



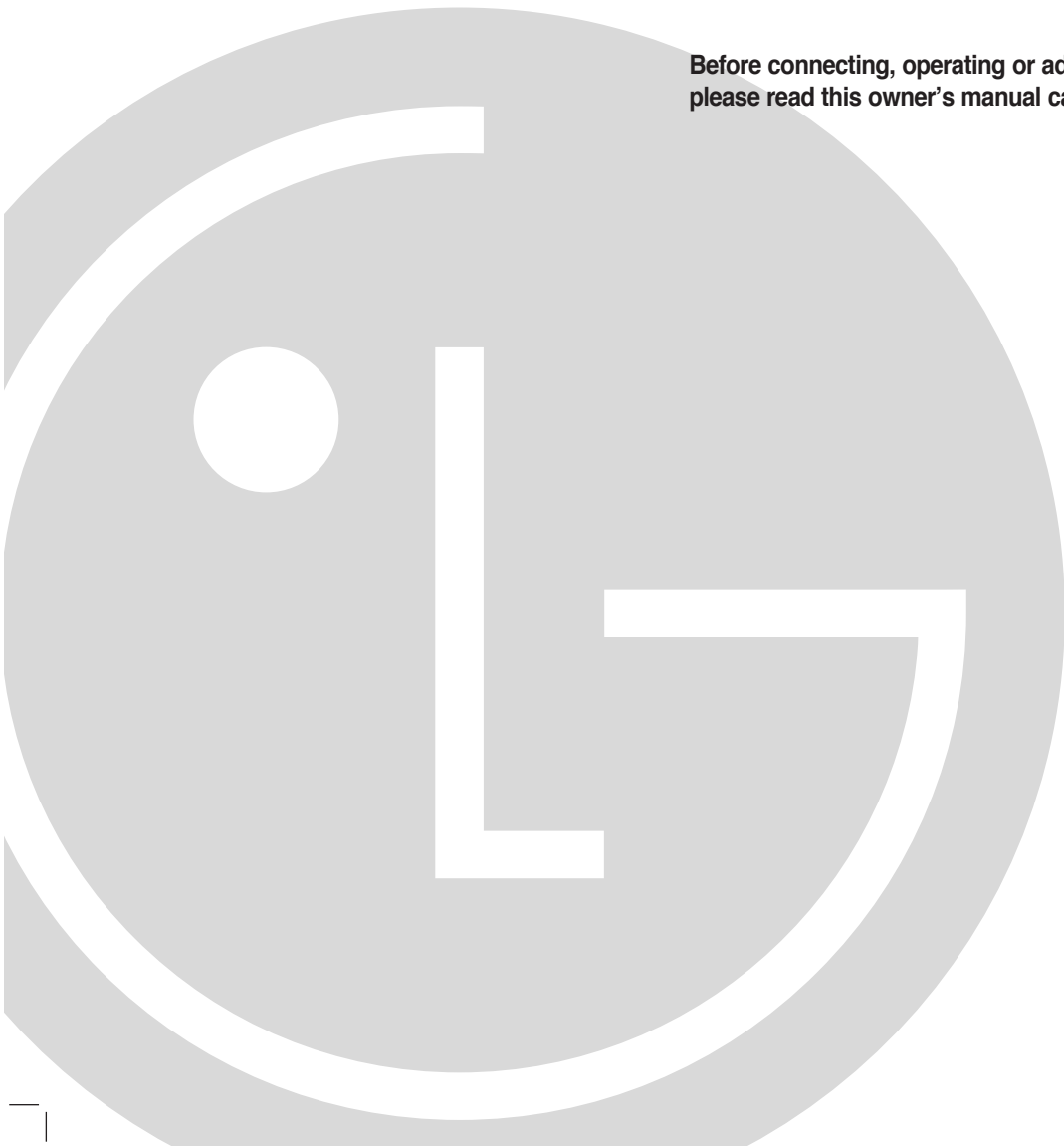
Home Monitoring System

Owner's Manual

MODEL: LSP-W1000

- LSP-W1000NS
- LSP-W1000PS
- LSP-W1000AC

Before connecting, operating or adjusting this product, please read this owner's manual carefully and completely.





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.



This 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 product.

FCC WARNING: This equipment may generate or use radio frequency energy. Changes or modifications to this equipment may cause harmful interference unless the modifications are expressly approved in the instruction manual. The user could lose the authority to operate this equipment if an unauthorized change or modification is made.

REGULATORY INFORMATION: FCC Part 15

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

- Reorient or relocate the receiving antenna.
- Increase the separation between the product and receiver.
- Connect the product into an outlet on a circuit different from that to which the receiver is connected.

- Consult the dealer or an experienced radio/TV technician for help.

- Labelling information:

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.

- RF Exposure Statement:

The antenna(s) used for this transmitter must be installed to provide a separation distance of at least 20 cm from all persons and must not be collocated or operating in conjunction with any antenna or transmitter other than those contained in this device.

FCC Regulations Part 15 Declaration of Conformity (DoC)

LG Corporation declares that the equipment described in this document is within the requirements of the Code of Federal Regulations listed below:

Title 47 Part 15, Subpart B, Class B for a digital device.

This declaration is based upon the compliance of the data transceiver to the above standards. LG has determined that the models listed have been shown to comply with the applicable technical standards if no unauthorized change is made in the equipment and if the equipment is properly maintained and operated.

Apparatus shall not be exposed to dripping or splashing and no objects filled with liquids, such as vases, shall be placed on the apparatus.

Disposal of your old appliance



1. When this crossed-out wheeled bin symbol is attached to a product it means the product is covered by the European Directive 2002/96/EC.
2. All electrical and electronic products should be disposed of separately from the municipal waste stream via designated collection facilities appointed by the government or the local authorities.
3. The correct disposal of your old appliance will help prevent potential negative consequences for the environment and human health.
4. For more detailed information about disposal of your old appliance, please contact your city office, waste disposal service or the shop where you purchased the product.

Canada Notice

This Class B digital apparatus complies with Canadian ICES-003, Issue 2, and RSS-210, Issue 4 (Dec. 2000).

"To prevent radio interference to the licensed service, this device is intended to be operated indoors and away from windows to provide maximum shielding. Equipment (or its transmit antenna) that is installed outdoors is subject to licensing."

Cet appareil numérique de la classe B est conforme à la norme NMB-003, No. 2, et CNR-210, No. 4 (Dec. 2000).

« Pour empêcher que cet appareil cause du brouillage au service faisant l'objet d'une licence, il doit être utilisé à l'intérieur et devrait être placé loin des fenêtres afin de fournir un écran de blindage maximal. Si le matériel (ou son antenne d'émission) est installé à l'extérieur, il doit faire l'objet d'une licence. »

Operation is subject to the following two conditions: this device may not cause interference, and (2) this device must accept any interference, including interference that may cause undesired operation of the device.

The term "IC:" before the certification/registration number only signifies that the Industry Canada technical specifications were met.

This device has been designed to operate with an antenna having a maximum gain of 2 dB. Antenna having a higher gain is strictly prohibited per regulations of Industry Canada. The required antenna impedance is 50 ohms.

To reduce potential radio interference to other users, the antenna type and its gain should be so chosen that the equivalent isotropically radiated power (EIRP) is not more than that required for successful communication.

European Union



Translated Statements of Compliance

[English]

This product follows the provisions of the European Directive 1999/5/EC.

[Danish]

Dette produkt er i overensstemmelse med det europæiske direktiv 1999/5/EC

[Dutch]

Dit product is in navolging van de bepalingen van Europees Directief 1999/5/EC.

[Finnish]

Tämä tuote noudattaa EU-direktiivin 1999/5/EC määräyksiä.

[French]

Ce produit est conforme aux exigences de la Directive Européenne 1999/5/EC

[German]

Dieses Produkt entspricht den Bestimmungen der Europäischen Richtlinie 1999/5/EC

[Greek]

Το προϊόν αυτό πληροί τις προβλέψεις της Ευρωπαϊκής Οδηγίας 1999/5/EC.

[Icelandic]

Þessi vara stendst reglugerð Evrópska Efnahags Bandalagsins númer 1999/5/EC

[Italian]

Questo prodotto è conforme alla Direttiva Europea 1999/5/EC.

[Norwegian]

Dette produktet er i henhold til bestemmelsene i det europeiske direktivet 1999/5/EC.

[Portuguese]

Este produto cumpre com as normas da Diretiva Europeia 1999/5/EC.

[Spanish]

Este producto cumple con las normas del Directivo Europeo 1999/5/EC.

[Swedish]

Denna produkt har tillverkats i enlighet med EG-direktiv 1999/5/EC.

France Notice

For Metropolitan departments 2.400 -2.4835 GHz for indoor use.

Some areas of France have a restricted frequency band.

There are few possibilities for outdoor use:

On private property or on the private property of public persons, use is subject to a preliminary authorization procedure by the Ministry of Defense, with maximum authorized power of 100 mW in the 2446.5–2483.5 MHz band.

Use outdoors on public property is not permitted.

In the departments listed below, for the entire 2.4 GHz band:

Maximum authorized power indoors is 100 mW

Maximum authorized power outdoors is 10 mW

There is partial restriction of the 2.4 GHz band for outdoor/indoor in part of the 2.4 GHz band,

Departments in which the use of the 2400–2483.5

MHz band is permitted with an EIRP of less than 100 mW indoors and less than 10 mW outdoors:

Italia Notice

Outdoor use is prohibited.

EMC Notice

Products bearing the CE marking comply with the R&TTE Directive (1999/5/EC), EMC Directive (2004/108/EC) issued by the Commission of the European Community. Compliance with these directives implies conformity to the following European Norms (in parentheses are the equivalent international standards and regulations):

- EN 55022 (CISPR 22)—Electromagnetic Interference
- EN55024 (IEC61000-4-2, 3, 4, 5, 6, 8, 11)—Electromagnetic Immunity
- EN61000-3-2 (IEC61000-3-2)—Power Line Harmonics
- EN61000-3-3 (IEC61000-3-3)—Power Line Flicker
- EN 300 328-2—Technical requirements for radio equipment
- EN 301 489-1, -17—General EMC requirements for radio equipment

IMPORTANT SAFETY INSTRUCTIONS

CAUTION: PLEASE READ AND OBSERVE ALL WARNINGS AND INSTRUCTIONS IN THIS OWNER'S MANUAL. AND THOSE MARKED ON THE PRODUCT. RETAIN THIS BOOKLET FOR FUTURE REFERENCE.

This product has been designed and manufactured to assure personal safety. Improper use can result in electric shock or fire hazard. The safeguards incorporated in this product will protect you if you observe the following procedures for installation, use, and servicing.

This product does not contain any parts that can be repaired by the user.

DO NOT REMOVE THE CABINET COVER, OR YOU MAY BE EXPOSED TO DANGEROUS VOLTAGE. REFER SERVICING TO QUALIFIED SERVICE PERSONNEL ONLY.

- 1. Read these instructions.** - All these safety and operating instructions should be read before the product is operated.
- 2. Keep these instructions.** - The safety, operating and use instructions should be retained for future reference.
- 3. Heed all warnings.** - All warnings on the product and in the operating instructions should be adhered to.
- 4. Follow all instructions.** - All operating and use instructions should be followed.
- 5. Do not use this apparatus near water.** - For example: near a bath tub, wash bowl, kitchen sink, laundry tub, in a wet basement; or near a swimming pool; and other areas located near water.
- 6. Clean only with dry cloth.** - Unplug this product from the wall outlet before cleaning. Do not use liquid cleaners.
- 7. Do not block any ventilation openings. Install in accordance with the manufacturer's instructions.** - Slots and openings in the cabinet are provided for ventilation and to ensure reliable operation of the product and to protect it from over-heating. The openings should never be blocked by placing the product on a bed, sofa, rug or other similar surface. This product should not be placed in a built-in installation such as a bookcase or rack unless proper ventilation is provided or the manufacturer's instructions have been adhered to.
- 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 attachments/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.**
- 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 when the apparatus has been damaged in any way, such as power-supply cord or plug is damaged, liquid has been spilled or objects have fallen into the apparatus, the apparatus has been exposed to rain or moisture, does not operate normally, or has been dropped.**



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Introduction

Features

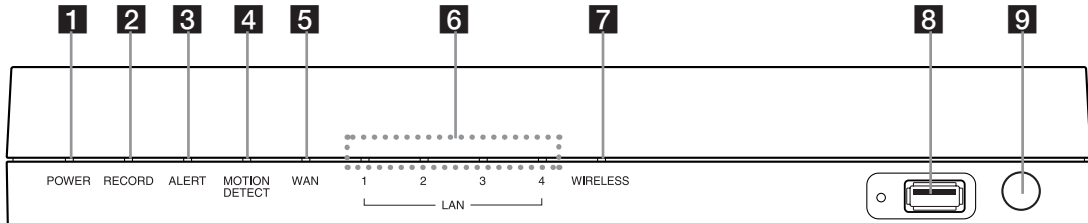
- Simply connect the LSP-W1000 to your network cameras (sold separately) and to your TV or monitor, and you'll be able to view camera images conveniently on your TV or monitor. The LG Wireless cameras can be connected as well, that is you won't have to worry about running cables from the LSP-W1000 to each camera.
- Use the Pan/Tilt function, aim the camera wherever you want by simply pressing the navigator keys on the included remote control.
- The camera's built-in sensor detects motion by people or animals moving within the sensor's range. When the sensor detects motion, the LSP-W1000 can alert you by sounding its built-in buzzer.
- Simply insert an optional USB memory stick or USB type external HDD device and you'll be able to record movies of your camera images. Later you can use the remote control to play back movies on your TV or monitor that were recorded by the LSP-W1000.
- Simply press the camera's PRIVACY button to hide the camera's lens when you don't want camera images to be seen.
- Up to 4 cameras can be connected, allowing you to keep an eye on every room with just 1 LSP-W1000.
- When multiple cameras are registered, you can view up to 4 camera images at once and switch to monitor a specific camera if necessary.

Notice Regarding Wireless Communications

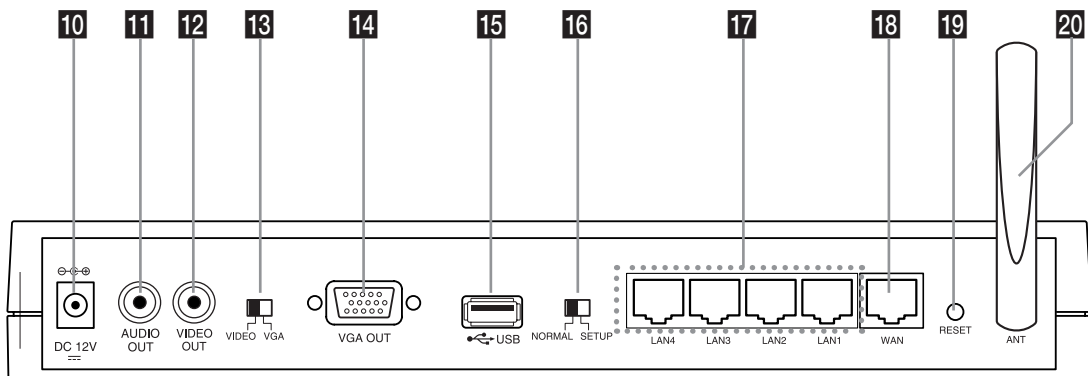
1. To avoid wireless communication interference and instability, do not use this product near the following devices.
 - Wireless transmitters (radio transmitters, cellular transmitters, etc.)
 - Wireless devices which operate at 2.4 GHz (security equipment, POS systems, cordless telephones, etc.)
 - Microwave ovens.
2. Wireless communication range and quality may be affected if the following types of objects are located between or near this product and other wireless devices connected to this product. In the event that images do not refresh at a regular rate, become cut off, etc., relocate this product, the other wireless devices, or the obstacles (if possible) for more stable wireless communications.
 - Metal door shutters
 - Walls made of concrete, stone, or brick, or walls which contain aluminiumbased heat insulation
 - Multiple walls
 - Fire doors and glass
 - Steel racks or shelves
3. Place cameras and this product at least 2 m (6.5 ft.) away from radios. Do not connect cameras and this product to a power outlet used by a radio.
4. In case of low picture quality when you use the wireless mode.
 - Change the channel of wireless option in the setup menu.
 - Set the wireless band option to 11G.
 - If you use a Notebook computer via the NetStation, it may cause the bad effect to the camera performance.

Netstation (Main unit)

Front panel



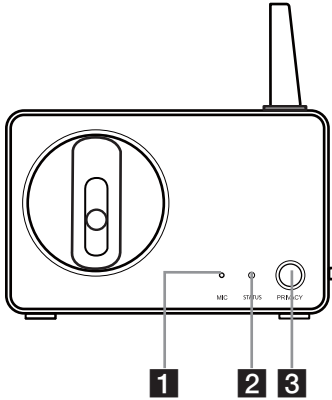
Rear panel



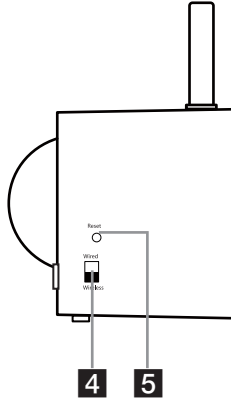
- | | |
|---|---|
| <p>1 POWER indicator
Lights when the unit is turned on.</p> <p>2 RECORD indicator
Lights when recording is in progress.</p> <p>3 ALERT indicator
Lights when the camera is disconnected or the system log will not be able to be saved.</p> <p>4 MOTION DETECT indicator
Blinks when a motion is detected.</p> <p>5 WAN indicator
Blinks when a network is connected.</p> <p>6 LAN (1-4) indicators
Fast blinking when the unit is connected to cameras with LAN cable.</p> <p>7 WIRELESS indicator
Fast blinking when the wireless camera is in progress.</p> <p>8 USB port
Connect an USB memory stick or USB type external HDD device for recording or playback.</p> <p>9 Remote Sensor
Point the remote control here.</p> <p>10 DC 12 V power input jack (Class 2 Only).</p> <p>11 AUDIO OUT
Connect the audio input signal of an external device.</p> | <p>12 VIDEO OUT
Connect to a monitor or display device.</p> <p>13 VIDEO/VGA select switch
Video or VGA output mode select switch.</p> <p>14 VGA OUT
Connect a VGA monitor.</p> <p>15 USB port
Connect an USB memory stick or USB type external HDD device for recording or playback.</p> <p>16 NORMAL/SETUP select switch
Mode select switch. Set the NORMAL mode to activate this unit. The SETUP mode is used only for service.</p> <p>17 LAN (1-4) ports
Connect the cameras with straight cable.</p> <p>18 WAN port
Connect the ethernet 10/100Mbps network cable for controlling this unit via a PC network.</p> <p>19 RESET button
Pushing the button resets the unit using a pointed object. If you need to factory reset, pushing the button for more 3 seconds and then the unit will be rebooted automatically.</p> <p>20 Wireless Antenna</p> |
|---|---|

Camera

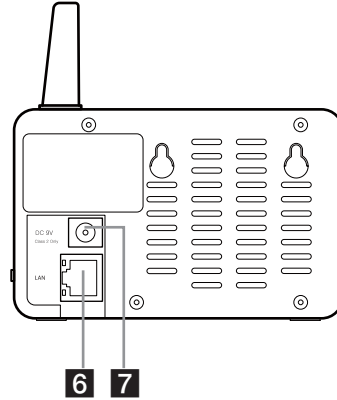
Front panel



Side panel

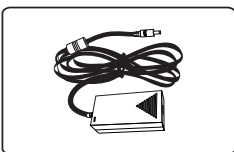


Rear panel

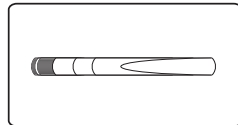


- 1 MIC**
The microphone is incorporated into the camera.
- 2 STATUS indicator**
Displays the camera status.
- 3 PRIVACY button**
Set the privacy mode, it allows you to make sure images from the camera cannot be seen.
- 4 Connection mode select switch**
Wired or Wireless mode select switch.
- 5 Reset button**
Resets camera.
- 6 LAN port**
Connects with LAN port of main unit by using the Straight Cable.
- 7 DC 12V power input jack (Class 2 Only)**

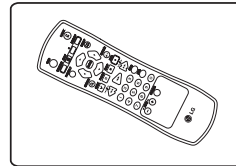
Accessories



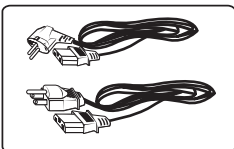
AC adaptor



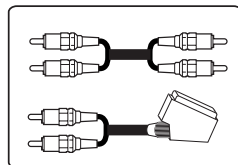
NetStation Wireless Antenna



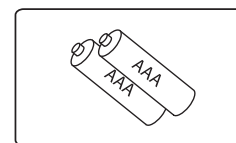
Remote Control



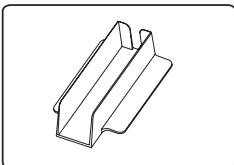
AC cord



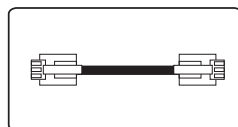
Audio/Video cable



AAA Type Battery



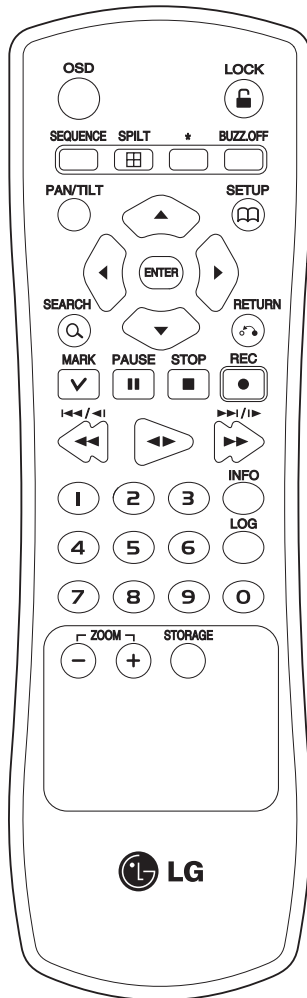
NetStation Stand



Lan Cable

Note: The accessories may be different depending on models.

Remote Control



OSD

Accesses or removes the On-screen Display.

LOCK

Displays the lock menu to change user type or disable system operation.

SEQUENCE

View all channels in sequence on the full screen mode.

SPLIT

Displays the screen mode to full or 4 screens.

BUZZ.OFF

Cancels alarm activation and returns the system to the condition before the alarm was activated.

PAN/TILT

Switches the unit to PAN/TILT mode to control the connected camera.

SETUP

Displays the setup menu or cancels operation of the setup menu.

Arrow Buttons (◀ ▶ ▲ ▼)

Selects or moves between the menu options.

ENTER

Confirms menu selections.

SEARCH

Displays the search menu.

RETURN

Returns to the previous menu or level.

MARK

Makes the mark point. Use this button to move the registered camera position.

PAUSE (||)

Pauses playback.

STOP(■)

Stops playback or recording.

REC (●)

Starts recording.

◀◀/◀||/▶▶

Searches the recorded images in reverse or skips the recorded images.

◀▶

Playback or reverse playback of recorded images.

▶▶/||/▶▶

Forward searches the recorded images or skips the recorded images.

Number Buttons (0,1-9)

Selects a channel directly or use for network settings.

INFO

Displays the system information window.

LOG

Displays the System Log List window.

ZOOM + / -

Zooms in/out on live images.

STORAGE

Displays the Target Media Space Information window.

*: This buttons are not available for this unit.

Remote Control Operation

Point the remote control at the remote sensor and press the buttons.

Cautions:

- Do not mix old and new batteries and never mix different types of batteries such as standard, alkaline, etc.
- Do not put the batteries in the place where young children can reach.

Remote Control Battery installation

Detach the battery cover on the rear of the remote control, and insert two batteries (size AAA) with ⊕ and ⊖ aligned correctly.

Hookup and Settings

Precautions

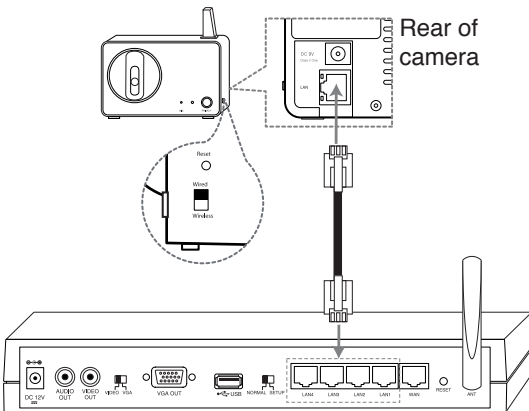
Be sure to switch off the camera before installation and connection.

Connecting cameras

Up to 4 cameras can be connected to the Netstation. You will need to configure the camera registration settings for cameras connected to the Netstation. (See page ??).

Wired connection

Set the Camera Mode Select switch to Wired position. Connect the LAN cable as shown below. Turn the Netstation and the camera power on. The camera will be panning and tilting operation.



Notes:

- If the camera is not connected to the Netstation with LAN cable, the panning and tilting operation is not activated even if the camera is powered on condition.
- Before connection, set the camera Connection Mode Select switch to Wired position.
- If you connect or register the camera to the Netstation using the LAN cable, you should use the supplied LAN cable or STP cable for shield the electromagnetic interference.
 - The camera(s) is(are) will be used after configuring the camera registration settings. (See page 17).

Connect the camera with wirelessly

If you want to connect without wires, following the next steps.

1. Set the camera mode select switch to Wireless position.
2. Pushing the reset button to reset the camera using a pointed object.
The camera will be panning and tilting operation.

Note:

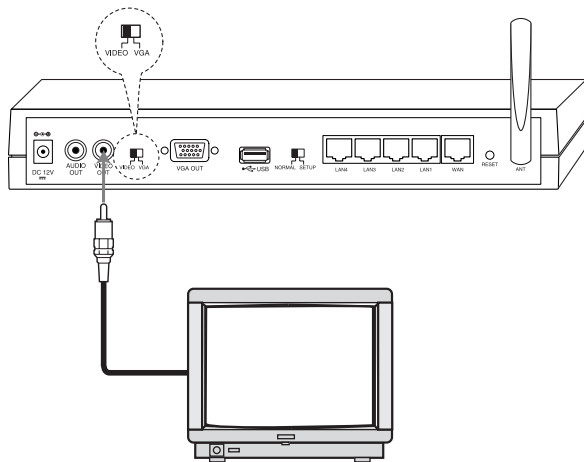
The wireless function is possible after configuring the camera registration settings for cameras connected to this unit. (See page 17).

Connecting the Display device

Make one of the following connections, depending on the capabilities of your existing equipment.

Video connection

When using the VIDEO OUT jacks, set the Video Output mode select switch to VIDEO. Connect the VIDEO OUT jacks on the rear of the Netstation to the corresponding input jacks on the TV or monitor using an VIDEO cable.



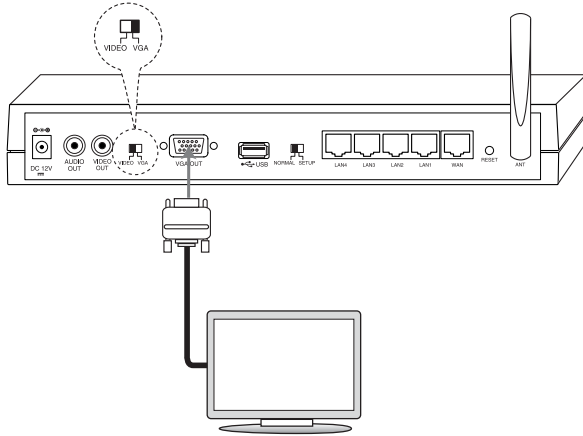
Note:

If the OSD is displayed too brightly, the OSD may be shown like flickering on the monitor. In that case, adjust the brightness.

VGA connection

When using the VGA OUT jack, set the Video Output mode select switch to VGA.

Connect the VGA OUT jacks on the rear of the NetStation to the corresponding input jacks on the TV or monitor using a VGA cable.

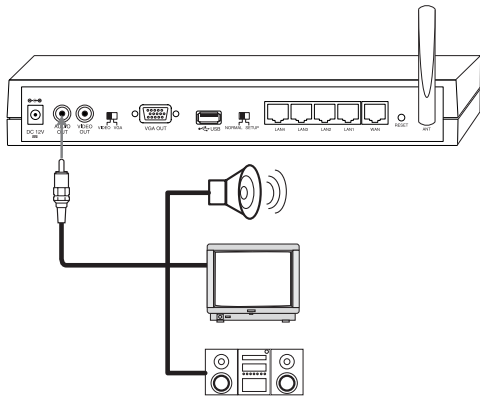


Note:

If the picture position is unbalanced on the VGA monitor, refer to the owner's manual of the VGA monitor to adjust the picture position of the VGA monitor.

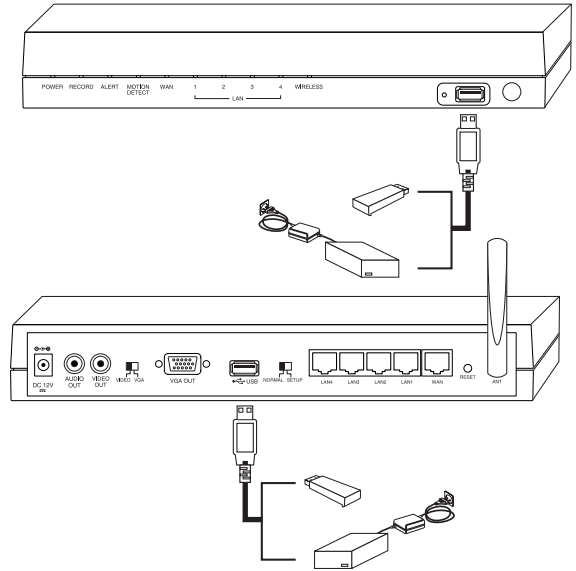
Connecting the audio device

Connect the AUDIO OUT jacks on the unit to the mono audio in jacks on your audio device.



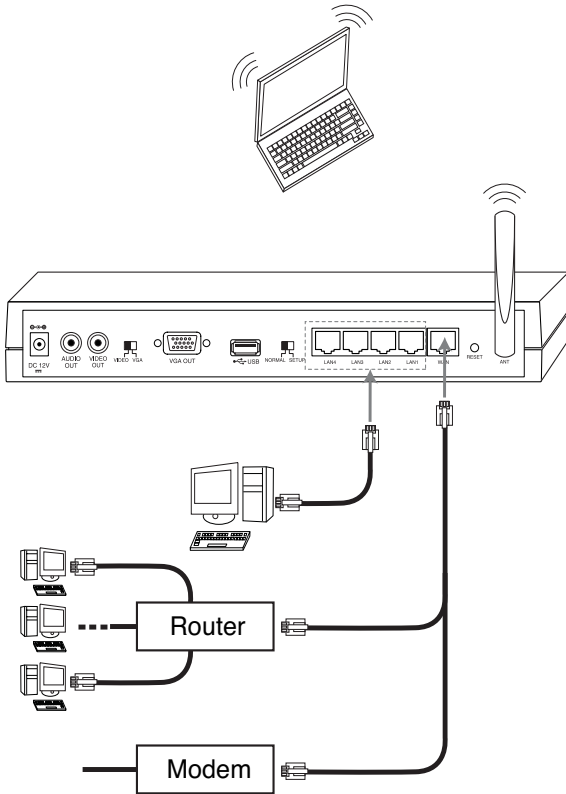
Connecting the USB device

Connect the USB memory stick or external USB HDD device for recording or playing. Then, you should use the recommended USB devices. (see page ??)



Connecting to the network

Connect the WAN port with a straight ethernet cable.

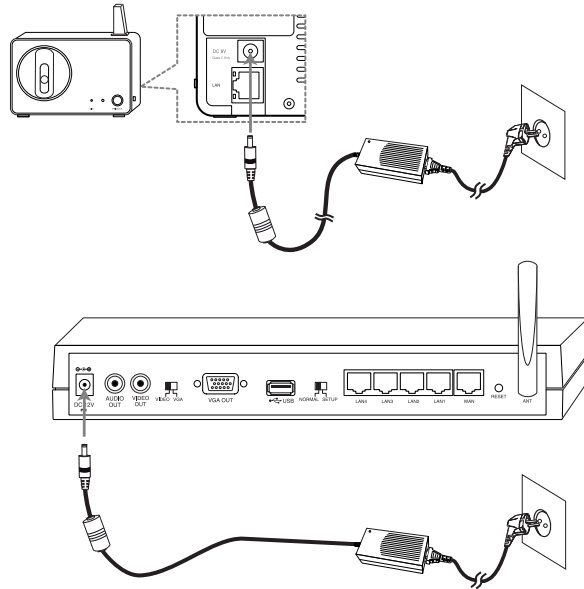


Notes:

- If you use the Router, you should set the Port Forwarding.
- If the IP address of both Netstation and external Router is same, the Netstation is not operate normally. In this case, you should change the IP address of the Router to solve the problem.

Connecting the power source

Connect a DC 12 V power source to the DC 12 V input terminal as shown below. When camera powered up, the camera performs a self-check (including one panning and tilting operation).



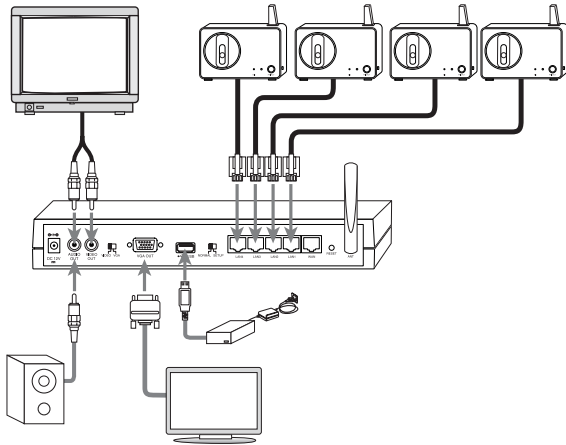
Notes:

- Use the supplied adaptor to prevent malfunction.
- The panning and tilting operation activates only when the camera is connected to the Netstation with LAN cable.

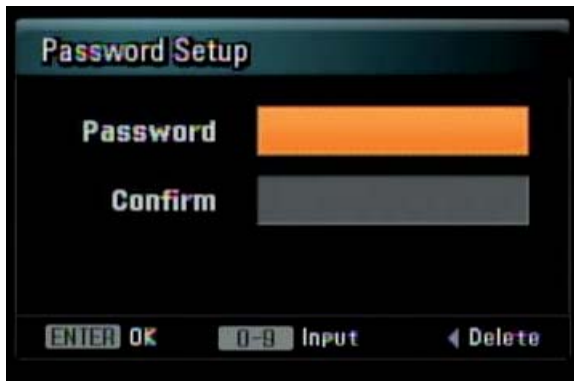
System operation

After the power is inputted for the first time to turn on the unit or set the unit as factory resetting, you will set the initial Administrator password and wireless setup manually.

1. Connects the camera(s) to the main unit using the Ethernet cable.
2. Connects the main unit to the monitor or display unit and turn them all on.



3. When the booting is completed the Password Setup window will be displayed. You can make the user password for this unit.



4. Input a new password more than 4-digit numbers and press ENTER. You can enter the password from minimum 4-digit numbers to 8-digit numbers. Enter it again and press ENTER to verify. If you make a mistake before pressing ENTER, press ◀.

5. Wireless Setup menu is displayed.







6. Use ▼▲◀▶ to select the desired setting as shown below.
 - **SSID**: You can change the SSID. Set the identifier for the wireless network local in use.
 - **Band**: Select the band (2.4GHz (G) or 2.4GHz (B+G)).
 - **Channel**: Select the channel. (Auto or 1-11(NTSC)/1-13(PAL))
 - **WEP Key**: You can set the WEP key to protect a wireless signal between this Netstation and connected camera(s). The WEP key is randomly created.
7. Press ENTER while [Apply] option is selected. Update window is displayed and update will start. After update is completed, the Camera Registration menu is displayed. To register the camera(s), see page 17.



8. After all settings are completed, press RETURN and select [Yes] then press ENTER to confirm your setting.

General explanation of the Live Screen

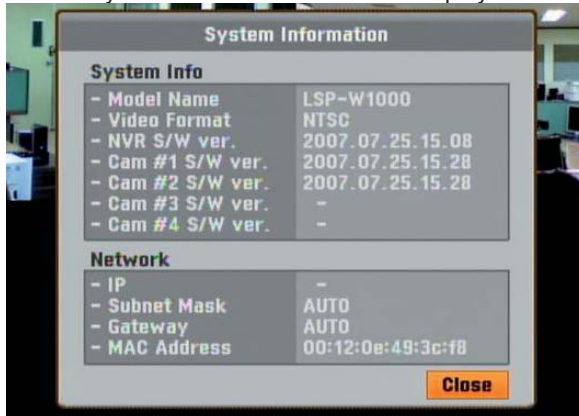


- | | |
|---|--|
| <p>1 Live Screen
Displays the current surveillance live screen.</p> <p>2 Zoom
Displays the current zoom level.</p> <p>3 Status display icon
Displays the icon of detected motions or recording status.</p> <p>4 Connect type with camera
Displays the current connected mode between the Netstation and the camera.</p> <p> : Displays when you connect the camera with wires.</p> <p> : Displays when you connect the camera in wireless mode.</p> | <p>5 Connected USB device position
Displays the connected USB device position.</p> <p> : When you connect the USB to the front of unit.</p> <p> : When you connect the USB to the rear of unit.</p> <p>6 Channel Number
Displays the channel number.</p> <p>7 Camera Name
Displays the edited camera name.</p> <p>8 Selected Channel
Displays the selected channel with yellow box.</p> <p>9 Date & Time
Indicates current date and time</p> <p>10 Current status of this channel
Displays when not registered the camera.</p> |
|---|--|

Viewing System Information

To view system information:

1. Press INFO.
The system information window is displayed.

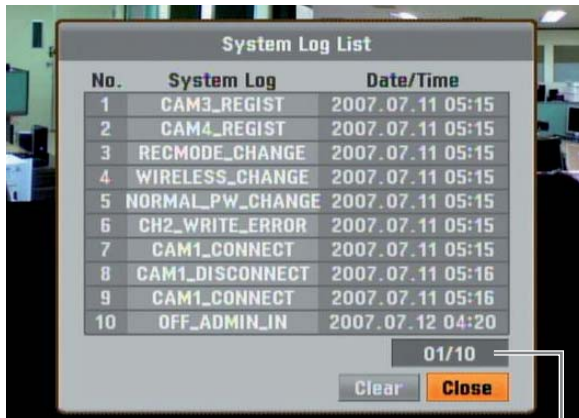


2. Press ENTER to exit the window.

Viewing the System Log List

To view the system log list:

1. Press LOG.
The system information window is displayed.



Use ◀ / ▶ to see the previous or next log list.

2. Use ◀ / ▶ to select [Close] icon and press ENTER to exit the window.

Notes:

- The system log list.
Camera Channel move, Camera Channel registration, Camera connect, camera disconnect, User (Admin/Normal) Log In, User (Admin/Normal) Log Out, USB Add, USB Format, USB Remove, Rec. Mode change, Network change, Password change, Wireless change, Factory Reset, Write error and Power On.
- If you want to erase the system log, select [Clear] and then press ENTER.

Lock function

You can change user type or disable system operation.

1. Press LOCK.
The login window is displayed.



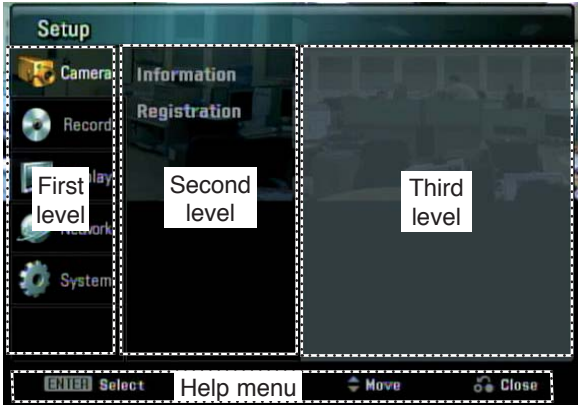
2. Use ◀ / ▶ to select a user type.
 - Administrator: Unlimited operation of the unit.
 - Normal User: Use of the limited functions of the system. (Split monitor and live image view are available.)
3. Press ▼ and enter the password.
You can see the live screen and operate the system.

Note:

If you select normal user for the first time, initial password is "0000".

Menu configuration

The features and options of this unit are configured through the menu. The operations of this unit can be set via a menu displayed on the monitor.



General settings

Arrow (▲/▼/◀/▶) Buttons:

Use these buttons to select the menu options or adjust the options value.

ENTER:

Select the option or confirm the setting.

RETURN:

Return to the previous menu or level. Close the displayed windows.

1. Press SETUP to display the setup menu.
2. Use ▲ / ▼ to select the desired option.
3. While the desired item is selected, press ▶ or ENTER move to the second level.
4. Use ▲ / ▼ to select the desired option then press ▶ or ENTER to move to the third level or displays selected option windows.
5. Use ▲ / ▼ / ◀ / ▶ to select the desired option then press ENTER to set the value.
6. Use ▲ / ▼ / ◀ / ▶ to select the desired setting then press ENTER to confirm your selection.
7. Press RETURN to exit the setup menu.

Note:

If you change the option value and then exit the menu or return to the previous menu, the saved message will appear. Then, select [Yes] and press ENTER to save the settings.

Camera settings

Information

Displays registered camera(s) informations.

CH	Camera Name	Preset	Type
1	Cam 1	Auto	Wired
2	Cam 2	Auto	Wireless
3			
4			
5			
6			
7			
8			

- **Ch:** Displays the channel number.
- **Camera Name:** Displays the registered camera name.
- **Preset:** Displays the selected preset name in the camera registration menu.
- **Type:** Displays the connected type of the camera.

Registration

You should register the camera when using it for the first time. You can add, move and erase the camera(s). If you register the camera, the camera should be connected to the Netstation with network cable and you should set the camera mode select switch to Wired position.

CH	Camera Name	Quality	Res.	Flip	Preset
1	Cam 1	High	D1	OFF	Auto
2	Cam 2	High	D1	OFF	Auto
3					
4					
5					
6					
7					
8					

- **CH:** Selects the desired channel to register camera.
- **Camera Name:** Display the camera name.
- **Quality:** Selects the encoding bitrate of MPEG4 encoder in the connected camera. (High, Mid. or Low)

- **Res.:** Selects the resolution of camera input signals. (D1: 720x480, CIF: 320x240).
- **Flip:** Set Flip to ON, when you see the live screen to flip the picture.
- **Preset:** Selects the picture quality of video sensor in the connected camera. (AUTO, P1(Fluorescent), P2 (Daylight), P3 (Cloudy), P4 (Incandescent) or P5 (CRT))

Moving a registered camera channel

1. Select a camera channel and press MARK.
2. Use ▲ / ▼ to choose a new channel to move the registered camera into the channel, then press ENTER.

Change the registered camera name

You can change the camera name.
The names can be up to 16 characters long.

1. Choose the camera channel you want to change the name, then press ENTER.
2. Press ▲ or ▼ to display the character input menu.
3. Enter a new name. Use ◀ / ▶ / ▲ / ▼ to select a character then press ENTER to confirm your selection.

Using the character input menu



- Language: Use ◀ / ▶ to change keyboard type.
- Space: Inserts a space at the cursor position.
- Delete: Deletes the previous character at the cursor position.
- ◀, ▶: Moves cursor to left or right.
- OK: Select to finish.
- Cancel: Cancels all entered characters.

Tip:
Remote control buttons for entering a name.

Numbers (0-9): Enters the corresponding character at the cursor position.

◀◀ / ▶▶: Moves cursor to left or right.

Record settings

Target Media

Select a media to record. The USB device should be connected to the NetStation for recording.



- **None:** No recording.
- **USB Front:** Selects when you connect the USB device to the front panel of main unit.
- **USB Rear:** Selects when you connect the USB device to the rear panel of main unit.
- **Size:** Displays the free space of the selected USB device.
- **Format:** To format the selected USB media.
- **USB Test:** To test the USB device.

Rec. setting

1. Use ▲/▼ to select the camera channel and press ENTER.
2. Use ▲/▼ to select recording mode for selected camera.
3. Press ENTER to confirm your settings.



- **CH:** Displays the channel number.
- **Camera Name:** Display the camera name.
- **Rec. Mode:** Selects the desired recording option.
 - No Rec.: Instant recording is possible using the REC button of the remote control.
 - Motion: Recording starts automatically when motion is detected.
 - Continuous: Continuous recording.
- **Post Time:** Specify the post-event recording time that records the situation from when the motion has been detected. This option is activated when the Rec. Mode is set the Motion mode.

Display settings

Language

Select a language for the setup menu and information display.



Dwell Time

You can set the channel sequence time to 2 seconds, 5 seconds, 10 seconds, 30 seconds or 60 seconds.



Network settings

WAN Port



- **Type:**

- **DHCP:** DHCP stands for Dynamic Host Configuration Protocol. Network settings of this unit are configured automatically by the DHCP server. If you set to DHCP, the [IP Address], [Subnet Mask] and [Gateway] options are dimmed and these options are not set.

- **Static:** Enter the network settings manually.

- **IP Address:** Enter an IP address using the number buttons (0-9) or Arrow (▲/▼/◀/▶) buttons.

- **Subnet Mask:** Enter a subnet mask address using the number buttons (0-9) or Arrow (▲/▼/◀/▶) buttons.

- **Gateway:** Enter the gateway address using the number buttons (0-9) or Arrow (▲/▼/◀/▶) buttons.

- **DNS DHCP:**

- **ON:** DNS settings of this unit are configured automatically by the DHCP server. If you set to ON, the [Main DNS] and [Sub DNS], options are dimmed and these options are not set.

- **OFF:** Enter the DNS settings manually.

- **Main DNS:** Enter the Main DNS server address using the number buttons (0-9) or Arrow (▲/▼/◀/▶) buttons.

- **Sub DNS:** Enter the Sub DNS server address using the number buttons (0-9) or Arrow (▲/▼/◀/▶) buttons.

Notes:

- For more detail on WAN Port setup, ask your network administrator and/or network service provider.
- After change the options, select [Apply] icon and press ENTER to confirm the settings.

DDNS (Dynamic Domain Name System)



- **DDNS**

- **ON:** Select to enable DDNS function.

This free service is very useful when combined with the Virtual Server feature. It allows Internet users to connect to your Virtual Servers using a URL, rather than an IP Address. This also solves the problem of having a dynamic IP address. With a dynamic IP address, your IP address may change whenever you connect, which makes it difficult to connect to you.

- **OFF:** If you set to OFF, the [Provider], [Domain URL], [ID] and [Password] options are dimmed and these options are not set.

- **Provider:** Select the desired DDNS Service Provider from the list (DynDNS or TZO). From the Internet, users will now be able to connect to your Virtual Servers (or DMZ PC) using your Domain URL.

- **Domain URL:** Apply for a Domain URL, and ensure it is allocated to you.

- **ID:** Enter the DDNS registered user ID for the DDNS Service.

- **Password:** Enter the user password in [ID] for the DDNS Service.

Notes:

- After change the options, select [Apply] icon and press ENTER to confirm the settings.
- The DDNS function is serviced using a TCP 8245 port by "No-IP" (<http://www.no-ip.com/>). In case the unit is used in the network system with a firewall, you have to open the TCP 8245 port so that DDNS data can get into firewall. For more detail on firewall setup, ask your network administrator and/or network service provider.

Sender Mail



- **Mail Send**

- ON: Select to enable Mail function.
- OFF: If you set to OFF, the [SMTP Server], [Mail Address] and [Password] options are dimmed and these options are not set.

- **SMTP Server:** Enter the SMTP Server address.
- **Mail Address:** Enter the mail address.
- **Password:** Enter the password.

Notes:

- After change the options, select [Apply] icon and press ENTER to confirm the settings. When you press ENTER, the test mail will be sent via the SMTP server to the user mail address automatically and the settings are saved when the mail test of the SMTP server is correct.
- You should know the SMTP server address of a mail service provider to use the SMTP server. (You should use the port number 25 of the SMTP server for this function.)

Receiver Mail



- **Address (1~4):** Enter the receiver mail address. You can input up to 4 E-mail addresses.

Note:

After change the options, select [Apply] icon and press ENTER to confirm the settings.

Notification

Set the notification options.

1. Select item and press ENTER.
A checking mark appears in front of the selected option.
2. Select [Apply] icon and press ENTER to confirm your settings.



- **Motion Detection:** Sends an E-mail when motion detection has occurred.
- **USB storage Full:** Sends an E-mail when the disc has fully recorded.
- **Admin PW Change:** Sends an E-mail when the administrator password has changed.
- **Camera Disconnect:** Sends an E-mail when a video signal from the camera has stopped because of a cable disconnection or malfunction of a camera.

Note:

For the E-mail sending function, the motion detection has 1 minute term before sending an E-mail again.

Wireless

Set the Wireless options.



- **Wireless**
 - ON: Select to enable Wireless function.
 - OFF: Select to unble the Wireless function.
- **SSID:** You can change the SSID. Set the identifier for the wireless network local in use. Do not use the SSID that is the same as the other wireless device.
- **Band:** Select the band (2.4GHz (G) or 2.4GHz (B+G)).
- **Channel:** Select the channel. (Auto or 1-11(NTSC)/1-13(PAL)). Use the same channel as that of the other wireless device, this unit may not be activated normally. In this case, change the channel.
- **WEP Key:** You can set the WEP key to protect a wireless signal between this Netstation and connected camera(s). The WEP key is randomly created.

Notes:

- After change the options, select [Apply] icon and press ENTER to confirm the settings.
- If you change the wireless options in the case of the camera is not connected to the Netstation, the camera(s) may not be activated normally.
- If you connect the NetStation and the camera with the wireless network, it may occur the interference with the other wireless device. In that case, refer to the owner's manual of the other wireless device to solve the problem.

System Settings

Clock



- **Clock Mode:** Select the clock setting mode. Set to [Auto] when using the NTP (Network Time Protocol) server for time adjustment. If the "Clock Mode" is set to [Manual], the time settings should be entered manually and the [NTP Server], [Time Zone] and [Daylight Saving] options are deactivated.
- **Date:** Enter the current date.
- **Time:** Enter the current time.
- **NTP Server:** Select NTP server. You may choose to select NTP server from the pull-down menu.
- **Time Zone:** Select your Time Zone. If your time zone is wrong selected, the E-mail sending time may be displayed in a wrong way.
- **Daylight Saving:** Set to ON to you use the daylight saving function.

User Password



- **Administrator:** You can change the password by entering the new password for the administrator.
- **Normal User:** Enter the password for the normal user.

Note:

Remember the new password. If you forget the new password, reset the unit and then the password and all settings are set to factory default settings .

Auto Log Out

Logout is automatically at fixed intervals. You can set auto logout time to 5 minutes, 10 minutes, 30 minutes or 60 minutes.



Buzzer



- ON: Makes a sound when a motion is detected.
- OFF: Turns off the motion buzzer.

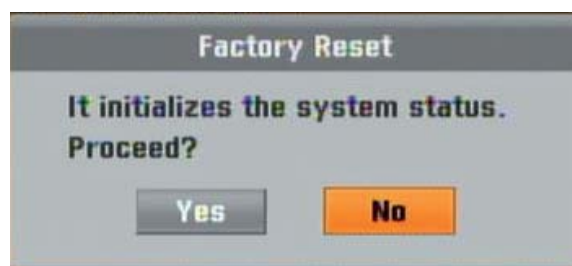
Factory Reset

You can reset the unit to its original factory settings.

1. Select [Reset] and press ENTER.



2. Use <Left>/<Right> to select [Yes] then press ENTER. The unit will be turned off and on automatically after a few seconds.



Recording

Images from a camera will be recorded on the connected USB memory stick or external USB HDD device. Before you start recording, first check the Target media settings in the record menu, and then make the recording target media settings.

Instant recording

Ensure all the cameras and USB memory stick or external USB HDD device are connected and that time and date have been set correctly.

1. Use ▲/▼/◀/▶ to select a live channel you want to record.
2. Press the REC button. The RECORD indicator of the unit turns red and the recording type indicator is displayed on the selected channel screen.
3. Press the STOP button you want to stop recording. If the motion or continuous recording is set, the recording mode will be changed into the motion or continuous recording mode.

Note:

A USB memory stick or external USB HDD device must be connected in the main unit in order to record camera images.

Motion recording

Images are recorded only when the specified camera's sensor is activated.

1. Press SETUP to display setup menu.
2. Use ▲/▼/◀/▶ to select [Rec. Setting] option. The Recording mode setting menu is displayed.
3. Press ENTER and use ▲/▼ to select the [Motion] option then press ▶.
4. Use ▲/▼ to select post time and press ENTER.
5. Press RETURN and use ◀/▶ to select [Yes] then press ENTER. Motion recording is now set.

Continuous recording

Images are recorded continuously.

1. Follow steps 1-2 as shown "Motion Recording".
3. Press ENTER and use ▲/▼ to select the [Continuous] option.
4. Press ENTER.
5. Press RETURN and use ◀/▶ to select [Yes] then press ENTER.

Notes:

- If you press REC during the motion or continuous recording, the recording mode will be changed into the instant recording mode.
- The recorded data file name is made automatically as the [Channel name_export date and time] type.
- If you set the Day Light Saving option to On and start recording, the word "S" is added on the end of the file name to avoid the repetition of the recorded file name.
- Do not remove the USB memory stick or external USB HDD device while the recording is in progress, it may cause a malfunction and the recorded data is not played.
- If the recorded data time is shorter than 1 second, it will be deleted automatically to prevent waste of space. You should record longer than 1 second to save the recorded data.
- Do not use the USB memory stick or external USB HDD device that is used by the other NetStation or it may cause malfunction.
- You can record instantly the scheduled channels even though motion or continuous recording is set to the channels.
- The video signal of recorded data is saved by the MPEG 4 compression technology. The audio signal of recorded data is saved by the G.726 compression technology.
- You can not record in following conditions.
 - The USB memory stick or external USB HDD device is not attached.
 - A HDD of external USB HDD device is not formatted.
 - The channel has no video input for display.
 - The USB memory stick or external USB HDD device has not free space.
- You can not record the Motion recording in following conditions.
 - The USB memory stick or external USB HDD device is not attached.
 - A HDD of external USB HDD device is not formatted.
 - The channel has no video input for display.
 - The Motion recording is not set.
- Priority of record.
Instant record > Motion record or Continuous record.
- If you press SETUP during the recording, the record setting menu is displayed.
- You can not record the data for less than 1 seconds.

Search and playback

Search the recorded data

When the SEARCH button is pressed, the search menu is displayed.

1. Use ▲/▼ to select the desired source device then press ENTER. If the USB device is not connected, the source name is dimmed and it is not selectable.
 - **USB Front:** Select when the USB device is connected to front of unit. Plays back or searches recorded contents of the connected USB device.
 - **USB Rear:** Select when the USB device is connected to rear of unit. Plays back or searches recorded contents of the connected USB device.
2. Use ▲/▼ to select channel to search the recorded contents of the channel.
3. Press ENTER. The date search menu is displayed.
4. Select the year, month or date to start search of the recorded data.
5. Use ◀/▶ to Select the [Get List] icon then press ENTER.
The search result is displayed.
6. Select the recorded contents you want to playback.
 - ◀/▶: Move to previous page or next page.
 - ▲/▼: Use this buttons to select the recorded contents.
 - 1~7 number buttons: You can directly select the contents. For example; If you press number 3 button, the select bar moves to the third cloud directly.
7. Press ENTER to start playback.
The picture is displayed.

Note:

Do not remove the external USB device while the search is in progress from the unit. It may cause a malfunction.

Functions available during playback

Button	Function
■ STOP	Stop playback.
PAUSE	Pause playback.
◀◀/▶▶	Press repeatedly to select the required scan speed. (▶▶, ▶▶▶, ▶▶▶▶, ▶▶▶▶▶ or ◀◀, ◀◀◀, ◀◀◀◀, ◀◀◀◀◀)
	While the playback is paused, press ▶▶ to play in slow motion. The slow motion playback in reverse is not available.
	During playback, press ◀◀/▶▶ for longer than 1 second to go to the next/previous recorded data.
◀▶ PLAY	Press to play reverse or normal playback.
OSD	Press to see the remain time of the playback files.

Notes:

- If you play the recorded data in the personal computer or the other playable unit, MPEG 4 codec and G.726 codec is needed.
- You should play the recorded data that is recorded from the Netstation. If you play the other data that is recorded from the other unit, the Netstation may malfunction.
- If you remove the USB device during the search or playback, it stops the search or playback and returns to the live screen.

Client program

Client Program is the network program of the Netstation.

The description pictures may differ from your OS (Operating System) type. The pictures used in this manual are based on Windows XP.

PC requirements

- OS (Operating System): Windows XP.
- CPU: Intel Pentium IV 1GHz or above.
- RAM: 256 MB or above.
- Graphics Card: AGP VGA with 64 MB Video RAM or above.
- Browser: Internet Explorer 6.0.
- Etc.: HTML V4.0 or later, JavaScript V1.2 or later.

Recommended PC requirements

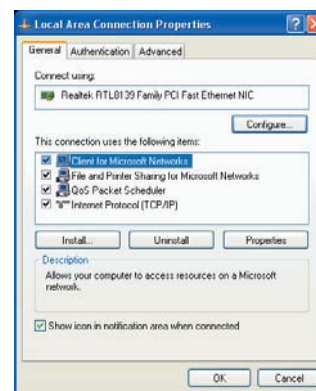
- **OS:** Windows XP
- **CPU:** Intel Pentium IV
- **RAM:** 512 MB
- **Graphics Card:** AGP VGA with 128 MB Video RAM

Notes:

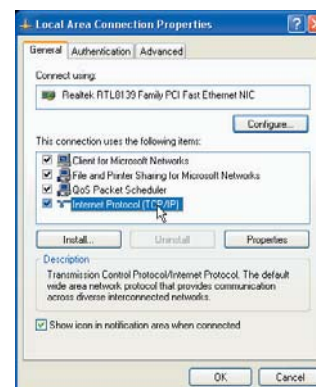
- Your Browser must support JavaScript.
- If you use the Windows Vista, Windows 2000 or Windows 98, some function may not operate correctly.
- If you can not install the client program, check the security settings on your computer. It has limitation as depending the security settings.

Logging in to the Web Viewer when the computer and the Netstation are directly connected

1. Connect a computer to the LAN port of the Netstation using the network cable.
2. Turn on the computer and Netstation.
3. Set the network configuration of the computer as shown below.
 - 1) Open the [Local Area Connection Properties] windows.



- 2) Select the [Internet Protocol [TCP/IP]] and click [Properties].

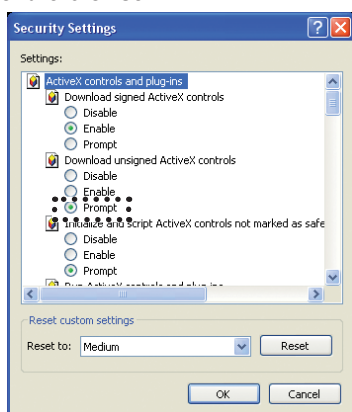


- 3) Select the [Obtain an IP address automatically] to use DHCP.
 - 4) Click [OK] or [Close] repeatedly to save the settings.

4. Start the web browser on the computer.
5. In the Address Box, enter "http://192.168.1.111".
6. Press ENTER and then the login page will be displayed.

Notes:

- The login page needs more time to display it according to a network condition.
- If the login page is not displayed, check the TCP/IP settings of the computer or the pop-up blocker. If you set the pop-up blocker, the login page is not displayed. You must allow the pop-ups.
- If you connect the Netstation for the first time, the Security Warning window is displayed to install the VLC player. You must install the VLC player for using the Web Viewer.
- If you block the ActiveX, you can not install the VLC player. In that case, change the "Download unsigned ActiveX controls" option to "Prompt" in the Security Settings menu (Tools > Internet Options... > Security tab > Custom Level... > ActiveX controls and plug-ins) of the browser.



- You can install the VLC player manually, visit the "http://www.videolan.org" website and download the VLC player for windows.

7. Select the User ID and enter the Password of selected user ID. If you login the Netstation as Administrator, you can not login using the web viewer program.
8. Click the [Login]. The Web viewer is displayed.

Note:

The Web viewer is used only for one user.

Logging in to the Web Viewer when the Computer and the Netstation are connected via internet

1. Connect a computer to the Internet.
2. Connect the internet cable to the WAN port of the Netstation.

Note:

Ensure that your computer and the Netstation are on the same network segment.

3. Turn on the computer and Netstation.
4. Check the IP Address of the Netstation. (See page ??)
5. Start the web browser on the computer.
6. In the Address Box, enter "http:///" and the IP Address of the Netstation.

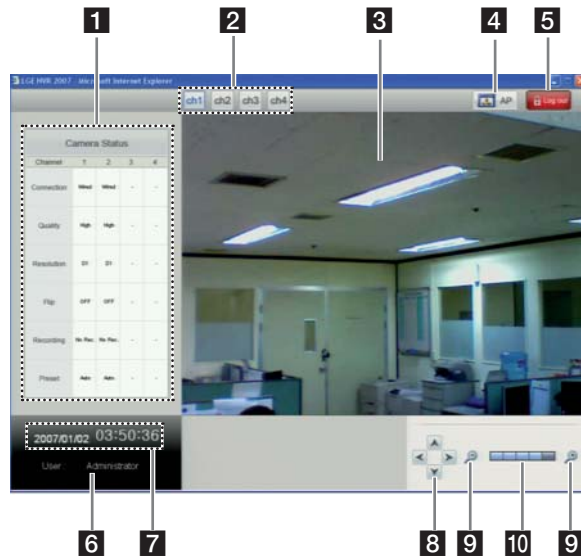
Note:

If you connect the Netstation to the Router, you should set the Port Forwarding and use the IP address of the Router to enter the web viewer. Refer to the owner's manual of the Router for port forwarding settings.

7. Follow steps 6-8 as shown [Logging in to the Web Viewer when the Computer and the Netstation is directly connected].

Using the Web Viewer

You can control the live image using the Web Viewer.



- 1** Camera Status Table
Shows the camera status.
- 2** Camera channel buttons
Press the ch1 to ch4 channel button to see the current surveillance images.
- 3** Live screen
Displays the current surveillance live screen
- 4** AP setup button
Click to go to the AP Setup menu.
This button is displayed only when a computer and the Netstation are directly connected using the network cable.
- 5** Log out button
Click to go to the log-in page of the Web viewer.
- 6** Display the current date and time
- 7** Display the current log-in User ID.
- 8** The 4-direction arrow buttons
You can pan and tilt the camera using the 4-direction arrow buttons.
- 9** Zooming buttons
You can operate the zoom range.
- 10** Displays the current zoom level.

Note:

The **4**, **8**-**10** function is used for Administrator.

AP (Access Point) settings

An access point is a bridging device for connecting a wired and wireless network together. Access points are typically wireless routers or stand-alone devices that plug into an Ethernet hub, switch, or router. Wireless adapters should be set to Infrastructure Mode when connecting to an access point or wireless router. (Infrastructure: An 802.11 network in which wireless devices communicate with each other by first going through an Access Point (AP) or wireless router.

If you want to change the AP options, refer to the following settings.

Click [AP] button and then display the Wireless Router setup window.

Warning

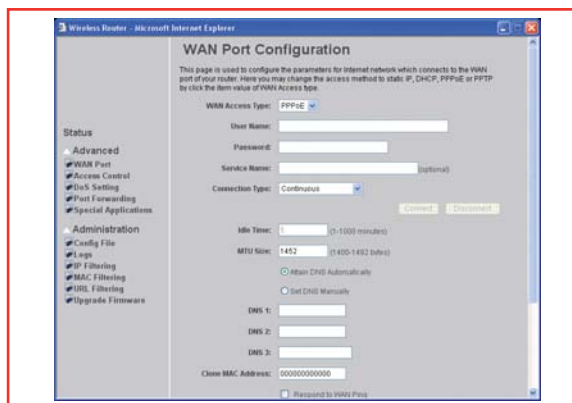
If you change the AP settings without technical knowledge, the Netstation may not be activated.

Status



- Internet:** Shows the internet connection status.
- Connection Details:** Click to show more details of the internet connection.
- LAN:** Shows the Local area network information.
- System:** Briefly shows the device name and firmware information.
- System Data:** Click to show the detailed information of the system.
- Refresh Screen:** Click to refresh all the data.

WAN Port Configuration



WAN Access Type: Select the WAN access type (PPPoE, PPTP and L2TP) from the pull-down menu.

Note:

You can set the Static IP or DHCP setting in the Setup menu of the Netstation.

User Name:

Password:

Service Name:

DNS 1-3: Enter the DNS server IP address(es) provided by your ISP, or you can specify your own preferred DNS server IP address(es). DNS 1 and DNS 2 servers are optional. You can enter another DNS server's IP address as a backup. DNS 1 and DNS 2 servers will be used when the DNS 1 server fails.

Clone MAC Address: Your ISP may require a particular MAC address in order for you to connect to the Internet. This MAC address is the PC's MAC address that your ISP had originally connected your Internet connection to. Type in this Clone MAC address in this section to replace the WAN MAC address with the MAC address of that PC.

• **Respond to WAN Ping** Check to enable the listed functions.

• **Enable UPNP**

• **Enable IPsec pass through on VPN connection**

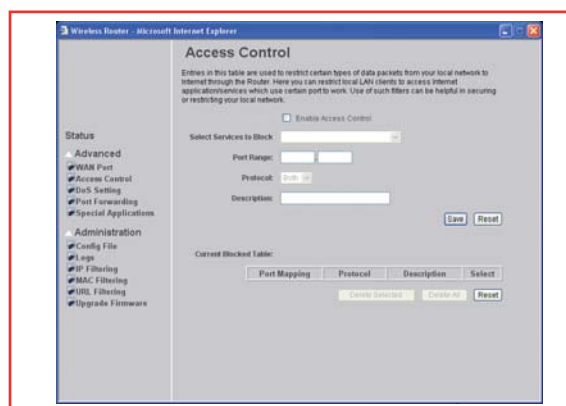
• **Enable PPTP pass through on VPN connection**

• **Enable L2TP pass through on VPN connection**

Save: After completing the settings on this page, click Save to save the settings.

Reset: Click Reset to restore to default values.

Access Control



Enable Access Control: Select to enable Access Control function.

Select Services to Block: This lists all defined Services. Select the Services you wish to block.

Port Range: For TCP and UDP Services, enter the beginning of the range of port numbers used by the service. If the service uses a single port number, enter it in both the start and finish fields.

Protocol: Select the protocol (TCP, UDP or Both) used to the remote system or service.

Description: You may key in a description for port range.

Save: After completing the settings on this page, click Save to save the settings.

Reset: Click Reset to restore to default values.

Current Blocked Table:

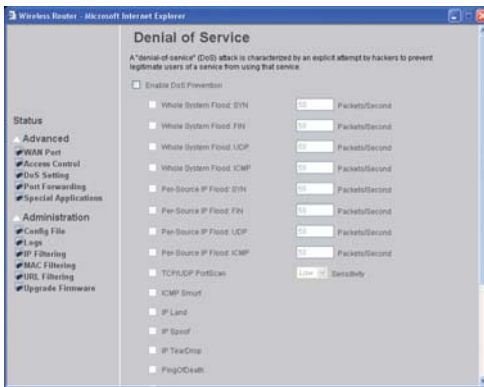
Note:

If you blocked some port(s), the Netstation may not activate correctly.

Denial of Service Setting

A DoS (Denial of Service) attack does not attempt to steal data or damage your PCs, but overloads your Internet connection so you cannot use it - the service is therefore unavailable.

If DoS function is enabled, DoS attacks will be detected and blocked. The default is unabled. It is strongly recommended that this setting be left enabled.



Enable DoS Prevention: Check to enable the DoS prevention function. Select the item listed to enable.

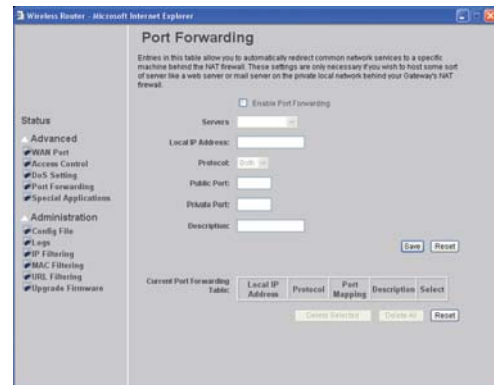
Enable Source IP Blocking
 Block time (sec) Set the threshold for the frequency of packets that are allowed to pass through. The default value is 50 packets per seconds. You can adjust the value according to your need. It is recommended that you set a practical number so that your network performance won't be hampered.

Select All Click to select all listed items.

Clear All Click to clear all listed items.

Apply Changes Click to save the current settings.

Port Forwarding



Enable Port Forwarding: Check to enable the Port Forwarding function.

Servers: Select the server.

Local IP Address: Enter the Local IP address.

Protocol:

Select the protocol (TCP, UDP or Both) used to the remote system or service.

Public Port: Enter a public port number.

Private Port: Enter a private port number.

Description: You may key in a description for port range.

Save: After completing the settings on this page, click Save to save the settings.

Reset: Click Reset to restore to default values.

Current Port Forwarding Table: Shows the current Port Forwarding information.

Delete Selected: Click to delete selected item.

Delete All: Click to delete all listed items.

Reset: Click Reset to restore to default values.

Note:

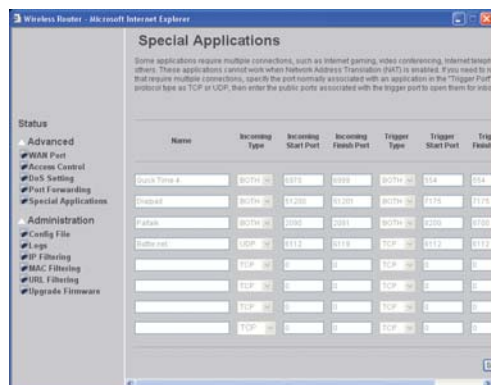
If you change the port number that is registered automatically from the system, you can not monitor using the WAN

Special Application

Some software applications require special or multiple connections to the Internet and these would normally be blocked by the firewall. For example Internet Telephony or Video conferences require multiple connections. So that these special applications can work properly and are not blocked, the firewall needs to be told about them. In each instance there will be a trigger port and incoming port(s), where traffic on the trigger port tells the firewall to open the incoming ports.

Special Application allows the router to keep track of outgoing data for specific port numbers. The router remembers which computer sends out what data, so when the requested data returns through the router, the data is sent back to the proper computer by way of IP address and port mapping rules.

You have to firstly check Enable before you can add/edit an application.



Name:	Enter the application name.
Incoming Type:	Select the incoming application type (TCP, UDP or BOTH)
Incoming Start Port:	Enter a port number as the incoming start port.
Incoming Finish Port:	Enter a port number as the incoming finish port.
Trigger Type:	Select the trigger type (TCP, UDP or BOTH)
Trigger Start Port:	Enter a port number as the starting outbound port for the special application defined in the preceding field.
Trigger Finish Port:	Enter a port number as the ending outbound port for the special application defined in the preceding field.
Enable:	Mark up to change edit mode.

Save: Press to save the new settings on the screen.

Undo: Press to discard the data you have entered since last time you press Save.

Config File

This feature allows you to download the current settings from the Wireless Router, and save them to a file on your PC.

You can restore a previously downloaded configuration file to the Wireless Router, by uploading it to the Wireless Router.

This screen also allows you to set the Wireless Router back to its factory default configuration.

Any existing settings will be deleted.



Backup Config: Use this to download a copy of the current configuration, and store the file on your PC. Click Download to start the download.

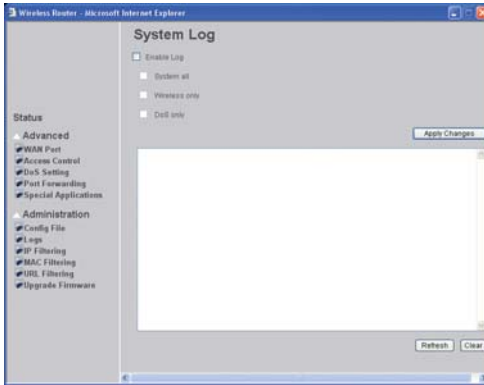
Restore Config : This allows you to restore a previously saved configuration file back to the Wireless Router. Click Browse to select the configuration file, then click Restore to upload the configuration file.

WARNING !
Uploading a configuration file will destroy (overwrite) ALL of the existing settings.

Default Config: Clicking the Restore Defaults button will reset the Wireless Router to its factory default settings. **WARNING !** This will delete ALL of the existing settings.

System Log

The Logs record various types of activity on the Wireless Router. This data is useful for troubleshooting, but enabling all logs will generate a large amount of data and adversely affect performance.



Enable Log: Click to enable log function.

Apply Changes: After completing the settings on this page, click Save to save the settings.

Refresh: Click to refresh the logs.

Clear: Click to delete the logs.

IP Filtering



Enable IP: Filtering Check to enable the IP filtering function.

Local IP Address: Enter the client IP address.

Protocol: Select the protocol (TCP, UDP or Both) used to the remote system or service.

Description: You may key in a description for the local IP address

Current Filter Table: Shows the current filter information.

Save: After completing the settings on this page, click Save to save the settings.

Reset: Click Reset to restore to default values.

MAC Filtering



Enable MAC Filtering: Check to enable MAC filtering function.

MAC Address: Enter the client MAC address.

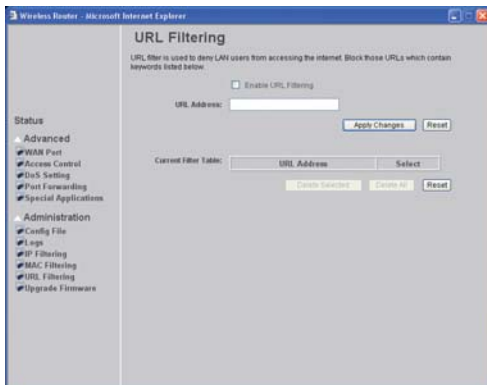
Description: You may key in a description for the MAC address.

Current Filter Table: Shows the current filter information.

Save: After completing the settings on this page, click Save to save the settings.

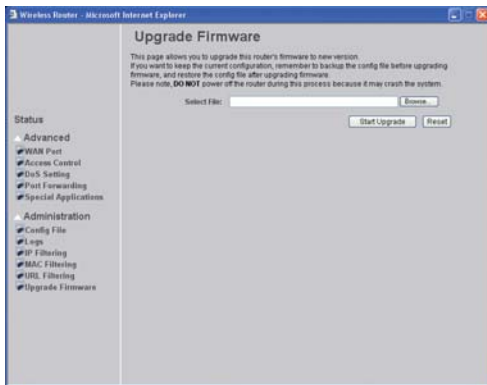
Reset: Click Reset to restore to default values.

URL Filtering



- Enable URL Filtering:** Check to enable URL filtering function.
- URL Address:** Enter the client URL address.
- Current Filter Table:** Shows the current filter information.
- Apply Changes:** After completing the settings on this page, click "Apply Changes" to confirm the settings.
- Reset:** Click Reset to restore to default values.

Upgrade Firmware



- Browse:** Click the Browse button, find and open the firmware file (the browser will display to correct file path).
- Start Upgrade:** Click the Start Upgrade button to perform
- Reset:** Click Reset to restore to default values.

Note:

You should reboot the Netstation system after firm-ware update.

Reference

Troubleshooting

Check the following guide for the possible cause of a problem before contacting service.

Symptoms	Resolutions
The system power does not turn on.	Check the power cable is connected correctly.
	Check the input voltage is correct.
The system power is turned on but no video data is displayed on the monitor.	Check the monitor power cable is connected properly.
	Make sure the monitor is turned on.
	Check the video output cable of the Netstation is properly connected to the monitor.
	Unplug the power cable and plug in again.
The camera numbers are displayed on the screen but the camera images are not displayed.	Check the camera is connected to the Netstation correctly.
	Check the power cable on the camera is connected correctly.
	Check there is no problem with the LAN cable connection from the camera to the Netstation.
	Turn off the Netstation and turn it on again.
The camera video is shown on the screen but the system does not record the video.	Check the recording mode in the record setting menu.
	Check the USB device detection status in the live screen window.
	Check the recordable disk space in the USB device.
It is impossible to search through the recorded video.	If there is no recorded video data, check the recording mode in the record setting menu.
	Check the user type. The search function is not available for a normal user.
The colors of some camera videos are strange or videos are displayed abnormally.	If the camera connected to the Netstation has a problem, make sure that the camera is not damaged by trying another camera into a working video output.
There is a lot of (screen) noise accompanying the image.	Check if there is any other problems in only the camera and if there is any other external cause after connecting to other cameras.
	Check if the LAN cable connection between the camera and the Netstation.
	Check if there is a high voltage wire around the LAN cable connection between camera and Netstation. It can cause interference and affect video quality.
	Check the LAN cable connection between the camera and the Netstation is the correct LAN cable.

Symptoms	Resolutions
An E-mail sent from this product was not received.	E-mail reception failed without SMTP server setting. <ul style="list-style-type: none"> • Make sure the network is correctly set. • Make sure the mail address is input correctly. • Check the spam mail setting of the inputted mail address. (If you set the spam mail, some mails are deleted automatically or classified in the spam mail box) • Some of SMTP mail services do not support an E-mails from private SMTP servers. In this case use the public SMTP server.
	E-mail reception failed even if the SMTP server was set. <ul style="list-style-type: none"> • When the [Please check the SMTP information or internet cable] message is displayed. <ul style="list-style-type: none"> - Check the SMTP server address. - Check the SMTP port number. (Default setting is 25). - Check the network settings. • When the [Please check the authentication information] message is displayed. <ul style="list-style-type: none"> - Check the user name. - Check the password. • The mail reception failed without error message. <ul style="list-style-type: none"> - Check the receiver's mail address. - Check your E-mail is not classified as a spam mail on the receiver's mail setting.
The remote control does not work properly.	Check the batteries in the remote control.

Note:

If you observe any of the following symptoms:

- Some of the front panel LEDs do not light.
- The NetStation does not operate normally.

You can reboot the NetStation as follows:

- Turn off the NetStation and turn it on again after a few seconds.

When the recorder does not work normally after rebooting, contact the service center.

Recommended devices

Supported external USB device list

No	Maker	Model Name	Capacity	USB Ver.
1	FM	Memorette	1GB	2.0
2	FM	Memorette	2GB	2.0
3	IOCell	CellDisk	1GB	2.0
4	LG	Xtic	1GB	2.0
5	SanDisk	Cruzer	4GB	2.0
6	Toshiba	2.5" HDD	80GB	2.0
7	Hitachi	3.5" HDD	250GB	2.0
8	Transcend	JF110/JF150	1/2GB	2.0

Notes:

- If the capacity of USB device has under 1GB or over 250GB, the USB device may not operate correctly.
- If you format the external USB device by using the other unit with NTFS or OS32 file system, the USB device may not be used on this unit. Use the FAT 32 file system for this unit. You can format the USB device as FAT 32 file system by using the format function in the Setup menu of the Netstation.
- Do not use the USB device via the USB Hub.
- Check the write speed of the USB and use it more than 2.5 Mbyte/sec write speed.

The necessary Capacity for 1Hour recording (Approximatly)

Resolution	Quality	1ch	2ch	3ch	4ch
D1	Low	113MB	226MB	340MB	450MB
	Middle	225MB	450MB	675MB	900MB
	High	450MB	900MB	1.35GB	1.8GB
CIF	Low	56MB	113MB	168MB	225MB
	Middle	113MB	225MB	340MB	450MB
	High	225MB	450MB	675MB	900MB

Note:

This recording capacity table is only for reference.

The recording capacity can be different depending on the recording image.

In case of external 250GB HDD, the recording time is approximatly 176hours.

Factory default configuration settings

1st	2nd	3rd	Data Range	Default	
Camera	Information				
	Registration				
Record	Target Media		None / USB-Rear / USB-Front	None	
		Size			
		Format			
	USB Test				
	Rec. Setting				
Display	Language		ENG	ENG	
	OSD		On / Off	On	
	Dwell Time		Off / 2 / 5 / 10 / 30 / 60 sec	Off	
Network	Wan Port	Type	DHCP / Static / (Others)	DHCP	
		IP Address	0.0.0.0 ~ 255.255.255.255	Null	
		Subnet Mask	0.0.0.0 ~ 255.255.255.255	Null	
		Gateway	0.0.0.0 ~ 255.255.255.255	Null	
		DNS DHCP	On / Off	On	
		Main DNS	0.0.0.0 ~ 255.255.255.255	Null	
		Sub DNS	0.0.0.0 ~ 255.255.255.255	Null	
	DDNS	DDNS		On / Off	Off
		Provider		DynDNS / TZO	DynDNS
		Domain URL		A~Z, 0~9, Special Character	Null
		ID		A~Z, 0~9, Special Character	Null
		Password		A~Z, 0~9, Special Character	Null
	Sender Mail	Mail Send		On / Off	Off
		SMTP Server		A~Z, 0~9, Special Character	Null
		Mail Address		A~Z, 0~9, Special Character	Null
		Password		A~Z, 0~9, Special Character	Null
	Receiver Mail	Address 1		A~Z, 0~9, Special Character	Null
		Address 2		A~Z, 0~9, Special Character	Null
		Address 3		A~Z, 0~9, Special Character	Null
		Address 4		A~Z, 0~9, Special Character	Null
	Notification	Motion Detect		On / Off	Off
		Disc Full		On / Off	Off
		Admin PW Changed		On / Off	Off
		Camera Disconnect		On / Off	Off
	Wireless	Wireless		On / Off	On
		SSID		A~Z, 0~9	HMS-AP-xxxx
Band			2.4GHz (B+G) / 2.4GHz (G)	2.4GHz (G)	
Channel			Auto / 1 ~ 11	Auto	
WEP Key			Off, a ten digit numbers (HEX code)	Off	

1st	2nd	3rd	Data Range	Default
System	Clock	Clock Mode	Auto / Manual	Manual
		Date	YYYY / MM / DD	Current Date
		Time	HH : MM	Current Time
		NTP Server	North America 1~3 / Europe 1~2 / Australia / Asia Pacific	North America 1
		Time Zone	GMT-12 ~ GMT+12	GMT
		Daylight Saving	On / Off	Off
	User Password	Admin	4~8 digit number	Null
		Normal	4~8 digit number	0000
	Auto Log Out		Off / 5 / 10 / 30 / 60 min	Off
	Beep		On / Off	Off
	Factory Reset	Reset		

Specifications

ITEM		LSP-W1000	
Video	Video Format		NTSC / PAL
	Input		4
	Output	Composite	1
		VGA	1
Resolution		640x480, 320x240	
Audio	Input		4
	Output		1
Motion	Input		OK
	Notification to e-mail		OK
Recording	Frame Rate (/Sec)		Max. 7.5 VGA Frames/Sec/Ch
	Recording Mode		Continuous / Motion / Instant Record
	Storage		Ext. USB Storage
Search / Playback	Playback Control	Mode	Normal / Still / Stop
			Fast / Slow Forward
			Fast / Slow Backward
	Search Mode		Date / Time / File
Display	Division Mode		1 / 4
	Motion Alert Mode		Buzzer
	Language		English
	Menu Screen		GUI
	Information		OK
	Pan/Tilt Angle		Pan: -50° to +50°, Tilt: -40° to +10°
	Zoom		Digital X4, 5 Steps
	Auto Sequence mode		OK
Network	LAN	Number of ports	4
		Connector type	Ethernet RJ-45
		Physical	100Base-TX/10Base-T
	Wireless (IEEE802.11b/g)	Transmission protocol (802.11g)	DS-SS, OFDM
		Transmission protocol (802.11b)	DS-SS
		Transmission speed (802.11g)	54/48/36/24/18/12/9/6 Mbps
		Transmission speed (802.11b)	11/5.5/2/1 Mbps
		Frequency range (MHz)	(2.412 - 2.484 GHz)
		Number of channels	(1~14 ch)
	User	RESET button	OK
		Mode switch	OK

ITEM		LSP-W1000	
Security	WEP Encryption		64/128Bit
	wireless stealth functionality		ESSID
	MAC address filtering		OK
	User Level Control		OK
I/O	Front	LED	10
		USB	1 port
		RCU sensor	1
	Rear	DC In	1
		RCA Jack	1 Audio / 1 Video
		D-Sub	VGA Video
		RJ-45	5
		DIP Switch	2
		USB	1
		RESET button	1
Antenna	1		
Etc	Password Protection		OK
	Password Reset		OK
	Log List		OK
	Web Client		OK
	Button Lock		OK
	Buzzer		OK
General	Video Codec		MPEG4
	Audio Codec		G.726
	Power Source		DC Adapter
	Power Consumption		
	Dimension (WxDxH mm)		
	Weight		
	Operation Humidity		
	Operation Temp.		



P/NO: MFL3????