

Stand Alone Type

DVR SYSTEM

USER'S MANUAL

(PRO-VERSION)



Revision Date: 2006.06.01.

Firmware Version Ex-Factory Date:

050905			

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1. Specification (SR-412)

Video standard	PAL/NTSC	
Audio	2-way Audio conference	
Monitor display	Real time:25 Fps (PAL), 30Fps(NTSC) per camera	
Covert camera operation	Programmable	
Event/Log search	Up to 1,000,000 for user login/out, config changes, remote access, connects/disconnects	
Record Scheduling	Daily, Weekly adjust specific Hr per channel	
Remote Access	TCP/IP, View, Search, Recording & Control by Client Program or I.E.	
Playback	Single and quad picture	
Pre/Post alarm recording	5 secs(Pre), 3 mins(Post), programmable per camera	
VGA	For monitors with Multi Sync Function only(1024 X 768(60Hz))	
Activity detection	12x12 grid, Sensitivity levels: 10	
Simplex/Duplex operation	Triplex	
Video inputs	4 x 1Vp-p, CVBS, 75ohms, BNC, looping inputs	
Monitor outputs	1 x CVBS/S-VHS, VGA (option)	
Spot output	1 x 1Vp-p, CVBS, 75ohms, BNC	
Audio inputs	4 x line-in, RCA sockets	
Audio output	1 x line-out, RCA socket	
Resolution	352x240,704x240,704x480(NTSC), 352x288,704x288,704x576(PAL)	
Compression standard	Mpeg4	
Recording speed	352x240 : 120/100 (NTSC/PAL) , 704x240 : 60/50 (NTSC/PAL) 704x480 : 30/25 (NTSC/PAL)	
Image size	3-5 Kbyte (352x240, 352x288), 5-10 Kbyte (704x240, 704x288) 6-16 Kbyte (704x480, 704x576)	
Hard disk capacity	: 3 X HDD (STANDARD DC SUPPLY USE) 4 X HDD (OPTIONAL SMPS USE)	
Secondary Storage	USB default(USB memory stick, USB HDD), CD-RW (option)	
Alarm inputs	4 x TTL, programmable as NC/NO	
Alarm outputs	1 x Relay with NO/NC contact; 30VDC/1A, 125VAC/0.5A resistive	
Back-up file formats	AVI, JPG, BMP	

Network Speed Control	8 levels
Pre-alarm recording	Up to 5 sec., programmable per camera
OSD languages	English, Spanish, Chinese, Dutch, Portuguese, French, Russian, Japanese, Polish, Romanian, German
Ethernet interface	10/100-Base-TX, RJ-45
Remote Function	Live View, Live Recording, Search, Set-up, Back-up
PTZ Control	RS-485 interface
Supply voltage	100VAC-240VAC, 5A, 60/50Hz
Power consumption	Approx. 60watts
Temperature range	5℃ to 50℃

2. Product contents List

Please Confirm the Contents When open Package.

1 Basic Contents



SR-412



12V Adaptor



Power Cable



User's Manual



Remote Controller



Remote Client Program Install CD



AAA Battery X 2

② Option Contents



HDD



VGA OUT Install Kit

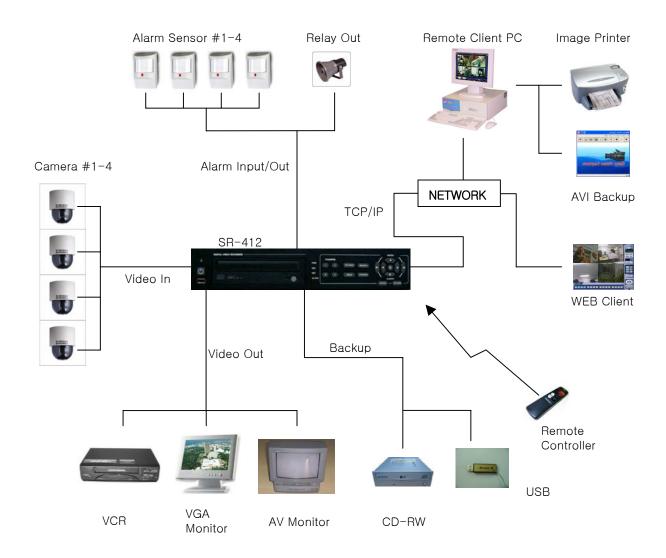


CD-RW

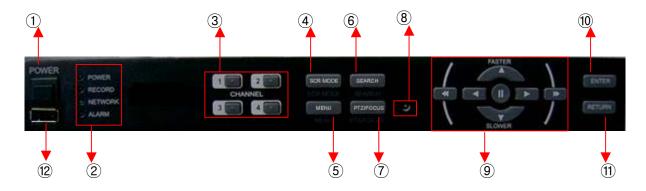


USB MOMORY

3. System Organization (SR-412)



1. Front Panel (1.0U)



- 1) Power: System Power On/Off
- ② Led indicator: Indicate Present System Status information.

 (POWER: System On/Off, RECORD: Record On/Off, NETWORK: Client Network Connection Status ALARM: Alarm Sensor Detection Status)
- (3) Channel Select button: Select Channel or Input Password.
- 4 SCR MODE: Select Screen Division Mode or Rotation Mode.
- 5 MENU: Go to System Menu.
- 6 SEARCH: Go to Search Mode for Searching Recorded Data.
- 7 PTZ/FOCUS: Go to Camera PTZ/FOCUS Control.
- 8 Remote Controller Sensor Input.
- 9 Search Controller: Searching Recorded Data or Control menu & PTZ/FOCUS.
- 10 ENTER: Apply Changing Setup.
- 11) RETURN: Cancel Setup or Return Previous Mode.
- 12 USB PORT: USB port for use the USB memory stick and USB HDD Backup

- Power Button is Soft Style to Prevent System Failure by Wrong Operation.
- Channel Selection Button is Prior to SCR Mode.
- When Remote Controller Sensor Input is Blocked by Something, it Cause Remote Controller do NOT Work Properly.
- When Press any Button, it Operate with Beep Sound.

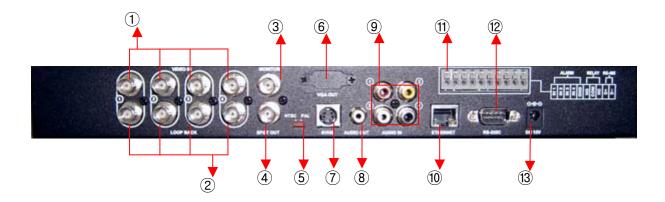
1-1. Front Panel (1.5U)



- ① Power: System Power On/Off.
- 2 Remote Controller Sensor Input.
- 3 CD-RW: CD-RW Device for Backup.
- 4 USB Port: USB port for use the USB memory stick and USB HDD Backup
- (5) Led Indicator: Indicate Present System Status Information.
 (POWER: System On/Off, RECORD: Record On/Off, NETWORK: Client Network Connection Status, ALARM: Alarm Sensor Detection Status)
- 6 Channel Selection Button: Select Channel or Input Password.
- 7 SCR MODE: Select Screen Division Mode or Rotation Mode.
- 8 SEARCH: Go to Search Mode for Searching Data.
- 9 MENU: Go to System Menu.
- 10 PTZ/FOCUS: Go to Camera PTZ/FOCUS Control.
- ① Search Controller: Searching Recorded Data or Control Menu & PTZ/FOCUS.
- 12 ENTER: Apply Changing Setup.
- 3 RETURN: Cancel Setup or Return to Previous Mode.

- Power Button is Soft Style to Prevent System Failure by Wrong Operation.
- Channel Selection Button is Prior to SCR Mode.
- When Remote Controller Sensor Input is Blocked by Something, it Cause Remote Controller do NOT Work Properly.
- When Press any Button, it Operate with Beep Sound.
- In Case of CD-RW, the Real Appearance will be Differ from the above Picture Depends on its Model.

2. Rear Panel



- ① Video In: BNC Port for Connection of DVR & Camera. (4 Camera Connectable)
- 2 Loop Back: Output DVR Camera Video to Loop Back Port. (4 BNC Port)
- 3 Monitor Out: Output DVR Video to AV Monitor.
- 4 Spot Out: Output Spot-out Video to AV Monitor.
- 5 NTSC/PAL: Select NTSC or PAL Type.
- 6 VGA OUT: Output Video to a Computer Monitor by Connected VGA (Option)
- 7 SVHS: Output Video by Connected SVHS.
- 8 Audio Out : Output Audio Data.
- 9 Audio In: Audio Input Terminal Related with #1~4 Camera.
- 10 Ethernet (TCP/IP): Port for Cross cable. (Possible to Remote Surveillance.)
- 1 Alarm/Relay/RS-485 : Connect Port for Sensor, Relay, & PTZ.
- 2 RS-232C: Connect Port for Program Debug.
- 3 DC Power Input: Power Supply by DC 12V Adaptor.

- When System Installation, Please Install under System Power Off Status.
- Please Use Specific Adaptor when Power Supply.

3. Remote Controller



- Unused Button's Description is Omitted.
- Every Button is Operated Same as Front Panel Button.
- Remote Controller can Operate when Remote Controller Sensor Input Part Reacted Each Other.
- * If there are many DVR at the same place, they are reacted together when press remote controller.

1. Hard Disk Installation

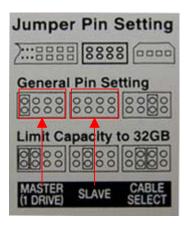
1) Jumper Setup as Master or Slave



- Jumper Setup as master or Slave, Following the Direction of Surface of Hard Disk.
- Jumper Located at Hard Disk Data Cable or Rear Side of Hard Disk.
- If One Hard Disk Installation, Setup as Master If Two Hard Disk Installation, Second One Setup as Slave.

!! When Hard Disk Add or Exchange, Must System Off Properly (System Off by Power Button). If not, it's a Cause of Fatal Hard Disk Error.!!

Example of Samsung HDD Jumper Setup



- Refer to General Pin Setting in Jumper Pin Setting on HDD Surface.
- When One HDD Install, Setup Pin as Master and Connect Pin at the Left End of Jumper.
- When Two HDD Install or Additional Install, First One Setup as Master and the Other is for Slave. Slave Setup has No Pin.
- When More than Two HDD install, Setup as Master or Slave to Connect One IDE Cable at the Same Method of Above.

!!Please Use Hard Disk which Possible to Supply Higher than UDMA66.!!

2 IDE Cable Connection to Main Board



- Confirm the IDE Cable Inside of Product
- Among the Three Connector, Indicated Blue Color Connector Must be Connected with Main Board. Other Connectors Connected with HDD



2 Connect IDE Cable to Hard Disk



- Insert Disk, Red Cable Head to Power Cable Plug
- Connect Power Cable to Hard Disk in the Same Way
- ※ If One HDD Install, Connect with End of Connector (Black)
 Recommended.

If Add HDD, Connect with Middle Connector (Gray) Recommended.







One HDD Installation

Two HDD Installation

Bracket Installation

3 After Finishing Cable Connection, Attach Hard Disk with Screw & Bracket









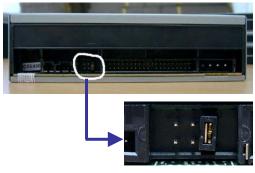
- For Rear PanelWhen Install Master HDD, Please Connect
 - It means, Master Connector which Connected with IDE1 Cable Must Connected with HDD (Master).

at IDE1 Port by Master Cable.

- -Master, Slave?
- IDE Hard Disk can connect two equipment at one cable (port). For the purpose of prevent confusing, two equipment named 'Master' & 'Slave'. 'Master' is one hard disk or first hard disk and 'Slave' is below second hard disk.

1. CD-RW & Hard Disk Installation

① Jumper Setup as Master or Slave

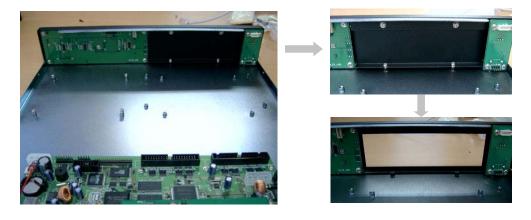


Incase of LG-8526B, MASTER

- Jumper Setup as Master or Slave (Refer to CD-RW Direction at the Surface).
- If Install One CD-RW at One IDE Cable, Setup as Master If Install One CD-RW & HDD at One IDE Cable, CD-RW Setup as Slave.

!! When CD-RW Install, Exchange, or Remove, Please System Off Properly (System Off by Power Button) and Disconnect DVR Power.!!

2 Remove Bracket for W/O CD-RW at the Front



3 After Assemble with Bracket, Attach to the Case







Connect by IDE Cable & Power Cable at the CD-RW





- When Install Master HDD, Please Connect at IDE1 Port by Master Cable.
- It means, Master Connector which Connected with IDE1 Cable Must Connected with HDD (Master).

⑤ After Assemble with HDD Bracket & Connect Cable (Refer to Previous page for HDD Setup)







<EX>When Two HDD Installation

6 Example of Install CD RW & HDD





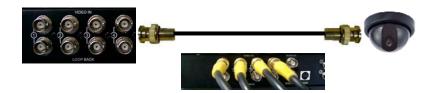




HDDx1 HDDx3 HDDx1+CD HDDx2+CD

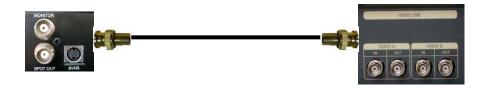
2. Camera Connection

Connect Camera at BNC Port in Back Side Panel.



3. Monitor Connection

Connect Monitor Terminal or S-VHS Terminal to Monitor



4. Computer Connection

Connect VGA OUT Terminal to Computer Monitor



5. Network Connection

Connect Ethernet Terminal and Network Cable



6. Alarm/Relay/PTZ Connection



① ALARM

Alarm Input - 'IN1, IN2, IN3, IN4': Connect Sensor Input by Channel 'GND': Connect Ground System

2 RELAY

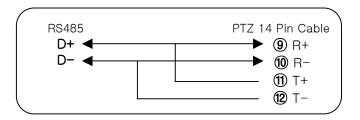
Alarm Output - 'NO, NC': After Checking Alarm Output Type (Normal Open or Normal Close)

and Connect to 'NO, NC'

'COM': Connect Remain Grounding Conductor

③ RS-485

Connect PTZ Camera - 'D+, D-': Connect PTZ Camera Control Line (+, - Terminal)



Example of Connection PTZ Camera No. 14 Pin Connector

7. Power Connection

Connect DC Power Input Terminal and Specific Adaptor



8. Finishing Installation

System Start by Power Button after Finishing Installation



* Hard Disk Format

If Do Not New Hard Disk Format, System Can't Recognize the HDD.
 So it's Same Situation of No HDD. Please Format HDD when Insert New HDD.
 (Only Display Possible, Not Work Menu & Search)



1. Power On



3. System Start (Initial Mode)



2. New HDD Format

(Select By Play, Backward Play Key)

When new discovery HDDs are two, It ask about each format. Then choose the Yes about all HDDs. If you Format the first HDD only, maybe second HDD don't Format.

** When you are doing to format, Never turn off.

If tuen off, HDD is able to occur fatal error.

4. Display

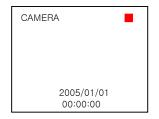
1. System Power ON



Picture for Power On after Finishing Installation

POWER

- Press Power Button to Start System
- After Checking Hard Disk, Need input Password to Operation
- Initial Screen View Mode is Quad Division Mode and Recording Mode



- Each Channel Indicate Camera Name & Recording Status
- Present Time & Date Indicate at Monitor Central Lower Side

Tip

• Check System Condition at LED

POWER: Showing System On/Off RECORD: Showing Record On/Off

NETWORK: Showing Client Connection Status ALARM: Lighting when Sensor Alarm Activate



4. Display



When connect by the RemoteAgent or Web Client, Indicator appear.

• Indicate the network condition.

Green: Network is stable.

Blue: Network is unstable.

Red: Network is very unstable.

2. Screen View Selection



- Select One Channel among 4 Channels
- Move to One Enlargement Watch Mode when Quad Screen Division Mode
- Move to One Enlargement Watch Mode when Rotation Mode

3. Screen Rotation Mode (SCR MODE)

SCR MODE

- User can Select 3 Kinds Watch Mode
 - 1) Quad (4CH) Division Watch Mode
 - 2 Selected 1CH Watch Mode
 - 3 4CH Rotation Watch Mode
- Quad (4CH) Watch Mode is Initial Mode when System Start



Quad (4CH) Division Watch Mode

Selected 1CH Watch Mode

4CH Rotation Mode

4. Display

4. PTZ/FOCUS Control

PTZ/FOCUS

- Control Camera PTZ (Pan/Tilt/Zoom) & Focus (Only Useable for Proper Camera)
- Press PTZ/FOCUS Button to Open PTZ Menu at Right-Under Side and Control by Search Controller
- Press PTZ/FOCUS Button Second Time to Open PRESET, SWING .FOCUS, IRIS
 Menu and Control by Search Controller





- Each icon mean the button of front keyboard.
- Control each function by front keyboard.

• F: Focus I: IRIS

5. System Power Off





- Press Power Button to System Off
- Input Password and Press Enter to Shutdown System

Tip

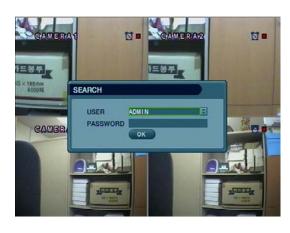
- System Log-On Possible ID: 'Administrator', 'Manager', 'User'
- Administrator: All Function Access (System On, Shutdown, Setup, Search)

Manager: System On and Search

User: System On

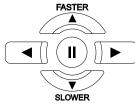
5. Search

Go to Search Mode



SEARCH

 Press Search Button and Log-In Administrator or Manager



• Use Direction Key to Move Menu





 To Open Each Menu Press Enter or Press Play Button



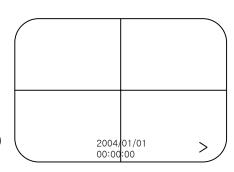
 Return to Previous.
 (Move to Previous Menu or Exit Search Mode and Return to Watch Mode)

1. Search by Date/Time

- Possible to Search Recorded Date & Time



- ① Move Cursor to Selected Date in Calendar (Recorded Date & Time Indicated by Gray Color)
- 2 Press Enter to Open Selected Date
- 3 Recorded Time Appear to Under Side
- 4 Press Enter at Selected Time (One Scale is 15 Minutes)
- (5) Menu Disappear and Output Recorded Video
- Showing Recorded Date & Time at Left-Upper Side as Watch Mode.
 Showing Playing Condition at Right-Under Side.
- Channel Selection Button in Watch Mode & SCR Mode Button are Apply the Same as Search Mode.
 (But Menu, Search, and PTZ/Focus Buttons are Exception)



5. Search

- · Control Playing Video

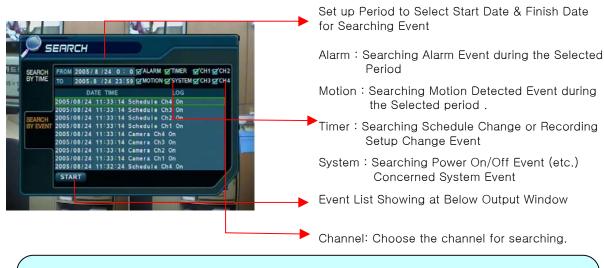
 - ② ◀ : Normal Speed Backward Playing
 - ③ (II): Pause Video
 - ④ Fast Forward (2 ~ 64 Speed)



* Press Normal Forward/Backward Button in Pause, Move to Next/Previous Frame.

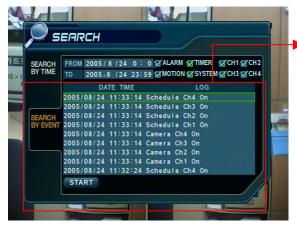
2. Search by Event

- Searching Video with Event Occurrence to Set up Period



- Alarm, Motion, System can be Select plural by Check (V)-(ENTER)
- To Change Setup, Press Enter and Press Direction Key After Changing Setup, Press Enter to Exit.

5. Search



• Date: Indicate Event Occurrence Order & Date

Time: Indicate Event Occurrence Time

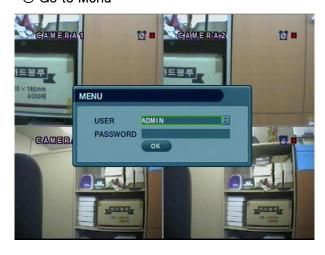
Event: Indicate Event Contents & Camera No.

- Event Searching Method
- ① User can Search Event Using by Direction key
- ② Search Event to Press Enter at Selected Event from Event Occurrence Time
- 3 Control Video is the same way as Time Mode Control

Tip

• The Search by Event is not Base on Video, but Event Occurrence Time.

Go to Menu



- ① Press Menu Button on Front Panel in Watch Mode
- ② Ask Password
- ③ Input Password Using by Channel Select Button [1][2][3][4])
- 4 After Input Password Press Enter to See Menu

Tip

- Initial Administrator, Manager, User Password is 1234.
- Showing Password as *
- Changing Password (System setup->System -> User management)
- Only Watch Mode can go to Entering setup. (Search & PTZ/Focus Mode can't move to Menu)

Go to System setup



• Choose the "system setup"

1.Display



 Every System Setup can Change or Maintain at Menu (6 Setup)



Move to Menu Using by Up & Down Button



To Open Detail Menu, press "the Enter"

RETURN

1-1. OSD



Return to Previous Menu or Return to Watch Mode

- Status Bar: Record Condition Mark On/Off (Recording: Red, Pre-recording: Green)
- Camera Title: Setup Camera Name to Show Left-Upper Side
- Event Icon: Indicate the menu location by icon
- Border: Border Mark On/Off when 4CH Division Watch Mode
- Border Color : Select Border Color (White, Blue, Red, Yellow, Green, Gray)
- Alpha Blending: Choose the transparency(1~100)

1-2. MONITOR



- Sequence Dwell: Setup Rotation Cycle Time (1~60 Sec.) when 4CH Rotation Mode at Watch Mode
- Spot-Out Dwell: Setup Spot-Out Time Cycle (1~60 Sec.) to Transmit Video
- De-interlace Mode: Remove Screen Spread on High Resolution, Low Frame **Only Applying When D1(704X480)
- Alarm Pop-Up Mode: When alarm happen, Alarm happened channel Pop-up
- Alarm Pop-Up Dwell: Alarm Pop-up Time(1~60Sec.)



2.Camera

- Setup Camera

2-1. Camera Title





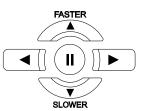
- Covert : Setup Covert On/Off
 - *What's Covert?

When Covert On Watch Mode, Display Video is Hidden, but Recording is On.

• Title: Setup Camera Name by Virtual keyboard



• Input the title by "Enter" after choose by button.

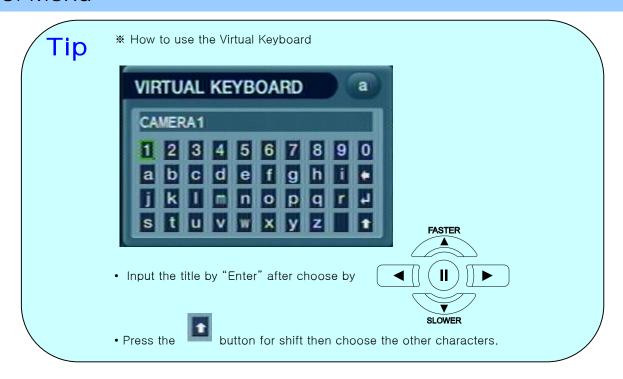


2-2. Color Setup





- Control the Monitor Bright, Contrast, Color, Tint
- All Setup Possible to Control 0~100
- Setup Channel by Channel



2-3. PTZ Setup



- PTZ Address : Select PTZ Camera Address
- PTZ Protocol: Select Kind of PTZ Camera
- Baud Rate: Setup PTZ Communication Speed (2400, 4800, 9600,19200, 38400 BPS)
- Enter button and setup the detailed PTZ

2-4. Motion Sersor



- Choose the Partial Motion Region channel by channel
- Sensitivity: 1~10



- Move Cursor by Direction Key and Press Enter at Selected Region
- Select All: Select Entire Region • Deselect All: Cancel Region Setup • Cancel: Cancel Change Setup & Exit • Save & Exit: Save the Changes & Exit

3. Audio

- Audio Setup



- Live Audio : Audio Output ON/OFF
 Live Audio Output from Audio In Terminal
- Audio Monitoring Channel: Select Channel for Audio Output Nr. 1~4 Audio In
- Network Audio TX: Choose the Audio transmission
- Network Audio RX: Choose the Audio receive

4. System

- Basic Environment Setup

4-1. date/time







- * First of all, Timezone should be setup as your location.
- Date TIME: Setup Present Date
 (If Time Setup to Past Date, Ask Delete Data for the Past Date.
 NO->Date/Time No Change, YES->After Delete Past Data and Change Date/Time)
- Date Format: Select Date Output Type (Ex: 2005-00-00, 2005/00/00)
- Time Format : Setup Time Type as 12 Hour Base or 24 Hour Base
- Network Time Server: Setup Present Time by Time Server.
- D.S.T: Daylight Saving Function On/Off



• Time Zone: Choose the time by GMT standard.

- * How to Time setup
- 1. Setup Timezone as your location.
- 2. Setup the Network Time server and press the "Sync" button.
- 3. If correct time is not getted automatically, setup the date/time manually.
- 4. If don't follow as upper, you may have the time error and the recording data search error.

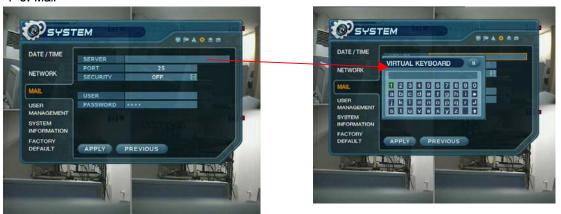
4-2. Network



- IP Address : Input IP Address
- · Gateway: Input Gateway IP for Internet Server
- · Subnet Mask: Input Subnet Mask IP
- DNS Server: Input DNS Server IP
- Network Speed : Setup Network Speed (Network Speed from System, Depend on Network Status)
- # If Change Network Setup, New Change Apply when after Rebooting.
- DHCP (Dynamic Host Configuration Protocol): Indicate IP Address for the DVR Automatically.
- 1. Enter to 'System -> Network' on the Menu.
- 2. Setup DHCP On/Off.
- 3. DHCP Off: User Input IP Address by Himself.
- 4. DHCP On: After DHCP On, Reboot the System.
- 5. Can see the setup IP automatically at the system information.
- DDNS (Dynamic DNS): You can connect the DVR by the fixed domain name(ex.00115f000001.dvrlink.net) at client or Web without entering the IP address.
- * If you use the DDNS, there is no necessity to enter again the IP Address every connection.
- 1. Enter to 'System -> Network' on the menu.
- 2. Setup DHCP On or Enter the IP address.
- 3. Setup DDNS ON and reboot.
- 4. Enter to 'System -> System information' on the menu.
- 5. Confirm the MAC address.
- 6. The domain name is "MAC address.dvrlink.net". EX) If Mac Address is 00-11-5f-00-b5-a7, the domain name is "00115f00b5a7.dvrlink.net"
- 7. If you connect by "00115f00b5a7.dvrlink.net" at client program or Web, you can connect the DVR.

- * 1. If your network connect at the router, please must port forwarding.
 - 2. Please must enter the exact IP address, DNS Server, Gateway, Subnet Mask.
 - 3. Please must connect the DVR at External Network.
 - If you don't follow 1,2,3, you can't receive the DDNS service.

4-3. Mail



• Server: Setup the mail server

• Setup by Virtual Keyboard after press the "ENTER"

• Port: mail server port

• Security: On/Off

• User & Password: input the DVR login user ID and Password.



4-4. User Management



User setup

- It is consisted 3 User Group as Administrator, Manager, User.
- Total 7 user belong to 3 User Group can be made.



- Input User ID, Password.
- Choose the Group.
- Input the E-mail Address.
- It can edit User ID information.
- E-mail notification On/Off: 1. ON:



2. OFF:





• Input the E-mail by Virtual Keyboard.

4-5. System Information



• S/W Version: Server Firmware Version

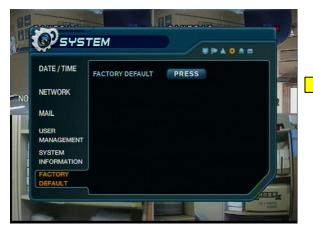
• Video Signal Type: NTSC or PAL

• Disk Capacity: used HDD capacity of the total HDD capacity

• IP Address: DVR's IP Address

• MAC Address: Fixed MAC address of the DVR

4-6. Factory Default





- Press "Press" to Start Initialize.
- Showing Warning Message and Press OK to Run Initialize.
- If do Factory Default, Every Setup is Initialized, but Saving Image is Not Erase.

5. Event/Sensor

5-1. HDD Event





• Drive: HDD connected location

• Threshold: Alarm setup temperature

• Value: HDD Temperature

• Smart Alarm: On/Off

• Check interval: HDD checking Time

5-2. Alarm Output



- Operation: Setup Alarm Sensor Connection Status (enable/disable)
- Type: Setup Alarm Sensor N/Open, N/Close Type

5-3. Alarm Output



- Setup each channel when alarm, videoloss, motion are happened.
- HDD Event: Alarm On/Off when HDD has the problem.
- Operation: Setup Relay Connect with Alarm Sensor.
- Mode: Setup Reacted Relay as Latched/Transparent Mode.
- Type: Setup Relay Type N/Open or N/Close.
- Duration: Setup Reacted Relay Time.
 (5sec~5min or Until key-in)

Tip

• Latched/Transparent

Latched - When Sensor Alarm Activated, Relay Reacted in Setup Duration Transparent - Relay Reacted Temporary During Sensor Alarm Activate

5-4. Buzzer out

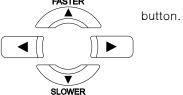


- Buzzer: On/Off
- Duration: Buzzer time(5sec~5min or Until key-in)
- setup each channel when alarm, videoloss, motion are happened.
 - HDD Event: Buzzer On/Off when HDD event is happened.
 - Keypad : Setup Key Input Sound.
 - Remocon: Setup remocon Input Sound.

5-5. E-mail Notification



- If the alarm, videoloss, motion and HDD event are happened, send the notification at the E-mail.
- · Choose the function by



6. Disk Management



- Disk Overwrite: Select Overwrite Permission when Hard Disk Full
 O N: Overwrite Hard Disk from Oldest Data
 - OFF: When Hard Disk Full, Stop Recording and Buzzer Activate
- Format: Refreshment Hard Disk. All Recorded Data Deleted

Go to Record Menu



1. Recording Operations

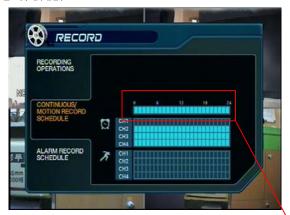


- Schedule Mode: Choose the DAILY or WEEKLY.
- Pre-Event Recording Time : Setup Pre-Event recording Time. (1~5 sec)
- Post-Event Recording Time: Setup Post-Event recording Time. (1~5 sec)

• Menu

2. Continuous/Motion Record Schedule

2-1. DAILY





- Ø
- · Continuous record setup
- K
- Motion record setup

- · Setup each channel
- Put the choose area at here and press "Enter" button.

2-2. WEEKLY





- Ø
- Continuous record setup
- · Setup each channel

- K
- Motion record setup
- Setup each day

3. Alarm Record Schedule

3-1. DAILY





:0:

Alarm record setup

- · Setup each channel
- Put the choose area at here and press "Enter" button.

3-2. WEEKLY



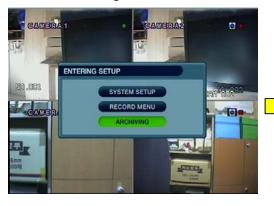


:0:

- · Alarm record setup
- Setup each day

· Setup each channel

Go to Archiving





① Device: Indicate CD-RW Model and USB MEMORY Model Automatically.

If you use the CD-RW and USB memory (or USB HDD) together,

it can choose the CD-RW and USB by



- 2 Start Time: Select Start Backup Time.
- 3 End Time: Select End Backup Time.
- 4 Channel & Video/Audio Selection: Select Channel, Video, & Audio for Backup.
- 5 Title: Change the Title of Backup by virtual keyboard.
- 6 Event: Select Attach Event Text File in Backup.
- 7 Start : Start Backup.





- Compatible CD Writer Models are LG(GCE-8526B,GCE-8527B), SAMSUNG(SW-252F, TS-H292A, SH-522C),ASUS(CRW-5232AS),GIGABYTE(GO-R5232B)
 - Compatible USB memory stick Models are LG(Royal, mobile, mirror), IMATION(iflash), Memorive PRO+ and Compatible USB HDD is CUTIE(FHD-254).
 - Inside of Backup CD, USB Including Necessary Codec for Playback (IMM4 Install File).
 - In case of RW Possible CD, Please Delete Previous Data on PC for Recording Again.

• System Requirement

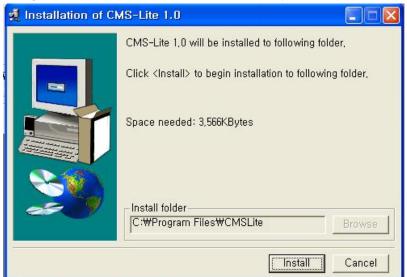
- 1 Main Board (CPU): Pentium-500(Minimum), Pentium 4 recommend
- 2 OS: Higher than Windows 98, DirectX 7.0A
- 3 Memory (RAM): More than 128 M
- ④ VGA: Graphic card that support the DIRECT-X *IMM4 Codec (When Playback Backup File)

DVR Remote Agent Install

① Open CD-ROM Drive and Run DvrRemoteAgentSetup.exe and then Appear Setup Menu



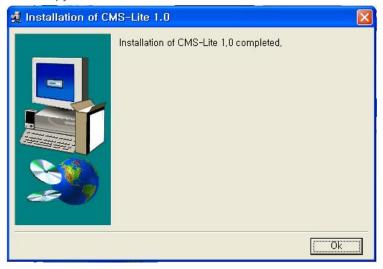
2 Close All Running Software and Press Next to Move Next Step



③ Ask designate Folder to Install DvrRemoteAgent, Recommend Basic setup c:₩program files:₩CMSLite. Click Next.



4 Showing Progress of Copy of Files



5 Finish DvrRemoteAgent Program Installation

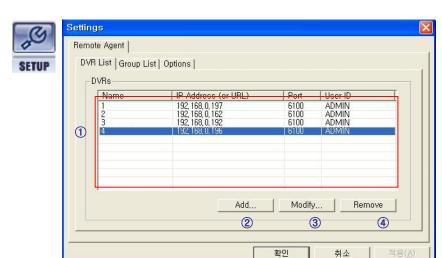
1. Function Introduction



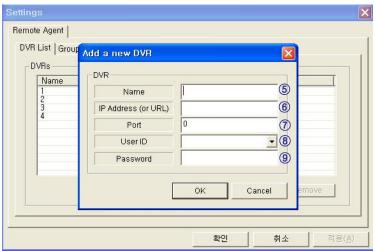
- 1 Main Screen Image: Showing Present Surveillance Camera Image
- 2 Camera Selection Button: Indicate Connected Camera No. & Select Image to Click Camera No.
- 3 Hidden/Exit: Hide DVR Client Window or Exit Program
- 4 Time Output: Showing Present Time & Date
- SEARCH: Move to Search Mode to Play VideoSETUP: Move to Setup to Change Network Setup or Option
- 6 DVR Selection: Select I/D to Connect Server
- 7 Connect : Connect DVR
 - Disconnect: Disconnect from DVR
- 8 Screen Division Selection: Change Screen Division Mode
- 9 Save by AVI file: Transmission Live Image Save by AVI File
- (10) Color Adjustment: Adjust Color of Live Transmission Image
- $\scriptsize{\textcircled{\scriptsize 11}}$ Event Viewer: Showing Present Event in Server & Find Image
- @ PTZ Control Button: Control Camera PTZ & Focus
- [®] Audio Button and Alarm: Control Two Way Audio & Mute and Alarm On/Off
- 14 Exit: Exit DVR Client
- (5) Connection Stauts: Showing the connected DVR.

2. Setting

2-1. DVR List

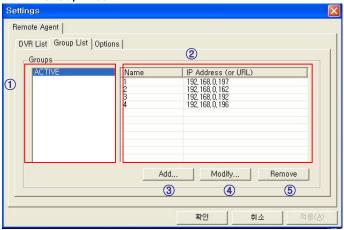


- ① DVR Status: Indicate Present Saving DVR & DVR Information.
- 2 Click to Input New DVR Information.
- ③ After Amend All DVR Information, Applying Change DVR Information
- (4) Selected DVR Delete at DVR Status.
- Click the "ADD" button.

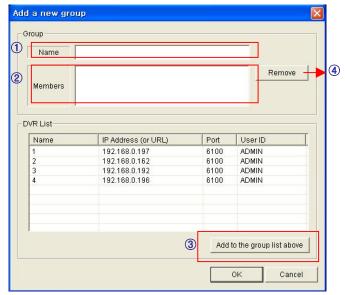


- 5 Input Name to Add or Amend DVR.
- 6 Input DVR IP Address to Add or Amend.
- 7 Indicate Port No.
- 8 Input ID for Connecting DVR.
- 9 Input Password for Connecting DVR.

2-2. Group List



- 1 Group list
- 2 DVR list belonging to the Group
- 3 Click to make the Group.
- 4 After Amend Group Information, Applying Change Group Information.
- 5 Selected Group Delete at Group Status.
- Click the "ADD" button.



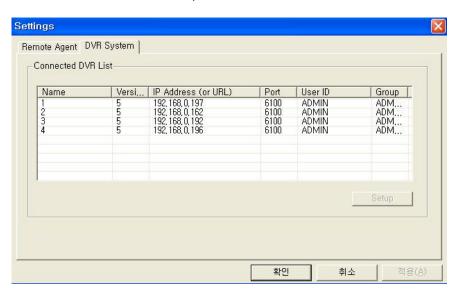
- ① Input the Group name.
- ② selected Group members list. It can control Total 4 DVR at the same time.
- 3 Click the button after select the DVR. Then it is registered at the group.
- 4 Remove the selected DVR.

2-3. Option

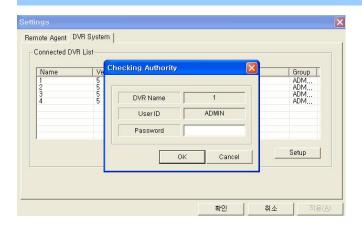


- ① Receive Event: Select Kinds of Event as Multiple. Remote Client Only Receive Selected Event. (System, HDD, Alarm, Video, REC)
- 2 OSD Display: Select Screen Information. (Name, Date, Resolution)
- ③ Screen Switching Interval (sec): During the Monitoring, Select Screen Rotation Interval Time (From 1 sec. to 300 sec.)
- 4 Live Audio Monitoring Channel: Select Channel for Listening Audio at Remote Among 4Ch Audio.
- ⑤ Saving Directory: Designate Remote PC Backup Image Saving Folder.

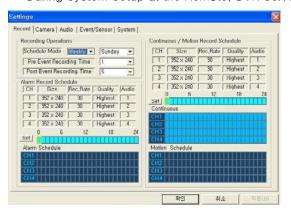
2-4. DVR Server Remote Setup



• Choose the DVR for setup and click the "Setup" button.



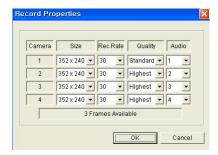
- Click DVR System Setup Tap, Password Input Window Open After Input Password, Setup Window Pop-up.
- DVR System Tap Indicated Only when Connect as Administrator.
- DVR System Setup Possible to Control Almost Every Setup at the Remote.
- When Activate Setup or Changing Setup at the DVR Server, It's Impossible to Change Setup at the Remote.
- During System Setup at the Remote, DVR Server Setup Start Make to Close Remote System Setup Automatically.



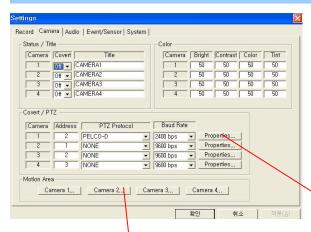
- Alarm Recording Schedule
 - Click the "Set: Button for Alarm Recording.

1 Record Setup

- Record Operations
- Schedule Mode: Weekly or Daily
- Sunday ~ Saturday
- Pre Event Recording Time: 0 ~ 5(Second)
- Post Event Recording Time: 5 ~ 180(Second)

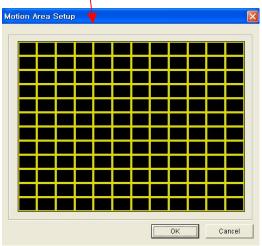


- Continuous/Motion record Schedule
- Click the "Set: Button for Continuous/Motion record Schedule.

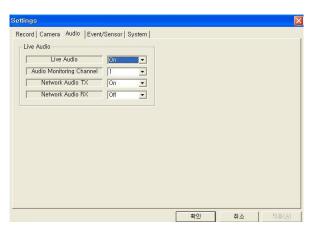


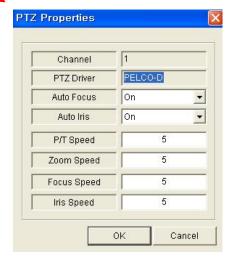
② Camera Setup

- Status/Title Setup
- Setup for Each Camera (Connection Status or Camera Name).
- Color Setup
- Setup Color for Each Screen.
- Covert/PTZ Setup
- Setup Each Camera Covert Function & PTZ Protocol.



- Motion Area
 - Click the "Camera" Button.
 - Choose the area.

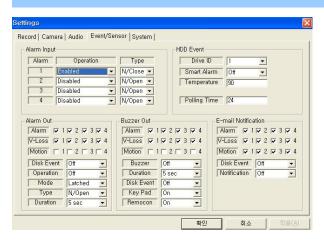




- Click the "Properties" button.
- Setup about PTZ camera.

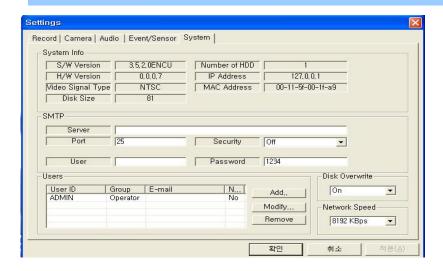
3 Audio Setup

- Live Audio Setup
- Live Audio & Two Way Audio Setup for Server.



4 Event/Sensor Setup

- Alarm Input
- Setup for Each Channel Alarm Connection & Type.
- · Alarm Out
- Setup each channel when alarm, videoloss, motion are happened.
- HDD Event: Alarm On/Off when HDD has the problem.
- Operation: Setup Relay Connect with Alarm Sensor
- Mode: Setup Reacted Relay as Latched/Transparent Mode
- Type: Setup Relay Type N/Open or N/Close
- Duration: Setup Reacted Relay Time (5sec~5min or Until key-in)
- Buzzer out
- Setup each channel when alarm, videoloss, motion are happened.
- Buzzer: On/Off
- Duration: Buzzer time(5sec~5min or Until key-in)
- HDD Event: Buzzer On/Off when HDD event happen
- Keypad : Setup Key Input Sound
- Remocon: Setup remocon Input Sound
- HDD Event
- Drive ID: HDD Connected location
- Smart Alarm: On/Off
- Temperature: HDD TemperaturePolling Time: HDD Checking Time
- E-mail Notification
- If happen the alarm, videoloss, motion and HDD event, setup the notification at the E-mail.
- HDD Event: E-mail notification On/Off when HDD event is happened.
- Notification: On/Off



⑤ System Setup

- System Info
- Possible to Watch DVR System Status.
- SMTP
- Setup the mail server and user's E-mail.
- Users
- Setup the Users.
- Click the "Add" or "Modify" button.



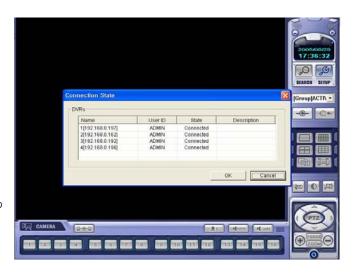
- Disk Overwrite
- Setup DVR HDD Overwrite On/Off.
- Network Speed

3. Monitoring

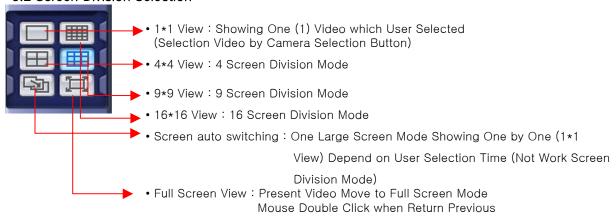
3.1 Selection Network I/D



- Select I/D to Connect Server.
- I/D can be Add, Change, and Delete at Setup



3.2 Screen Division Selection



*Mouse Double Click Make the Same Function as Full Screen.

Tip

- Multi DVR Client
- 4EA DVRs can be control the live view, search the data, backup data and setup about each channel at the same time.
- Refer to p48 about setup.



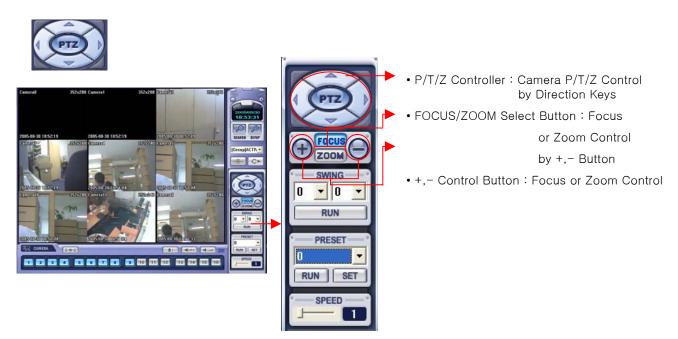


• 9 Division Mode

• 16 Division Mode

3.3 P/T/Z Control

• Press the PTZ Button.

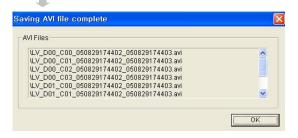


3.4 AVI File Conversion





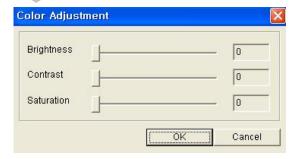
- Click AVI Conversion Button to Start AVI File Conversion.
- During AVI Conversion Showing a Message and before Click 'Stop" Save AVI File continuously.



- 'Press 'Stop' to Open Designate File Name & Saving Location, and Save AVI File.
- Saved AVI File can Open Ordinary Moving Picture Player or Backup Player.
- Moving Picture Player Codec Version Need Higher than Divx 5.1 & IMM4 Codec.

3.5 Color Adjustment

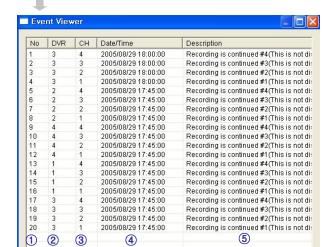




- Click Controller Possible to Control Color
- Change Brightness, Contrast, Saturation from 0 to 100
- · Click OK to Finish Changing Setup

3.6 Event Viewer





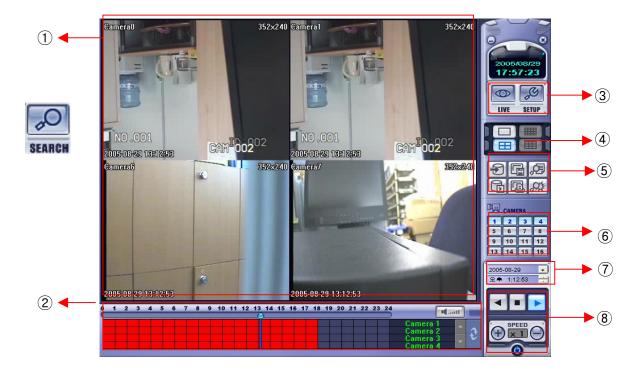
- 1 Indicate Event Occurred Order No.
- 2 Indicate Event Occurred DVR No.
- 3 Indicate Event Occurred Camera No.
- 4 Indicate Event Occurred Time & Date
- 5 Indicate Event Detail Description
- 6 After Select Event, Move Search Bar in Search Mode
- 7 Return to Search Main to Play Selected Event Image

>

Go to timelane

4. Search

4.1 Function Introduction



1 Search Screen: Playing Selected Video

2 Search Bar: Search & Indicate Camera Recording Situation by Time Bar

③ LIVE: Return to Watch Mode SETUP: Open Setup to Change Network Setup or Option

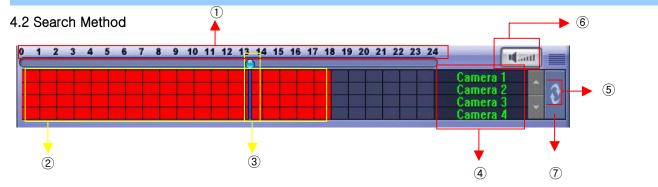
4 Screen Division Selection: Change Playing Screen Division Mode

5 SEARCH Option: Backup Video or Search Event

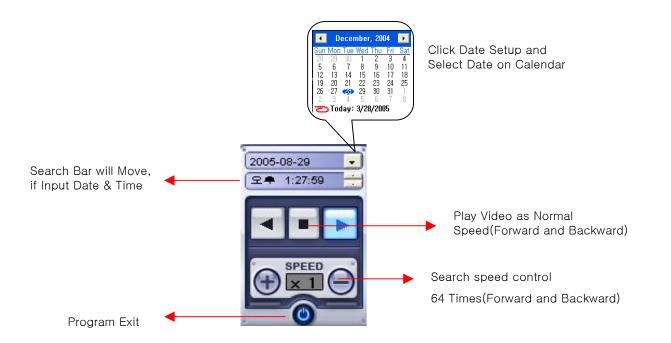
6 Camera Selection Button: Select Camera at the 1*1 View

7 Quick Search: Find Image to Designate Date & Time

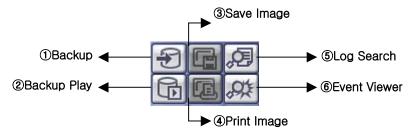
8 Search Controller: Control Playing Video



- 1) Indicate 0~24 Hour
- ② Indicate Recording Situation (Blue: No Record, Yellow: Recorded Image at the Time)
- ③ Search Bar: Select Video to Drag Mouse Search Controller in Recorded Area
- 4 Indicate Camera Channel to Confirm Camera Recording Situation
- ⑤ If Connected Channel is 5 or More, Another Channel will be Scroll.
- (6)
- 7 Refreshment Recording Information Situation Window by Camera Channel

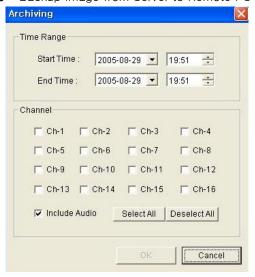


4.3 SEARCH Option

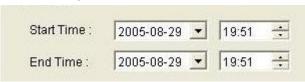


1 Backup - Backup Image from Server to Remote PC





• Time Range



Designate Backup Image Data Length to Input Start Time & End Time.

- Channel: Check Camera Channel for Backup
- Include Audio: Check Audio Including when Backup
- Select All Deselect All

• Press OK to Open Backup Status & Start Backup.



• When Finish Backup, Back Status Window Disappear & Backup Data Save at Hard Disk Root Folder in Remote PC.

2 Backup Play (DVR Player) - Transfer to DVR Player



- ① Showing Image (Possible to Only 1*1View Mode)
- ② Backup File Open to Play First Video
 - Ex. : ch02_04131730_04131735.rec (Backup File for # 2 ch. Apr.13, 17H30M ${\sim}17\text{H35M}$)
- 3 Indicate Present Playing Video Camera Channel No.

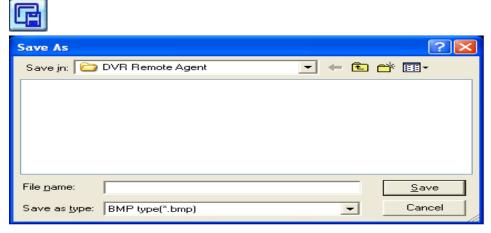
Total: 00:02:00

- 4 Indicate Present Time & Date and Possible to Search Time & Date
- 5 Search Controller, the Same Way of Previous Search

Tip

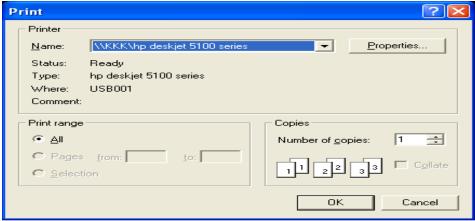
- Backup Play Setup in Search Mode is the Same as DVR Player, so it can be Run Independently without Running Remote Program.
- Backup Player & Ordinary Moving Picture Player Possible to Playback, Real Time AVI Backup File can Display as the Same Format.

3 Save Image - Capture Image & Saving Image at Hard Disk or Removable Disk



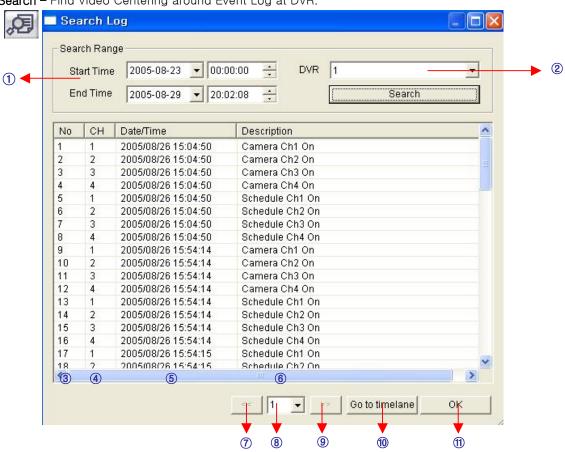
- Click 'Save Image' Icon During Playing Video
- Designate File name, File Type (JPG,BMP), and Location and Press Saving
- Conversion and Saving Image from Remote Viewer
- 4 Print Image Present Image Capture and Print Out Image





- During Play Video, Click 'Print Image'
- After Selecting Printer, Start Image Printing
- Print Out Remote Viewer Image

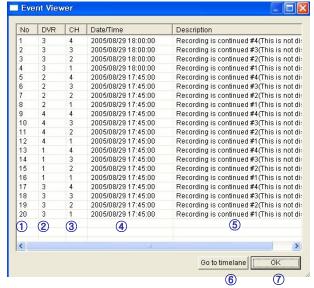
5 Log Search - Find Video Centering around Event Log at DVR.



- ① Input Start Time and End Time at the Selected Date to Search Event When Press Search Button, Event Output at the Below Window
- 2 Choose the DVR for searching the log.
- $\ensuremath{\mathfrak{G}}$ Indicate Event Log Order No. (<code>Max</code> Event Log No. of 1 Page is 100)
- 4 Indicate Event Occurred Camera No.
- (5) Indicate Event Occurred Time & Date
- 6 Indicate Event Detail Description
- 7 Move to Previous Page
- 8 Move to Next Page
- 9 Move to User Select Page
- 10 After Select Event, Move Search Bar in Search Mode
- 11) Return to Search Main to Play Event Image

6 Event Viewer- Showing Present Event in Server & Find Image

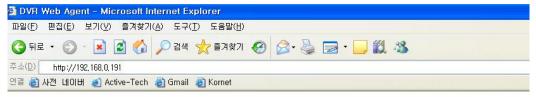


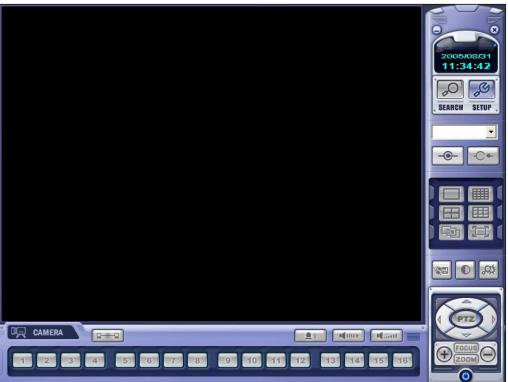


- 1) Indicate Event Occurred Order No.
- 2 Indicate Event Occurred DVR No.
- 3 Indicate Event Occurred Camera No.
- 4 Indicate Event Occurred Time & Date
- 5 Indicate Event Detail Description
- 6 After Select Event, Move Search Bar in Search Mode
- 7 Return to Search Main to Play Selected Event Image

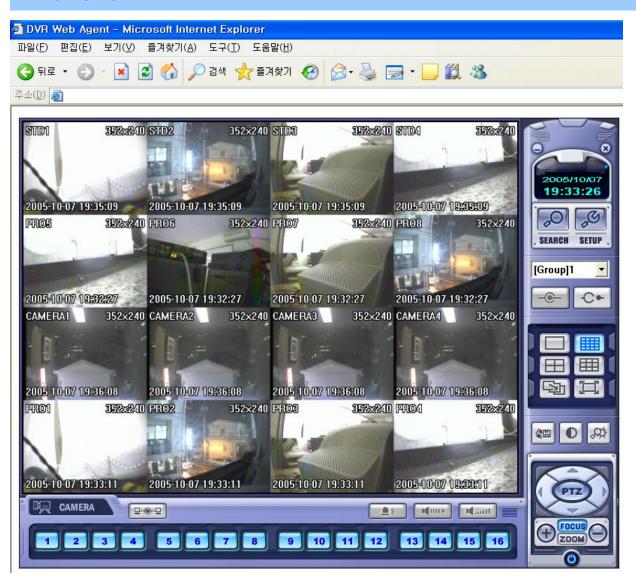
5. Web Client

- WEB Client Connection
- ① Input IP Address or URL for DVR Server at the Internet Explorer Address Input Place.
- ② When Appear Active-X install Message, Please Click Confirm or Continue.





- 3 Showing Web Client Window at Internet Explorer.
- 4 All function is same with Remote Agent.



Error Report

Date	Customer	Model	Complete Unit/KIT	Serial No.	Remark
Error Phenomenon or Special Report					
Enter 1 honomon of opecial report					
Improve Request					
Complementary Measure					