

SECURITY FIRST™

DIGITAL Video Surveillance System

With 19" LCD MONITOR and H.264 Network DVR



User's MANUAL

INSTALLATION & SAFEGUARDS

All the safety and operating instructions should be read before the unit is operated.

Environmental Conditions

1. To prevent electric shock or other hazard, do not expose unit to rain, moisture, or dust.
2. Place this unit in a well ventilated area and do not place heat generating objects on this unit.
3. This unit should not be located in an area where it is likely to be subjected to mechanical shocks.

Before You Start



1. Ensure the power switch is in the OFF position prior to starting.
2. Do not attempt to open or remove the covers (may expose you to dangerous voltage or other hazards).
3. Installation should be performed by qualified service personnel only.
4. This unit should be operated only from the type of power source indicated on the manufacturer's label and with the power supply included with the unit.

Notice



1. Before initial configuration or operation you must first set the TIME/DATE, followed by HDD clear. If you don't follow these steps first, it may cause the HDD to not record or save. Even though it is recorded, you cannot search recorded data.
2. When it comes to HDD capacity, you can use a larger capacity of HDD.
3. When you set the Record Setup, you have to also set the Record Configuration and Schedule Setup. This unit records as per the Record type & Schedule setup. The default setting value for Schedule setup is Continuous mode.

Notice



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 may cause harmful interference in which case the manufacturer of the device is not responsible and the user would be responsible to correct the interference.

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

"This Class B digital apparatus complies with Canadian ICES-003."

"Cet appareil numérique de la classe B est conforme à la norme NMB-003 du Canada."

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CHAP 1. Features & Package Contents

1-1. Features

Display

World Leading Active Matrix TFT-LCD Panel
Hi Performance Image Processing Circuit
Real Industrial Mechanical Design
Versatile terminals for Security and Industrial Solution

Real time display per camera
Auto Sequence
PIP (Picture in picture)
Digital Zoom of display
Simple playback mode
Simple PTZ camera control

Record

Efficient Image Quality in 6 steps
Schedule recording
Event Record by alarm and motion detection

Network

Monitor and Search by using Web Viewer via network

Playback

Search and playback by recorded data size and date/time

Data backup

USB Device Back-Up available

Others

Supports UNI-CODE
PAL/NTSC Auto detection

1-2. Package Contents



1. Monitor



2. DVR Main Unit



3. Cameras



4. Power Cord



5. Power Adapter



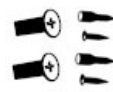
6. VGA Cable



7. Stereo Cable



8. Power Cable



9. Screws and Washers



10. Mouse



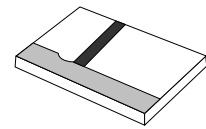
11. Software CD



12. Wall Mount Bracket



13. Remote Control and Battery



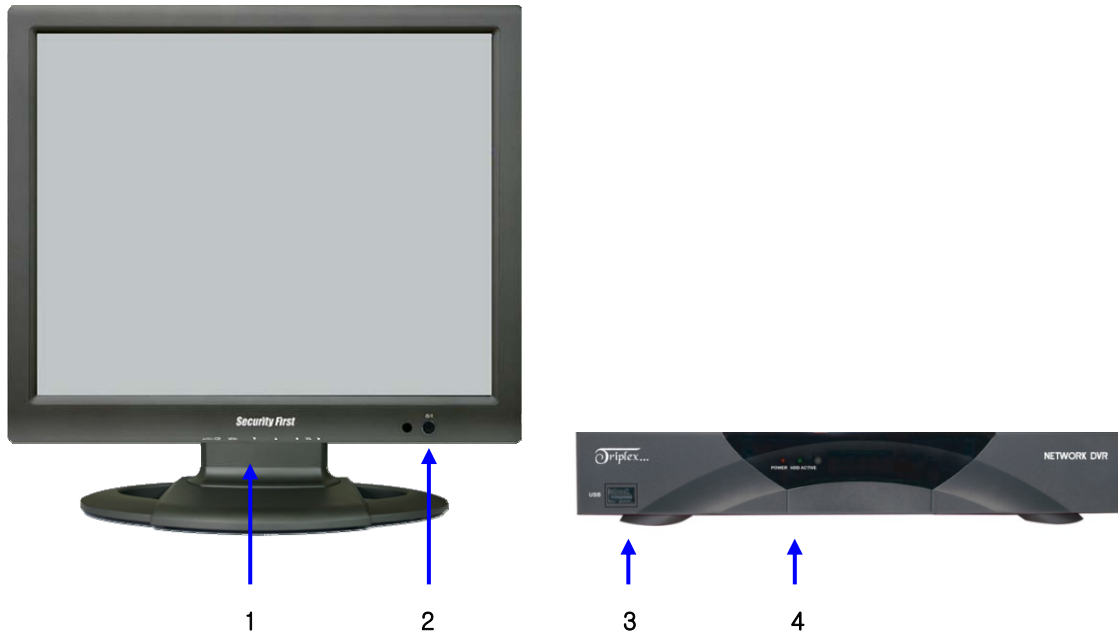
14. User's Manual

Package Contents	Description
1. Monitor	19" TFT-LCD Monitor
2. DVR Main Unit	Stand-Alone Digital Video Recorder
3. Cameras	RJ11 Cameras and Hardwired Cables (4 Ea)
4. Power Cord	AC power supply to adapter for 12V DC power
5. Power Adapter	DC power supply
6. VGA Cable	Connect LCD Monitor and DVR Main Unit (See a installed part)
7. Stereo Cable	For Sound and Remote Control
8. Power Cable	DC power in DVR unit from LCD monitor
9. Screw and Washers	For positioning Wall Mount Bracket
10. Mouse	Enables to control all functions of DVR
11. Software CD	Remote Viewer Software & Backup CD Player
12. Wall mount bracket	Wall mount bracket – screw
13. Remote Control Unit	Remote Control and Battery (2 x "AAA")
14. User's Manual	

* Design & specifications are subject to change without notice

CHAP 2. Function of Each Button

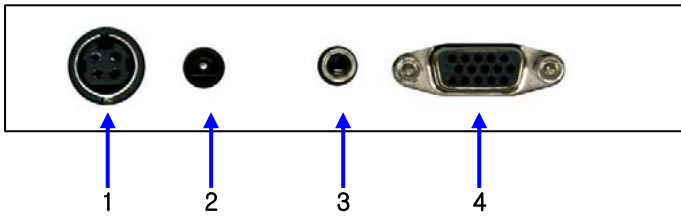
2-1. Front



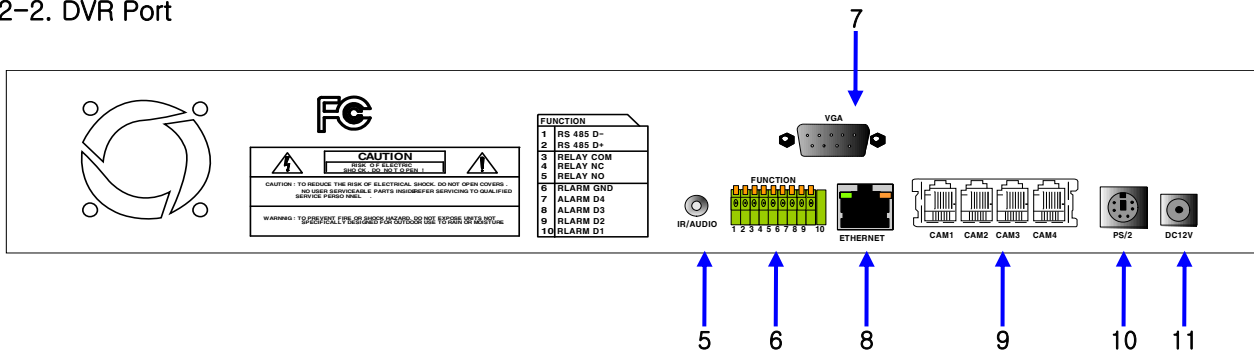
No.	Name	Function
1	AUTO/ENTER	AUTO: Auto geometry adjustment in PC Source Enter OSD menu and execute all of the functions
	MENU	Open or close OSD
	▲ , ▼	This button allows user to move the sub-menu
	◀ , ▶	Adjust the volume / Adjust menu settings
2	IR	Remote control sensor
	O/I, LED	Turns the power ON or OFF. LED lights with green when the power is turned ON LED lights with red when the power is turned OFF
3	USB HOST	Used for Data Backup (only USB memory stick should be used for backup.)
4	LED Lamps	Shows status of operation POWER : Power status HDD ACTIVE : HDD status

2-2. Rear(PORT)

2-1. Monitor Port



2-2. DVR Port



	Name	Function
1	DC IN	DC 12V input from Adapter
2	DC OUT	DC output to DVR
3	AUDIO/IR	Connection with DVR (for Audio and IR)
4	VGA	Modified VGA (for video and signal etc.)
5	Audio In/Out	1ch audio output
6	RS 485	Connection with PTZ camera or other external device using RS 485 interface
	RELAY Output	Relay out terminal
	SENSOR Input	Sensor input terminal
7	VGA	Connection to Monitor
8	ETHERNET	Connection to ETHERNET device
9	CAMERA Input/ Audio Input	Connection with camera (NTSC / PAL) 4ch video and audio input
10	PS/2	Connection with PS/2 MOUSE
11	DC Power	DC over 12V adapter

CHAP 3. Installation

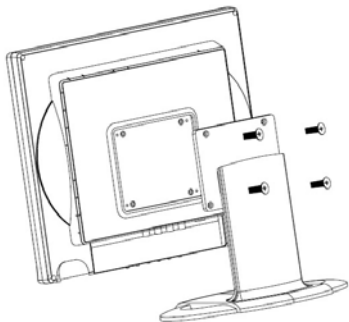
3-1. Installation Configuration

1) Basic Installation

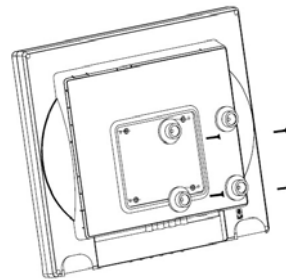


2) Wall-mount Installation

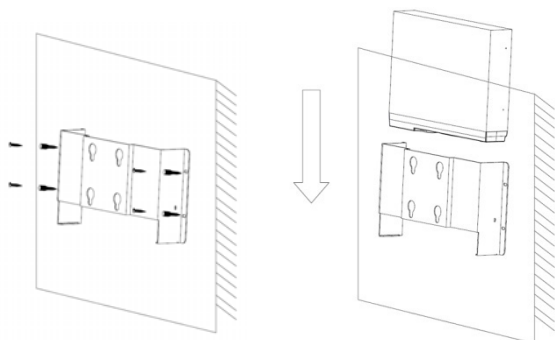
First, unscrew stand assembly



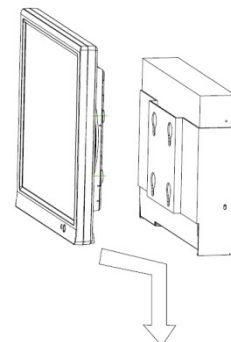
Second, attach the Monitor positioning bracket to the monitor with screws provided.



Third,
1) mount the wall mounting bracket on the wall using the 4 washers and screws supplied.
2) adjust the fixing screws head angles as necessary

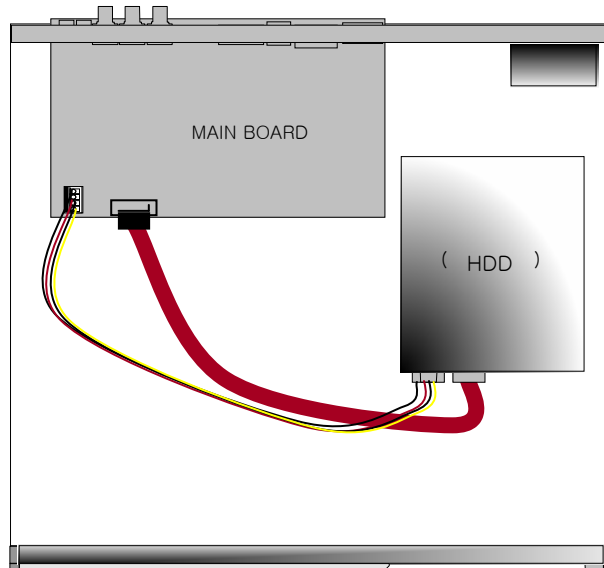


Finally ,
assemble the monitor fixing bracket with monitor



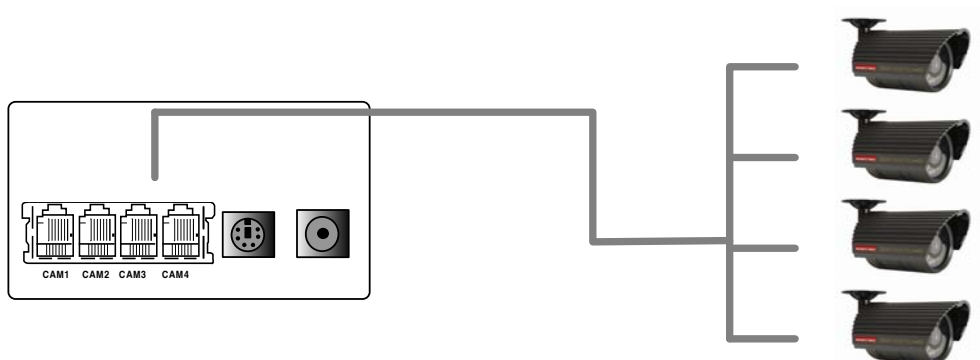
3-2. Detailed Installation

1) HDD



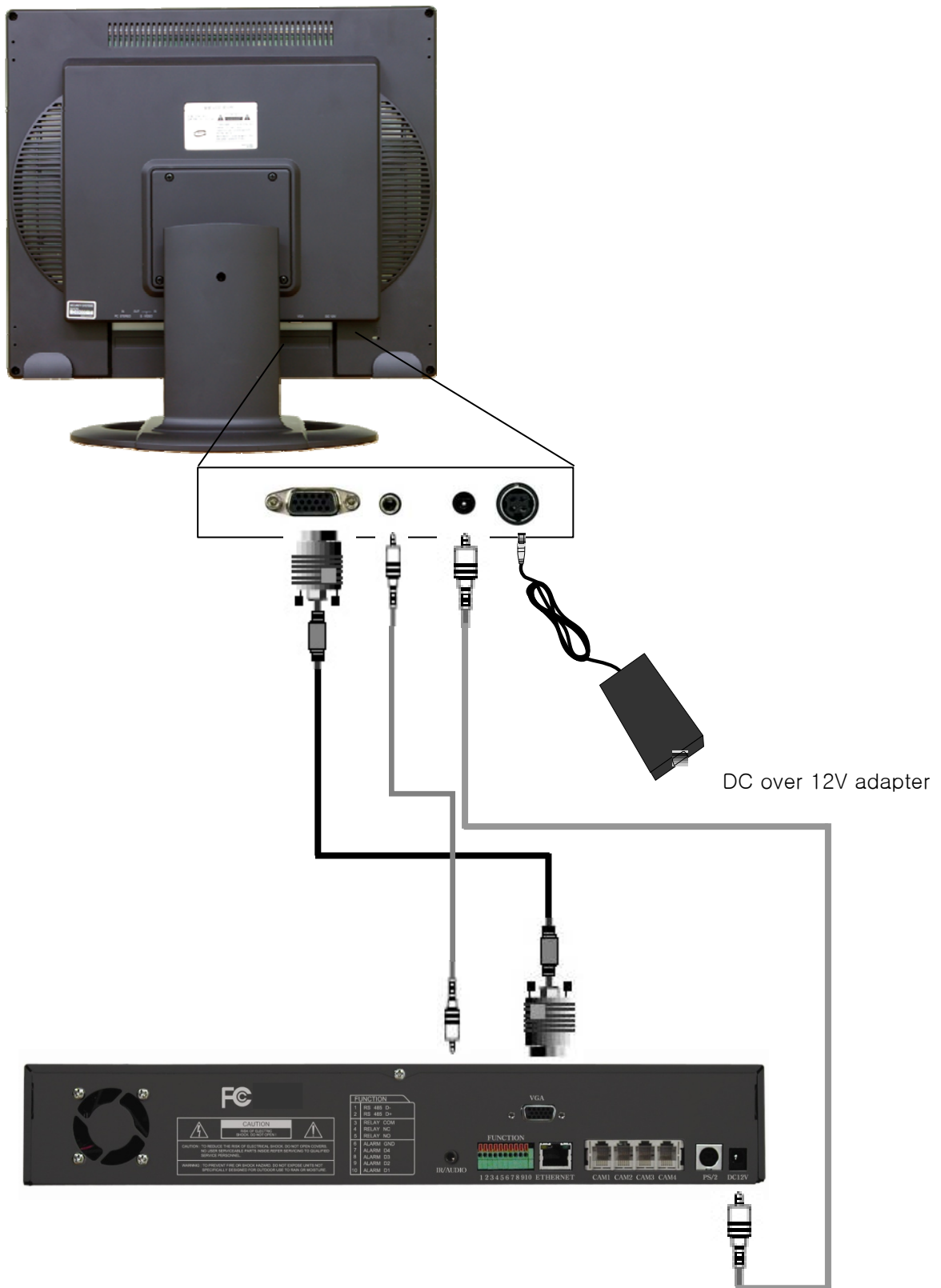
1. Connect Main Board and HDD using SATA data cable and HDD power cable.
2. Place the HDD absorbers (included in package) on the bottom of case and then install the HDD on top of them by using the screws (included in package).
3. Screws must be inserted from outside of the case bottom.

2) Camera



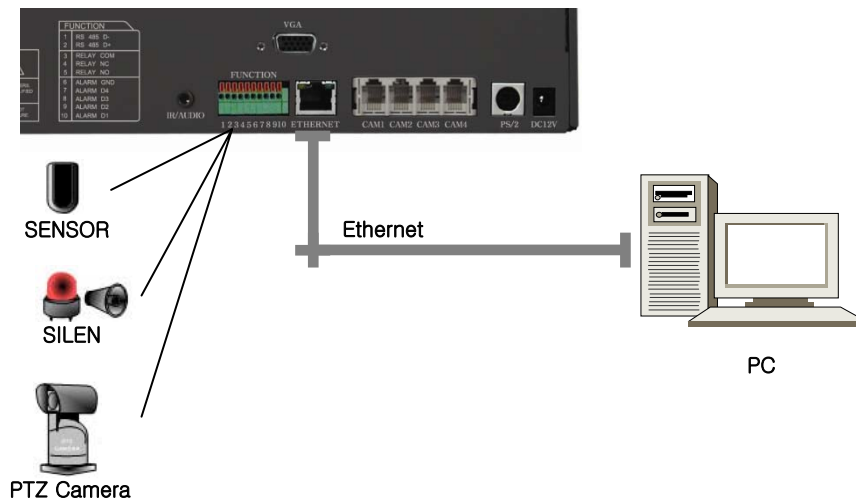
Connect camera to the camera input on rear panel of DVR marked CAMERA IN.

3) Monitor and Power



Connect the video output marked MONITOR to Video-In of Main monitor.

4) Other External Device



RS-485 : Control external device like PTZ camera.
(Pin No.1 & No.2)

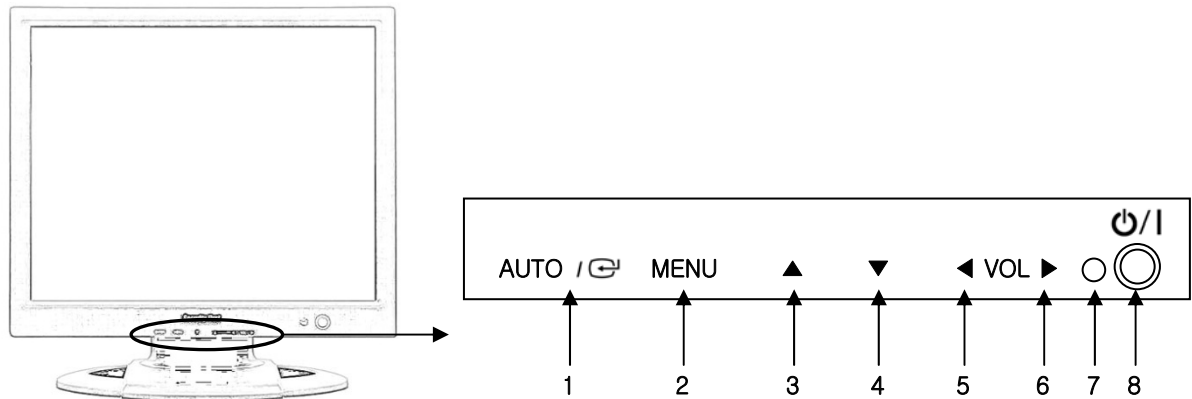
RELAY Output : Relay Output (Pin No.3 ~ No.5)

SENSOR Input : Sensor Input – Alarm Input (Pin No.6 ~ No.10)

ETHERNET : Connection to LAN, WAN

CHAP 4. Operation

4-1. Monitor Operation



1. AUTO/ENTER

AUTO : Auto geometry adjustment

ENTER : Enter OSD menu and execute all of the functions

2. MENU

Activates and exits the OSD (On Screen Display)

This button can also be used to move previous or status.

3,4. UP/DOWN(▲ / ▼)

This button allows user to move the sub-menu of the activated function.

▼ : Audio mute on or off when disappeared OSD

5,6. VOLUME(◀ / ▶)

Adjust the volume/Adjust menu setting.

▶ : Adjust the audio volume when disappeared OSD

7. IR Sensor

Remote control sensor

8. POWER ON/OFF

Turns the power ON or OFF.

There will be a delay of a few seconds before the display appears.

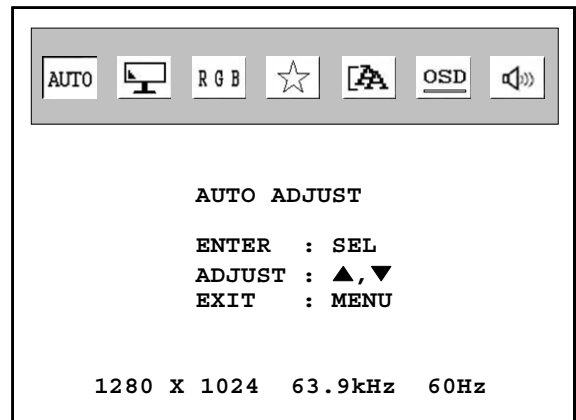
The power LED (next to the power switch) lights with green when the power is turned ON.

The power is turned off by pressing the power switch again and the power LED goes Red.

4-2. OSD MENU DESCRIPTION

1. AUTO ADJUST

Adjust screen size



2. SCREEN

1) BRIGHTNESS

Increase or decrease the intensity of the image.

2) CONTRAST

Increase or decrease the intensity (lightness or dimness) of the image

3) H.POSITION

Move image horizontally on screen right or left.

4) V.POSITION

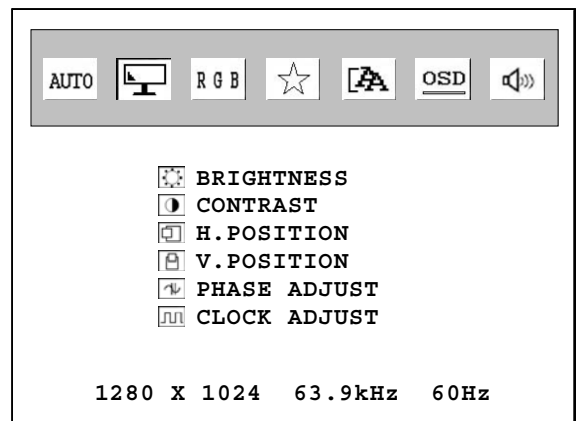
Move image vertically on screen up or down.

5) PHASE ADJUST

Remove and horizontal noise and clear up or sharpen the character images.

6) CLOCK ADJUST

Minimizes any vertical bras or stripes appearing on the screen background.



3. COLOR

1) COLOR TEMP.

Adjust color temperature to 9300, 6500, user.

2) RED

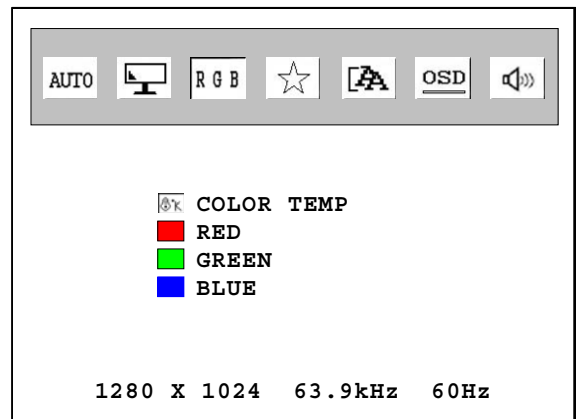
Adjust red color for user.

3) GREEN

Adjust green color for user.

4) BLUE

Adjust blue color for user.



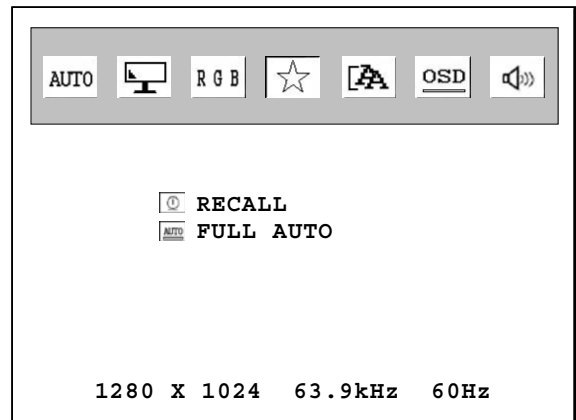
4. UTILITY

1) RECALL

Returns to the default settings programmed at the factory; default setting.

2) FULL AUTO

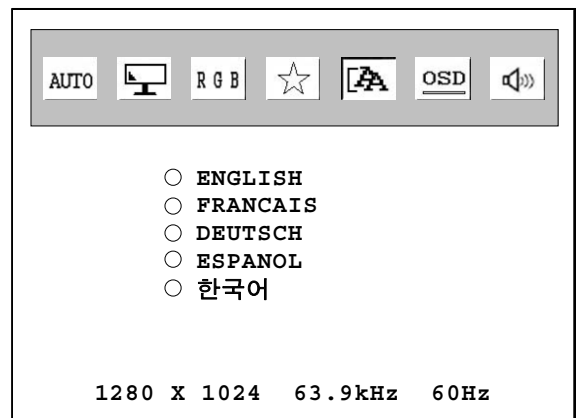
Adjust color temperature and screen size.



5. LANGUAGE

The menu displays selected languages.

First, select your language.



6. OSD

1) OSD TIMEOUT.

Select the OSD display timing.

2) OSD H.POSITION

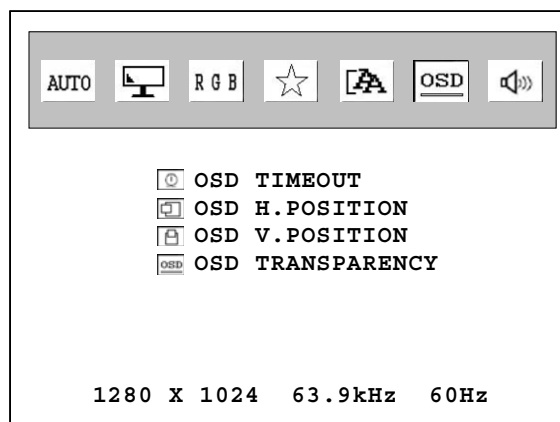
Move the OSD position to right or left.

3) OSD V.POSITION

Move the OSD position up or down.

4) OSD TRANSPARENCY

Select the OSD background.



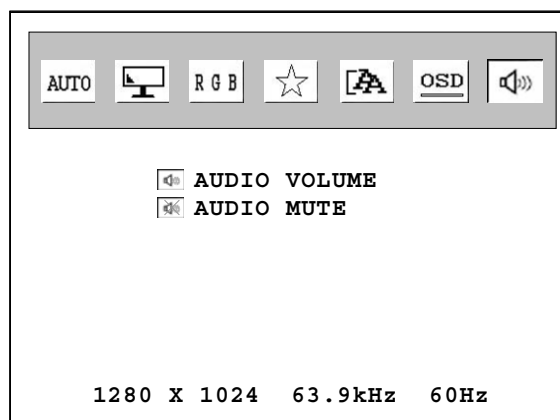
7. AUDIO

1) AUDIO VOLUME

Adjust audio volume.

2) AUDIO MUTE

Mute audio volume.




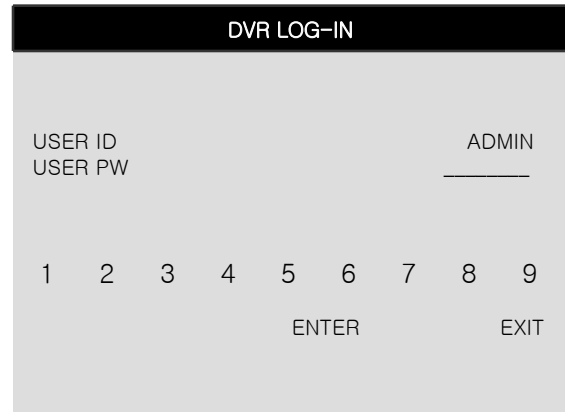
4-3. System Log-In

GENERAL USE OF MOUSE

Mouse buttons	Functions
Mouse Wheel	Increases or decreases setup value on the Menu mode
Right	Decreases setup value on the Menu mode
Left	Increases setup value on the Menu mode Execute all of the functions (clicking icons)

* Please use a mouse pad for proper operation of the mouse.

- 1) After power on, a right-click of the mouse shows an icon bar on the screen. Then click the [Menu] icon  to log in.
- 2) Then, you will see 'DVR Log-In' message shown at right.
- 3) You may log in as an ADMIN, MANAGER, or USER1 ~ USER8.
- 4) Input your password (Max. 8 digits are available for password) and click 'ENTER'.
- 5) To exit, click 'EXIT' button.



If the password entered matches previously set password, you can log into 'MAIN MENU'. If an incorrect password is entered, you will see "PW IS NOT CORRECT" message on display. The factory default password is none. Just click 'ENTER' for first time initial log in.

- Factory default password
- ADMIN : (Blank)
- MANAGER : '1'
- USER1~USER8 : '2'~'9'

※ For security reasons, be sure to make note of your own password.

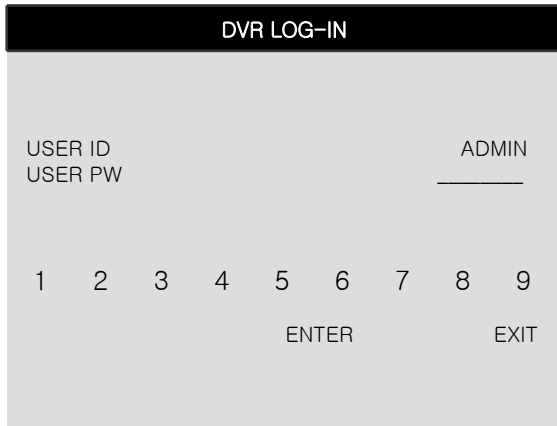
4-4. Factory Default

Before first operation, you must check that each channel is displaying properly and log in 'Main Menu' and set Time/Date and set HDD clear.

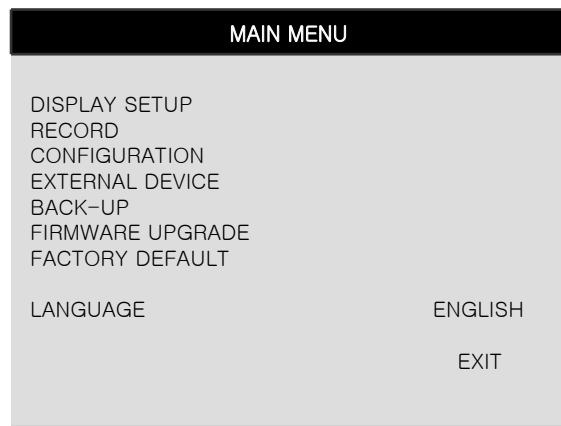
1) HDD Clear

You can see HDD Model name, serial number, number of blocks and size of HDD. In order to clear HDD, click 'CLEAR' at the bottom as shown below.

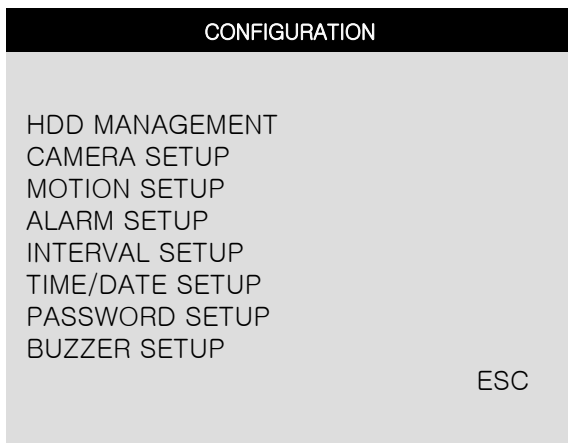
(1) Please refer to 4-3. System Log in again.
Then, click 'ENTER'.



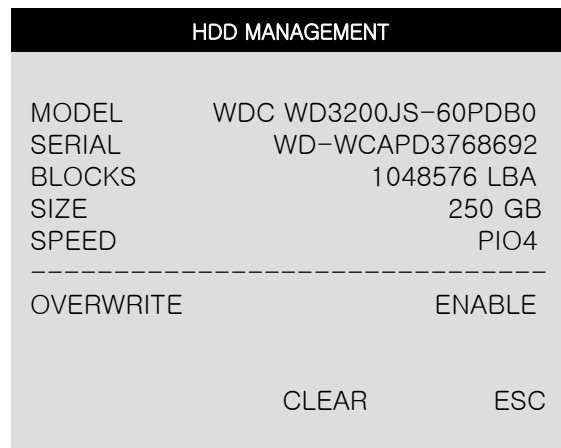
(2) Click 'EXTERNAL DEVICE'.



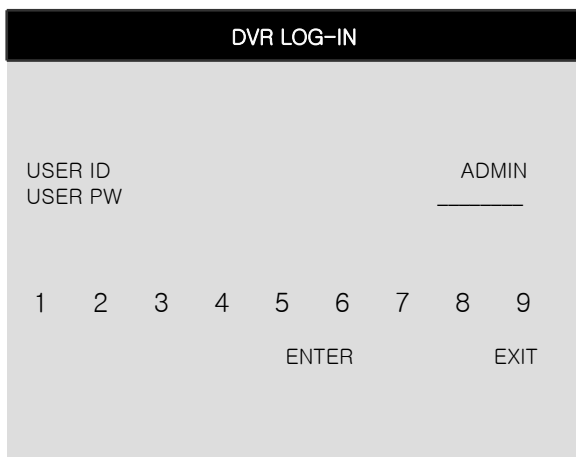
(3) Click 'HDD MANAGEMENT'.



(4) Click 'CLEAR'.

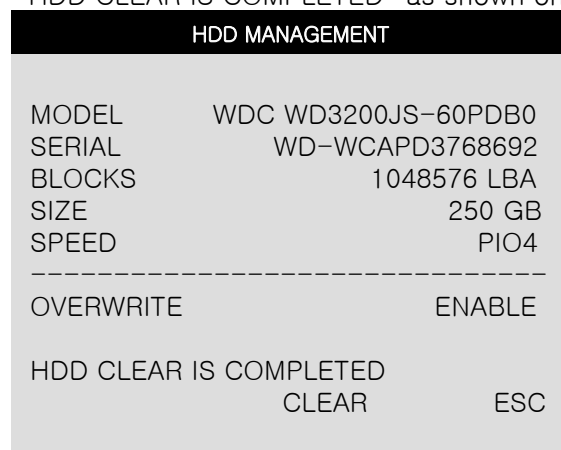


(5) Please refer to 4-3. System Log in again.
Then, click 'ENTER'.



(6) Now you can see

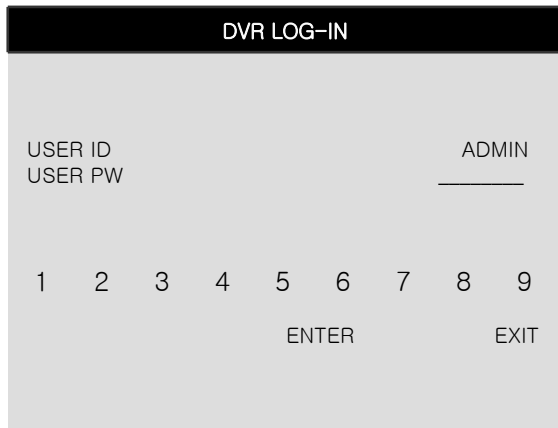
"HDD CLEAR IS COMPLETED" as shown on the left.



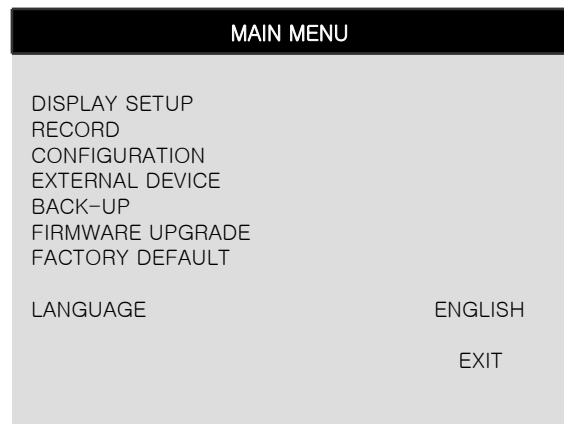
2) Factory Default

Factory default setting initializes DVR system.

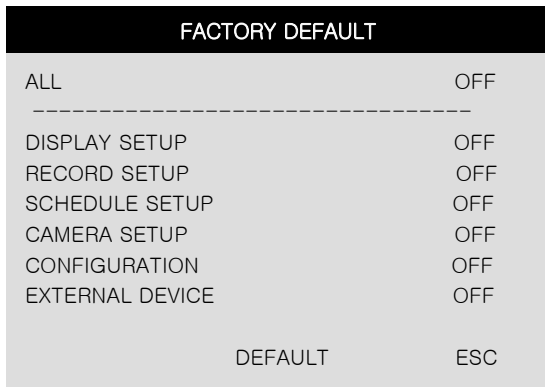
(1) Please refer to 4-3. System Log in again.
Then, click 'ENTER'.



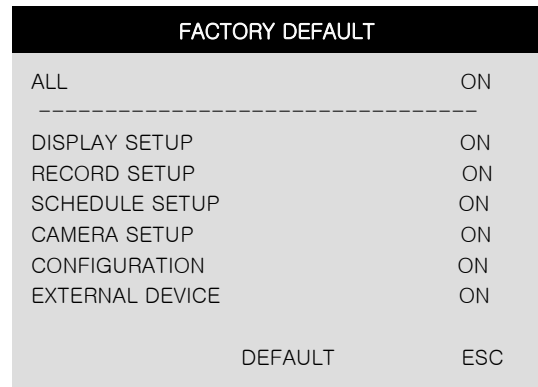
(2) Click 'FACTORY DEFAULT'.



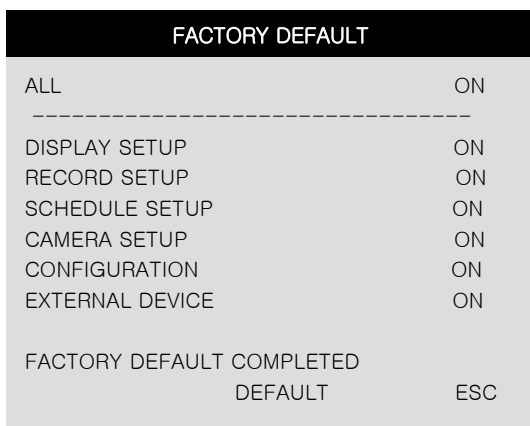
(4) Choose ON for 'ALL'.



(2) Click 'DEFAULT'.



(5) Now you can see "FACTORY DEFAULT COMPLETED" as shown on the left.



4-5. Display Configuration

Operation display

- Audio Off
- Audio On
- Volume Off
- PTZ mode
- PIP mode
- ZOOM mode
- SEQ mode
- FRZ mode

Live Display

ETHERNET connection status icon

- Disconnected
- Connected
- Network search

Emergency Record & Schedule Record [RED]

Stop Recording [GREEN]

HDD space display (Possible recording days)

OVERWRITE status icon

- * shows white when overwrite is ENABLE
- * sets lower when overwrite is DISABLE
- * blinking during OVERWRITE

- Playback
- Search
- Freeze
- Sequence
- Zoom
- PIP
- PTZ
- Menu
- Emergency recording start
- Emergency recording stop

※ Click , it goes back to Schedule Record mode.

Playback display

- FASTEST PLAY
- FAST PLAY
- FORWARD PLAY
- PAUSE
- BACKWARD PLAY
- FAST BACKWARD
- FASTEST BACKWARD PLAY


Playback Display

HDD space display (Location of the current playback image in HDD)

- MENU
- MOVE TO THE BEGINNING
- BACKWARD PLAY
- PAUSE
- FORWARD PLAY
- MOVE TO THE END
- INCREASE PLAYBACK SPEED
- DECREASE PLAYBACK SPEED
- SEARCH
- EXIT


4-6. Live View Setup

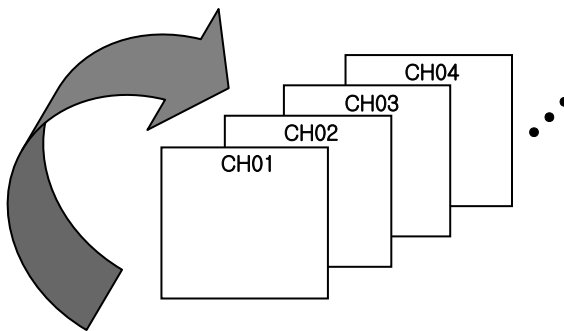
1) Full / Multiple View

Move the cursor onto [4 - split icon]  in the icon bar and click it to view 4 channel division. To enlarge each channel, click 1,2,3,4 Icon. Then, you will see a channel in full screen mode.




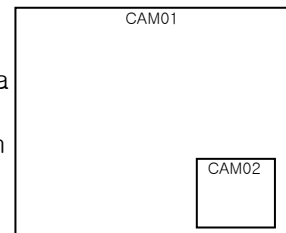
2) SEQ

Click  icon. It automatically displays full screen images in sequence. You can setup the SEQ time interval on setup menu. (MAIN MENU – CONFIGURATION – INTERVAL SETUP – SEQUENCE SCREEN)




3) Picture in Picture (PIP View)

When it is in full screen display mode, you can see another camera in a small window by clicking [PIP] icon , the other camera (in small window) is rotating in sequence to next number of camera and you can set the rotating time interval as per the procedure in Main Menu – CONFIGURATION – INTERVAL SETUP – PIP SCREEN.



4) ZOOM View

In live mode, if you click the [ZOOM] icon , images are displayed in two times larger size. While using [ZOOM] mode, you can move the enlargement area by using the mouse. To exit ZOOM mode, click [ZOOM] icon again.

5) Freeze


Pause a live view temporarily.

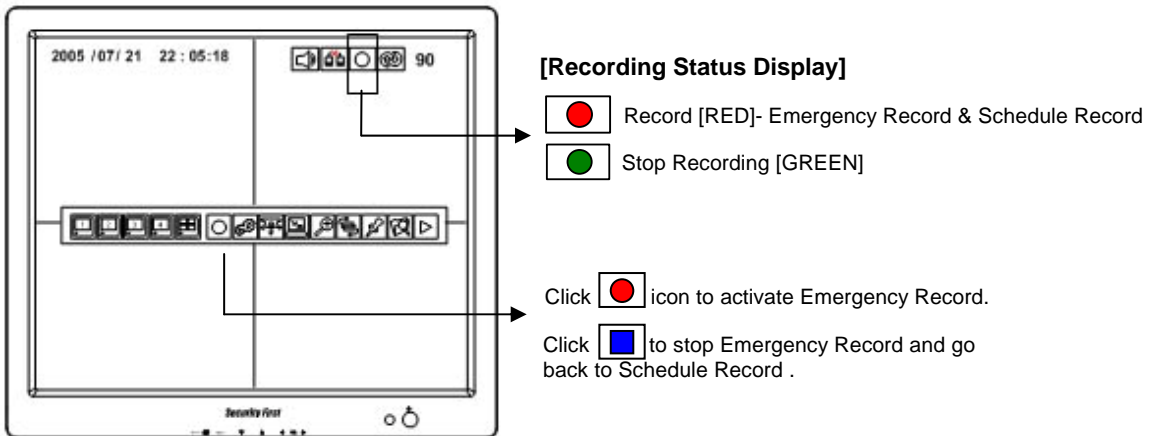
Click [FRZ] icon  and click channel what you want to FRZ channel.

It press FRZ channel again, it will cancel all.

4-7. Record

It records as a setting made by the user in Schedule Mode.

- Emergency Record
Once you click this icon  , it keeps recording continuously regardless of schedule setting.
- Schedule Record
Go to MAIN MENU-RECORD-SCHEDULE SETUP and setup schedule as you want.
It records as a setting. (Use 5-3. Record chapter)
- Record Icon in Red indicates Emergency Record and Schedule Record.




- This DVR unit does not record in following conditions ;
- ※ When Overwrite function is off and HDD is full
- ※ When there is no scheduled recording
- ※ When you update a firmware

4-8. Playback

On record mode or stop mode, click [playback] icon  to play the recorded data in 1x speed.

4-9. Search

There are three search methods controlled by the mouse wheel button, left and right button of a mouse.

When you click [SEARCH] icon , you see a window shown as below.

Select a target data by using the mouse.

In PERCENT SEARCH Mode, you can select certain data by clicking on the bar.

To move to the previous mode, click 'ESC'.

1. PERCENT SEARCH

Search by percentage of total recorded data. It starts from image corresponding to set % of data on the search bar.

2. TIME/DATE SEARCH

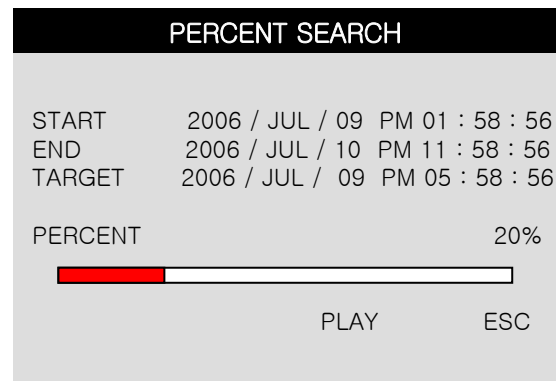
Search by time & date. Playback starts from the time & date selected.

3. EVENT SEARCH

Search by event list (Motion, Alarm, Video Loss)



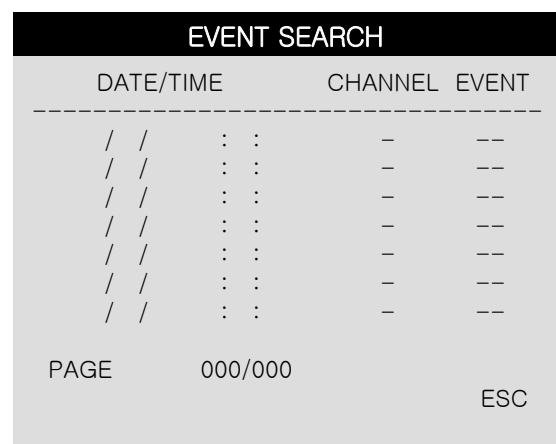
SEARCH MAIN MENU



PERCENT SEARCH




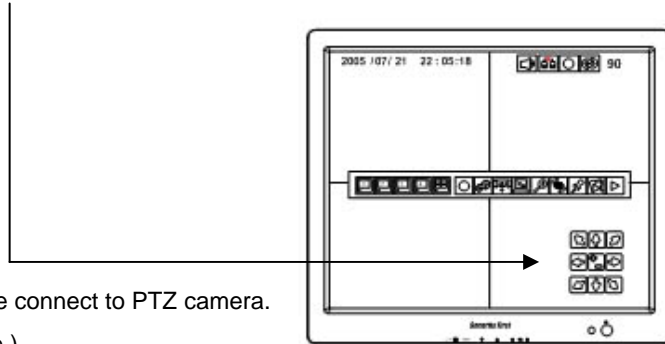
TIME/DATE SEARCH



EVENT SEARCH

4-10. PAN/TILT/ZOOM Camera Operation

Click the [PTZ] the icon  in the icon bar, then you can see 'arrow' keys & '+/-' key shown below. Click these arrow keys to move a PTZ camera to each direction. By using '+/-' key, you can control ZOOM IN/OUT function. ('+' : ZOOM IN / '-' : ZOOM OUT)



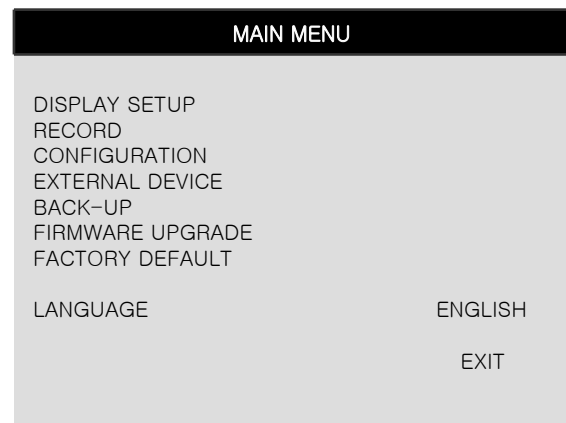
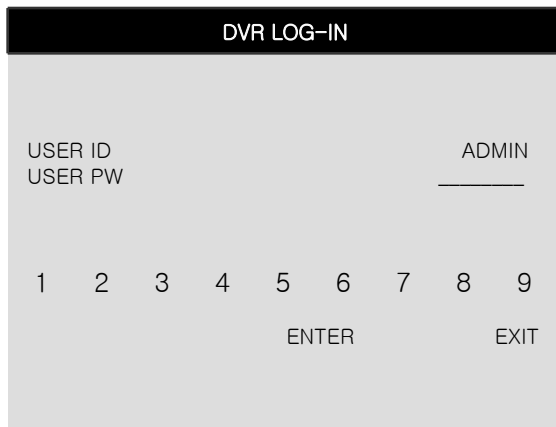
- If you would like to use PTZ function, please connect to PTZ camera.
(PTZ camera is not included in this package.)

4-11. Data Backup

Right-click to see the icon bar and click [MENU] icon  and go to 'Backup'.

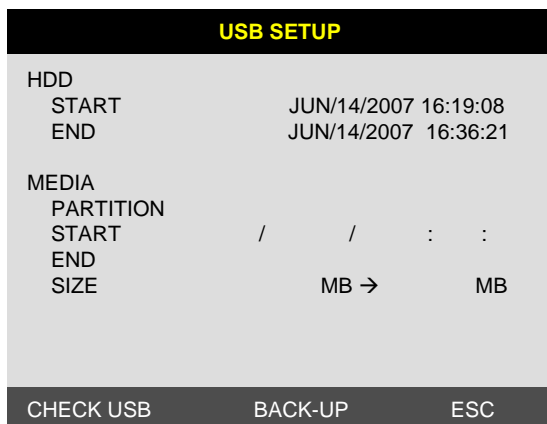
- (1) Please refer to 4-3. System Log in again.
- (2) Click 'BACK-UP'.

Then, click 'ENTER'.



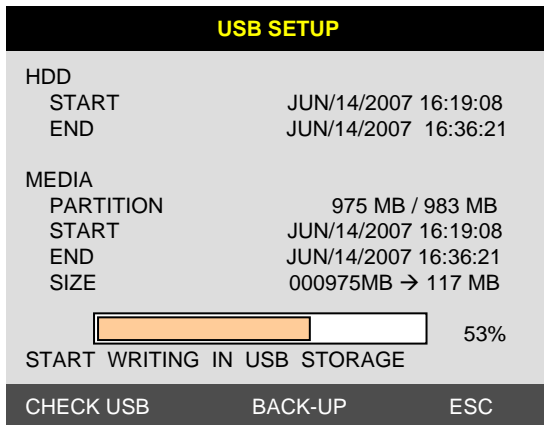
- (3) Insert USB memory stick and click 'CHECK USB'.

※ The START & END time / date in HDD sub-menu only shows start and end of recording. This is not selectable and editable.

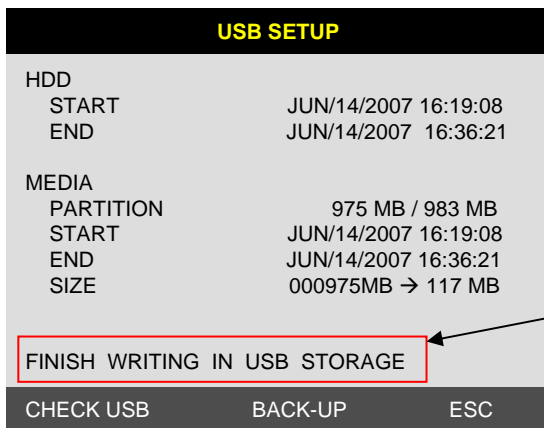


※ Only USB memory stick should be used for backup.

- (4) To set start time of back-up and back-up data size in MEDIA sub-menu, use the mouse (left/right/wheel button).
- ※ End time of back-up will be calculated automatically as per start time & date and the back-up data size you set.
 - ※ You can select the back-up data size (size of back-up data from start of back-up), but END of back-up time is automatically determined by DVR itself.
- (5) Click 'Back-up' to start USB back-up.



- (6) You can verify the back-up by installing and running the Player on your PC. Refer to 6-3. Viewer



System Status Messages

(1) When MEMORY STICK is recognized

- USB STORAGE IS CHECKING ...
- USB STORAGE IS AVAILABLE

(2) During Back-Up

- START WRITING IN USB STORAGE
- FINISH WRITING IN USB STORAGE

(3) Error Messages

- THERE IS A PROBLEM ON USB PORT
(If USB PORT fails to work properly or not connected)
- INPUT DATE TIME ERROR
(If you select incorrect date & time, not in between START and END time in HDD.)
- RECORD DATA IS NOT AVAILABLE
(When USB memory stick is full or backup data file size is 0MB)

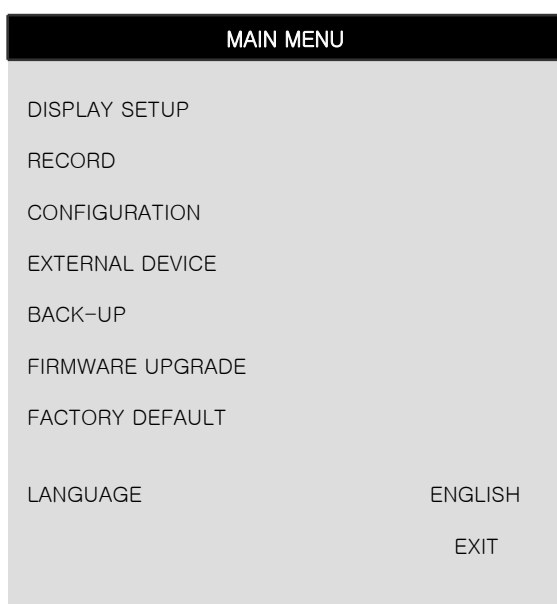
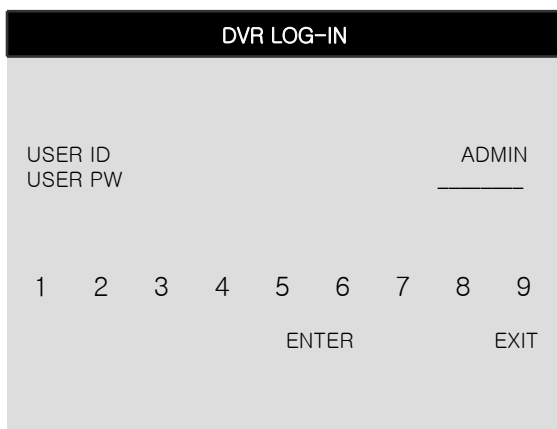
CHAP 5. Setup

5-1. General Operation

Click the [MENU] icon  and input user password to log in.

(1) Please refer to 4-3. System Log in again.

Then, click 'ENTER'.



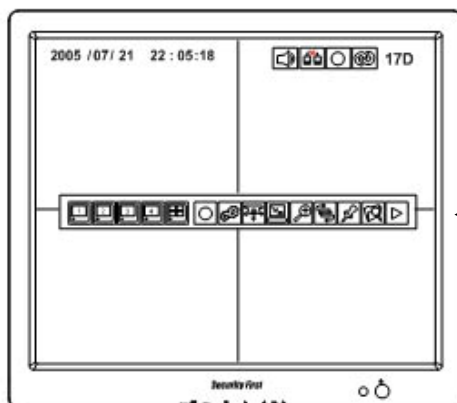
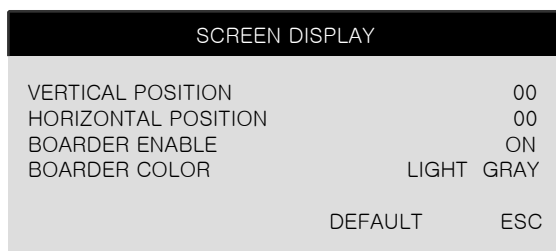
MAIN MENU

5-2. Display Setup

This is the setup menu for display on the screen.
 If you click 'DISPLAY SET UP', then you change setting values for the display as shown below.



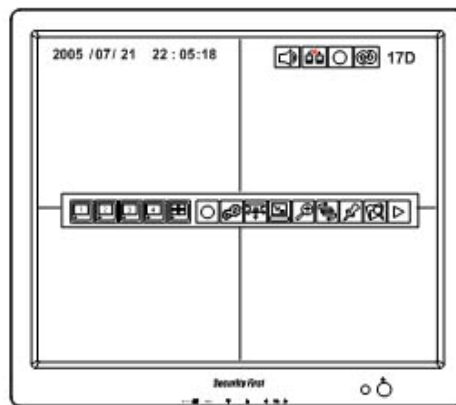
1) Screen Display Setup



VERTICAL POSITION : -5 ~ 5
 HORIZONTAL POSITION : -31 ~ 31
 BORDER ENABLE : ON/OFF
 BORDER COLOR : COLOR SELECT

2) OSD Setup

OSD SETUP		
TOP OSD OFFSET		0
	DEFAULT	ESC



TOP OSD OFFSET : -1 ~ 1

5-3. Record

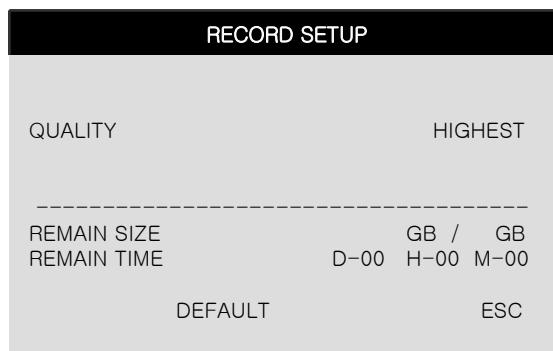
This is the most important configuration of the DVR. When you select 'RECORD' in the main menu, you can see the window as shown on the right.

1) Record Setup



(1) QUALITY : 5 step selectable

- Highest
- High
- Normal
- Low
- Lowest



(2) REMAIN SIZE

Indicates HDD capacity remains by size (GB). / Indicates total HDD capacity (GB).

(3) REMAIN TIME

Indicates HDD capacity remains by time.

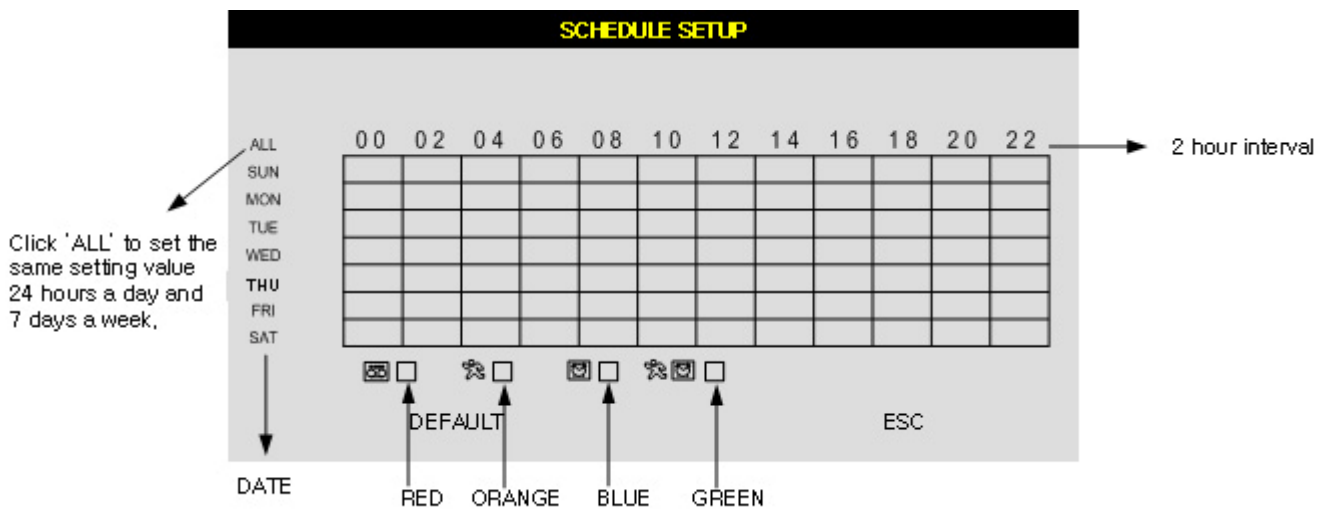
D- days, H- hours, M- Minutes

2) Schedule Setup

DVR system records in Schedule Recording mode. In Schedule Recording mode, you can choose four different types of recording modes and schedule by 2 hour intervals from Sunday to Saturday.

Default recording mode is continuous recording.

Set Recording time interval for a day of the week (Time interval : 2 hours) and recording type.



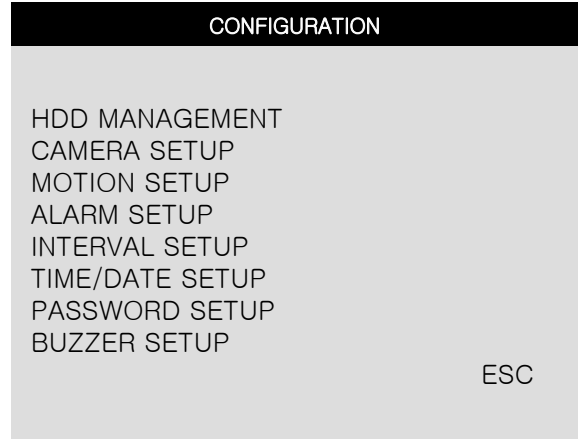
- : Continuous recording
- : Motion recording
- : Alarm recording
- : Motion & Alarm recording

※ Default setting is continuous recording.

※ Each recording type is indicated in different color of boxes. You can set up schedule by dragging the mouse. In this case, the recording type of the boxes dragged is same as the one that you initially select. All blocks can be activated or deactivated by using 'ALL' button.

5-4. Configuration

When you click 'CONFIGURATION' on the main menu, you can go to the 'CONFIGURATION' menu, as shown on the right.



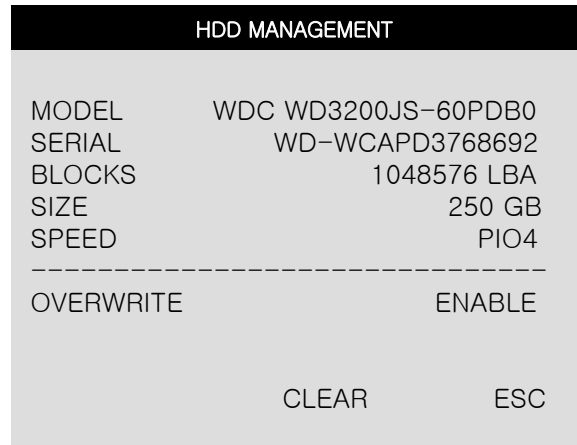
1) HDD Management

You can see HDD Model name, serial number, number of blocks and size of HDD. You can also clear HDD. (While you are in this HDD MANAGEMENT Mode, DVR does NOT record.)

MODEL : HDD MODEL NAME
 SERIAL : HDD SERIAL No.
 BLOCKS : HDD LBA BLOCK Number
 SIZE : HDD TOTAL SIZE
 SPEED : HDD MODE
 OVERWRITE : ENABLE, DISABLE

What is OVERWRITE?

- When HDD is full, the oldest data in HDD is automatically deleted as DVR records new data.



2) Time/Date Setup

In this setup, you can select date/time of DVR system and display format.

You can adjust values by using the mouse wheel or left/right button of the mouse.

※ For first time installation, date/time setup must be completed first.

DATE FORMAT : DATE(ASIAN/EUROPEAN /AMERICAN)
 HOUR FORMAT : (2H/24H)
 MONTH FORMAT : (ENGLISH,NUMERIC)

TIME/DATE SETUP	
DATE	JUN/15/2007
TIME	15:41 :45
DATE FORMAT	AMERICAN
HOUR FORMAT	24HOUR
MONTH FORMAT	ENGLISH
DEFAULT	ESC

3) Camera Setup

You can setup values for each camera.

CAMERA SETUP	
CHANNEL	CH1
TITLE	CAM01__
BRIGHTNESS	1
CONTRAST	7
SATURATION	14
HUE	-32
DEFAULT	ALL-DEFAULT ESC

(1) CHANNEL : You can select a channel for which you want to change values.

(2) TITLE : You can name each camera with an 8-digit number or letter combination.

Move the cursor onto a location that you want and choose numbers or letters by using mouse wheel or left/right button of the mouse. To exit to the previous menu mode, click 'ESC'.

DEFAULT = CAM01__ ~ CAM03__

(3) COLOR : You can adjust color, for each camera, by using the mouse.

BRIGHTNESS : Adjust brightness (-32 ~ 31) [DEFAULT = 1]

CONTRAST : Adjust contrast (-32 ~ 31) [DEFAULT = 7]

SATURATION : Adjust saturation (-32 ~ 31) [DEFAULT = 14]

HUE : Adjust hue (-32 ~ 31) [DEFAULT = -32]

(4) Executing Buttons

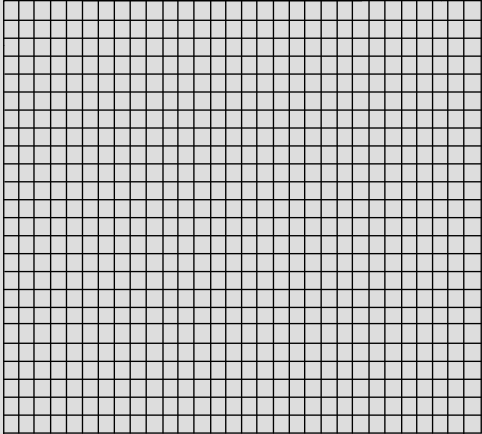
ALL-DEFAULT : Initializing all values, for all channels, as a default setting value.(CH1 ~ CH4)

DEFAULT : Initializing all values, for the applied channel, only as a default setting value.

ESC : Use to exit

4) Motion Setup

MOTION SETUP

CHANNEL	CH1	
SENSITIVITY	6	
DURATION	05	
SIZE	2	

DEFAULT
ALL-DEFAULT
ESC

MOTION SETUP: You can change values by mouse wheel and left/right button of the mouse.

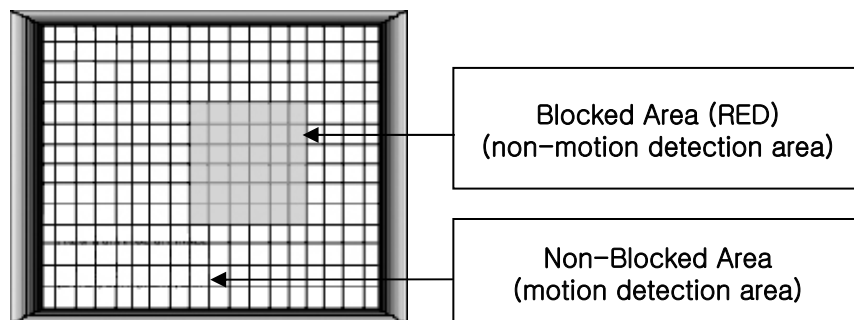
- SENSITIVITY: Adjust sensitivity of a movement. You can adjust level 1 ~ level 7. [DEFAULT : 6]
- DURATION : Whenever motion is detected (set in Motion Recording mode), DVR records for a certain time from the point when motion is detected. (2 sec.~99 sec.) [DEFAULT : 5 sec.]
- SIZE : Select the CELL SIZE for Blocked Area (RED). (1,2,3,6, and ALL) [DEFAULT : 2]
- ALL-DEFAULT: Default setup for all channels

MOTION MASK SETUP : Set motion detection area.

- CELL : Move to the cell and then decide to make it activated or deactivated by clicking it. When the cell is activated, motion is detected. Motion is not detected on deactivated cells. Whenever you click a cell, it changes between activated and deactivated.

BLOCK SETUP: First, you decide 'Activated' or 'Deactivated' by clicking a cell.

- Then, if the initial cell is 'Activated', the blocks dragged by the mouse are also activated.
- If the initial cell you select is deactivated, the blocks dragged are also deactivated.



5) Interval Setup

See the switching time interval for SEQ or PIP function.(1 sec. ~99 sec.)

SEQUENCE SCREEN :Set the sequencing switch time interval in live full screen.

PIP SCREEN : Set the sequencing switch time interval of PIP window.

EVENT UPDATE : Set the minimum time interval of event to be listed on EVENT LIST.
If EVENT UPDATE time is set at 10 sec, only following event happened at 10 sec or more than 10 sec after previous event shall be listed on EVENT LIST.

INTERVAL SETUP	
SEQUENCE SCREEN	01 SEC
PIP SCREEN	01 SEC
EVENT UPDATE	600 SEC
	DEFAULT ESC

6) Alarm Setup

Set type of alarm sensors connected to DVR unit. N.O represents Normal Open type and N.C Normal Close type.

INPUT : Select NORMAL OPEN, NORMAL CLOSE, or DISABLE.
DISABLE disables the alarm sensor connected to DVR.

DURATION : Set the duration of alarm when an ALARM is activated. (2 sec. ~ 99 sec.)

ALARM SETUP	
CHANNEL	CH1
INPUT	DISABLE
DURATION	01 SEC
	ALL-DEFAULT DEFAULT ESC

7) Password Setup

Set user ID and Password.
You can make up to an 8-digit number combination for a password by clicking number '1' ~ '9' on password setup menu.

To change password, click 'USER PW' first to activate the menu.

You must input current password and then input new password.
Input new password again to confirm.

PASSWORD SETUP	
USER ID	ADMIN
USER PW	-----
NEW PW	-----
CONFIRM	-----
1	2
3	4
5	6
7	8
9	
	ENTER ESC

Number selection for password

※ Changing the user Password in the first operation is recommended.

8) Buzzer Setup

You can select Buzzer OFF/ON on this setup menu.

BUZZER SETUP	
KEY TONE	ON
VIDEO LOSS	ON
ALARM ACTIVE	ON
MOTION DETECT	ON
DEFAULT	ESC

5-5. External Device Setup

Please refer to 4-3. System Log in again.

Then, click 'ENTER'.

DVR LOG-IN									
USER ID							ADMIN		
USER PW							_____		
1	2	3	4	5	6	7	8	9	
							ENTER		EXIT

Click 'EXTERNAL DEVICE'

MAIN MENU	
DISPLAY SETUP	
RECORD	
CONFIGURATION	
EXTERNAL DEVICE	
BACK-UP	
FIRMWARE UPGRADE	
FACTORY DEFAULT	
LANGUAGE	ENGLISH
	EXIT

Set parameters of external devices connected to DVR like Ethernet, Mouse, etc.
If you click EXTERNAL DEVICE on the main menu, then you will see the window shown on the right.

EXTERNAL DEVICE	
TCP/IP SETUP	
PAN/TILT SETUP	
MOUSE SETUP	
AUDIO SETUP	
	ESC

1) TCP/IP Setup

TCP/IP function enables you to see live pictures and recorded pictures via the Internet.

TCP/IP SETUP	
IP SETUP	
DDNS SETUP	
	ESC

(1) IP Setup :

Shows the network information assigned to the DVR unit. If the DHCP setup status is AUTOMATIC, you can set the IP port only. If the DHCP setup status is MANUAL, you must set all parameters. If IP port number is blocked, a network specialist's advice is needed.

IP SETUP	
MAC ADDRESS	00-0A-A2-00-FD-63
DHCP MODE	MANUAL IP DETECT
IP PORT	50000
IP ADDRESS	192.168.001.160
GATEWAY	192.168.001.001
SUBNET	255.255.255.255
ESC	

A. Static IP



A static IP address is a number (in the form of a dotted quad) that is assigned to a computer by an Internet service provider (ISP) to be its permanent address on the Internet. Input IP address which is assigned by your ISP in IP CONFIG SETUP.

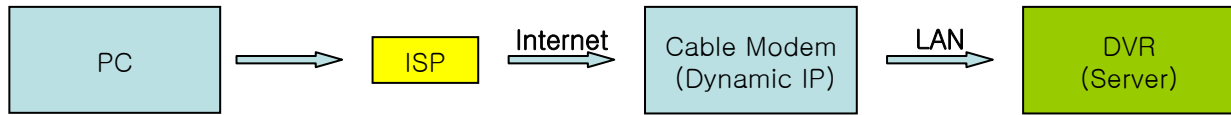
- 1) Verify if IP address is OK or not with PC before connecting DVR.
(or inquires to Internet service provider that assigned IP address, GATEWAY, SUBNET MASK)
- 2) Connect LAN cable to DVR after confirmation.
- 3) DVR : MENU → LOG IN DVR → EXTERNAL DEVICE → TCP/IP SETUP → IP SETUP .
- 4) Set DHCP to MANUAL.
- 5) Verify if MAC ADDRESS starts from 00-0A-A2...
- 6) Input the assigned IP address.
- 7) Set IP PORT. (50000 recommended)
- 8) Input GATEWAY (which is assigned by your ISP).
- 9) Input SUBNET MASK (which is assigned by your ISP).
- 10) Go out of MENU SETUP.
- 11) Turn off and on Modem (Router) which is provided by your ISP.
→ This is to reset client of MAC from your ISP.
Wait 30 seconds after turning on.
- 12) Access DVR with Remote Viewer Software.
See a chap.6 IRS

IP SETUP	
MAC ADDRESS	00-0A-A2-**-**-**
DHCP MODE	MANUAL IP DETECT
IP PORT	50000
IP ADDRESS	211.118.047.160
GATEWAY	211.118.047.001
SUBNET	255.255.255.255
ESC	

← Assigned by your Internet Service Provider

* If user fails to access, please verify 1,6,7,8,9,11 again.

B. Dynamic IP



This contrasts with a Dynamic IP address, wherein an IP address is assigned to a computer, usually by a remote server which is acting as a Dynamic Host Configuration Protocol server. IP addresses assigned using DHCP may change depending on the addresses available in the set scope. Dynamic IP Addresses assigned by Dynamic Host Configuration Protocol servers are used because it creates efficiency within a network.

If you set 'AUTOMATIC' for DHCP Type on TCP /IP setup menu, IP information is automatically assigned from ISP's DHCP.

- 1) Verify if IP address is OK or not with PC before connecting DVR.
(The internet connection confirmation)
- 2) Connect LAN cable to DVR after confirmation.
- 3) Turn off and on Modem (Router) which is provided by ISP company.
-> This is to reset client of MAC from ISP company.
Wait 30 seconds after turning on.
- 4) Turn off and on DVR.
- 5) DVR: MENU → LOG IN DVR → EXTERNAL DEVICE→TCP/IP SETUP → IP SETUP.
- 6) Verify if MAC ADDRESS starts from 00-0A-A2...
- 7) Set DHCP to AUTOMATIC and click 'IP DETECT'.
- 8) Set DHCP to MANUAL
- 9) Go out of MENU SETUP after getting IP successfully.
- 10) Access DVR with Remote Viewer Software.
See a chap.6 IRS

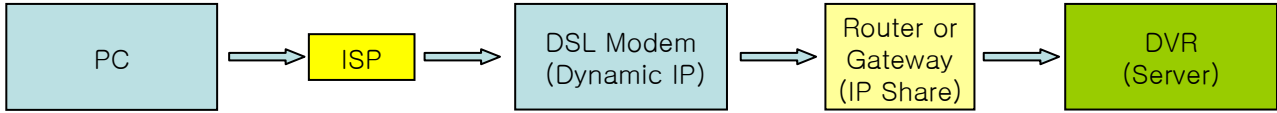
IP SETUP	
MAC ADDRESS	00-0A-A2-**-**-**
DHCP MODE	AUTOMATIC
	IP DETECT
IP PORT	50000
IP ADDRESS	211.118.047.160
GATEWAY	211.118.047.001
SUBNET	255.255.255.255
	ESC

IP SETUP	
MAC ADDRESS	00-0A-A2-**-**-**
DHCP MODE	MANUAL
	IP DETECT
IP PORT	50000
IP ADDRESS	211.118.047.160
GATEWAY	211.118.047.001
SUBNET	255.255.255.255
	ESC

Assigned by your Internet Service Provider

* If user fails to access, please verify 1,3,4,7,8 again.

C. Dynamic IP of PPPoE (DSL)



DVR doesn't support DSL (PPPoE), user will need to set NETWORK with IP SHARE in order to access DVR remotely. At this time, user will need to port forward on DVR. Please contact IP SHARE Manufacturer if you need to know how to forward port.

Even though the user may have a Static/Dynamic IP, if you want to use another device (PC) through IP SHARE, set NETWORK as follows

- 1) Verify if IP address is OK or not with PC before connecting DVR.
(The internet connection confirmation)
- 2) Connect Router (IP SHARE) to DSL modem as shown the following picture.
- 3) Set the Internet connection on Router (IP SHARE). (Refer to the Router Manual).
- 4) Verify if sub-group of network in Router is OK or not.
- 5) Connect DVR to Router.
- 6) DVR : MENU → LOG IN DVR → EXTERNAL DEVICE →TCP/IP SETUP → IP SETUP.
- 7) Set DHCP to AUTOMATIC and click IP DETECT.
- 8) Set DHCP to MANUAL
- 9) Verify if MAC ADDRESS starts from 00-0A-A2...
- 10) Set IP PORT, (50000 recommended)
- 11) Go out of MENU SETUP.
- 12) Forward port from Router (Refer to the next page).
- 13) Access DVR with external IP and Port (Port forwarded).

* If Router supports DDNS, user can access Remote Viewer using Domain Information.

IP SETUP	
MAC ADDRESS	00-0A-A2-**-**-**
DHCP MODE	AUTOMATIC IP DETECT
IP PORT	50000
IP ADDRESS	192.168.001.160
GATEWAY	192.168.001.001
SUBNET	255.255.255.255
ESC	

IP SETUP	
MAC ADDRESS	00-0A-A2-**-**-**
DHCP MODE	MANUAL IP DETECT
IP PORT	50000
IP ADDRESS	192.168.001.160
GATEWAY	192.168.001.001
SUBNET	255.255.255.255
ESC	

* If user fails to access, please verify 1,4,7,8,12 again.

If you are using a router, please setting up DMZ and Port Forwarding instructions below.

[How to set DMZ]

- Set DMZ as per router manual, if you want to connect a DVR by using one internet line.
- Setting procedure and name of DMZ may be various from router manufacturers.
- For more detail information, please refer to router manual.

One example of how to set DMZ is shown below.

- 1) Access to your router. (Please refer to router manual provided by a router manufacturer.)
- 2) Find 'Applications & Gaming' and go to 'DMZ'.
- 3) Click 'Enable' and input IP address on 'DMZ Host IP Address'.
- 4) Click 'Save Settings' to save.

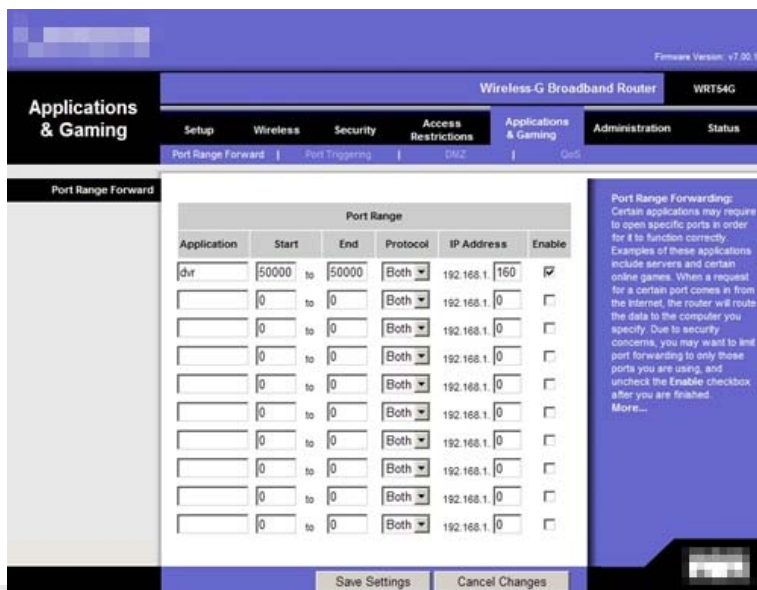


[How to do Port Forwarding]

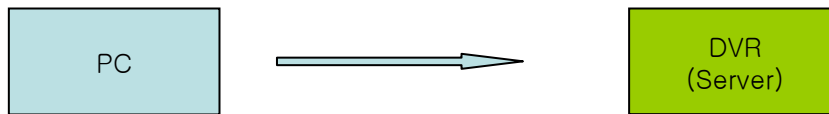
- Set Port Forwarding as per router manual, if you want to connect to several DVRs by using one internet line.
- Setting procedure and name of Port Forwarding may be various from router manufacturers.
- For more detail information, please refer to router manual.

One example of how to do Port Forwarding is shown below.

- 1) Access to your router. (Please refer to router manual provided by a router manufacturer.)
- 2) Find 'Applications & Gaming' and go to 'Port Range Forward' on the menu.
- 3) Input Port number of your DVR on 'Start' / 'End' section below.
- 4) Input IP Address and check 'Enable'. Then, click 'Save Settings' to save.



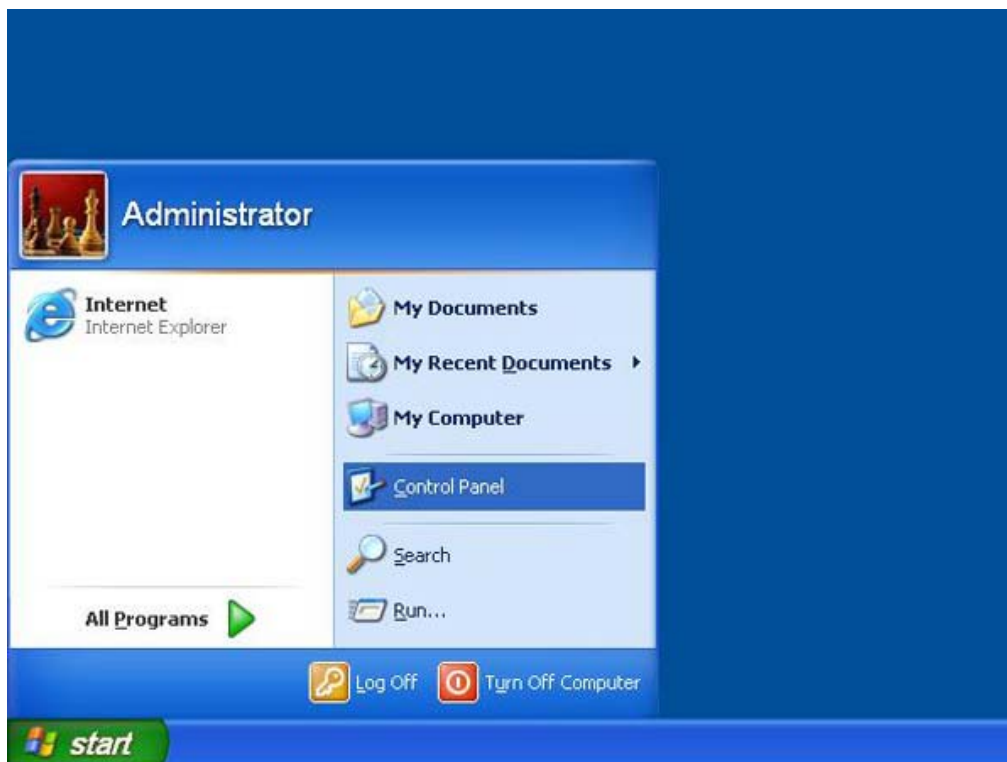
D. Direct connect to DVR



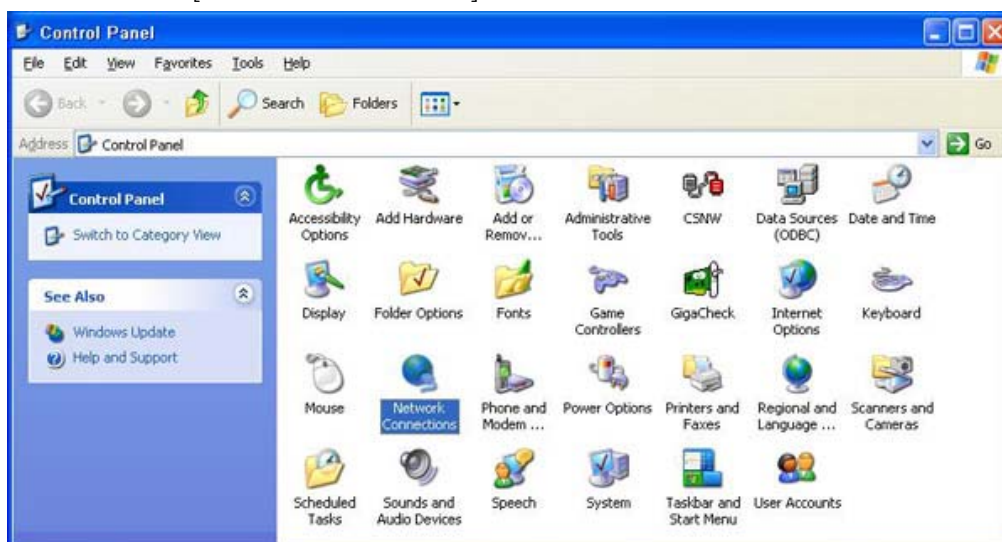
When you try to connect to DVR directly, you must use DIRECT CABLE.

a. PC's TCP/IP Setting

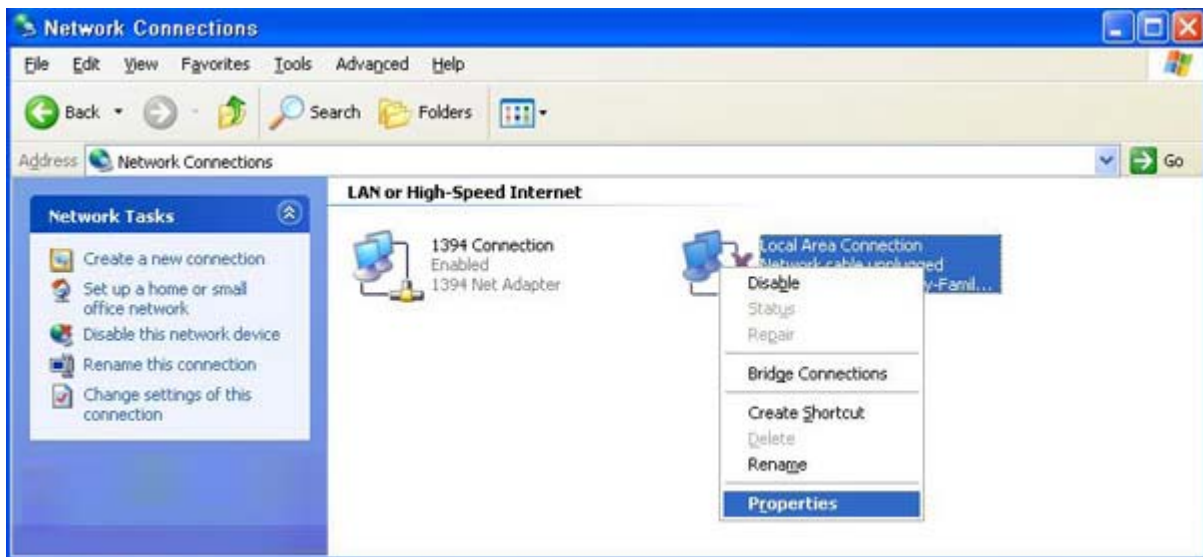
1. For WindowsXP/2000, Click [start] – [Control Panel] click



2. Double click [Network Connections]



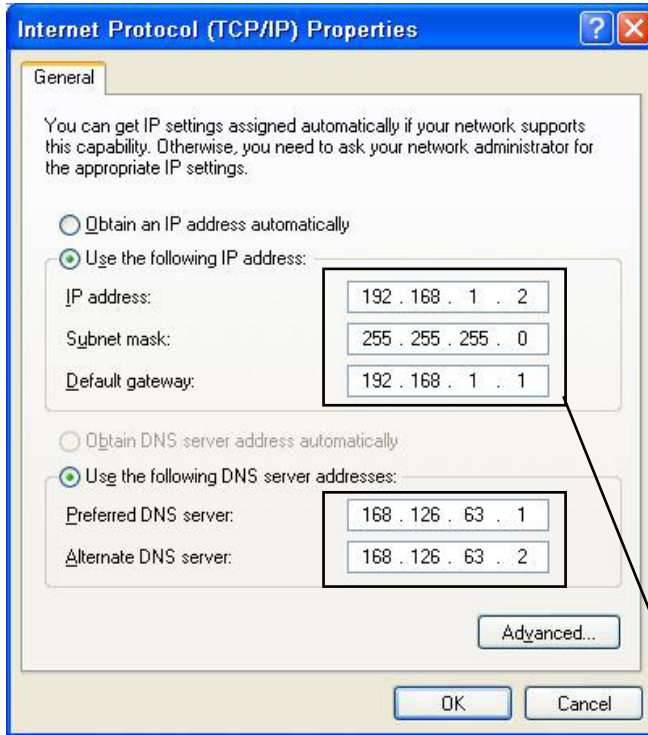
3. Right-button click [Local Area Connection]



4. Click 'Properties' [General] – [Internet Protocol (TCP/IP)]



5. IP Address Setting



IP Address : AAA.BBB.CCC.DDD
 AAA.BBB.CCC is identical with DVR's setting
 DDD with DVR's setting is not same

Subnet mask must be 255.255.255.0

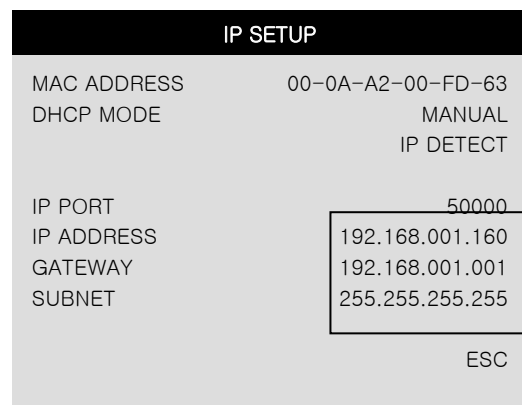
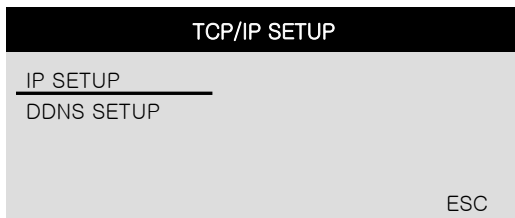
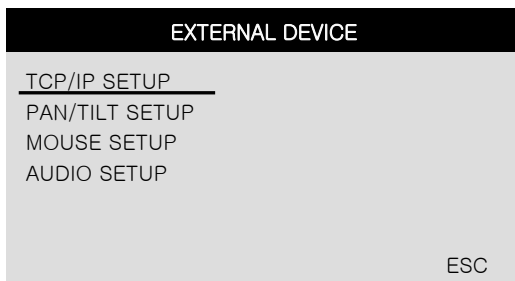
Default gateway is AAA.BBB.CCC.1
 AAA.BBB.CCC is identical with HUB's Address

DNS Server is different in the country and ISP Supplier.
 When PC does not using internet, if it does not input, it is irrespective.

Setting example

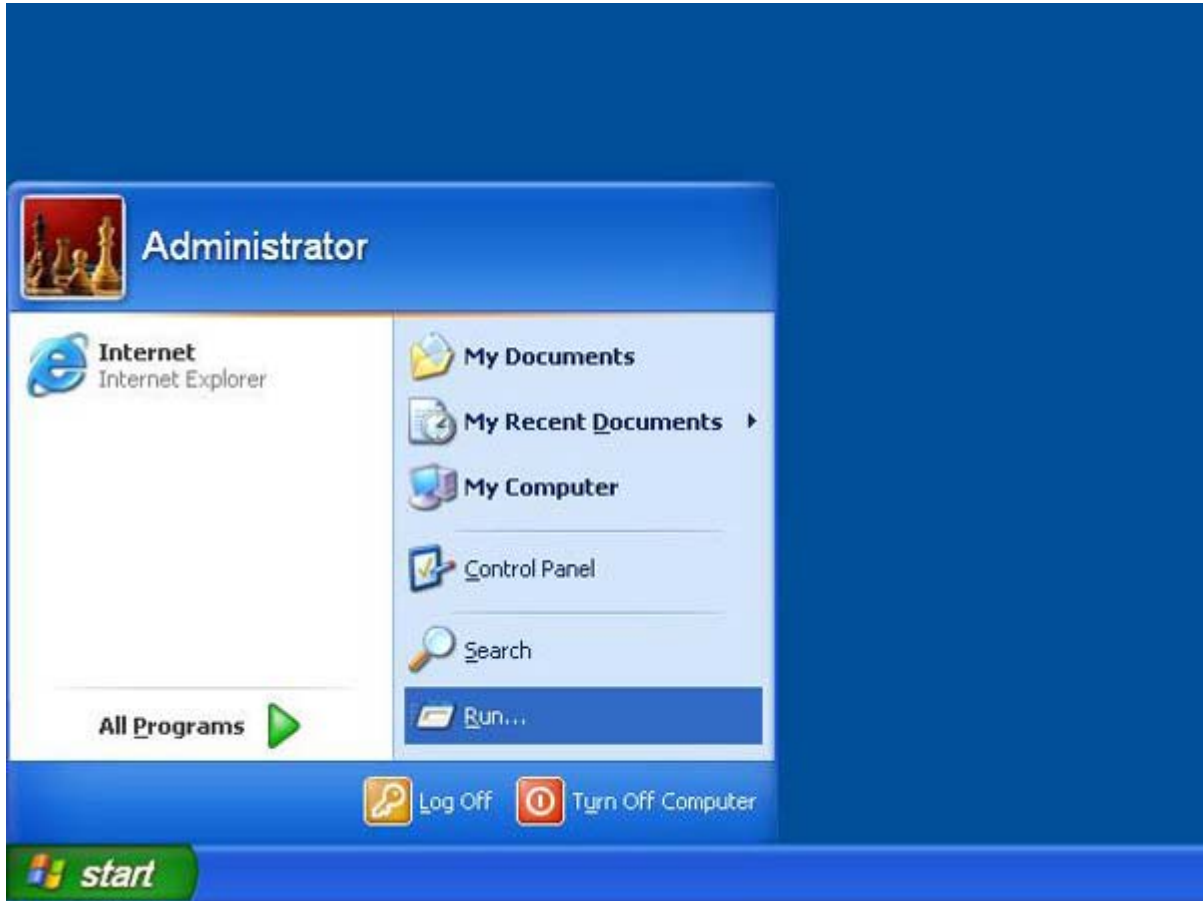
b. DVR Setting

Please reaffirm DVR setting

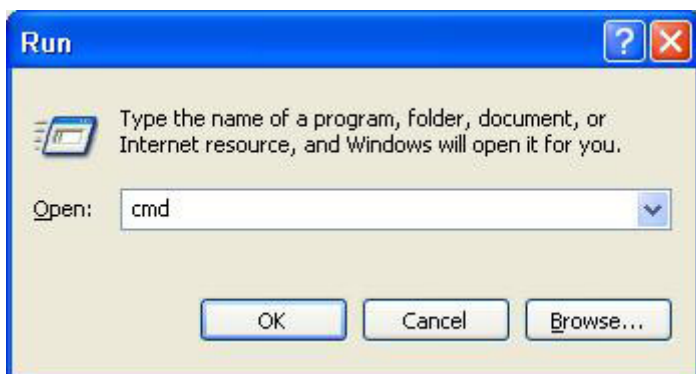


c. PC's reaffirmation

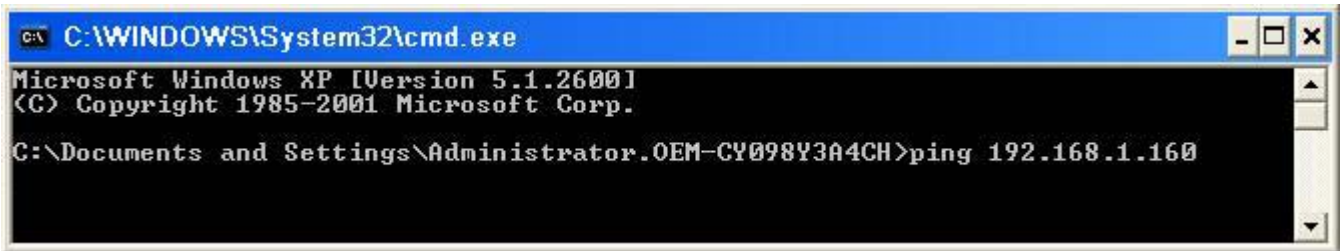
1. Click [start] – [Run..]



2. Input 'cmd' and click [OK]



- Click [start] – [Run...] and type command 'ping 192.168.1.160(DVR's address)'



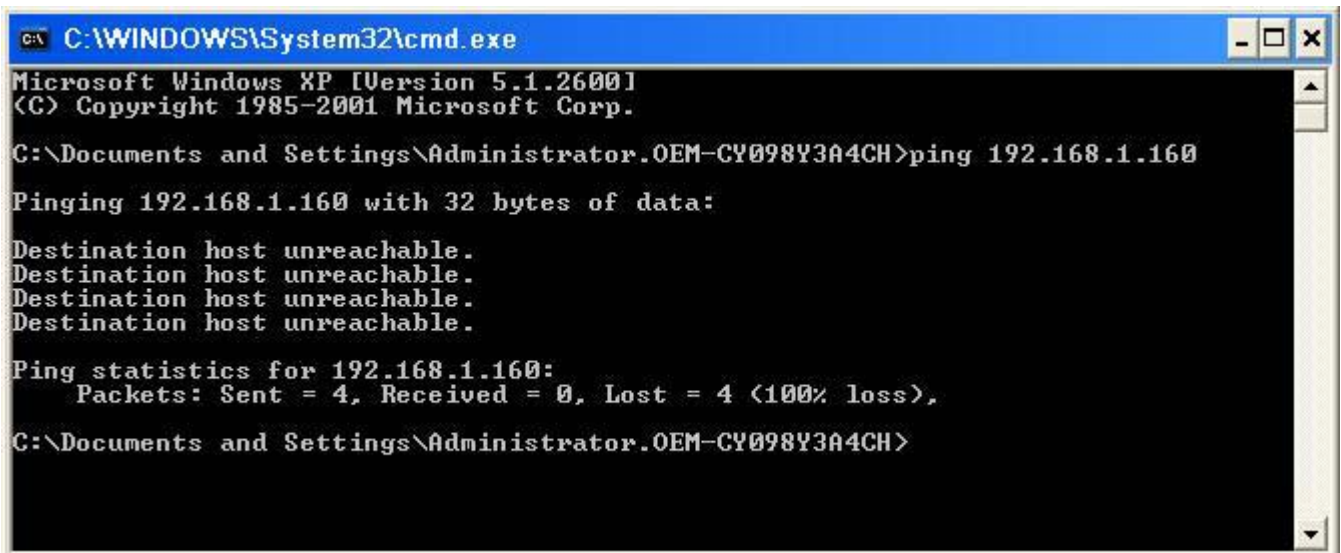
```

C:\WINDOWS\System32\cmd.exe
Microsoft Windows XP [Version 5.1.2600]
(C) Copyright 1985-2001 Microsoft Corp.

C:\Documents and Settings\Administrator.OEM-CY098Y3A4CH>ping 192.168.1.160

```

Case 1. PC – HUB or HUB – DVR is not connected



```

C:\WINDOWS\System32\cmd.exe
Microsoft Windows XP [Version 5.1.2600]
(C) Copyright 1985-2001 Microsoft Corp.

C:\Documents and Settings\Administrator.OEM-CY098Y3A4CH>ping 192.168.1.160

Pinging 192.168.1.160 with 32 bytes of data:

Destination host unreachable.
Destination host unreachable.
Destination host unreachable.
Destination host unreachable.

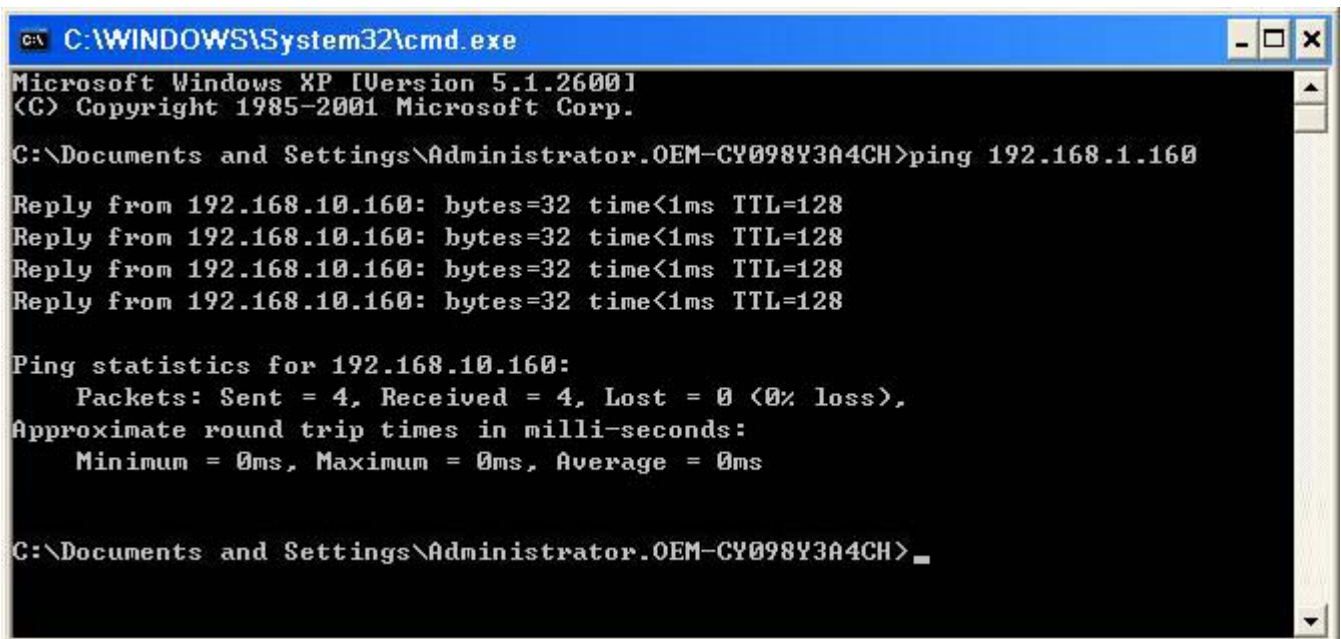
Ping statistics for 192.168.1.160:
    Packets: Sent = 4, Received = 0, Lost = 4 (100% loss),

C:\Documents and Settings\Administrator.OEM-CY098Y3A4CH>

```

Please verify 1. PC's TCP/IP Setting, 2. DVR's setting again

Case 2. PC – HUB or HUB – DVR is connected with the normality



```

C:\WINDOWS\System32\cmd.exe
Microsoft Windows XP [Version 5.1.2600]
(C) Copyright 1985-2001 Microsoft Corp.

C:\Documents and Settings\Administrator.OEM-CY098Y3A4CH>ping 192.168.1.160

Reply from 192.168.10.160: bytes=32 time<1ms TTL=128
Reply from 192.168.10.160: bytes=32 time<1ms TTL=128
Reply from 192.168.10.160: bytes=32 time<1ms TTL=128
Reply from 192.168.10.160: bytes=32 time<1ms TTL=128

Ping statistics for 192.168.10.160:
    Packets: Sent = 4, Received = 4, Lost = 0 (0% loss),
    Approximate round trip times in milli-seconds:
        Minimum = 0ms, Maximum = 0ms, Average = 0ms

C:\Documents and Settings\Administrator.OEM-CY098Y3A4CH>

```

Next pages are several network scenarios. Please identify which scenario your current network falls within and follow the instructions for configuring and accessing your DVR via TCP/IP.

(2) DDNS Setup :

Please refer to CH.8 DDNS Setup
for more information.

Refer to 8-2. DDNS set up in DVR

DDNS SETUP	
DDNS ENABLE	OFF
DNS SERVER	192.168.063.001
INTERVAL	D-00 H-00 N-20 REGISTER
DDNS STATUS	
IP ADDRESS	
IP PORT	
REMAIN TIME	
LAST REGISTRATION DATE	
	ESC

2) Pan Tilt Zoom Setup

PAN/TILT SETUP	
COMMAND SETUP	← PTZ Camera setup
SPEED SETUP	← PTZ Speed setup
ESC	

PAN/TILT SETUP	
PAN SPEED	7
TILT SPEED	7
ZOOM SPEED	7
DEFAULT	ESC

COMMAND SETUP	
CHANNEL	01
MODEL	PELCO-D
PTZ ID	000
BAUDRATE	2400 BPS
CMD DELAY	1.00 MSEC
COMMAND	PAN/TILT STOP
LENGTH	16
CODE	00 00 00 00
	00 00 00 00
	00 00 00 00
	00 00 00 00
DEFAULT	ALL-DEFAULT ESC

- (1) CHANNEL : Select channel
- (2) MODEL : Select camera model (protocol type) per channel
- (3) PTZ ID : Select PTZ ID (per channel)
- (4) BAUDRATE : Select data transmission speed
- (5) CMD DELAY : Select command delay time

* If you would like to use PTZ function, please connect to PTZ camera. (PTZ camera is not included in this package.)

3) Mouse Setup

If you increase sensitivity, the mouse cursor moves faster.

MOUSE SETUP	
SENSITIVITY	3
DEFAULT	ESC

4) Audio Setup

If you select a channel, the audio of the selected channel is recorded.

AUDIO SETUP	
CHANNEL	CH1
INPUT VOLUME	15
OUTPUT VOLUME	03
DEFAULT	ESC

- (1) CHANNEL : By selecting a channel, you can set audio recording ON/OFF. (CH1,CH2,CH3,CH4 or OFF)
- (2) INPUT VOLUME : Volume setup for microphone
- (3) OUTPUT VOLUME : Volume setup for speaker

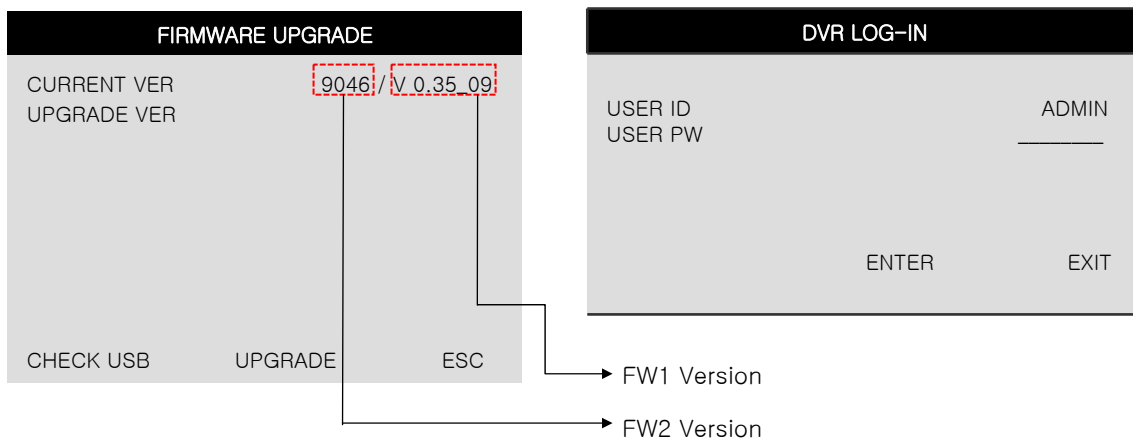
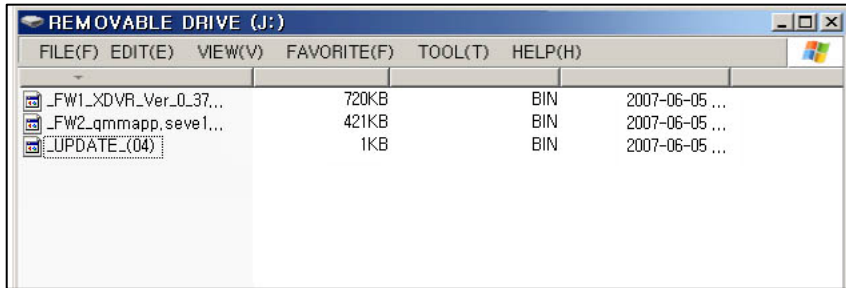
5-6. Firmware Upgrade

When it comes to Firmware Update, you can download it in website.

Visit website <http://www.securityfirstcamera.com> and click menu [DVRs and Recorders].

Click this model (SDVS-1904) and download the newest firmware.

Extract and save the firmware file to USB memory stick



5-7. Factory Default

Factory default setting initializes DVR system.

Select categories below that you want to initialize and choose ON. Then, click 'Default' button.

In order to initialize all of the categories below, choose ON for 'ALL'. Then, click 'Default' button.

Please refer to 4-4. Factory Default again.

FACTORY DEFAULT	
ALL	OFF

DISPLAY SETUP	OFF
RECORD SETUP	OFF
SCHEDULE SETUP	OFF
CAMERA SETUP	OFF
CONFIGURATION	OFF
EXTERNAL DEVICE	OFF
DEFAULT	ESC

FACTORY DEFAULT	
ALL	ON

DISPLAY SETUP	ON
RECORD SETUP	ON
SCHEDULE SETUP	ON
CAMERA SETUP	ON
CONFIGURATION	ON
EXTERNAL DEVICE	ON
FACTORY DEFAULT COMPLETED	
DEFAULT	ESC

CHAP 6. IRS (Integrated Remote Station)

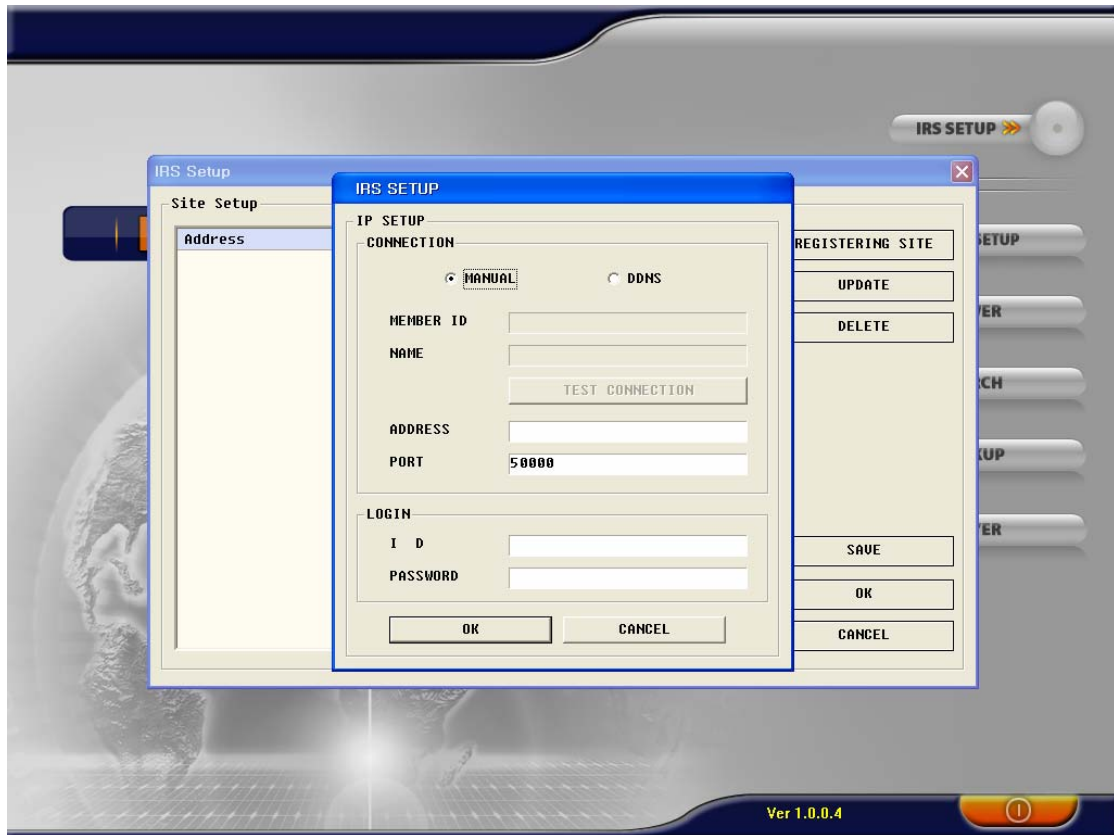
MAIN INTERFACE



- IRS SETUP** Inputs information for IRS network connection.
- DVR SETUP** Changes DVR setting over a network.
- VIEWER** Enables to show live image display.
- SEARCH** Enables to search and show recorded image display.
- BACKUP** Enables to back up recorded images in DVR to your PC.
- PLAYER** Enables to play the backup images on your PC. (AM4 file)

※ Interface and functions of IRS are subject to change without prior notice.

6-1. IRS Setup



- MANUAL** Select "Manual" to input IP address and port number manually.
- DDNS** Select "DDNS" to use IP address and port number that you already registered in DDNS server. (For more information about DDNS, please refer to page 54~59.)
- MEMBER ID** Input member ID that you registered in DDNS server.
- NAME** Input DVR name that you registered in DDNS server.
- ADDRESS** Input IP address manually.
- PORT** Input port number manually.
- LOGIN**
- ID** Input DVR ID which has been set in DVR already. (Input 'admin'.)
- Password** Input password of DVR.

※ Interface and functions of IRS are subject to change without prior notice.

6-2. DVR Setup

The screenshot shows a web-based interface for DVR setup. The main area is a large grey rectangle with the text "Wait To Connection" centered. To the right is a control panel with the following elements:

- A radio button labeled "MANUAL" is selected.
- Four input fields with labels: "ADDRESS", "PORT NUMBER", "ID", and "PASSWORD". The "PORT NUMBER" field contains the value "50000".
- Two buttons: "CONNECT" and "DISCONNECT".
- Version information: "Ver 1.0.0.1".
- A "CLOSE" button at the bottom.

You can change some settings of DVR listed below over a network.

(Alarm, Buzzer, Interval, Password, Record Configuration, Record Schedule, Audio)

MANUAL Input IP address and port number of DVR manually.

ADDRESS Input IP address of DVR manually.

PORT NUMBER Input port number of DVR manually.

LOGIN

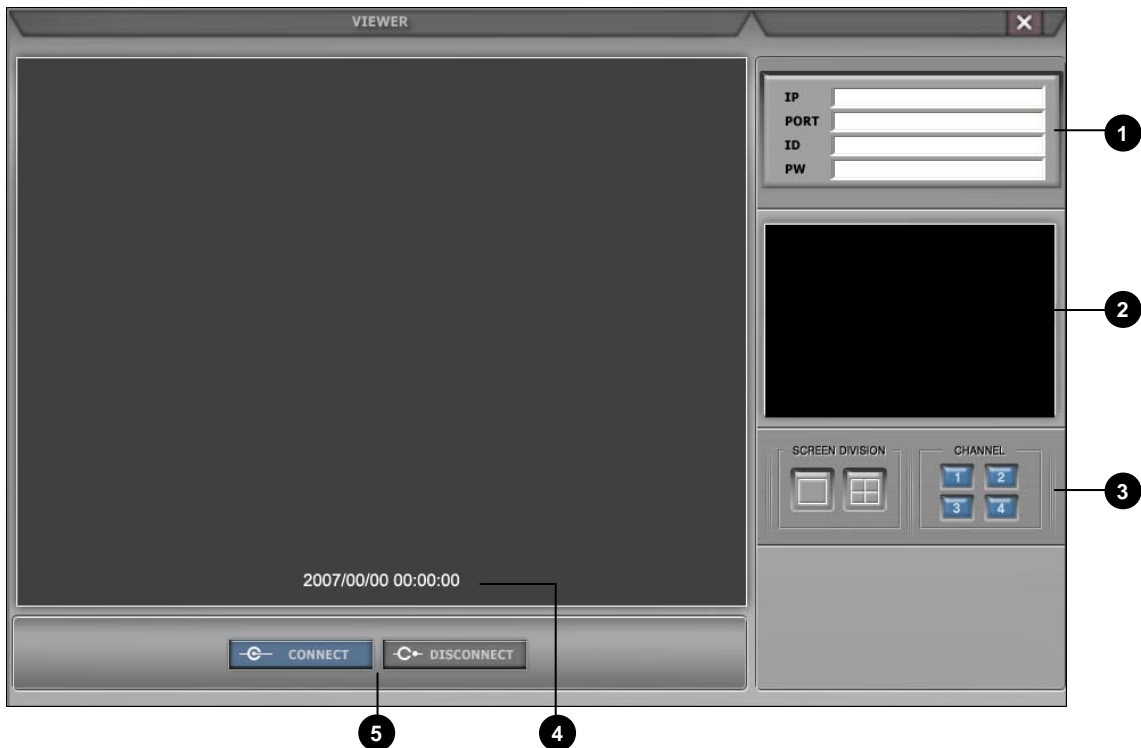
ID Input DVR ID which has been set in DVR already. (Input 'admin'.)

PASSWORD Input password of DVR.

CLOSE Click "CLOSE" to exit.

※ Interface and functions of IRS are subject to change without prior notice.

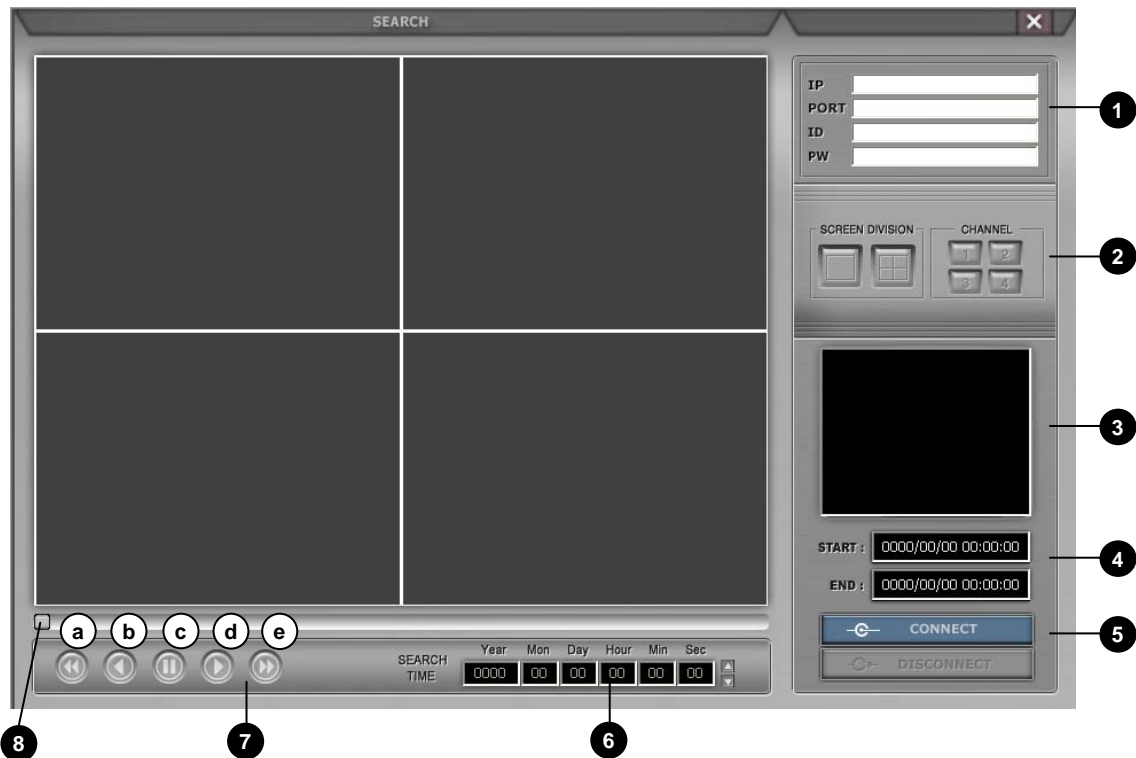
6-3. Viewer



- ❶ **DVR connection setup** : Input network information to connect.
(IP / PORT / ID / PW)
- ❷ **System information** : Displays connection status and operating information.
- ❸ **Screen display**
 - a) SCREEN DIVISION : Selects full screen mode or 4-split mode
 - b) CHANNEL : Displays full screen for each channel.
- ❹ **Time** : Displays time & date information of DVR.
- ❺ **Network connection**
 - a) CONNECT : Click this button to connect to DVR & see live view over a network.
 - b) DISCONNECT : Click this button to disconnect.

※ Interface and functions of Viewer are subject to change without prior notice.

6-4. Search

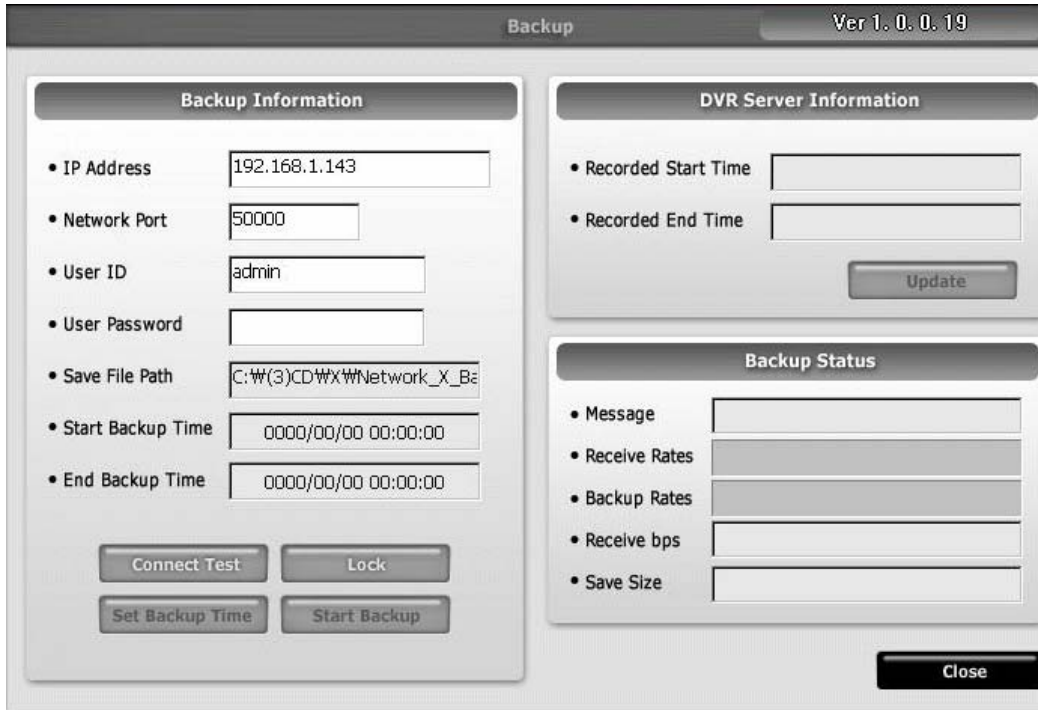


- ① **DVR connection setup** : Input network information to connect.
(IP / PORT / ID / PW)
- ② **Screen display**
 - a) SCREEN DIVISION : Selects full screen mode or 4-split mode
 - b) CHANNEL : Displays full screen for each channel.
- ③ **System information** : Displays connection status and operating information.
- ④ **Recorded data display** : Displays start time & end time of recorded data.
- ⑤ **Network connection**
 - a) CONNECT : Click this button to connect to DVR & see live view over a network.
 - b) DISCONNECT : Click this button to disconnect.
- ⑥ **Search time** : Input time and date to search images.
- ⑦ **Operation buttons**
 - a) Fast backward playback
 - b) Backward playback
 - c) Pause
 - d) Forward playback
 - e) Fast forward playback
- ⑧ **Search bar** : Enables to search recorded data by using this bar.

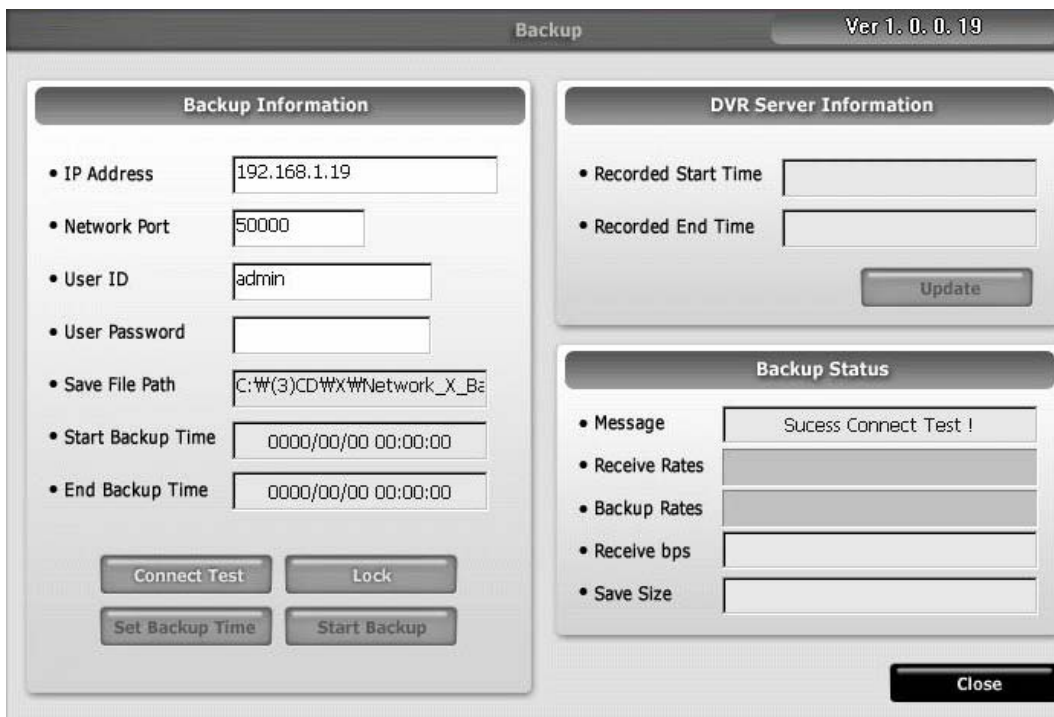
※ Interface and functions of Search are subject to change without prior notice.

6-5. Backup

1) To execute BACKUP, input IP Address & Port and click 'Connect Test' button.

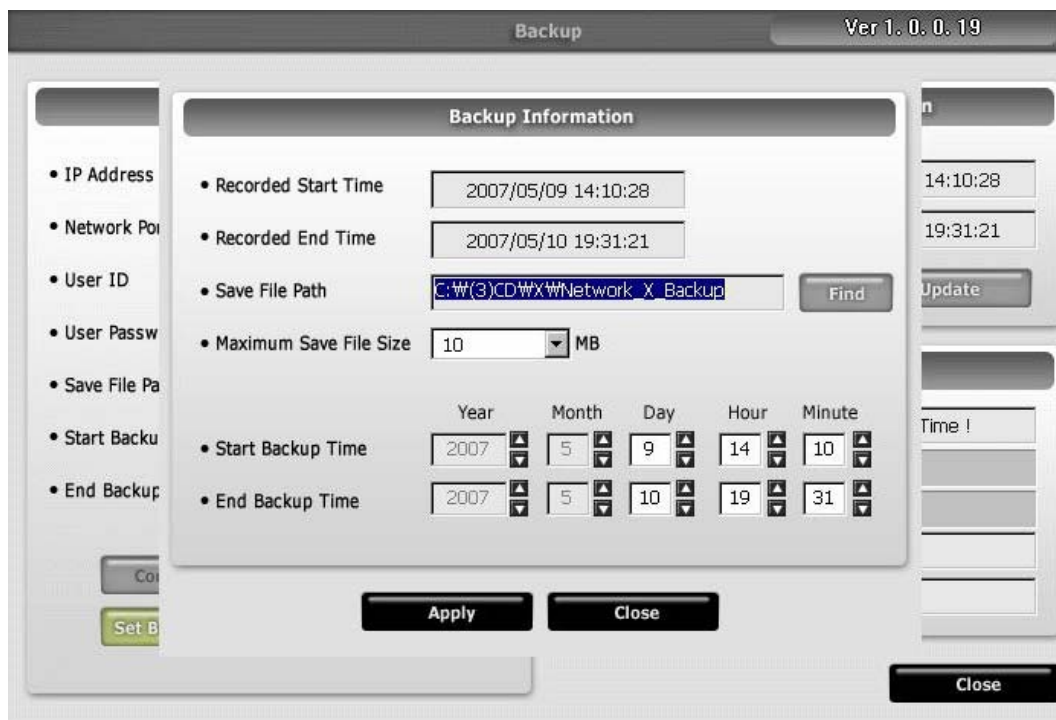


2) After Connect Test is done, you can see 'Success Connect Test!' message. Then, click 'lock' button and click 'Set Backup Time' button.

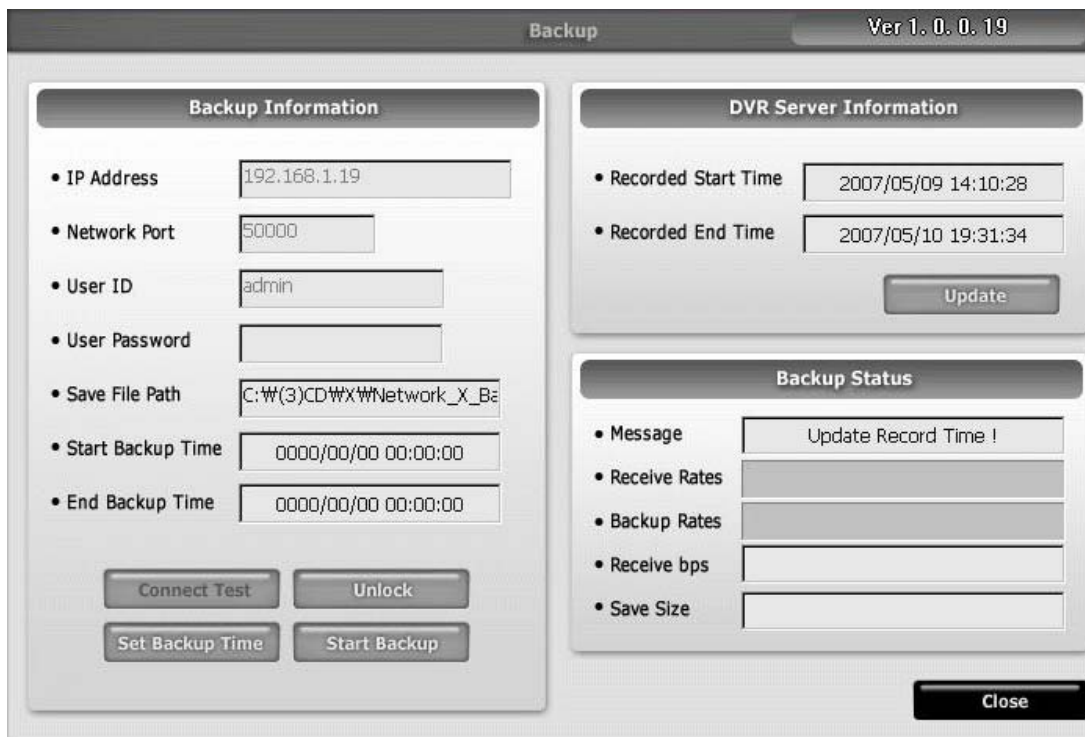


※ Interface and functions of Backup are subject to change without prior notice.

3) Now you set 'Start Time', 'End Time', 'Save File Path', 'File Size' and click 'Apply'.



4) After finishing time setting, click 'Start Backup' to start backup. Then, you can see the backup file on the path that you chose.



※ Interface and functions of Backup are subject to change without prior notice.

6-6. Player



① **Time display** : Displays current time.

② **Recorded data display** : Displays start time & end time of recorded data.
Also, displays operating status during playback.

③ **Screen display**

- a) SCREEN DIVISION : Selects full screen mode or 4-split mode
- b) CHANNEL : Displays full screen for each channel.

④ **Operation buttons I**

- a) OPEN : Selects backup AM4 file.
- b) EDIT : Enables to edit backup image, save and print.
*Edit function is available when one channel is selected.
- d) AVI SAVE : Save backup images in AVI file format.
**AVI save function is available when one channel is selected.
- c) EXIT : Ends backup player.

⑤ **Operation buttons II**: Search for recorded data.

- a) Go to the beginning of recorded data and play.
- b) Fast backward playback
- c) Backward playback
- d) Pause
- e) Forward playback
- f) Fast forward playback
- g) Go to the end of recorded data and play.

⑥ **Playback speed setting button** : Able to adjust playback speed by using upper/ lower buttons.
DELAY : Adjusts playback interval. The higher, the slower. (1, 2, 4, 8, 16, 32)

⑦ **Play bar** : Enables to search recorded data by using this bar.









※ Interface and functions of Player are subject to change without prior notice.

Image EDIT

Click “EDIT” to go to image edit mode.



- 1** RECORDED DATA DISPLAY : Displays start time & end time of recorded data.
Also, displays operating status during playback.
- 2** EDIT TOOL : User can adjust color tone of copied images using this buttons.

 - Contrast
 -  : make bright part of image brighter and dark part of image darker
 -  : To reduce light and shade, lower contrast a little.
 - Brightness
 -  : make an image brighter
 -  : make an image darker
 - Sharpness
 -  : gives sharp-edge effect
 - Blur
 -  : make an image soft
 - Operation buttons
 -  : saves data in JPEG file format.
It is saved in the folder where player is installed.
 -  : User can print current image selected.
- 3** EDIT : Return to player mode.

※ Interface and functions of Edit are subject to change without prior notice.

AVI SAVE

Click “AVI SAVE” to go to AVI saving mode.



- ❶ **RECORDED DATA DISPLAY** : Displays start time & end time of recorded data.
Also, displays operating status during playback.
- ❷ **OPTION** : Used to save data in AVI file format.
 - CHANNEL : Selects channel
 - FRAMERATE : Decides frames per second of data to be saved.
 - SIZE : Decides the size of data to be saved automatically.
 - START : Starts saving
 - STOP : Stops saving. Once it is stopped, 'C:\WWEB_BACKUP' folder is opened automatically.
- ❸ **AVI SAVE** : Opens 'Option' setting to start AVI saving.
Closes 'Option' setting after finishing AVI saving and go back to player mode.

※ Interface and functions of AVI SAVE are subject to change without prior notice.

CHAP 7. DDNS Web-server

7-1. Registering DVR for DDNS (DDNS Web-server)

1) Please access www.h264ip.com and click Register Member ID.

2) Please click DVR Add to register DVR.

Welcome web

Member

- Member Register
- My DVR List
- My DVR Register
- DVR Setup
- Viewer
- Search
- Backup
- Player

My DVR List

* Click Viewer icon on the right side of ACT to operate Viewer.
 * You should add www.h264ip.com on Trusted Sites (Tools -> Internet Options -> Security) at first Viewer installation.
 * : DVR Setup : Viewer : Search : Backup : DVR Edit : DVR Delete

DVR Name

No	Name	MAC	IP:Port	Last Modified	Tool	Edit
21	Wallmart_XAD	00-0A-A2-06-D3-65	210.126.14.153:50000	2007-05-22 11:52:05		

※ Interface and functions of DDNS service are subject to change without prior notice.

3) Please click confirm after inputting DVR information (DVR Name and MAC Address only). Then, Click "Confirm" button.

My DVR Register

* Mac Address should be listed correctly without dash "-".
 * Mac Address already listed can not be registered again.

DVR Name	<input type="text" value="superman"/>
MAC Address	<input type="text" value="000AA200F00C"/> * without dash "-"
IP Address	<input type="text"/>
IP Port	<input type="text"/>
<input type="button" value="Confirm"/>	

4) Now, DVR is listed on DDNS web server without IP and Port number.

DDNS service
 DYNAMIC DOMAIN NAME SYSTEM

[Home] [Logout] [Member Edit]

Welcome web

Member

- Member Register
- My DVR List
- My DVR Register
- DVR Setup
- Viewer
- Search
- Backup
- Player

My DVR List

* Click Viewer icon on the right side of ACT to operate Viewer.
 * You should add wwwh264ip.com on Trusted Sites(Tools -> Internet Options -> Security) at first Viewer installation.
 * : DVR Setup : Viewer : Search : Backup : DVR Edit : DVR Delete

DVR Name DVR Add

No	Name	MAC	IP:Port	Last Modified	Tool	Edit
21	Wallmart_XAD	00-0A-A2-06-D3-65		2007-05-22 11:52:05		

※ Interface and functions of DDNS service are subject to change without prior notice.

7-2. DDNS set up in DVR

* The following setting is a sample for a cable modem connected to DVR directly.

- 1) Go to Menu
- 2) Go to IP SETUP menu, if you set DHCP AUTOMATIC then it detects IP address automatically.

IP SETUP	
MAC ADDRESS	00-00-00-00-00-00
DHCP MODE	AUTOMATIC
IP PORT	50000
IP ADDRESS	192 168 001 160
GATEWAY	192 168 001 001
SUBNET	255 255 255 000
	ESC

- 3) Go to the previous menu and click DDNS SETUP.

TCP/IP SETUP	
IP SETUP	
DDNS SETUP	
	ESC

4) Set DDNS ON/OFF 'ON'.

IP address which is assigned from DHCP server is automatically input on DNS SERVER.

```

DDNS SETUP

DDNS ENABLE                ON
DNS SERVER                 168.126.063.001
INTERVAL                   D-00 H-00 M-20
                           REGISTER

DDNS STATUS                REGISTER OK
IP ADDRESS                 192.168.001.160
IP PORT                    50000
REMAIN TIME                D-00 H-00 M-20
LAST REGISTRATION DATE
> WED. 12 JUL 2006 09 : 21 : 36 GMT

ESC
    
```

5) Go down to REGISTER and push ENTER button to renew IP registered on DDNS SERVER.

(Interval : connection interval time between DVR and DDNS SERVER)

D = Day, H = Hour, M = Minute

```

DDNS SETUP

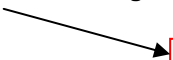
DDNS ENABLE                ON
DNS SERVER                 168.126.063.001
INTERVAL                   D-00 H-00 M-20
                           REGISTER

DDNS STATUS                REGISTER OK
IP ADDRESS                 192.168.001.160
IP PORT                    50000
REMAIN TIME                D-00 H-00 M-20
LAST REGISTRATION DATE
> WED. 12 JUL 2006 09 : 21 : 36 GMT

SUCCESS TO REGISTER DVR INFO

ESC
    
```

DDNS status messages



DDNS error messages

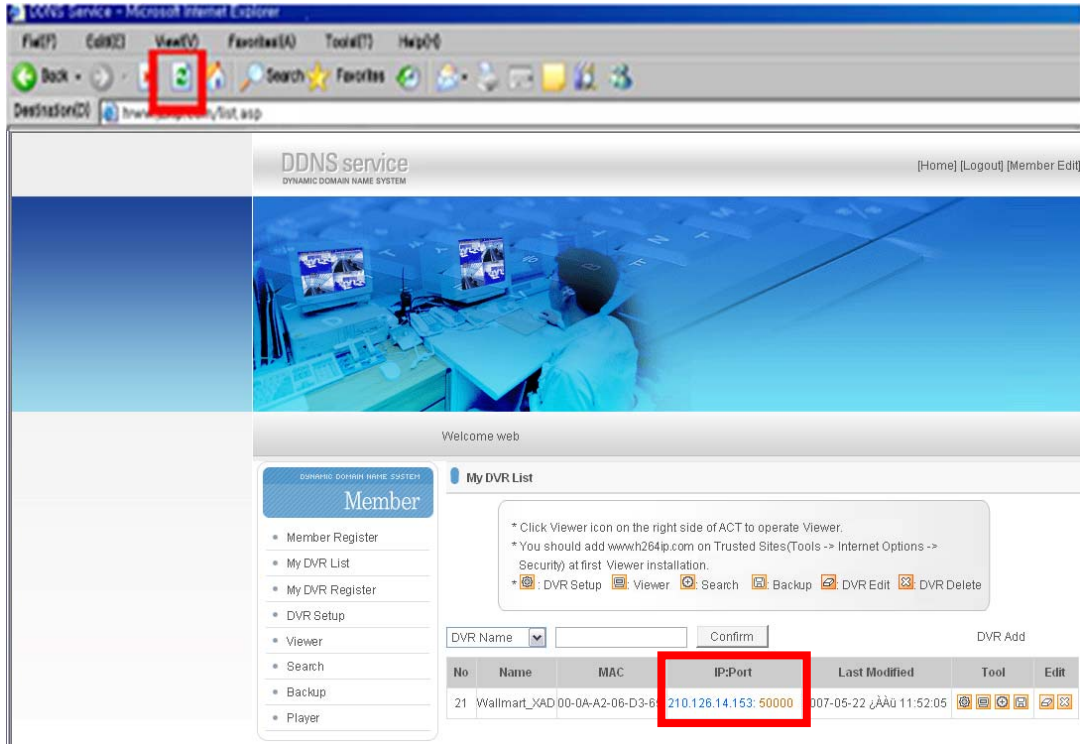
FAIL TO COMMUNICATE WITH DDNS SERVER :

(In this case, check out whether DNS server IP address is 168.126.063.001. If the IP address is same, please try another DNS server IP address provided by your ISP.)

FAIL TO REGISTER DVR INFO :

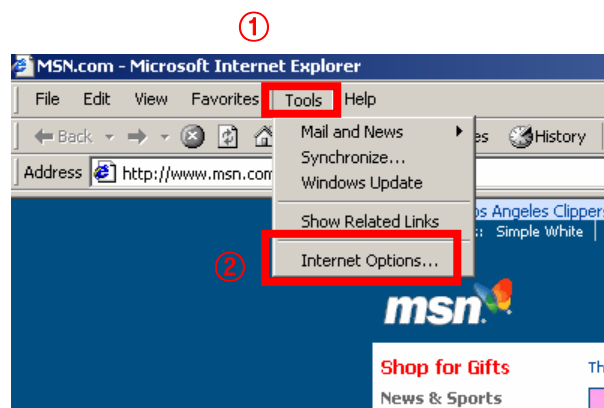
(In this case, please check out whether you registered your DVR in www.h264ip.com. And also check out your MAC address in your DVR is same as the one that has been registered in www.h264ip.com.)

6) Go to your computer again after you see “SUCCESS TO REGISTER DVR INFO” and then Click ‘refresh’ button. Then, DDNS server automatically catches your DVR’s IP address and Port number.

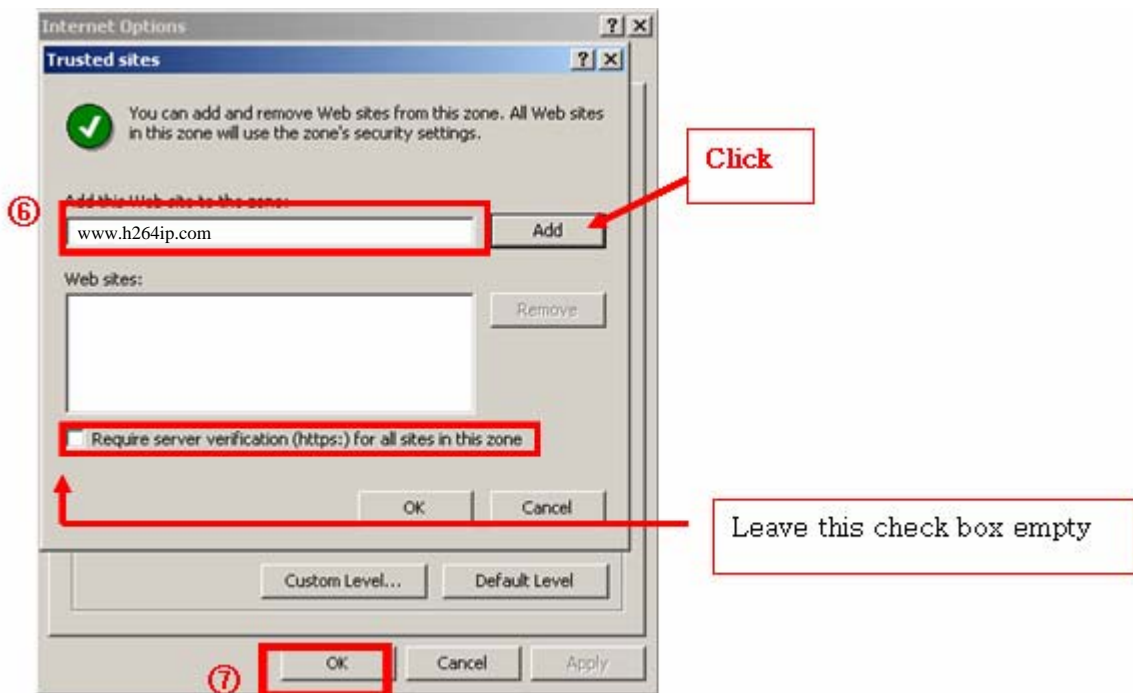
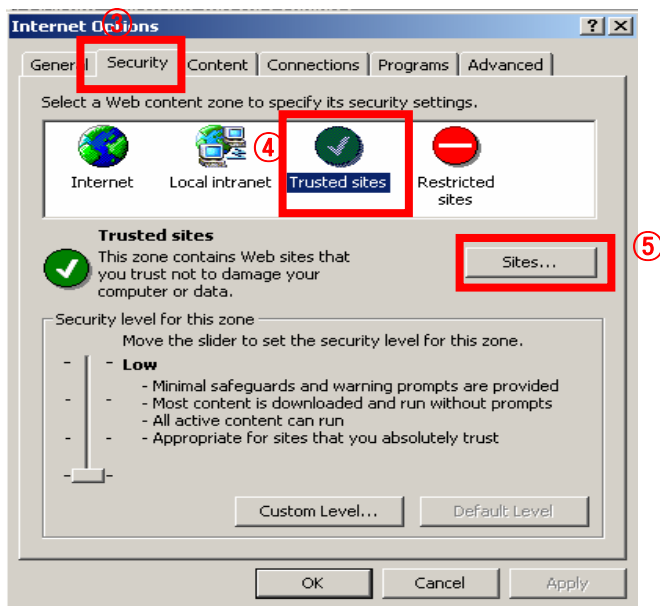


Note.

Before using Web-Viewer, please add www.h264ip.com on Trusted Sites at first installation as follows. (Tools -> Internet Options -> Security)



※ Interface and functions of DDNS service are subject to change without prior notice.

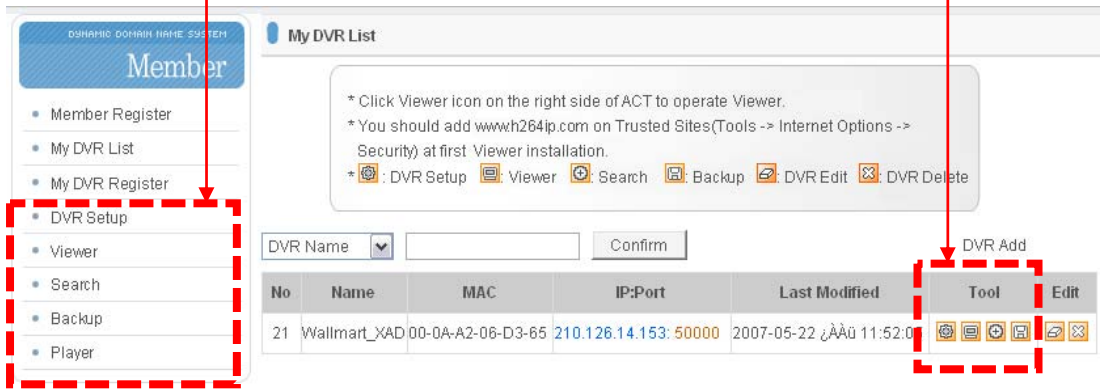


7-3. Web program

Some functions of IRS (Integrated Remote Station) such as Viewer, Search, Backup and Player are also available on the web.

*If ActiveX control installation is required for the first time access, please click 'Yes'.

Click and input information needed for internet connection to DVR manually. Click these icons, then it connects to DVR automatically via DDNS server.



These functions such as Viewer, Search, Backup and Player are same as the ones in IRS. (Please refer to 'Chap 7. IRS' section from page 47 to 51.)

- Viewer** Enables to show live image display.
- Search** Enables to search and show recorded image display.
- Backup** Enables to back up recorded images in DVR to your PC.
- Player** Enables to play the backup images on your PC. (AM4 file)

※ Interface and functions of DDNS service are subject to change without prior notice.

CHAP 8. Specifications

- High contrast ratio High Brightness
- External Power Adaptor
- Tile and VESA mounting



Video	VGA	1CH Input
Audio		1CH Input
Resolution		SXGA(1280x1024)
Frequency	Horizontal (KHz)	31KHz ~ 82KHz
	Vertical (Hz)	55Hz ~ 77Hz
Power Consumption		Max. 40W
Dimension (W x D x H)	Net	430 x 421 x 200 mm
	Packing	490 x 506 x 225 mm
Weight (kg)	Net	6.5 kg
	Gross	8.5 kg
Power supply		DC 12V / 6.67A
Environmental Consideration	Operating Temperature	50°F ~ 104°F (10°C ~ 40°C)
	Operating Humidity	10% ~ 80%, non-condensing
	Storage temperature	-4°F ~ 113°F (-20°C ~ 45°C)
	Storage Humidity	5% ~ 95%, non-condensing
LCD Type Video	Type	19" Diagonal AM-TFT
	Pixel pitch (mm)	0.294(H) x 0.294(V)
	Brightness (cd/m2)	300
	Contrast ratio	1000:1
	Response Time (ms at 25°C)	5(on/off)
	Viewing Angle (L/R/T/B)	80/80/80/80
	Active Area (mm)	376.3 x 301.1

Design and specifications are subject to change without notice.

CHAP 8. Specifications

- H.264 Hardware Codec
- Real time live display in all channels
- Triplex (Playback / Recording / Ethernet)
- Web monitoring
- Easy control by Mouse
- USB memory stick for data backup
- Easy PTZ Camera (MOUSE)
- Password protection



Multiplex function	Triplex (Playback / Recording / Ethernet)		
Storage Capacity	Internal	HDD	1 SATA HDD (no limit in capacity of HDD)
Video	Inputs		4Ch
	Output	VGA	1Ch VGA
	Compression		H.264
	Compression Rate		5 step selectable
	Live Display Speed		Real Time Live Display
	Recording Mode		Time, Motion, Schedule, Alarm
	Search		Event Search, Date/Time Search, Percent Search
	Recording Speed (NTSC/PAL)		Max. 120IPS(NTSC) 100IPS(PAL)
Recording Resolution		CIF	
Audio Recording	1 Ch Input / 1 Ch Output		
Switching Intervals	1~99 Sec selectable		
Live Division Screen	1 / 4 Split		
	Digital Zoom, PIP in live mode		
Alarm	Inputs	4 Alarm (NO/NC Selectable)	
	Outputs	1 (NO / NC)	
	Post Alarm	Alarm output duration : 1 ~ 99 Sec selectable	
Network	TCP/IP (Web view supported)		
Backup	USB Memory Stick / Download via IP Network		
PTZ Control	Via RS-485		
Firmware upgrade	USB Port for firmware upgrade		
Operation	P/S2 mouse, network		
Weight	2 kg		
Dimensions (W x H x D) mm	370 X 260 X 62		

Design and specifications are subject to change without notice.

Vendor Stock Number: 5005

ETHOS PARTNERSHIP GROUP, L.L.C.
2928 Ingersoll Avenue, Suite 100
Des Moines, IA 50312

Customer Support: 1-866-329-9933
Website: www.securityfirstcamera.com
Made in Korea



L39ME0109 Rev.0