then press ENTER SWITCH to set STATIC...

   (STATIC : Select in case the network configuration of monitor is fixed IP (Public or Private IP)



2) Move to IP ADDR / GATEWAY / SUBNETMASK by using ▲/▼ KEY.

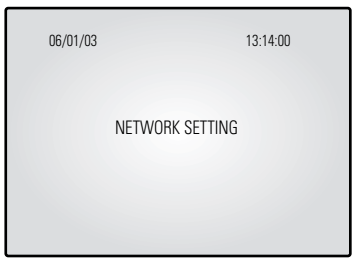
3) Press ENTER SWITCH and type in IP ADDR / GATEWAY / SUBNETMASK respectively.

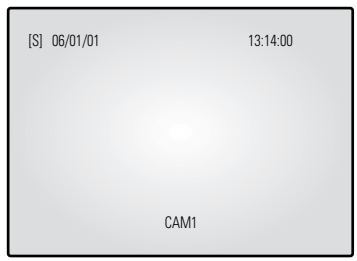
4) DNS 1 and DNS 2 will be automatically set to DNS as shown above.

   Use ◀ / ▶ KEY to change it.

5) After setting, move to the main screen by using the MENU BUTTON.

6) Set values will be stored as shown below. It takes 2 or 3 seconds.





On completion of setting to Static IP(Fixed IP)setup, the screen, [S] is displayed.
If the network connection is cancelled or cut, [S] starts blinking.

7) Open your Internet Explorer web browser.
Using a Static (fixed) IP, You may also connect remotely by typing in the IP address of the SMO-211QN/SMO-150QN, Such as
http://192.168.1.200

*** Note : HTTP Port**

Set the port to be used when connection to SMO-211QN/SMO-150QN in Internet Explorer and receive the necessary files for image transmission.
Necessary files for the image transmission.
The port setting is used for various network configuration or a particular port etc.

CAUTION

A port number is reserved for TCP port and HTTP port setting.
Default values should not be changed.
However, if the IP Router is used in a network environment, input proper values with reference to the IP Router manual.

If the SMO-211QN/SMO-150QN is using a Router, you may also connect remotely by typing In the WAN
IP Address of the Router and the HTTP port assigned to the SMO-211QN/SMO-150QN.
(here you must type in the port address even if it is the default “80”), such as
http://192.168.1.200:80

DHCP User

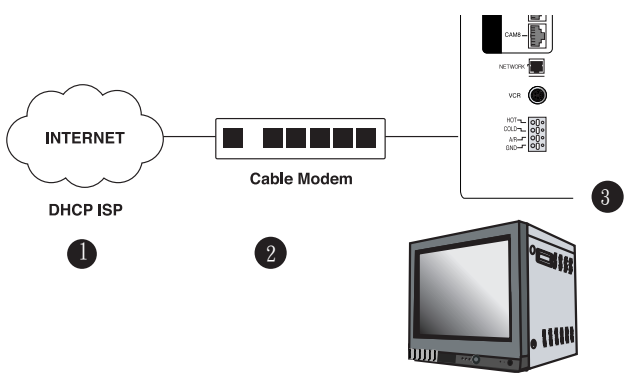
- Constituted by Dynamic IP on the cable/xDSL modem network

You can use the SMO-211QN/SMO-150QN products through the network using Dynamic IP on cable/xDSL modem. In this case, it should be connected with DDNS to support the Dynamic IP.

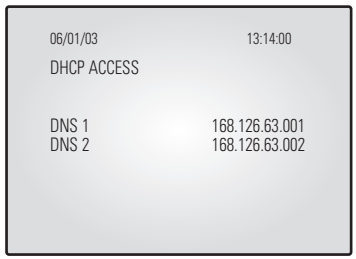
In case of a configuration using DHCP, as the connection to SMO-211QN/ SMO-150QN is made using domain names (EX : http://sff0000.websamsung.net) that are automatically registered in our DDNS server, IP address, Subnet Mask and Gateway that are in the network tab of Admin Mode are not necessarily to be inputted.
The proper domain names of SMO-211QN/SMO-150QN are automatically registered to DDNS
server installed in our company in case of modem connection.The default

The default IP type is DHCP .

1) Connect as the figure below and turn on the power of the equipment in the order shown.



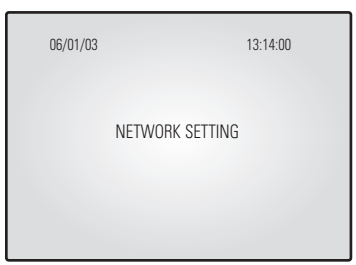
2) Move to 'DHCP...' by using ▲/▼ KEY in NETWORK ACCESS, then press ENTER SWITCH to set to DHCP.

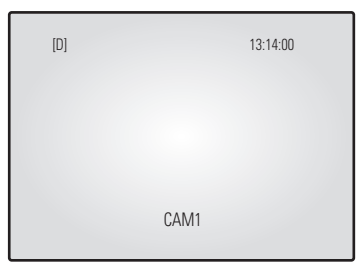


3) DNS 1 and DNS 2 will be automatically set to DNS as shown above.
Use ◀ / ▶ KEY to change it.

4) After setting, move to the main screen by using the MENU button.

5) Set values will be stored as shown below. It takes 2 or 4 seconds.





On completion of the DHCP setup, the screen, [D] is displayed.
If the network connection is cancelled or cut, [D] starts blinking.

6) You can view the video source of the SMO-211QN/SMO-150QN from a remote location PC.

7) Make sure the remote PC meets the minimum specification requirements described in Chapter 5. Each product feature (Eng-91) and make sure that the PC is internet capable.

8) Open your Internet Explorer web browser, type in the following in the URL window and press Enter.

http://sff0000.websamsung.net

Where ff0000 is the MAC address of your SMO-211QN/SMO-150QN in this example.

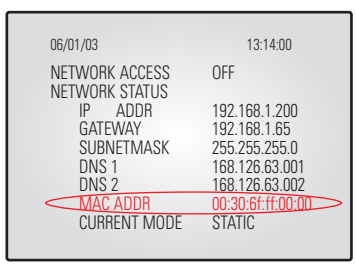
If your SMO-211QN/SMO-150QN's MAC address is ff0001, then type in ff0001 instead of ff0000

*** Note : MAC Address.**

Locate the MAC Address of the SMO-211QN/SMO-150QN (each SMO-211QN/SMO-150QN has its own unique MAC address)

It can be checked in '7.NETWORK SETUP" of SETUP MENU'.

It is the last 6 digits as shown below.



CAUTION

If you change the HTTP port number 80 to 82 then you must type like below in address bar.

The default part number is 80. You may need to change the part namber if you cannot link to the security system from a remote location due to a firewall or other issues.

http://sff0000.websamsung.net:82

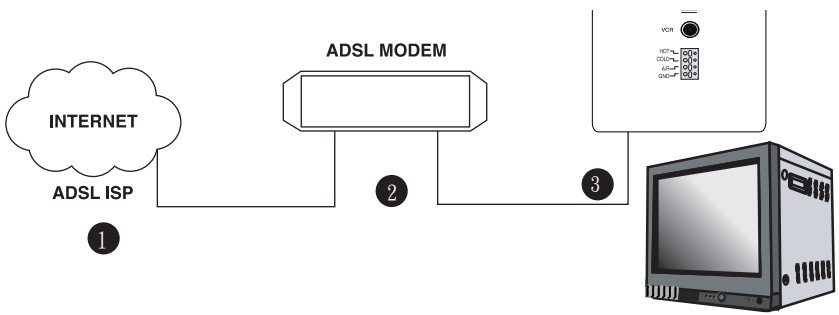
At this time, you should add "s" in front of "mac address".

DSL User (PPPoE)

SMO-211QN/SMO-150QN products can be used on the network using IP through PPPoE (DSL).

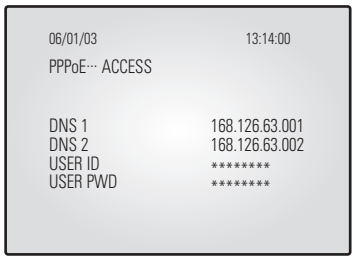
In case of a configuration using PPPoE, SMO-211QN/SMO-150QN connection is made through the domain names (EX : http://sff0000.websamsung.net) that are automatically registered in Samsung's DDNS server. You do not need to enter IP address, Subnet Mask and Gateway in the network tab of Admin Mode.

1) Connect as in the figure below and turn on the power of each piece of equipment in the following order.



2) MOVE TO EACH item by using ▲/▼ key, and ◀ / ▶ KEYchange the set value.

3) Move to **'PPPoE...'** by using NETWORK ACCESS.
Press ENTER SWITCH to set to PPPoE.



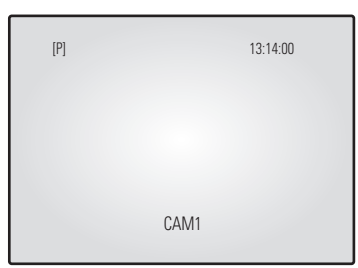
4) When the PPPoE (DSL) type in the User Name and Password (and Confirm Password) given to you by the DSL Service Provider.

CAUTION

When using DSL (ISP-internet service provider) you must type correct User Name and Password to connect to SMO-211QN/SMO-150QN. If you type an incorrect User Name or Password, commection is impossible.

ID and PASSWORD

5) USER ID and PWD (Password)are limited to 40 digits maximum. Only numerals,@symbol and small characters can be used.
   Capital letters are not supported.
6) DNS 1 and DNS 2 will be automatically set to DNS as shown above.
7) Use ◀ / ▶ KEY to change it.
8) After setting, move to the main screen by using the MENU button.
9) Set values will be stored as shown below. It takes 2 or 3 seconds.



On completion of setting to PPPoE(DSL)setup, the screen, [P] is displayed.
If the network connection is cancelled or cut, [P] starts blinking.

10) You can view the video source of the SMO-211QN/SMO-150QN from a remote location PC.

11) Make sure the remote PC meets the minimum specification requirements described in Chapter 5. Each product feature (Eng-91), and make sure that the PC is internet capable and set up to able to browse the internet.

12) Open your Internet Explorer web browser, type in the following in the URL window and press ENTER.

http://sff0000.websamsung.net

For example, if your SMO-211QN/SMO-150QN's MAC address is ff0001, then type in ff0001 instead of ff0000 is a fixed letter that must be typed in. This will ensure connection to the monitor.

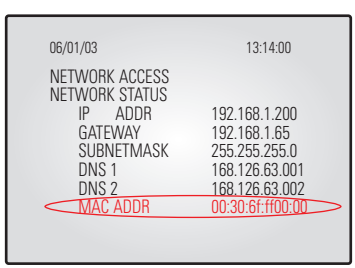
*** Note : MAC Address.**

Locate the MAC Address of the SMO-211QN/SMO-150QN (each SMO-211QN/SMO-150QN has its own unique MAC address)

It can be checked in '7.NETWORK SETUP" of SETUP MENU'.

It is the last 6 digits as shown below.

At this time, you should add "s" in front of "mac address".



CAUTION

If you change the HTTP port number 80 to 82 then must type like below in address bar.

http://sff0000.websamsung.net:82

CAUTION

In cases where the PC's DNS server address is not set and the connection using domain name is not available, Please consult your network administrator to set DNS server address.

CAUTION

The connection to SMO-211QN/SMO-150QN is unavailable for about 2~5 minutes after DSL Modem's power ON.

Since the connection is not available, as the IP is not received from DSL communications, please reboot by turning off the power of DSL Modem and SMO-211QN/SMO-150QN for more than 5 seconds,and then try to connect again.

3-8) SMO-211QN/SMO-150QN basic setting

1) Open your Internet Explorer web browser, type in the Monitor's IP address:
   http://sff0000.websamsung.
   in the URL window press ENTER.
2) When you choose the Admin menu, it asks you the Admin ID and password.
3) Type in root / root. On delivery, they are "root" (administrator's ID) / "root" (administrator's Password). The password can be changed on Admin Menu.

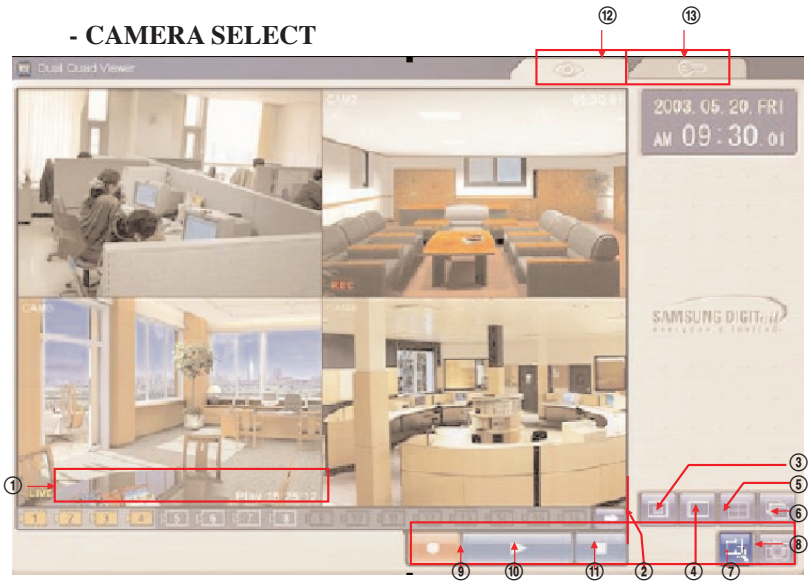
4) Click “YES”. This will automatically download the necessary Active X Controls to operate the Remote Viewer.
It takes about 20 seconds at the first connection.

5) When you enter properly, a window appears as shown below.

Note:If the MPEG 4 codec is improperly installed, you will not see video images. To see video, click on Dual Quad Viewer in the upper left portion of the screen, then a window will appear prompting you to install MPEG 4.

3-8-1) "LIVE" MENU

- CAMERA SELECT



Initial display mode of monitor if QUAD A.

- Remote Viewer Function Buttons

KEY Type		Function
①		Choose a camera by channel Ch 1 ~ Ch 8 4 Cameras are supplied. You can connect 4 additional cameras if desired.
②		NEXT CHANNEL
③ ④	 	SINGLE MODE (ch1 Default selected) 320 X 240 Size 720 X 480
⑤		QUAD MODE (QUAD Default selected)
⑥		SEQUENCE MODE
⑦		SAVE PATH
⑧		CAPTURE
⑨		REC

⑩		PLAY
⑪		STOP
⑫		LIVE MODE change
⑬		ADMIN MODE change

- SINGLE SCREEN DISPLAY

If users want to see the camera image at full mode,or smaller mode,

Select a target camera with NEXT channel or CHANNEL SELECT keys.

After camera selection, camera image can be displayed at full screen.

* AT SINGLE DISPLAY

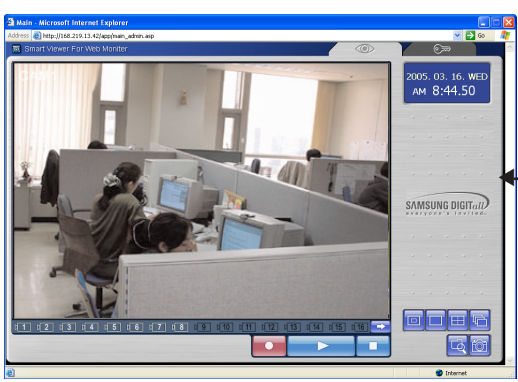
Original Size Large Size

- QUAD MODE DISPLAY

A user can select the QUAD mode.

QUAD A -> QUAD B -> QUAD A -> ...

• QUAD MODE DISPLAY



QUAD A : QUAD DISPLAY MODE From Camera1 to Camera4

QUAD B : QUAD DISPLAY MODE From Camera5 to Camera8

- Auto SEQUENCY DISPLAY MODE

Press the sequence key in the single or QUAD mode to display the screen in sequence. If the DWELL TIME SETTING of SETUP MENU is set to 3 seconds and the SEQUENCY KEY is pressed at this time, the operation will be carried out as follows. (NO signal channel will be skipped while single screen is auto-switching)

* SINGLE MODE SEQUENCE DISPLAY

Press SEQUENCY KEY When SINGLE MODE (camera select key) is displayed at full screen.

* QUAD MODE SEQUENCE DISPLAY

Press SEQUENCY KEY When QUAD A (QUAD B) MODE is displayed.

- SAVE PATH MODE

Press the SAVE PATH KEY to change the name of the DIRECTORY.

- CAPTURE MODE

Press the CAPTURE KEY to store each picture in the form of FMPI.

- Motion Picture Recording and Playback

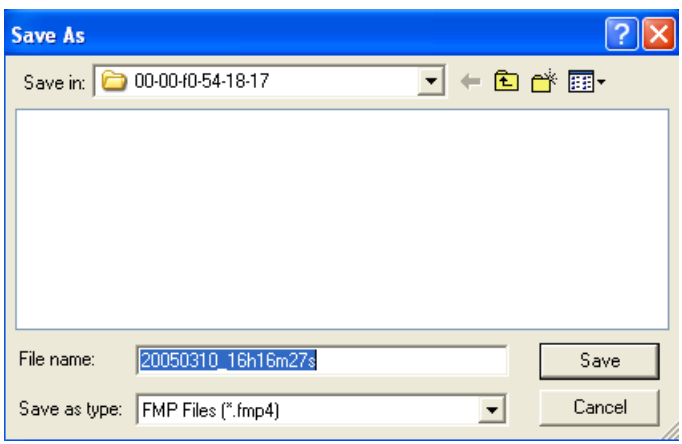
1. Recording

When saving with Viewer, the file and folder are created automatically.

If the Mac address of product is "00-30-6F-FF-00", the created file and folder are as follows.

"C:\Program Files\Samsung \SMO-211QN/SMO-150QN\00-30-6F-FF-00"

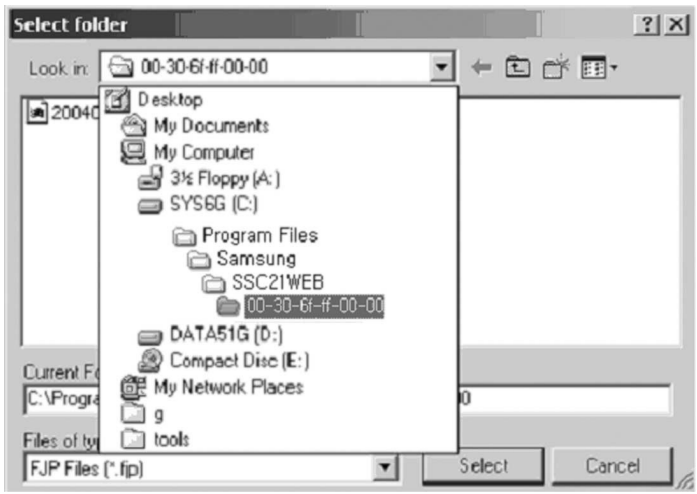
An user can change the name of file or folder by use of the save key ( ) of Viewer.



If you are connected to and recording from more than one SMO-211QN/SMO-150QN on the same PC, there will be more than one “Server Name” directory.

You can always locate the file by choosing the Server Name directory.

Within the Server Name directory, files are automatically saved with file names in time stamped format.



2. PLAY

When you select play and double click the file, that file will play back on the Remote Viewer as a motion clip. You can select several files simultaneously at once (up to 10) and the files will be played back in the order of the file name (by date and time).

3. PLAYER

- Player installation/execution/deletion

  - Installation

    Player will be installed together when it is connected to SMO-211QN/SMO-150QN.

- Execution (Follow the instruction to execute it separately.)

  Click Start —> Program —> Smart Webviewer For WEB-MON —> Player. (Fig. 3)

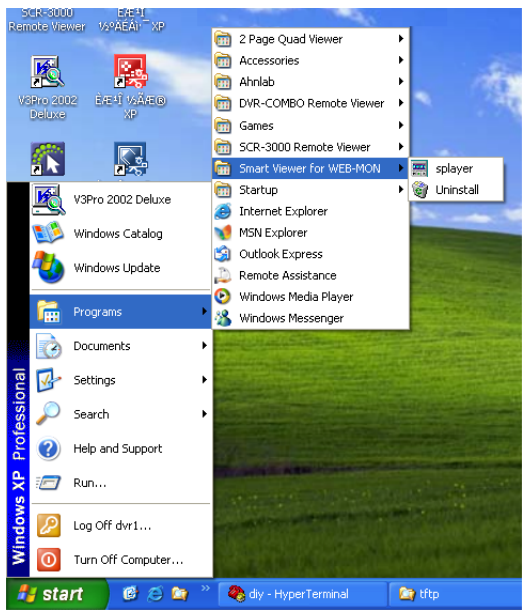
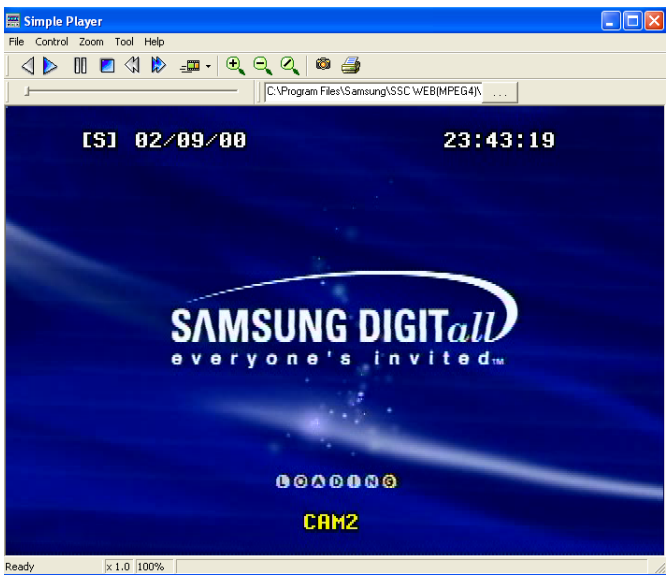


FIG.3

- Deletion

  Click Start —> Program —> Smart VIewer For WEB - MON —> Uninstall. (Fig. 3)

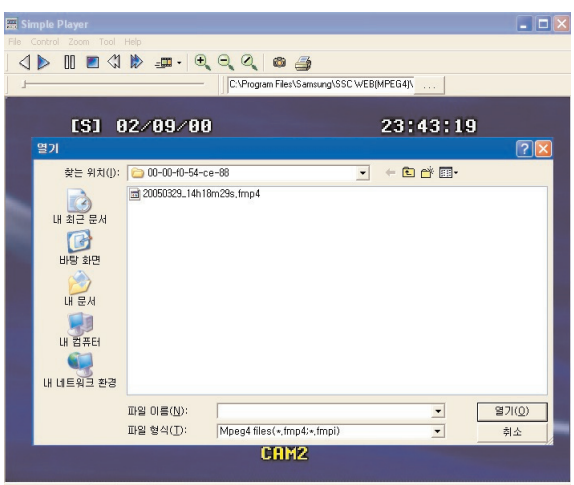
- Program screen configuration



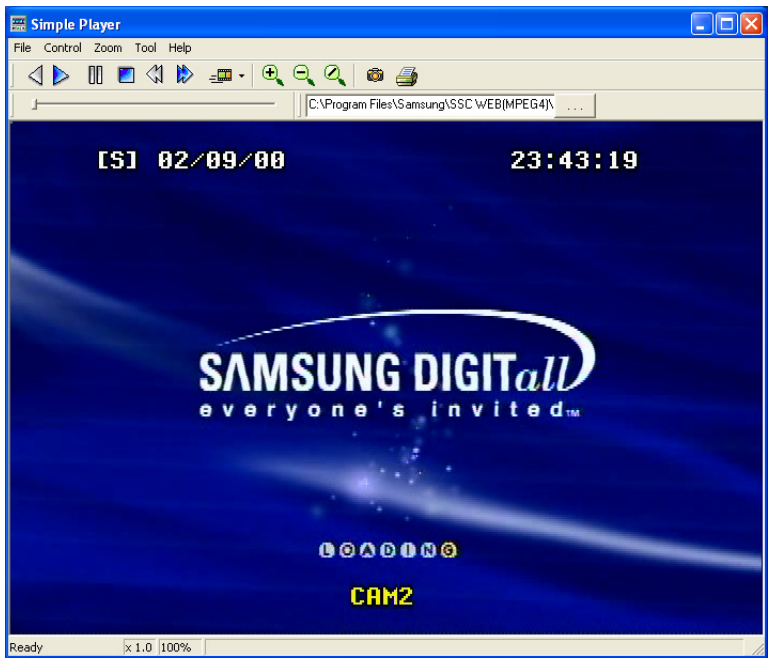
- How to play

1. Playback

File - Open... Selecting this, you can choose between fmp4(moving image file) or fmpi(still image file) in the window as shown below.



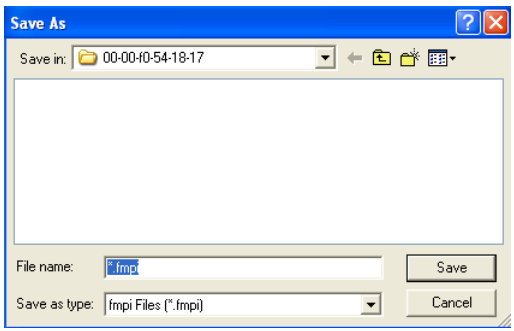
Having chosen and opened a file, you will see a picture as shown below.



	Reverse playback		Enlarge
	Playback		Reduce
	Pause		Original size
	Stop		Save the present frame as a FMPI image
	To the back frame		Print
	To the front frame	Status bar	Display the playback speed, magnification, and information on the storage.
	Speed control		

- Snap shot

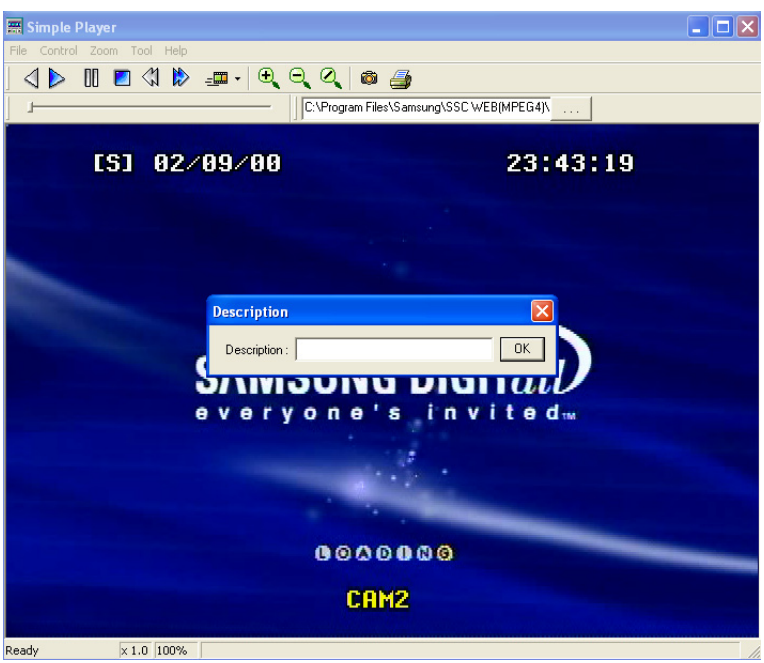
Save the present image as a form of fmpi file. Select in the toolbar. The result will be as follows.



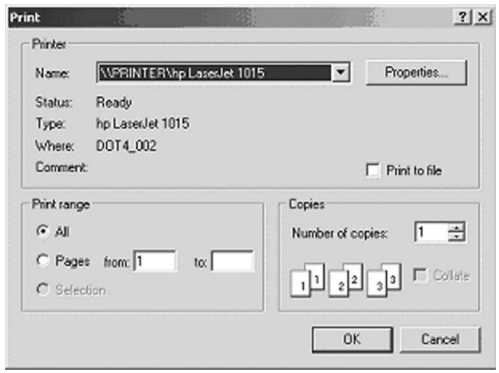
Type in the file name and press 'Save' to store it as a fmpi file.

- Print

Prints the present image. Select in the toolbar. The result will be as follows.



Type in the phrase you added in ‘Description’. Then press the ‘OK’ button.



Select Print and press ‘OK’.

Admin Menu

The following pages are geared towards advanced users who function as network adminid-trators, and will be using the system in a network environment.

It is an administrator's menu to set the general items on SMO-211QN/SMO-150QN Server. To use this menu, you need the administrator's ID and Password.

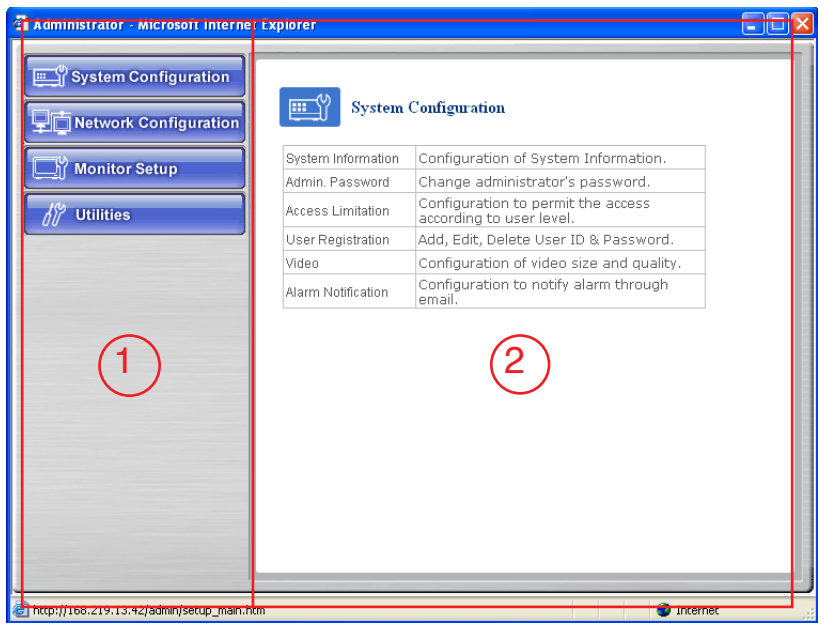
On delivery, they are "root" (administrator's ID) / "root" (administrator's Password). The password can be changed on Admin Menu.

Admin Menu Entering

1) Click the Admin menu and a login window will appear.

2) When you connect to the SMO-211QN/SMO-150QN Server through Web browser, the initial screen will be as follows.

-3) Type in the administrator and password in the user's name and password columns and press Enter key to execute the Admin Menu as shown below.



4) Screen configuration

① : General menus of Admin Menu. The menus related to SMO-211QN/SMO-150QN Server are divided into System, Network, Monitor Setup, and Utilities in the main. Each of them has several sub menus.

② : When you click one of the main menus (System Configuration, Network Configuration, Monitor Setup, Utilities), its sub menus and simplified explanation on them will appear.

• Admin Menu Structure

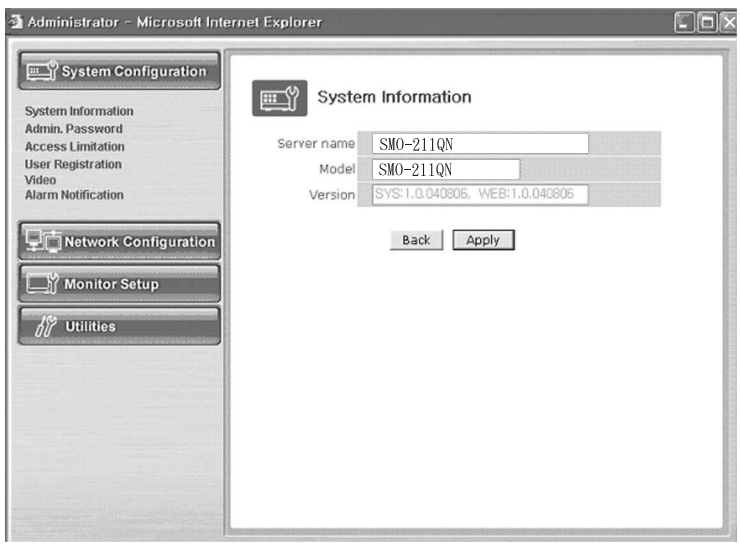
Category	Main Menu
System Configuration	System Information
	Admin. Password
	Access Limitation
	User Registration
	Video
	Alarm Notification
Network Configuration	Network Configuration
	PPPoE (DSL)
	Network Ports
	View Network Status
	Network Status Notification
	DDNS Configuration
Monitor Setup	Date & Time
	View Event Log
	Display
	Dwell Time
	Title
	Alarm
Utilities	Save Configuration
	Reboot
	System Update

3-8-2) System Configuration Menu.

1. System Information

In this menu, you can check the information on the system including the name of the SMO-211QN/SMO-150QN Server.

Server name can be changed if desired.



- Menu Configuration

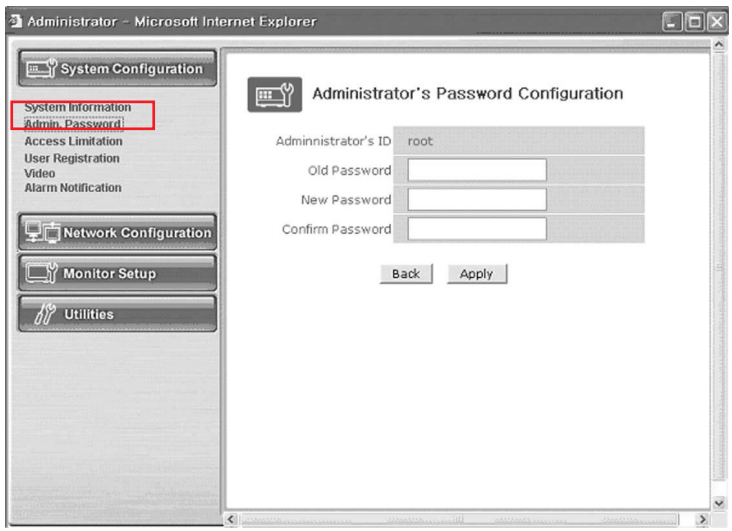
Server Name	Type in the name of the SMO-211QN/SMO-150QN Server. * Server's name should be composed of 19 or less numerals or English alphabetical letters. It cannot start with a numeral and should start with a letter. White characters including a space, tab, and a special letter cannot be used.
Model	Model name is SMO-211QN/SMO-150QN.
Version	SMO-211QN/SMO-150QN Server product's version

After completing setting, click Apply button.

If you click the back button, initial values are typed in all fields.

2. Admin Password

In this menu, the administrator (root) password can be changed.



- Menu Configuration

Administrator's ID	Administrator's ID is always "**root**".
Old Password	The initial password is "root".
New Password	Type the new password. * The password should be composed of 4-8 digit numerals or alphabets.
Confirm Password	Type the new password again.

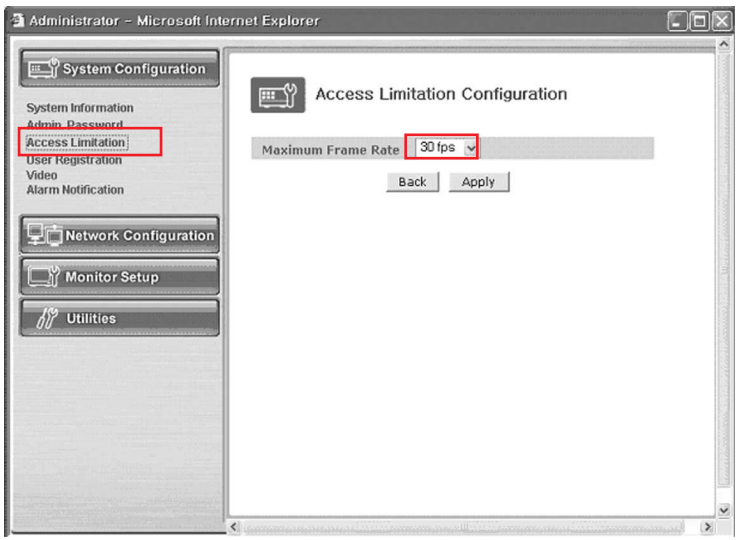
After completing setting, click Apply button.

The new password will be applied.

The user needs to log in again by using the new password.

3. Access Configuration

This menu is to set the targets the SMO-211QN/SMO-150QN Server can have a access to.



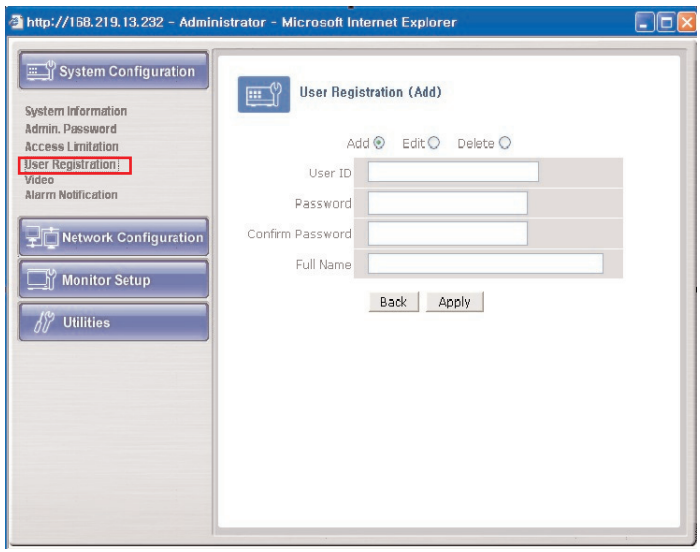
- Menu Configuration

Access Limitation Configuration	This is to set limit for the frame speed for users who are registered in the system, to join and view images. The users, who join in the system after this setting, will be connected at the set speed. The access speed can be set on the Local Network depending on the network status. (30/15/10/5/2/1 ips)

After completing setting, click Apply button.

4. User Registration

This is a user control menu to register, change, or delete the users who may have access SMO-211QN/SMO-150QN Server.



- Menu Configuration

User ID	Set the ID you want to register.
Password	Set the password you want to register.
Confirm Password	Type again the password you want to register.
Full Name	Type in the name you want to register.
Add	This is a menu to register a user. It is to fix the user's ID, Password, name, and set the users accessibility of the system. - Type in the user's ID in the User ID column. - Type in a password in the Password and Confirm columns. The user's ID and the password should be composed of 20 or less numerals or letters. - Type in the name of the user in Full Name column.
Edit	On this menu, you can change the existing password and name. The user's ID cannot be changed. The configuration of the menu is same as Add, however you should select the user's ID in this menu. - Choose Edit menu. - Click "Select User ID" in User ID and click the user's ID you want to edit. - Modify the password and name and click Apply button to apply the modified items.
Delete	This menu is to delete the registered user. - Choose Delete menu. - Choose the user's ID you want to delete in the box. - Click Delete button to delete the ID.

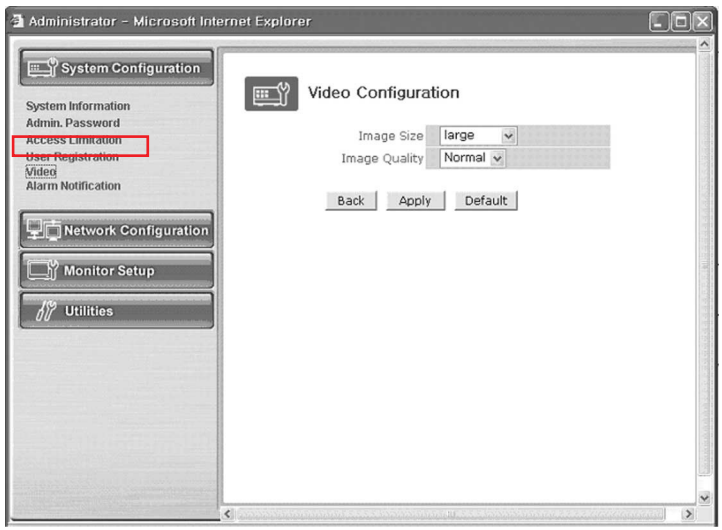
After completing setting, click Apply button.

If you click the back button, initial values are typed in all fields.

Note: A maximum of 5 users can log onto the system at one time.

5. Video Configuration

This is to set the data to be added in the video configuration and set an environment for each channel.



- Menu Configuration

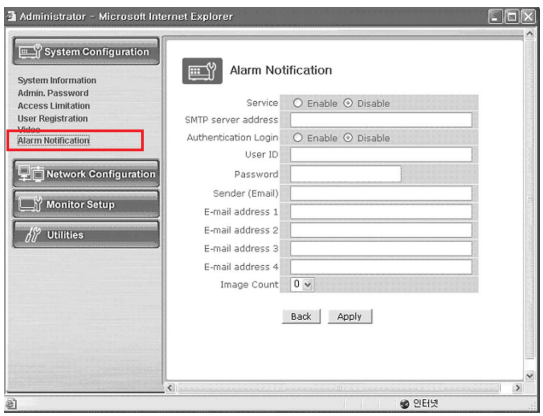
Image Size	This is to choose the size of the video data image . You can choose between 2 size (Small / large).
Image Quality	This is to choose the image quality. You can choose between 3 levels (High, Normal, Low).

After completing setting, click Apply button.

6. Alarm Notification

This notifies the registered users of an alarm arising situation through e-mails.

At this time, a maximum of 5 stored JPEG pictures, which were stored, can be sent together.

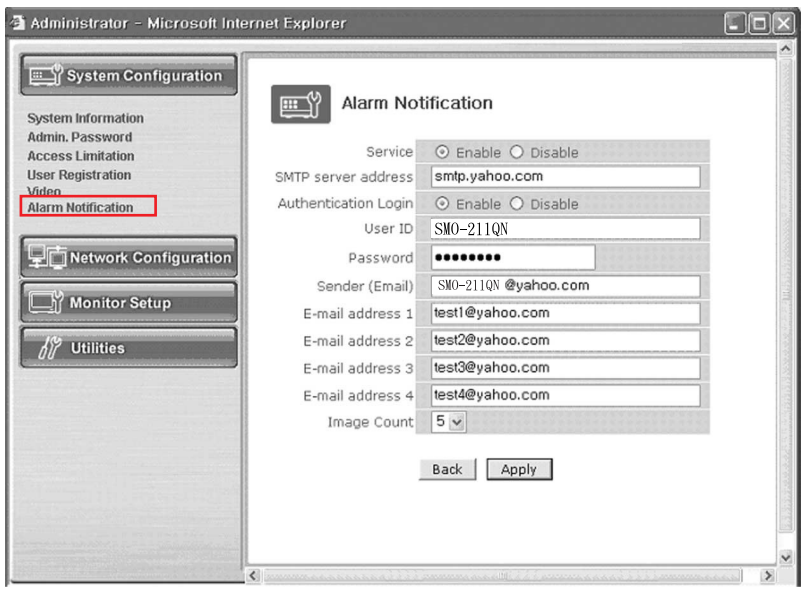


- Menu Configuration

Service	Choose enable if you want to send the ALARM notifying E-MAIL.
SMTP server address	SMTP server of the ISP that provides SMO-211QN/SMO-150QN with services. ISP's confirmation required.
Authentication Login	Choose enable if you want to log in the SMTP of the ISP providing SMO-211QN/SMO-150QN with services.
User ID	ID for the SMTP server of the ISP that provides SMO-211QN/SMO-150QN with services.
Password	Password for the SMTP server of the ISP that provides SMO-211QN/SMO-150QN with services.
Sender (E-mail)	Register the Adiministrator E-mail SMO-211QN/SMO-150QN
E-mail address 1 ~4	E-mail addresses you want to send the alarm notification to.
Image count	JPEG images to send. Up to 5 pictures can be sent at 0.5-second intervals. * Some SMTP servers may not support JPEG forwarding. Set this function after checking the SMTP server.

After completing setting, click Apply button.

EX) When user who has an e-mail address (SMO-211QN@yahoo.com) and password(123456) in YAHOO, sets “Alarm Notification” in order to send a mail to (test1@yahoo.com).



After completing setting, click Apply button.

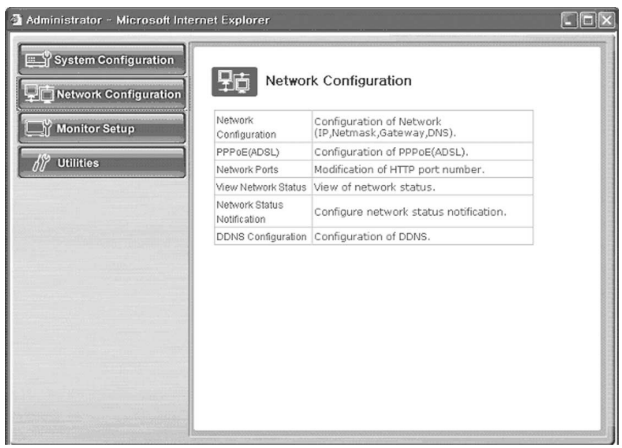
image transfer in your e-mail account.

In the event of Alarm, please use PLAYER to catch normal JPEG images.
Otherwise, the image size will be reduced to a half JPEG size.
Refer to Eng-57 “How to play” for the detailed usage of PLAYER .

3-8-3) Network Configuration Menu.

1. Network Configuration

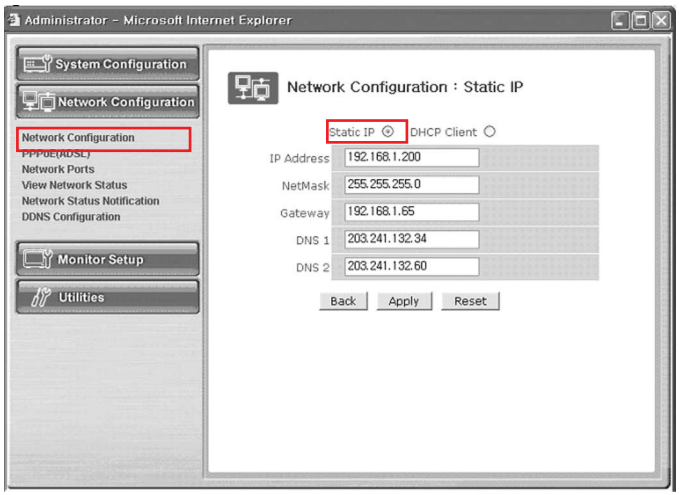
On this menu, you can fix the general environment related to the network of the SMO-211QN/SMO-150QN Server and check the present status.



- Menu Configuration

Network Configuration	Set “Static IP” or “DHCP”.
PPPoE(DSL)	Set PPPoE (DSL).
Network Ports	Set “Network Port”.
View Network Status	Modification of HTTP and other application network port numbers.
Network Status Notify	View network status.
DDNS Configuration	DDNS Configure

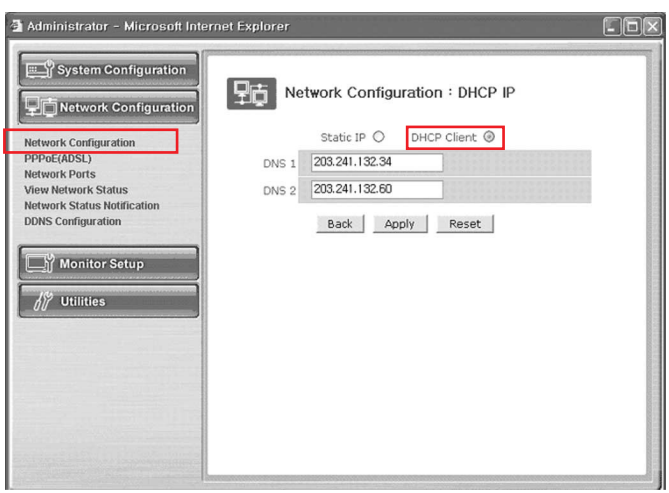
1-1. Network Configuration : Static IP / DHCP Client



1) If the IP of the SMO-211QN/SMO-150QN Server is Static : Choose “Static IP”.

2) Type in the IP Address you want to assign to the SMO-211QN/SMO-150QN Server, NetMask, GateWay, DNS1, and DNS2 addresses.

1-2. Network Configuration : Static IP / DHCP Client



1) If the IP of the SMO-211QN/SMO-150QN Server is DHCP : Choose “DHCP Client”.

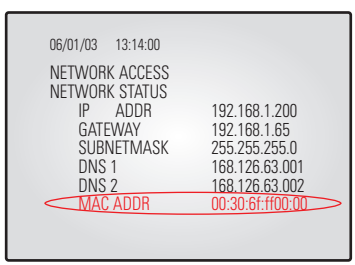
2) Type in the addresses of DNS 1 and DNS 2.

3) Click Apply button to apply the settings.
   If you click Reset button, the latest setting will be applied again.
   Click Back button if you don't want to apply the setting.
4) If the mac address of an user is XX:XX:XX:FF:00:00, an user who uses DDNS but does not know the IP can connect the Viewer by typing as follows in the URL.
   EX) http://sff0000.websamsung.net

   If the mac address of an user is XX:XX:XX:FF:00:01, connect to SFF0001.
   EX) http://sff0001.websamsung.net

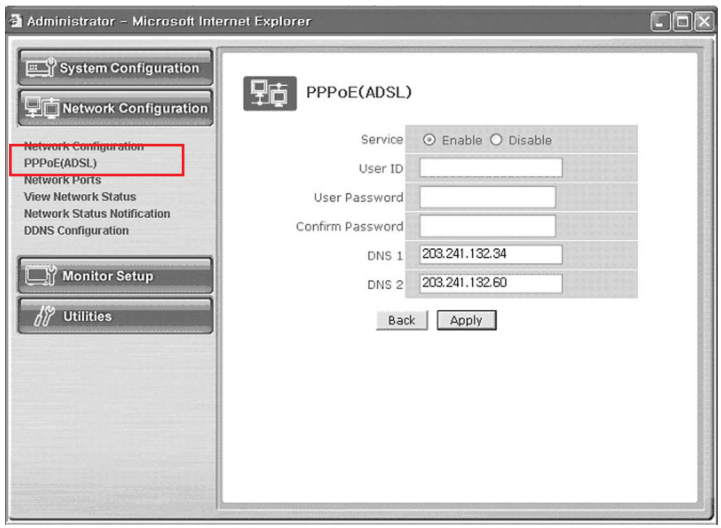
*** Note : MAC Address.**

Locate the MAC Address of the SMO-211QN/SMO-150QN (each SMO-211QN/SMO-150QN has its own unique MAC address). It can be checked in "3-7) NETWORK SETUP function and setting method (Eng-41)" of SETUP MENU.
It is the last 6 digits as shown below.



MENU -> SETUP MENU -> 7.NETWORK SETUP

2. PPPoE (DSL) for Eth0



1) Service : Decide if you want to try PPPoE Connection or not.

2) User ID : User's ID that is registered in the ISP.

3) User Password : User's password that is registered in the ISP.

4) Confirm Password : Confirm the password.

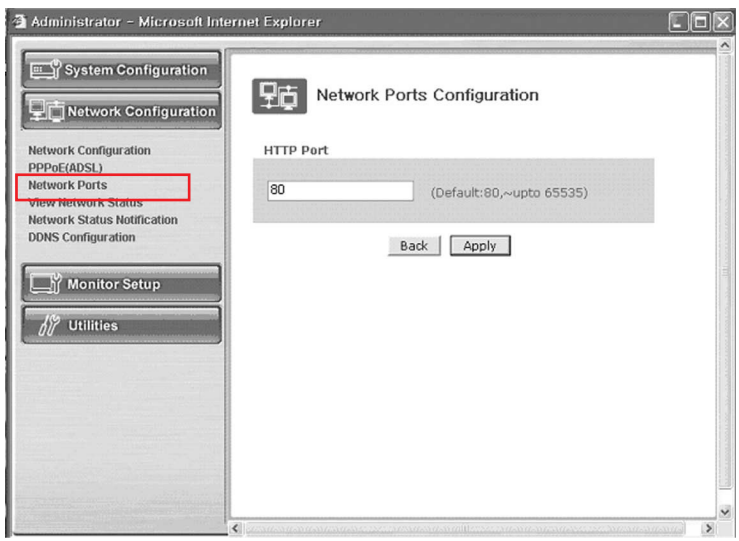
5) DNS (Domain Name Service) : Service to convert a Domain Name (ex. www.yahoo.com) into an IP address (ex. 216.109.127.28).
The SMO-211QN/SMO-150QN Server uses this service to join the FTP server or other webs by the Domain Name.
DSL service supports only PPPoE (Point to Point over the Ethernet).

DNS is a default value, so it does not need to change.

*** Note :** When connecting DSL, ID & PASSWORD are limited to 40 characters.

3. Network Ports Configuration

It sets the HTTP Port number to use when the SMO-211QN/SMO-150QN Server communicates with a Client PC.



The present SMO-211QN/SMO-150QN Server uses HTTP Port (80).

- HTTP Port

1) This is the port the Client PC uses to connect to the web page of the SMO-211QN/SMO-150QN Server. Depending on the environment of the network, its value may vary.
2) The fault values is 80 and can be assigned up to 65535 maximum.

* If you change the value of the HTTP Port, you should type in the new one with the address of the SMO-211QN/SMO-150QN Server in the address window of the web browser.
(Ex. If the IP address of the SMO-211QN/SMO-150QN Server is 192.168.1.100 and the HTTP Port : 8080, http://192.168.1.100:8080.)

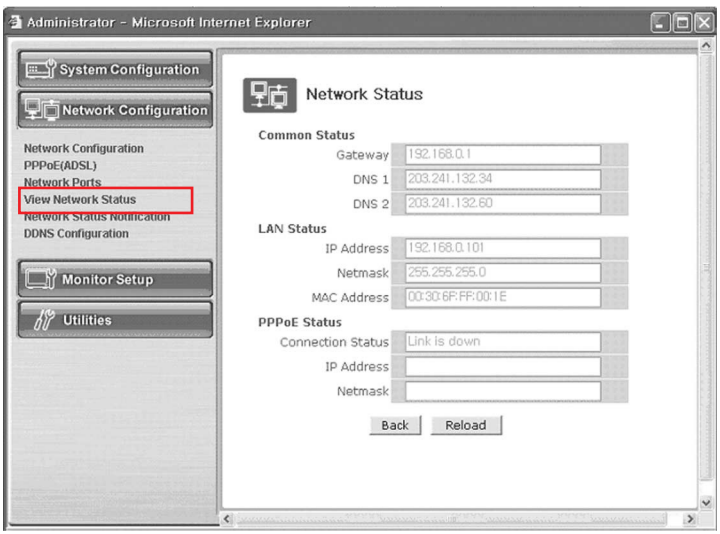
3) Click Apply button to apply the present setting.

CAUTION

Set the port to be used when connecting to SMO-211QN/SMO-150QN in Internet Explorer.
The port setting is used for various network configurations, for example when connecting to a network with firewalls.

4. View Network Status

This is a menu to see the general status of the network setting of the SMO-211QN/SMO-150QN Server.



- Menu Configuration

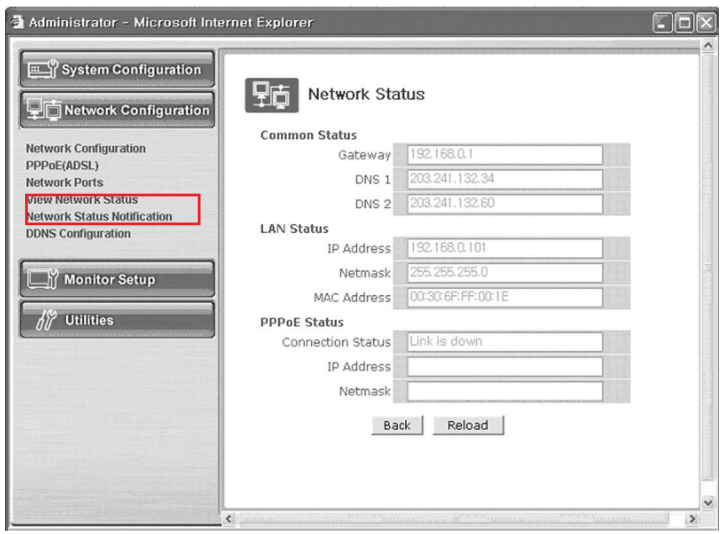
Common Status	To check the status of the Gateway, DNS 1, and DNS 2.
LAN Status	To check the status of the STATIC IP Address, Netmask, and MAC Address.
PPPoE Status	If the PPPoE service is connected, Link is up. At this time, the service IP and NETMASK can be also checked. If the PPPoE service is not in the connected, Link is down. The existing setting will be recalled if you press Reload button.

5. Network Status Notification

When there is a change in the setting status of the SMO-211QN/SMO-150QN Server, it sends e-mails to the people who want it. Set Mail Notification to “Enable” to send the network setting status of the SMO-211QN/SMO-150QN Server to the specified e-mail addresses in the cases as follows.

There are some conditions required for this setting.

1) DHCP Client has been set in “Network Configuration” menu and an IP has been assigned from the actual DHCP Server to make communication possible.
2) PPP Client has been set in “PPPoE” menu and communication has become possible through the connection with ISP or PPP Server.



- Menu Configuration

Mail Notification	E-mail forwarding or not. Enable : Forward E-mails. Disable : Doesn’t forward E-mails.
SMTP Server	Type in the address of the server that provides e-mail relay function.
Authentication Login	Shows if the ISP has an authentication for the use of SMTP.
User ID	ID for Authentication Login
Password	Password for Authentication Login
Sender(Email Address)	Type in the addresses of the sender.
Recipient’s Email Address	Type in the addresses of the recipients. (3 addresses maximum.)

Network Status Notify Configuration

click “Network Status Notify” in the Network Configuration group.

Choose to use the Mail Notification function or not. Choose “Enable” if you want to notify the network status of the SMO-211QN/SMO-150QN Server to people who through e-mails.

Type the address of the SMTP Server.

*** SMTP Server plays a part as a relay that receives the mail of the user and delivers it to the receiver.**

Set “Authentication Login” to enable and type in the ID and password assigned from the SMTP server.

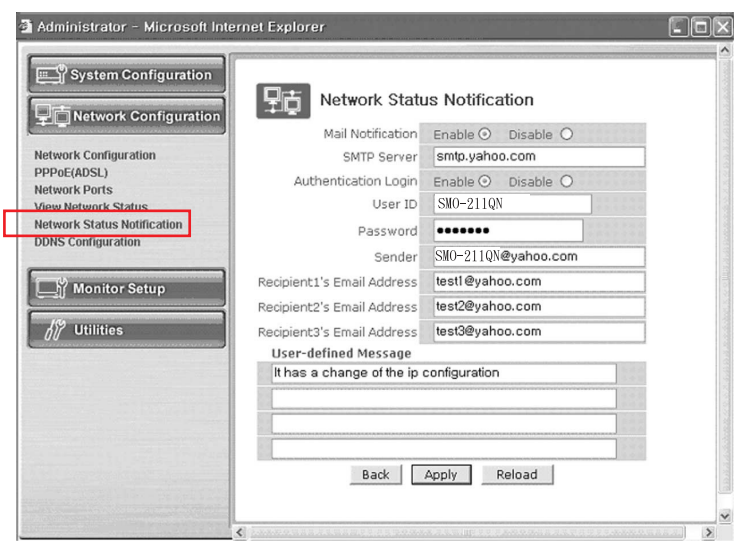
Type the e-mail address of the person who receives the E-mail. Maximum 3 people can receive the mail.

Type the message you want to add in “User Defined Message”.

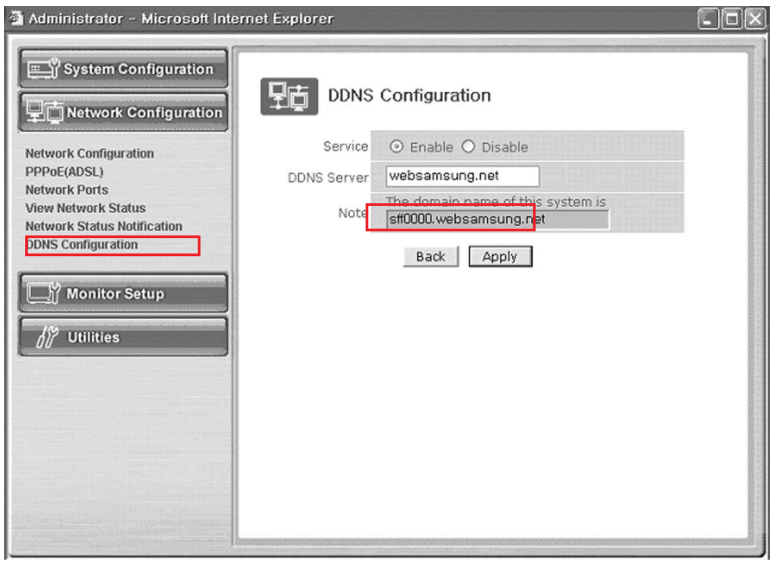
After completing setting, click Apply button.

If you click the reset button, it will return to the latest setting.

EX) When user who has an e-mail address (SMO-211QN@yahoo.com) and password(123456) in YAHOO sets “Alarm Notification” in order to send a mail to test1@yahoo.com...



6. DDNS Configuration



- Menu Configuration

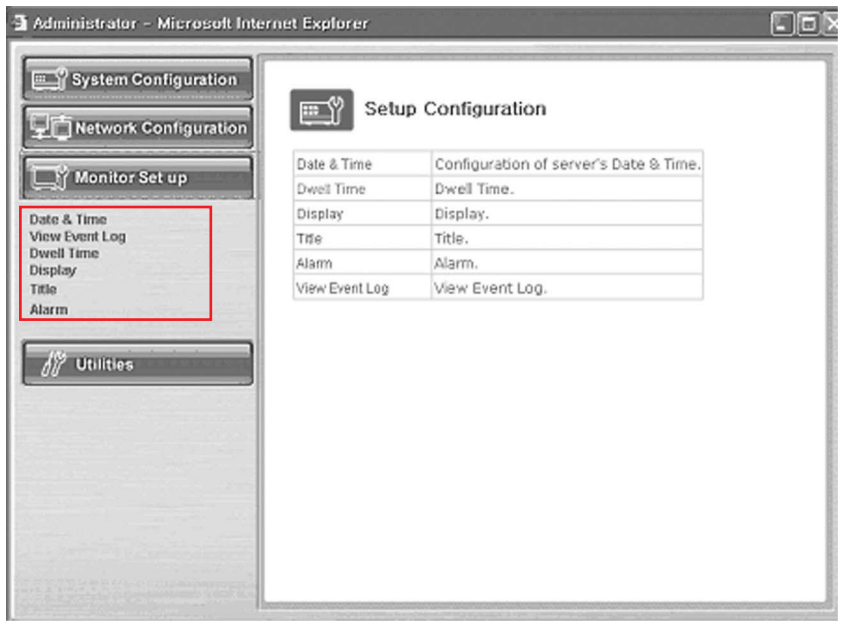
Server	Select Enable or Disable
DDNS Server	Websamsung.net
Note	The domain name of this system is sff0000.websamsung.net

CAUTION

In case of a configuration using DHCP, as the connection to SMO-211QN/SMO-150QN is made using domain names (EX : http://sff0000.websamsung.net) that are automatically registered in Samsung's DDNS server, IP address, Subnet Mask and Gateway that are in the network tab of Admin Mode are not necessarily to be inputted.

The proper domain names of SMO-211QN/SMO-150QN are automatically registered to the Samsung DDNS server.

3-8-4) Monitor Set up



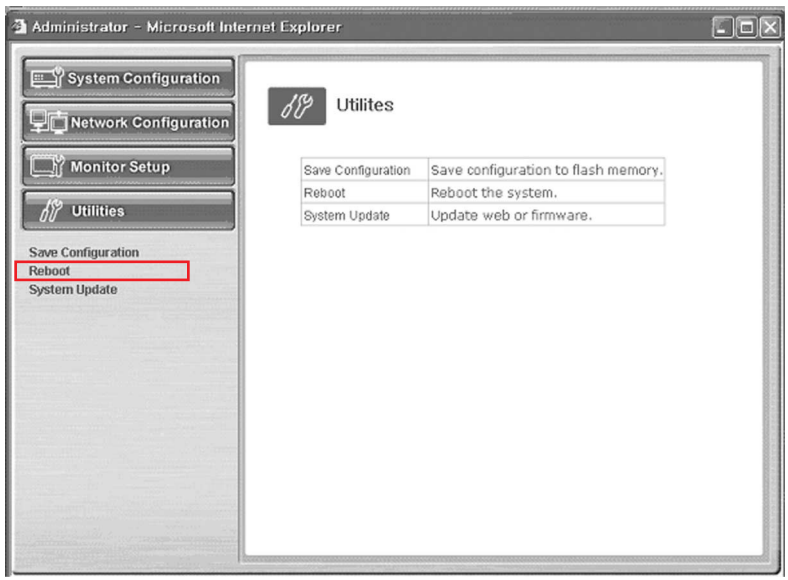
- Menu Configuration

Please refer to CHAPTER3 of the user's manual.

Date & Time	Set the display data format and current time.
View Event Log	Display the time and data of camera event and type of event.
Dwell Time	Displays each picture for pre-set time and automatically Switches it to the next picture in SEQUENTIAL DISPLAY MODE.
Display	Allows users to select the color andset theborder ON/OFF in the QUAD DISPLAY
Title	Set the title of each camera as desired.
Alarm	Allows users to set the ALARM MODE for each camera.

3-8-5) Utilities

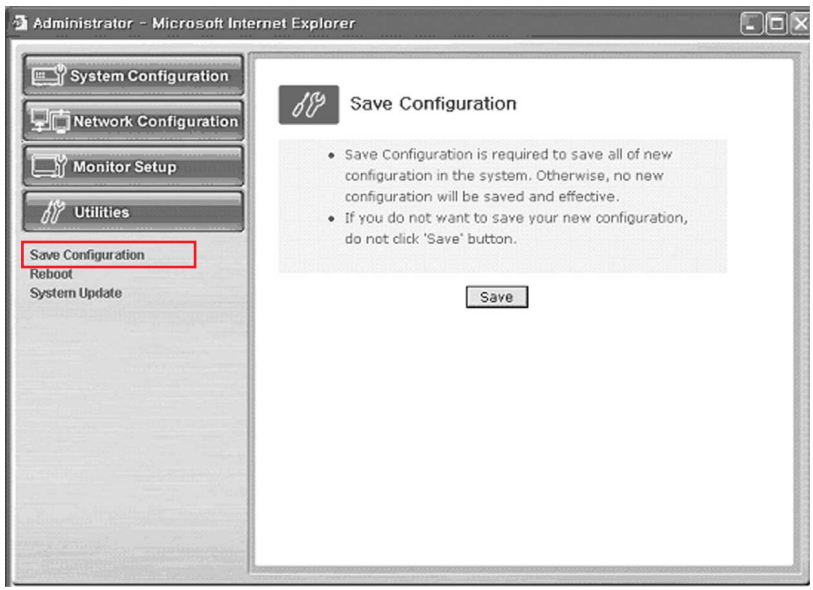
This menu is for the flash memory's update, rebooting, restoring to the basics, and system upgrade.



- Menu Configuration

Save Configuration	Save Configuration is required to save all new configuration in the system.
Reboot	System reboot is strongly recommended to apply all new configurations properly to the SMO-211QN/ SMO-150QN system
System Update	System Update

1. Save Configuration

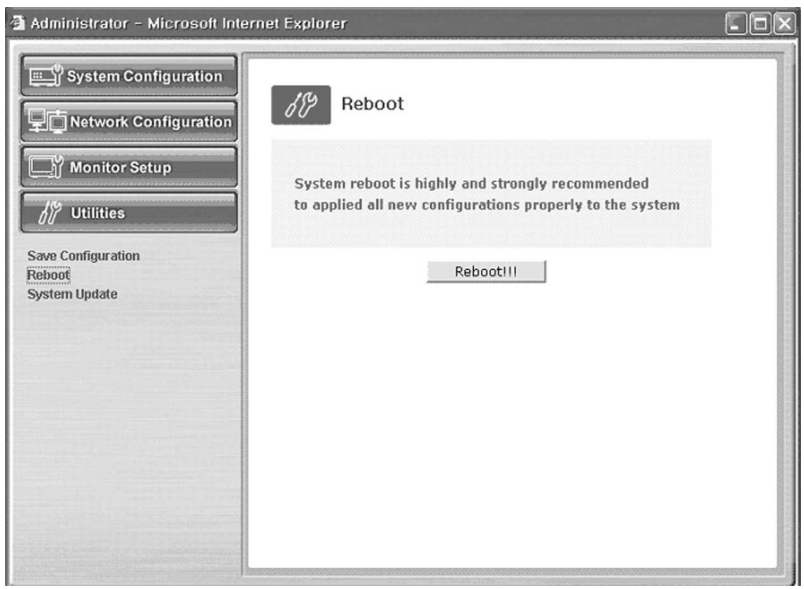


This menu is to save all of the present setting in the Flash Memory.

If you changed any of the settings for the SMO-211QN/SMO-150QN, it is recommended that you save it in the Flash Memory in this menu.

2. Reboot

This menu is for the rebooting of the system. It is better to reboot the system if you change the setting and update the flash.



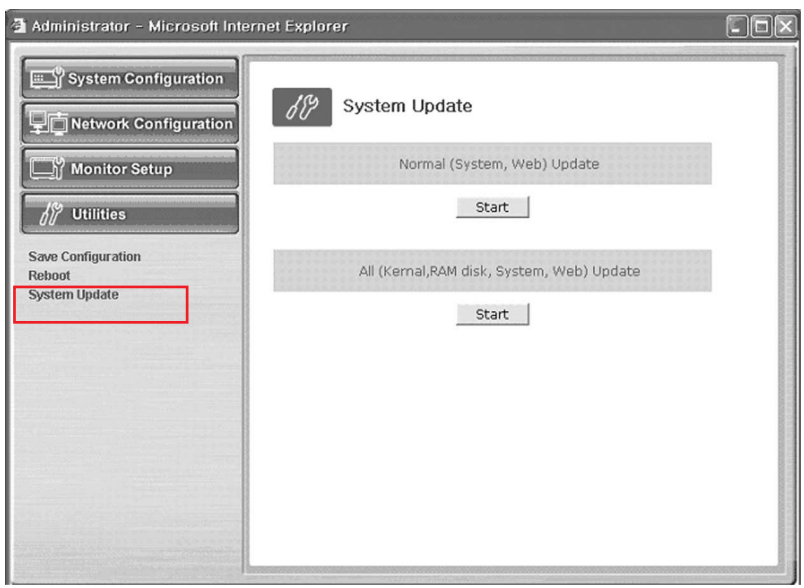
1. Click “Reboot” in the utilities group.
2. Click “Reboot!!!”.

4. System Update

This menu is to update the inner programs and data of the SMO-211QN/SMO-150QN Server. They are recorded in the Flash Memory and composed of 4 parts called Kernel Image, Ram disk Image, System Image, and Web Image respectively.

Each image file should be stored in the user's PC for update.

Depending on the range you want to update, press the start button properly.



Normal (System and Web) Update	Update only the System Web.
All (Kernel, RAM disk, System, Web) Update	Update all 4 images of Kernel, RAM Disk, System, and Web.

4-1. Normal (System and Web) Update

When you click the start button located in the bottom of Normal (System and Web) Update, a window will appear to ask if you want to update.

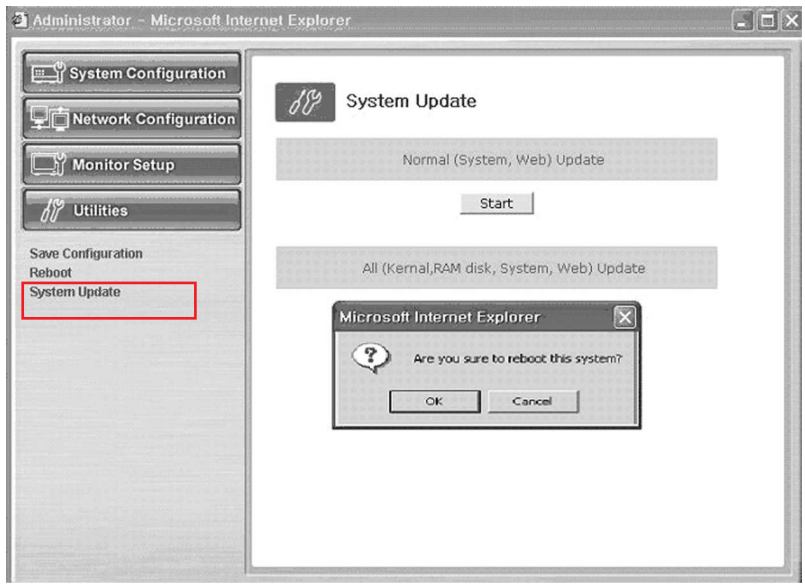
Click "Cancel" to stop updating. Click "OK" to proceed updating.

Other processes are same as the process of "All Update". (Excluding the update of Kernel and RAM disk)

After completing the update, click the reboot button to reboot the system.

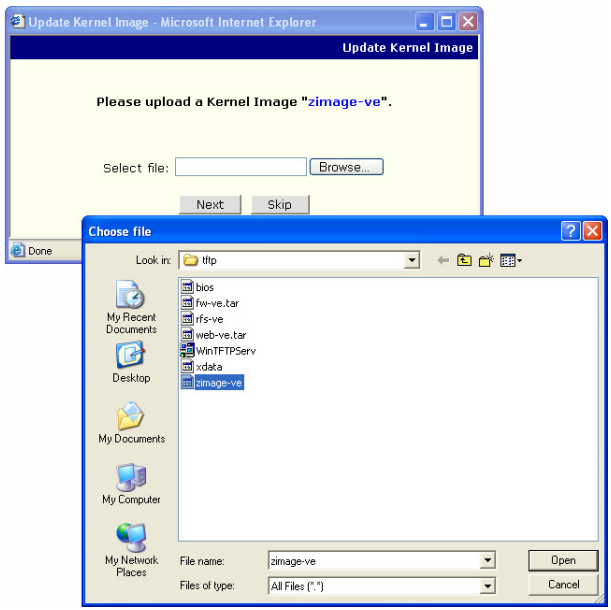
3-2. All (kernel, RAM disk, System, Web) Update

When you click the start button located, a window will appear to ask if you want to update.



Click “Cancel” to stop updating.

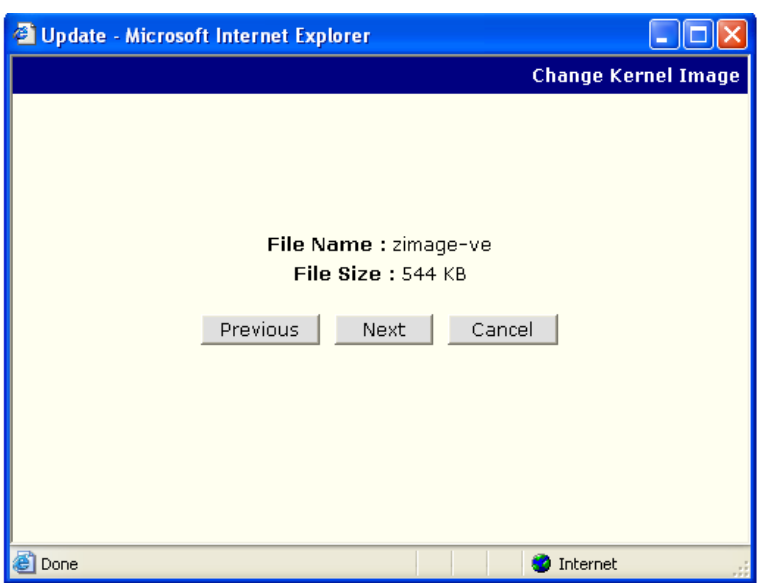
1. “OK” to proceed updating.
2. A pop-up window will appear. Choose “Zimage-ve” in the browser.



3. Click “Next” button to move to the next stage.

   Click “Skip” button to move to the next stage without Kernel Image’s update.

   Click “Next” button and a window will appear to check the name and size of the file.



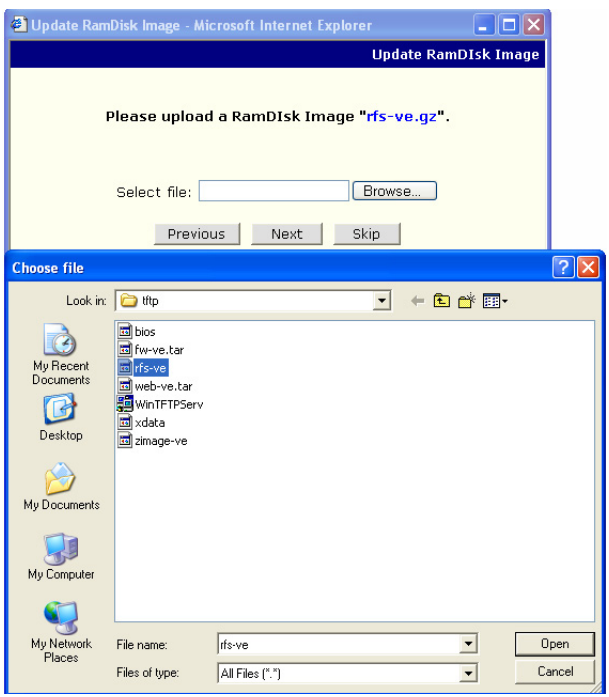
Click Previous button to go back to the previous stage.

Click the Next button to execute update of the program and move to the next stage.

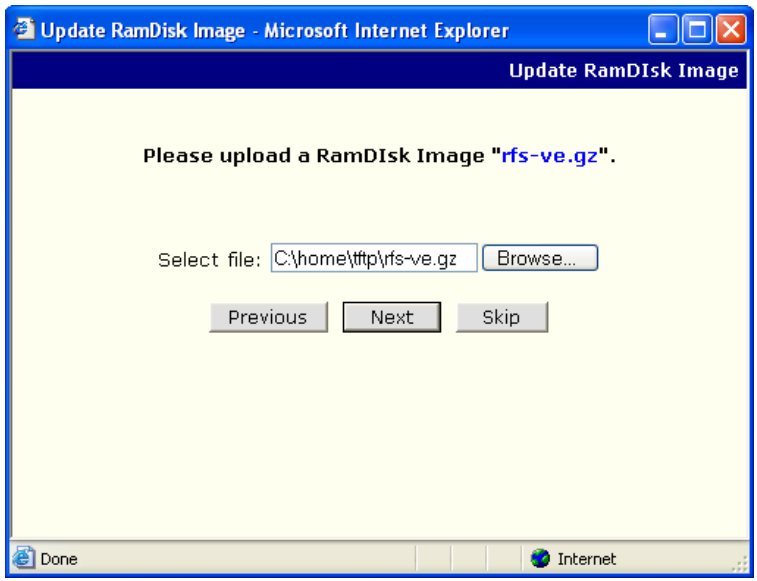
Click the Cancel button to stop the update process.

4. In the next stage, a pop-up window will appear for the file searching for the RAM Disk Update.

   Choose “rfs-ve.gz” in the browser.



5. Click “Next” button to move to the next stage.



Click “Skip” button to move to the next stage without Kernel Image’s update.

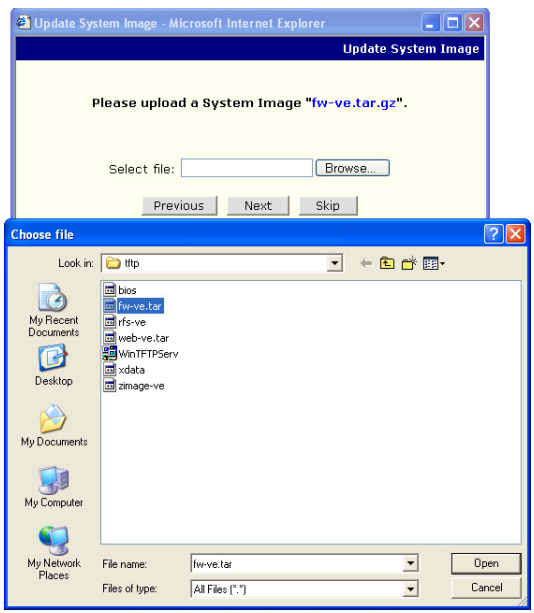
Click “Next” button and a window will appear to check the name and size of the file.

Click “Previous” button to go back to the previous stage.

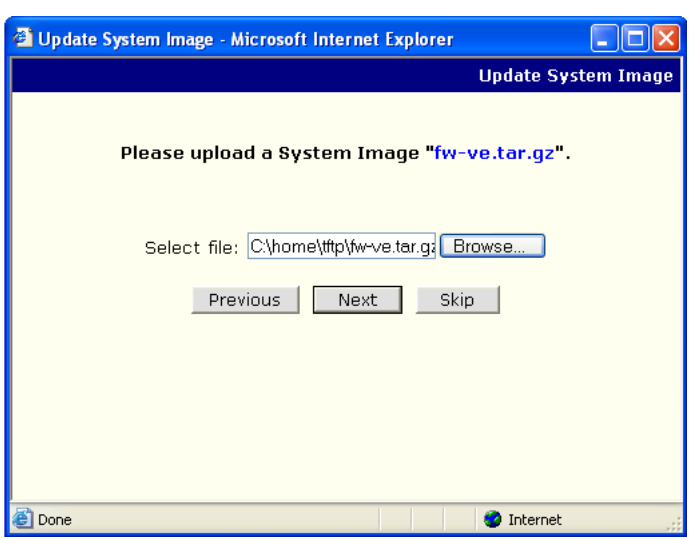
Click the Next button to execute update of the program and move to the next stage.

Click the Cancel button to stop the update process.

6. In the next stage, a pop-up window will appear for the file searching process for the System Image Update.
   Choose “fw_2pq-ve.tar.gz” in the browser.



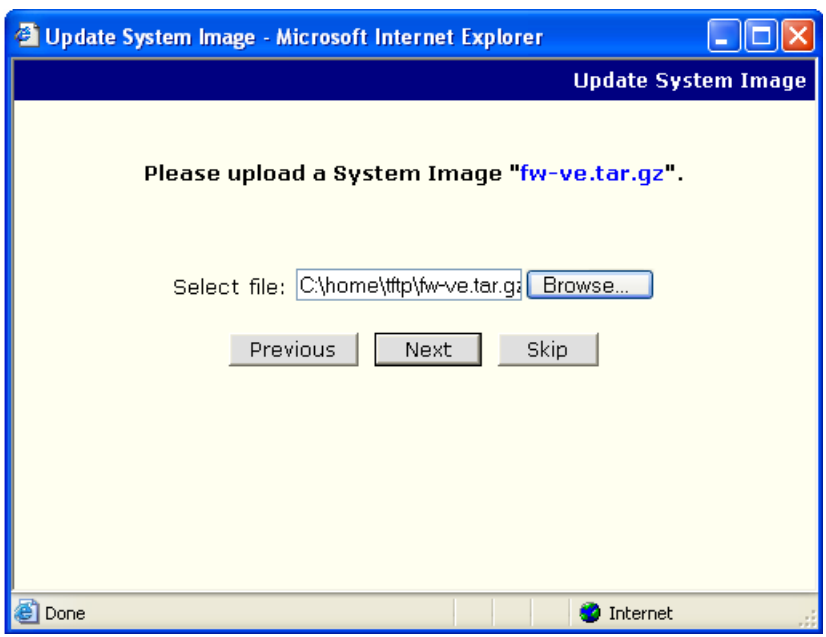
7. Click “Next” button to move to the next stage.



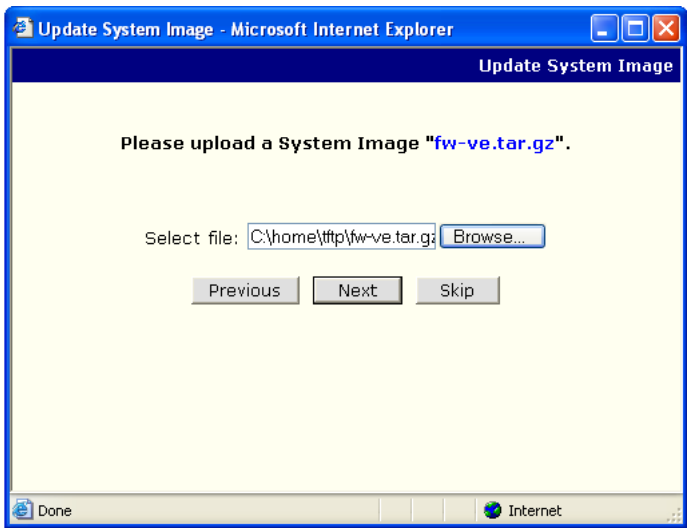
Click “Skip” button to move to the next stage without kernel Image’s update.
Click “Next” button and a window will appear to check the name and size of the file.
Click “Previous” button to go back to the previous stage.
Click the Next button to execute update of the program and move to the next stage.

Click the Cancel button to stop the update process.

8. In the next stage, a pop-up window will appear for the file searching process for the System Image Update. Choose “web-ve.tar.gz” in the browse.



9. Click “Next” button to move to the next stage.



Click “Skip button to move to the next stage without Kernel Image’s update.

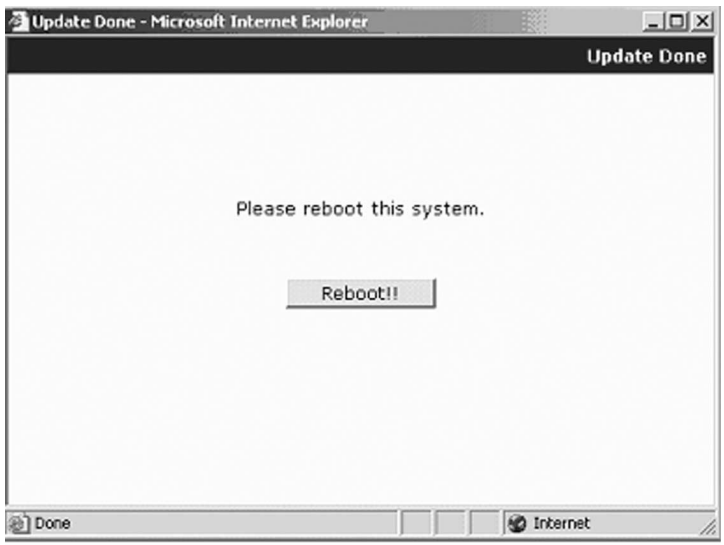
Click “Next” button and a window will appear to check the name and size of the file.

Click “Previous” button to go back to the previous stage.

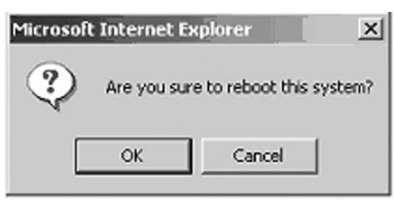
Click the Next button to execute update of the program and move to the next stage.

Click the Cancel button to stop the update process.

10. A window will appear for rebooting after completing all the update processes.



Click the reboot button and press the confirmation button to reboot the system.



11. Close your web browser and wait for about a minute before you log in again

Files related to the update of SMO-211QN/SMO-150QN

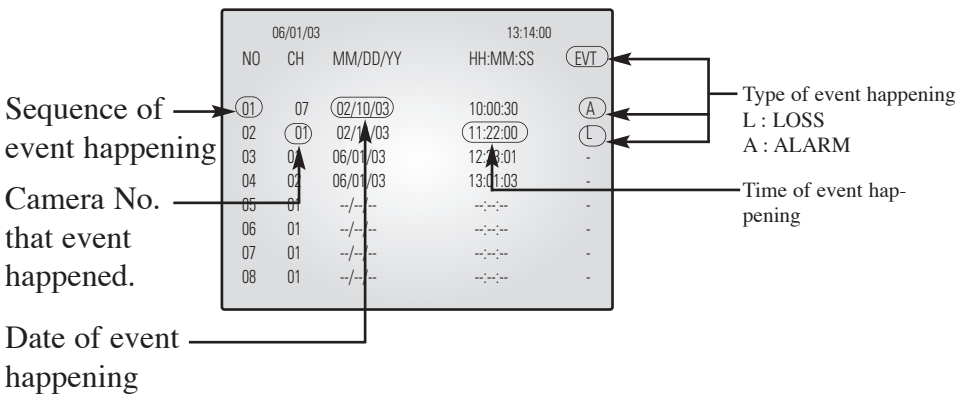
Kernel Image	zimage-ve
RAM Disk Image	rfs-ve.gz
System Image	fw_2pq-ve.tar.gz
Web page Image	web-ve.tar.gz

The window shown above may not appear if there is a pop-up blocker installed in the user's PC. If you update system on a web page, you should disable the pop-up blocker to proceed.

*** Note :** Software updates and user manuals can be downloaded at
http://www.securitysamsung.com
Refer to Appendix A (page 106).

3-9) VIEW EVENT LOG MENU function and setting method

- **Function:** Displays the time and date of camera event and type of event.
- **Setting method:**Move to #7. VIEW EVENT LOG MENU by using ◀**ENTER**▶ SWITCH at SETUP MENU, then press the ENTER SWITCH to display the OSD as shown in the figure below. (The figure shows the initial setting status.)



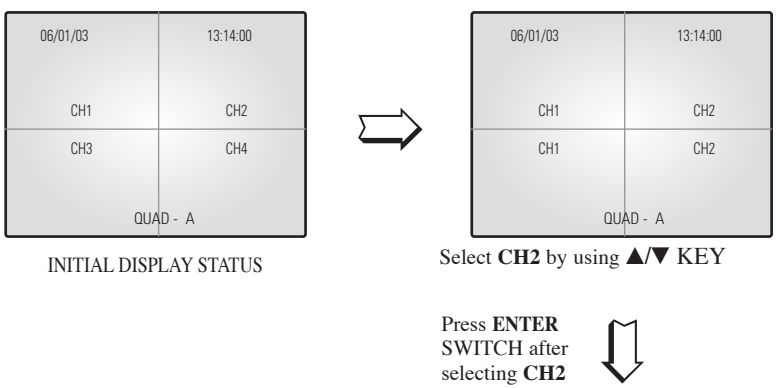
The event which occurred most recently is recorded with first priority, then users can move to the next page by using ◀**ENTER**▶ SWITCH. A total of 64 events can be listed.

*** Note :** If you press the FREEZE key and the SEQUENCE key at the same time, all event lists will be erased.

Chapter 4: DISPLAY MODE setting method

4-1) SINGLE SCREEN DISPLAY

Initial display mode of monitor is QUAD - A. If you want to see the camera image at full mode, select a target camera by using ▲/▼ KEY. After that, press the ENTER SWITCH and selected camera image will be displayed at full screen. If you press the ▲/▼ KEY SINGLE DISPLAY MODE at this time, they can see another camera image at full screen. For example, when you want to see CH1 at FULL MODE after SINGLE -displaying CH2 at QUAD - A, please follow the instructions below.



INITIAL DISPLAY STATUS

Select **CH2** by using ▲/▼ KEY

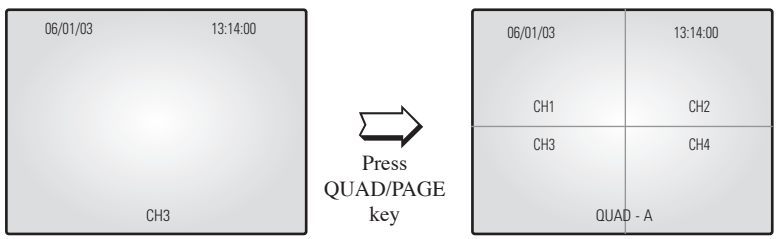
FULL SCREEN DISPLAY of **CH1**

FULL SCREEN DISPLAY of **CH2**

4-2) QUAD MODE DISPLAY

Users can switch SINGLE DISPLAY MODE and SEQUENTIAL DISPLAY MODE to QUAD DISPLAY MODE, or QUAD - A (QUAD - B) to QUAD - B (QUAD - A), or PIP MODE to QUAD MODE, press the QUAD/PAGE KEY.

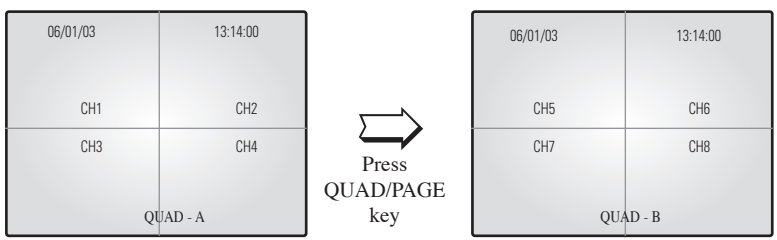
* QUAD MODE display from SINGLE MODE or SEQUENCE MODE,



CH3 DISPLAY

QUAD MODE DISPLAY
of QUAD - A

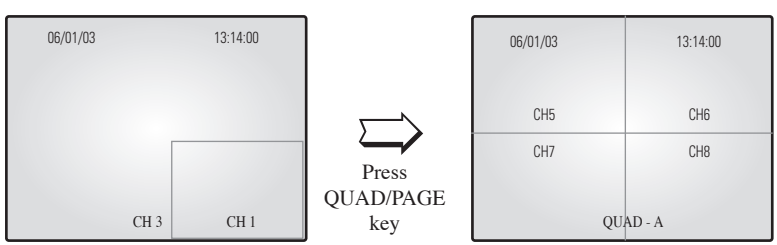
* QUAD B(QUAD A) display from QUAD A(QUAD B),



QUAD MODE DISPLAY
of QUAD - A

QUAD MODE DISPLAY of
QUAD - B

* QUAD - B(QUAD - A) display from PIP MODE,



PIP MODE DISPLAY

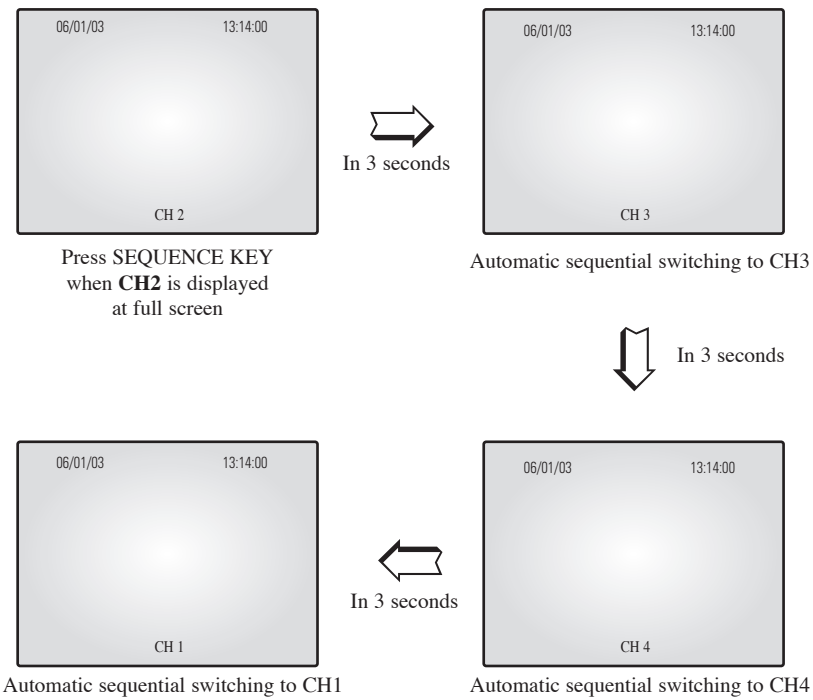
QUAD MODE DISPLAY of
QUAD - A

4-3) AUTO SEQUENTIAL DISPLAY MODE

Pressing on the SEQUENCE KEY on the front allows screen to automatically switch to SINGLE MODE full screen or QUAD MODE. (‘no-signal’ channels will be skipped while single screen is auto-switching.)

If the DWELL TIME SETTING of SETUP MENU is set to 3 seconds and the SEQUENCE KEY is pressed at this time, the operation will be carried out as follows.

* SINGLE MODE SEQUENCE DISPLAY



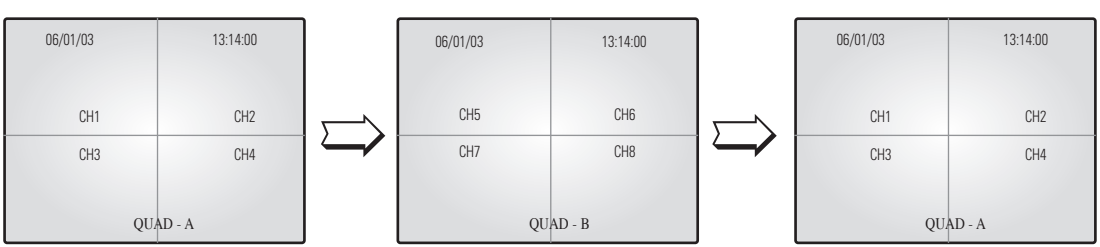
Press SEQUENCE KEY when **CH2** is displayed at full screen

Automatic sequential switching to CH3

Automatic sequential switching to CH1

Automatic sequential switching to CH4

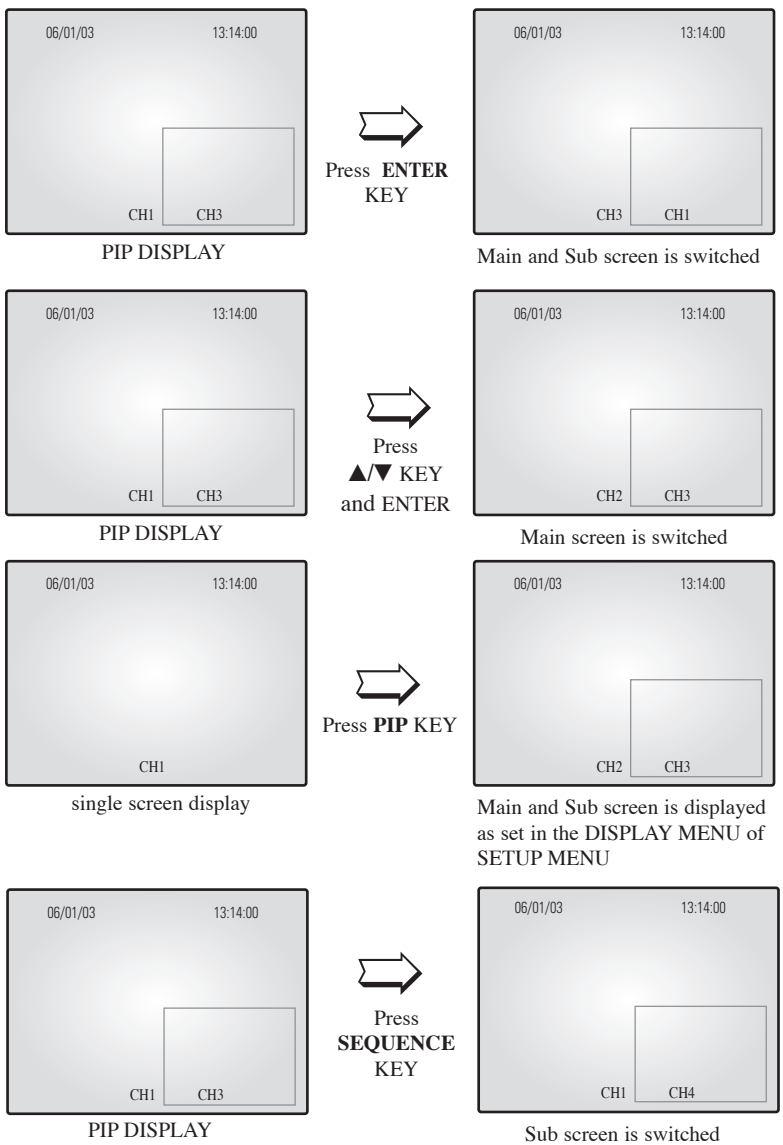
* QUAD MODE SEQUENCE DISPLAY



4-4) PIP MODE DISPLAY

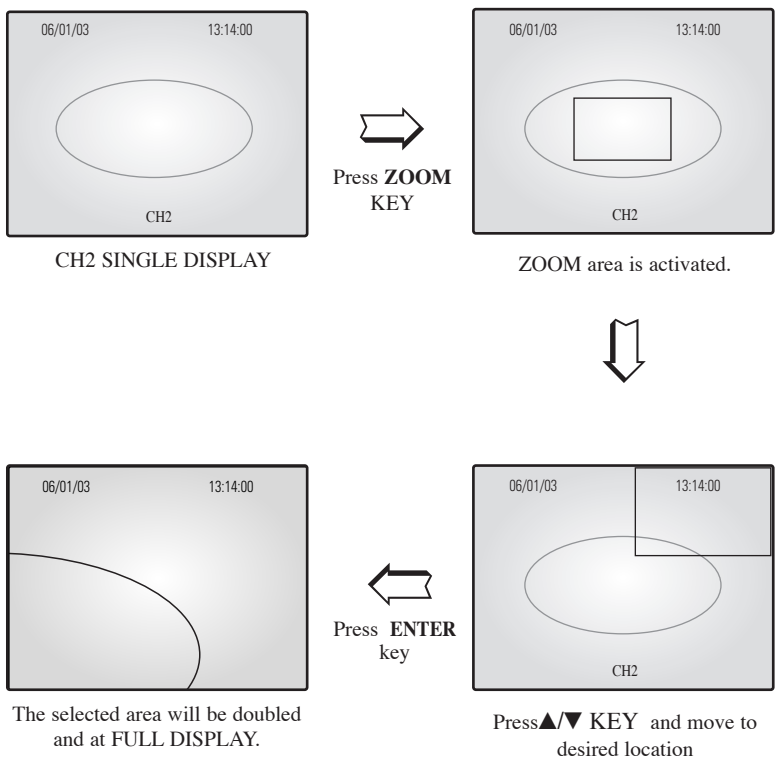
Can be used to see PIP screen in Single screen mode.

If you press the **SEQUENCE** on PIP screen ,the Sub- screen will change. If you press the ▲/▼ KEY,the main screen can be transferred to another channel. Sub-screen location can be selected in DISPLAY MENU in SETUP MENU.



4-5) ZOOM MODE DISPLAY

When users want to see a zoomed image of a specific area of the display, press the ZOOM KEY in the front to display zoom selection area. Select zoom target area by using ▲/▼ KEY, and press the ENTER SWITCH, then, the selected area will be displayed at full single mode with zoomed area doubled.In the zoom function operation in SINGLE DISPLAY MODE (CH2), the operation will be carried out as shown in figure below. (You can select nine Zoom areas on the screen in SINGLE DISPLAY MODE are nine.)



Chapter 5: Product features **SOC-C120 : Standard Camera**

Model Name	SOC-C120
Broadcasting System	NTSC STANDARD
Imaging Device	1/4 ”SUPER HAD IT CCD
Effective Pixels S	510(H) x 492(V)
Synchronization	Internal
Resolution	H :330 TV Lines, V: 350 TV Lines
Signal Output	VBS 1.0Vp-p(75ohms composite)
S/N Ratio	≤ 48 dB
Minimum Scene Illumination	2lux(F2.0, 50 IRE)
Gamma Correction	0.45
Lens	Focal Length (f) : 3.8 mm, F Number = 2.0
Auto Exposure	Electronic Shutter Iris
Audio	-40dB Condenser Microphone Inclusion
I/O Connectors	Modular jack
Operating Temperature	+32°F ~ +104°F
Power Source	DC 12V
Power Consumption	Approx. 2W
Dimensions	2.25(W) x 1.86(H) x 3.95(L) inch
Weight	0.29 lbs

SOC-D120 : Dome Camera

Model Name	SOC-D120
Broadcasting System	NTSC STANDARD
Imaging Device	1/4 ”SUPER HAD IT CCD
Effective Pixels	510(H) x 492(V)
Synchronization	Internal
Resolution	H :330 TV Lines, V: 350 TV Lines
Signal Output	VBS 1.0Vp-p(75ohms composite)
S/N Ratio	≤ 48 dB
Minimum Scene Illumination	2lux(F2.0, 50 IRE)
Gamma Correction	0.45
Lens	Focal Length (f) : 3.8 mm , F Number = 2.0
Auto Exposure	Electronic Shutter lris
I/O Connectors	Modular jack
Operating Temperature	+32°F~ +104°F
Power Source	DC 12V
Power Consumption	Approx. 2W
Dimensions	3.94(ø)X2.56(H) inch
Weight	0.18 lbs

SOC-P120 : PIR Camera

Model Name	SOC-P120
Broadcast System	NTSC Standard
Imaging Device	1/4" Color IT CCD
Effective Pixels	510(H) X 492(V)
Synchronization	Internal
Resolution	H :330 TV Lines, V: 350 TV Lines
Signal Output	VBS 1.0 Vp-p (75 ohms composite)
S/N Ratio	≤ 48dB
Minimum Scene Illumination	2 lux (F2.0, 50IRE)
Gamma Correction	0.45
Lens	Focal Length :3.8 mm, F Number = 2.0
Auto Exposure	Electronic Shutter Iris
PIR Sensor	Mounting Height : 1.5m to 3m(5ft to 10ft) Warm-Up Period : Max. 50 seconds Spectral Response : 5 to 14 um Sensitivity : 4860(V/W) Detectivity : 1.5 X 10^8Cm $Hz^{1/2}$/W
Audio	Sensor : Off/On Alarm LED : Off/On (0.3~2 sec) Alarm Output : NC (350V/130mA) -40 dB Condenser Microphone Inclusion
I/O Connectors	Modular Jack (RJ-11)
Operating Temperature	+32°F ~ +104°F
Power Source	DC 12V (Camera & Sensor from Monitor)
Power Consumption	DC 12V (External Power Supplier) Approx. 2W
Dimensions	2.74(W) x 4.53(H) x 2.13(L) inch
Weight	About 0.33 lbs

OBSERVATION MONITOR

Video Input	• CAMERA 8 Input: 1.0Vp-p(CVBS), 75Ω (vertical) • VCR 1 Input (to Video Out of VCR) : 1.0Vp-p, 75Ω (vertical)
Video Output	• VCR 1 Output: 1.0 Vp-p, 75Ω (vertical), S-Jack Type, CVBS
Audio Input	• CAMERA 8 Input: • VCR 1 Input (to Audio Out of VCR) : S-Jack Type
Audio Output	• CAMERA 8 Input: • VCR 1 Output: S-Jack Type
Alarm/Motion Features: Connected to Alarm Box/Camera	A/O (HOT, COLD) : Relay Active A/R (Alarm Reset) : Open Collector "L" Level, Pulse Width =150ms or above Alarm Hold Time : Select 5 sec, 15 sec, 30 sec, 1 min, 3 min, 5 min, 10 min, 20 min, 30 min..
Sequence	Select between 01 sec to 30 sec.
Event List	(max) 64 case
Display mode	Single mode, Quad A mode, Quad B mode, PIP, Sequence Freeze, Zoom(X2)
Horizontal Resolution	350 TV Lines or more (Live Mode Full Screen)
Operation Temperature	+32°F ~ +104°F
CRT	21"/15" FLAT MONITOR
Dimension (W x D x H (inch))	21" - (MONITOR)19.3 x 17.5 x 18.8, (PACKING)24.4 x 28.1 x 23.4 15" - (MONITOR)14.4 x 13.4 x 15.4, (PACKING)18.6 x 23.1 x 19
Weight	21" - (MONITOR) 58.21 lbs, (PACKING) 76.51 lbs 15" - (MONITOR) 31.53 lbs, (PACKING) 44.54 lbs
Power consumption	110W
Video system	NTSC VIDEO SYSTEM
Operation Humidity Range	20% ~ 85%
AC Input Ranges	AC 120V, 60Hz
Audio Output[watt]	1.5W

NETWORK

Hardware	• 32bit Embedded Processor • Flash Memory : 8Mbytes • SDRAM : 32Mbytes
Network Protocols	• HTTP, TCP/IP, FTP, Telnet, ARP, PPP, DHCP, PPPoE
Image Compression & Quality	• Compression Algorithm : Real-time fmpi • Rate : 30 fps for each channel • Quality : 3 levels
Video Format	• NTSC
Video Resolution	• NTSC, 352x240, 704x240
Performance	• Max 30 Frame Per Second (NTSC)
Management	• Configuration by serial port or web browser • Remote Flash memory update
LAN Interface	• 10/100 Base-T Fast Ethernet
Security Function	• Password protected server access
PC Specification	• CPU_Pentium IV 1GHz higher • RAM_256MB or higher • Video Memory_32MB or higher • Resolution_1024x768 or higher • OS_Windows 2000/XP Service Pack • installation recommended • Web Brower_Internet Explorer 5.5 or later

The system performance may decrease if the computer has lower specification than the recommendations, is not installed with the latest service pack, or has an illegally installed operation system(OS).

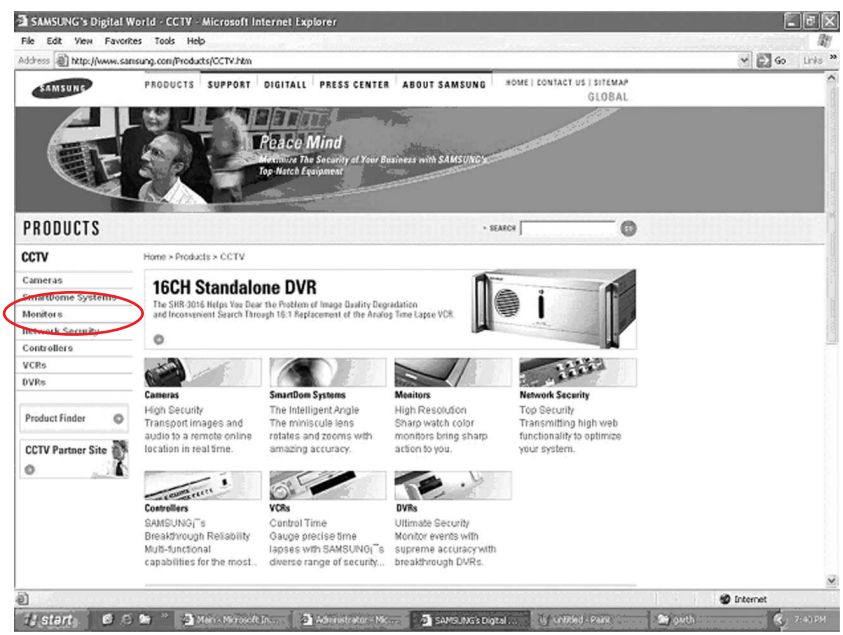
A unique MAC address is registered to this device.
If the administrator setting and monitoring may not be available due to conflicting unregistered MAC addresses, please contact a local service center or head office.

SMO-211QN/SMO-150QN enables users to see up to four viewers on one computer.
The system may malfunction if over five viewers with low performance computers are connected to the device.

Appendix A) Software up data

The initial screen of Samsung Electronics' web site is as follows.

1. http://www.securitysamsung.com
   http://www.samsung.com/Products/CCTV.htm
2. Network Security in Homepage
3. Download the following items for SMO-211QN/SMO-150QN.
   ① Owner's manual - SMO-211QN/SMO-150QN Owner's manual
   ② UP-GRADE S/W - kernel, RAM disk, System, Web



Appendix B) IP Router Setup Guide

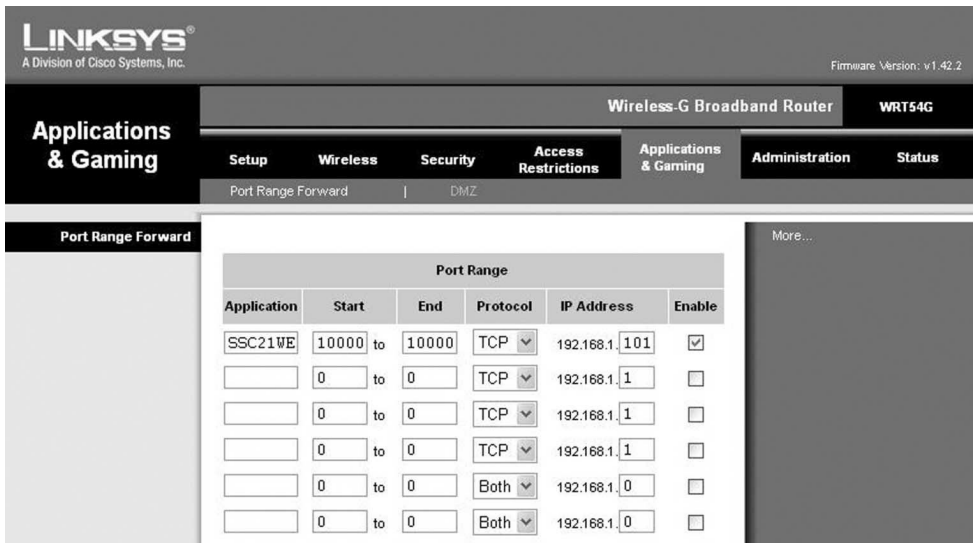
List of Routers compatible with SMO-211QN/SMO-150QN.
Refer to Router User's Manual for the detailed router setup.

Step-by-Step Examples :
Linksys (Model : WRT54G)
Netgear (Model : WGR614v4)
D-Link (Model : DI-624+)
SMC (Model : 7004VBR)

CAUTION
Other routers may be incompatible with SMO-211QN/SMO-150QN.

Step-by-Step Setup Example of IP Router

Linksys model WRT54G



1. Click the “Application and Gaming” tab.
2. Click “Port Range Forward”.
3. Port forwarding

   Row #1 :

   ① Application : Set this to “HTTP”

   ② Start and End : Set both to “From 10000 to 65535”

   ③ Protocol : Select “TCP”

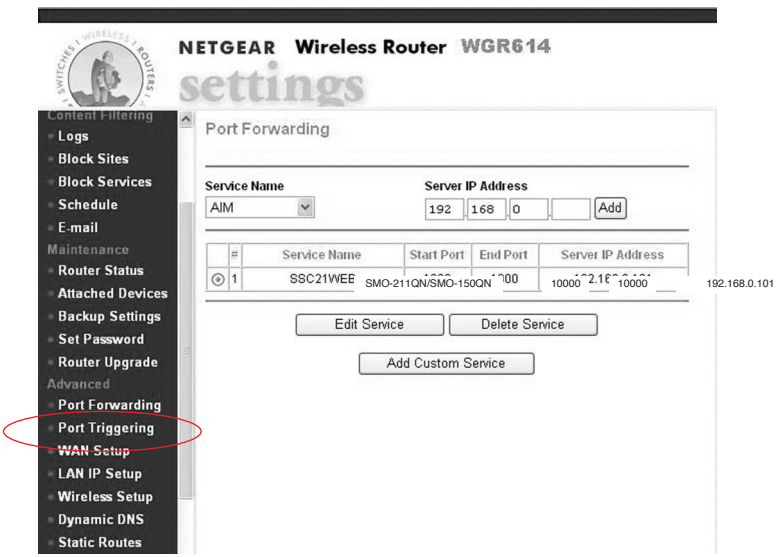
   ④ IP Address : SETUP MENU -> 7. NETWORK SETUP -> Check IP from network status to apply it identically to Private IP after DHCP setup. (Eng- 41 Setup)

   * It is not in use by any other device connected to the IP Router including the Local PC.

   ⑤ Enable : Leave this “checked”
4. Click “Save Settings”
5. Close browser window.

Step-by-Step Setup Example of IP Router

Netgear model WGR614v4



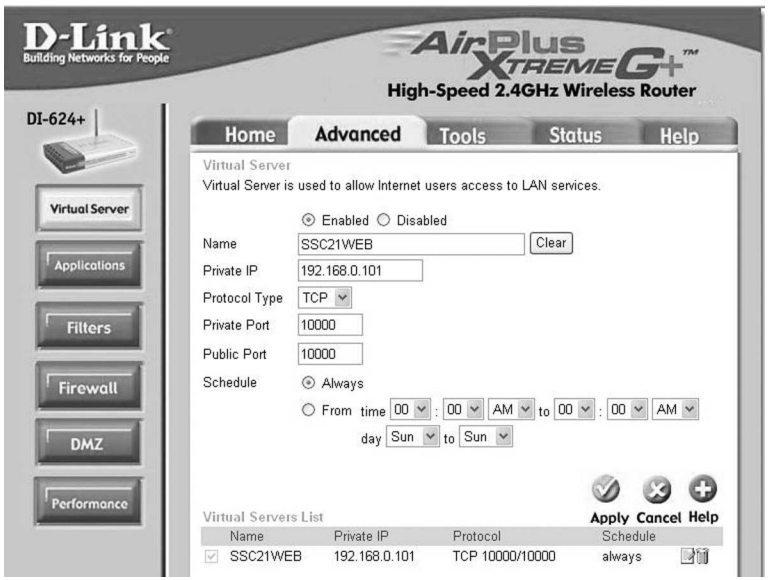
1. Click the “Router Status”
2. Click the WAN and LAN Port information.
   Write down the WAN Port IP Subnet Mask number and the LAN Port IP Address number.
   You will need it later when setting up the SMO-211QN/SMO-150QN.
3. Click “Advanced” and “Port Forwarding”
4. Port forwarding (HTTP)
   - ① Click “Add Custom Service”
   - ② Service Name : Set this to “HTTP”
   - ③ Start Port and End Port : Set both to “From 10000 to 65535”
   - ④ Server IP Address : SETUP MENU -> 7. NETWORK SETUP -> Check IP from network status to apply it identically to Private IP after DHCP setup. (Eng- 41 Setup)

   * It is not in use by any other device connected to the IP Router including the Local PC.

   - ⑤ Make sure “Enable” is checked.
   - ⑥ Click “Add”
5. Close browser window.

Step-by-Step Setup Example of IP Router

D-Link model DI-624+



1. Select “Virtual Server” and “Advanced”

   You need to create Virtual Servers (Port Forwarding) for HTTP, TCP and Upgrade separately.

2. Virtual Server (Port Forwarding) for HTTP

   ① Enabled : Leave this “checked”

   ② Name : Set this to “HTTP”

   ③ Private IP : SETUP MENU -> 7. NETWORK SETUP -> Check IP from network status to apply it identically to Private IP after DHCP setup. (Eng- 41 Setup)

   * That is not in use by any other device connected to the IP Router including the Local PC.

   ④ Protocol Type : Select “TCP”

   ⑤ Private Port and Public Port : Set both to “From 10000 to 65535”

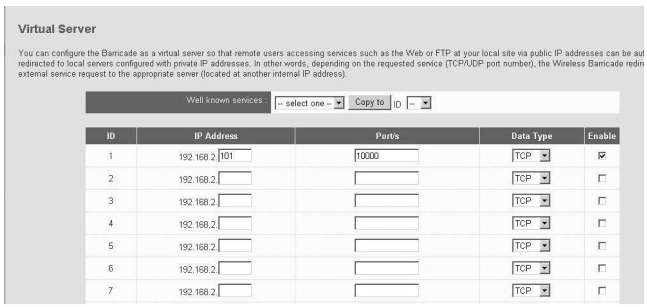
   ⑥ Schedule : Select “Always”

   ⑦ Click “Apply”

3. Close browser window.

Step-by-Step Setup Example of IP Router

SMC model 7004VBR



1. Select “NAT” and “Virtual Server”

   You need to create Virtual Servers (Port Forwarding) for HTTP

2. Virtual Server (Port Forwarding) for HTTP : use the first empty ID row.

   ① IP Address : SETUP MENU -> 7. NETWORK SETUP -> Check IP from network status to apply it identically to Private IP after DHCP setup. (Eng- 41 Setup)

   * That is not in use by any other device connected to the Router including the Local PC.

   ② Private Port and Public Port : Set both to “From 10000 to 65535”

   ③ Data Type : Select “TCP”

   ④ Enable : Leave this “checked”

3. Click “APPLY”

4. Close browser window.

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