

Digital Video Recorder
HNDR Series

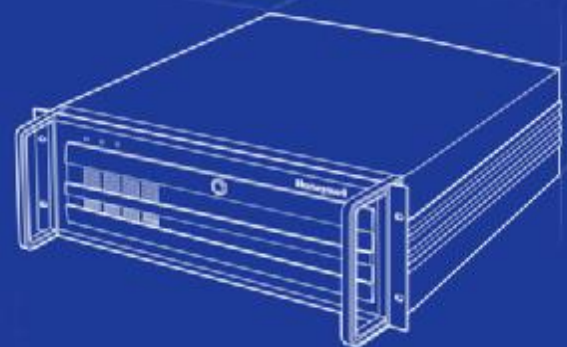
User's Guide

D I G I T A L V I D E O R E C O R D E R

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Smart search
Recording
Network





Safety Precautions





Be Sure to Read “Safety Precautions” before Using This Product





For Safety of the User and Others and To Prevent Loss or Damage of Properties.

- Following signs and explanations serve as a reminder for the potential hazards and the degree of loss or damage that may result from non-observance of necessary precautions.

 <b style="font-size: 1.2em;">Warning	 <b style="font-size: 1.2em;">Caution
Sign that warns loss of life or serious damage in case relevant orders or instructions are violated.	Sign that warns injury or material loss or damage in case relevant orders or instructions are violated.


- Following signs and explanations specify required precautions that should be taken.


 <b style="font-size: 1.2em;">Warning	 <b style="font-size: 1.2em;">Caution
<div style="display: flex; align-items: center;">  <div> <p>This is a “Prohibition” sign that should not be violated</p> <p>Violation could cause loss or damage of life and property.</p> </div> </div>	<div style="display: flex; align-items: center;">  <div> <p>This is a “Mandatory” sign that should be implemented.</p> <p>Violation could cause loss or damage of life and property.</p> </div> </div>


 <b style="font-size: 1.2em;">Warning	 <b style="font-size: 1.2em;">Caution
<div style="display: flex; align-items: center;">  <div> <p>Do Not Disassemble.</p> <p>Violation could cause loss or damage of life and property.</p> </div> </div>	<div style="display: flex; align-items: center;">  <div> <p>Do Not Touch.</p> <p>Violation could cause loss or damage of life and property.</p> </div> </div>


Safety Precautions


Warning


	<p>Do Not Touch This Product with Wet Hands or Wet it.</p> <p>Water or other liquid could cause fire, electric shock or failure.</p>
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	<p>Do Not Touch Power Cord with Wet Hands.</p> <p>There is a danger of electric shock.</p>
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	<p>Pull Out the Power Cord Immediately In Case Water or Other Liquid Leaked In.</p> <p>There is a danger of electric shock or fire.</p>
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	<p>Do Not Disassemble or Rebuild.</p> <p>There is a danger of electric shock, fire or failure.</p>
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	<p>Do Not Put Heater or Other Heat-Emitting Appliance Near This Product.</p> <p>There is a danger of fire or mechanical failure.</p>
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	<p>Do Not Use This Product Where There Are Propane Gas, Gasoline or Other Flammable Gas and Dust.</p> <p>There is a danger of explosion or fire.</p>
---	---


Caution

	<p>Do Not Clean with Benzene, Thinner or Other Volatile Matter.</p> <p>It could damage products.</p>
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	<p>Do Not Install in an Unstable Place.</p> <p>Fall could cause an injury or failure.</p>
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	<p>Do Not Use or Keep This Product Where There are Strong Direct Rays of Light and Temperature Is High.</p> <p>It could deform the product or cause a failure.</p>
---	---

	<p>Do Not Throw This Product and Avoid Strong Impact.</p> <p>It could cause a failure.</p>
---	---

	<p>Risk of explosion if Battery is replaced by an incorrect type.</p> <p>Dispose of used Batteries according to the instructions.</p>
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Precautions on Use

For effective use of the product free of troubles, following precautions should be taken:

- When there is a problem with the product, contact the store where you purchased the product or the agency instead of trying to disassemble it yourself.
- In case of product malfunction due to a product failure, turn off the PC and contact the store where you purchased the product.
- This product does not operate when the power circuit breaker is lowered or during power outage.

About The Product

Thank you very much for using the HNDR (Honeywell Network Digital Recorder) from Honeywell.

Developed with proven technology of Honeywell Co., Ltd., this product guarantees the quality by having passed the reliability and compatibility tests.

This User Manual is prepared exclusively for HNDR Users.

- Honeywell Co., Ltd. reserves the copyright for this User Manual.
- Unauthorized copying of this User Manual is explicitly prohibited.
- For loss or damage caused by the use of non-standard products and by non-observance of stipulations as described in the User Manual, Honeywell Co., Ltd. should not be held responsible.
- For additional information required for installation and in case HNDR needs to be disassembled for upgrading of system functions or repair, please request for technical assistance from where you purchased this product or the main office of Honeywell.
- HNDR is the registered trademark of Honeywell Co., Ltd.
- Safe use of this product is guaranteed, as the product successfully completed domestic EMI Registration for appliance for home and industrial use as well as overseas certification such as CE (Europe) and FCC (U.S.A.).
- The contents of this Manual are subject to change to enhance product performance without prior notification.

Guidelines for Installation and Use

1. Humidity

Do not install this product in a building that leaks rain and with high humidity. If water leaks into DVR, it could cause a failure or become a fire hazard.

2. Trouble Repair

Do not disassemble or rebuild this product on your own to avoid electric shock. If there is a trouble with DVR, contact the store where you purchased the product instead of trying to repair it yourself.

3. Power Supply

Do not use a power supply other than specified (AC110V or AC220V option). There is a danger of electric shock or other hazard.

4. Installation Environment

The HNDR is designed for interior use, to be installed in a PC slot. Accordingly, do not install the HNDR in a place with extreme temperatures. (Recommended temperature: $-10^{\circ}\text{C} \sim 45^{\circ}\text{C}$)

5. Sun light, etc.

This product should not be directly exposed to sun light or other strong rays of light, for fear of damage to the product.

6. Impact or Vibration

Be careful not to drop HNDR or cause it to be affected by strong impact or vibration.

7. Installation in An Unstable Place

Make sure that the HNDR is not installed in an unstable place, shelf or table. It can injure users or other people, or damage the product.

8. In Case HNDR Does Not Operate Properly

In case an abnormal movement is detected during operation (i.e., unusual noise, smell, or smoke), stop the operation immediately, cut off the power supply, and contact the store where you purchased the product.

9. Cleaning

When cleaning the HNDR, be sure to turn off the power to the PC and clean it with a dry cloth. When the soiled area is not washed cleanly, use a cleaner for furniture.

10. For A/S

For any of the following conditions, cut off the power supply of HNDR and request for repair from the store where you purchased the product.

- A. The connector in the power supply is damaged.
- B. Rain or water leaked into the HNDR.
- C. Liquid is spilt on or a foreign material got into the HNDR.
- D. The HNDR does not operate as described in the User Manual.
For adjustment of the HNDR, follow the instructions as described in the Manual. (In case it is manipulated in ways other than specified in the Manual, it could cause more severe damage to the board.)
- E. The HNDR fell to the ground and was damaged severely.
- F. There is a noticeable change in performance.

Contents

Check that these materials are included when you open the box.

Should there be anything missing contact the dealer bought it from.

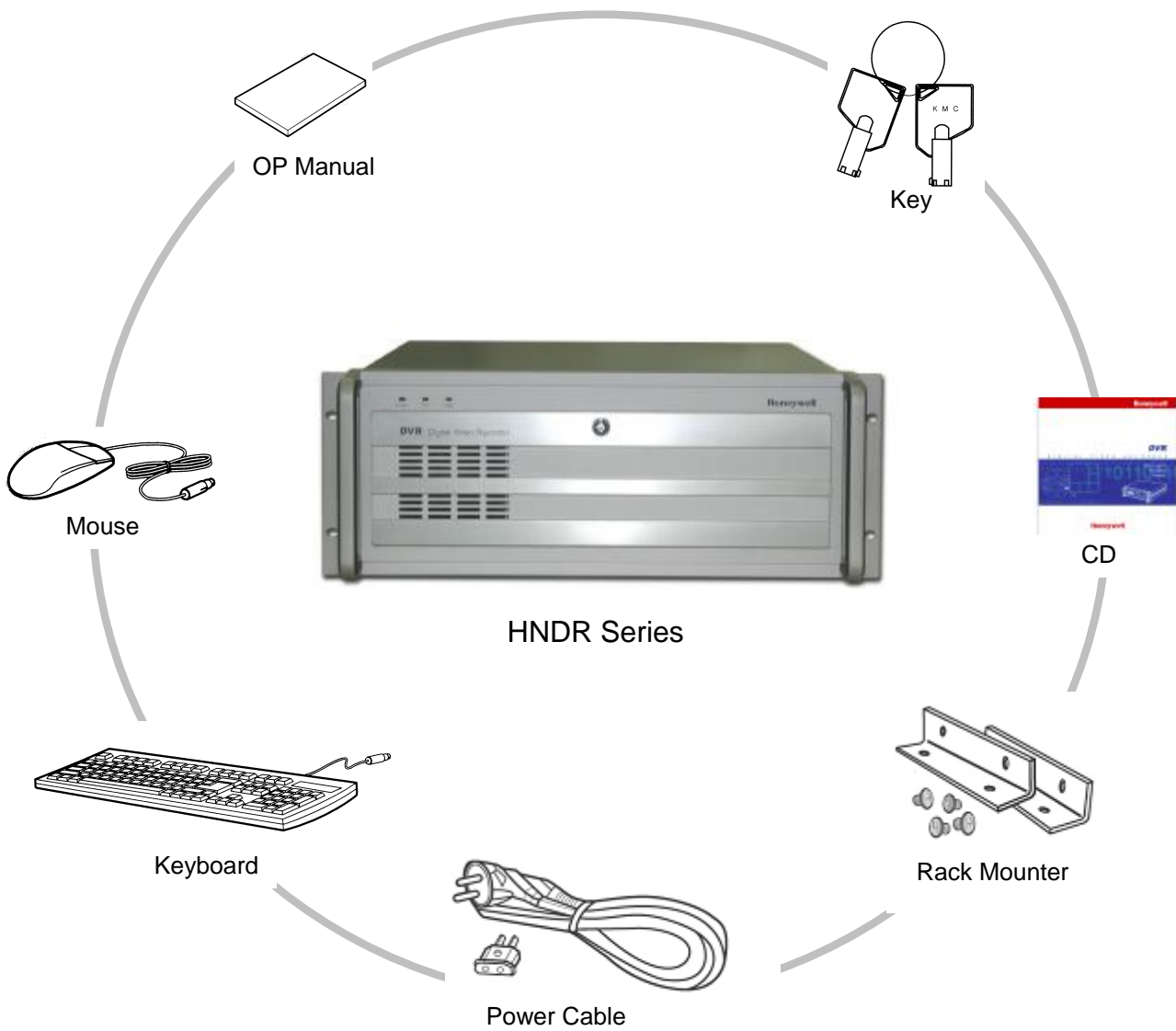


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Chapter 1. About HNDR

1. HNDR Overview

- DVR (Digital Video Recorder) refers to a product that adopts a digital recording method instead of the existing analogue tape method. DVR digitalizes all image data for storage and playback.
- Analogue tape method is not an easy way to retrieve recorded data during search of image data. But the HNDR system provides you with accurate and easy searching method for the desired date and time.
- While the existing CCTV has a recording/playback image quality poorer than surveillance monitor, the HNDR system provides a recording/playback image quality equivalent to that of the surveillance monitor.
- With improvements to meet the need of an integrated equipment for system integration, the HNDR system has integrated common QUAD, VCR, SWITCHER, and MUX functions.
- Keeping recorded data has been a tough task. But the HNDR system makes it possible to keep data with various volumes semi-permanently by recording them on up-to-date backup devices (DAT, CD, DVD, etc.).
- The HNDR system allows you to control security devices in connection with sensors, and operate control devices automatically/manually with ease.
- In addition, remote access to DVR allows you to bring or control data remotely. (HNDR-Net)
- When the HNDR system has a modem or LAN installed, the HNDR-Net allows you to remotely access to the HNDR system to check on its state, retrieve data from the HNDR data or move them onto the HNDR-Net, and set HNDR preferences and manage schedules.
- HNDR is a next generation Digital Video Security System, providing stability, easy search and storage, and increased multi-functionality.

2. Features of HNDR

1) Features of HNDR

- **1~16 Video Inputs**
Up to 16 videos are available for input.
- **1~16 Sensor Inputs / 1~4 Relay Outputs**
Up to 16 input sensors are available for connection.
Relay outputs allow you to operate the HNDR connected with sirens, shutters, and doors when something moves or sensors go off.
- **Voice storage and bi-directional communication support**
Can store both voice and video data. Bi-directional voice communication is available when a network connection is established with the HNDR-Net. (1 channel (4 channel option))
- **Multi-screen support**
You can view 1, 4, 6, 9, 10, or 16 videos on one screen.
- **PAN/TILT/ZOOM/FOCUS Operation support**
The HNDR can control an equipment, if installed, that adjusts a camera upward/downward/to the left/to the right within the program.
In addition to the basic functions above, various functions such as Auto Scan, Preset, Tour, etc. may be provided by our Scan Dome (HSD-251).
- **System Auto Recovery Function (Watch-Dog)**
When a problem occurs in the system, the HNDR detects the problem, and reboots the system, restoring it to the normal operational condition.
- **Recording with Motion and Sensor Detection**
A camera can record images only when it detects any motion. It can also record images when it detects sensors. (Data monitoring and storage are made easy without storing unnecessary images.)
- **Diverse Methods for Image Compression/Transmission**
Available choices for compressing and transmitting images are MJPEG and MPEG methods.
- **Simple Video Authentication**
Allows you to easily create a separate authentication program (Auth Tool) and video file for presentation so that the recorded images of the HNDR have legal effects.
- **Convenient Video Playback**
Allows you to playback the recorded HNDR images using a separate Viewer Program (including the HNDR), or replay them with a common media player by saving them as a common video file (AVI format).
- **Accurate Motion Detection Setting**
Allows you to set the state of detecting accurate motion of images on Setup. You can easily set the range of detecting subtle motion by dot.
- **Check HNDR-Net Access**
Allows you to easily identify users of the HNDR-Net and the HNDR-Web who are logged in the HNDR system.
- **Notification of Emergency**
Can send an e-mail automatically when HNDR events (sensor, motion) occur.

- **Scheduled Recording**

Allows you to select a desired weekday and time for recording using schedules. (Recording is available for the same time zone or weekday only.)

- **Data Backup and Automatic Backup**

Allows you to backup data in different devices (DAT, CD, DVD, etc.), and by desired camera, date, and time. Automatic backup is also available using recording schedule.

- **Digitalized Image Search Support**

Allows you to easily retrieve saved images by camera (or simultaneously) and by desired date and time. You can also save and print, and correct and enlarge an image.

- **Network Support (Modem, TCP/IP Protocol)**

Network support allows you to remotely access the HNDR to retrieve or backup image data. You can set up preferences on the HNDR as well.

Item	Specification
Video Input	16 Channels (NTSC/PAL)
Voice Input	1 Channel (4channels option)
Sensor Input	16 Channels
Sensor Output	4 Channels
Composite Output	1 Channel (NTSC/PAL, Switching 16 Channels)
Image Compression Method	Select MJPEG or MPEG
Recording Method	Continuous Recording, Sensor Recording, Motion Recording, Sensor/Motion Recording, Event Recording
HNDR-Net Transmission Method	PSTN, ISDN, ADSL, LAN
Backup	CD , DAT, DVD
PTZ	RS-485 Interface

Item	Specifications
OS	Windows 2000 Professional, XP Home Edition
CPU	Pentium 4, 2.4 GHz
Main Board	Intel Chip Set
Video Card	AGP, 32MB RAM, ATI Chip set
MEMORY	256 MB, DDR RAM
LAN	10/100 Mbps
HDD	40 GB, 7200RPM
Direct X	8.0 Higher

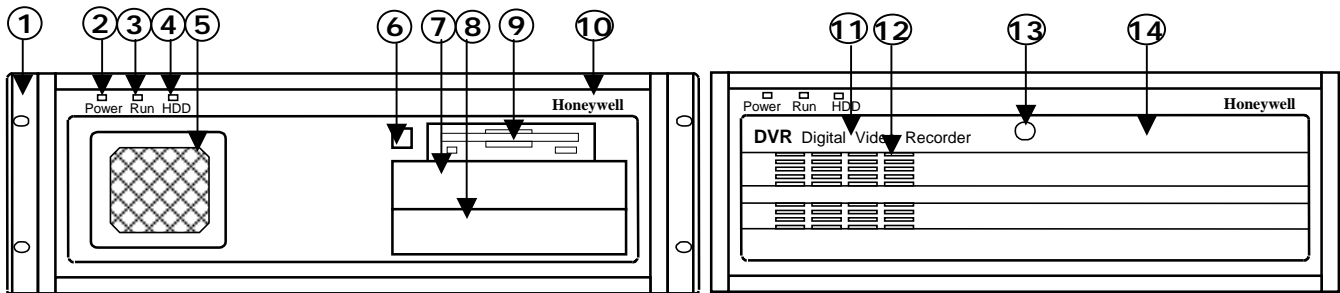
2) Features of HNDR-Net

- **Multi-Net Access Support**
Allows you to integrate and manage multiple HNDR sites in the HNDR-Net system.
- **Multiple Protocols (PSTN, ISDN, ADSL, etc.) Support**
Allows you to access the HNDR using various communication protocols.
- **Real-time Monitoring of HNDR Images**
Allows you to access the HNDR to monitor images of the camera connected with the HNDR in real-time in the HNDR-Net system.
- **Retrieval and Storage of HNDR Data**
Allows you to access the HNDR to retrieve data, or receive and store data from the HNDR-Net.
- **Bi-Directional Communication of Voice Support**
Bi-directional voice communication between the HNDR and the HNDR-Net is available.
- **PAN/TILT/ZOOM/FOCUS Remote Control Support**
Allows you to control PAN/TILT equipment connected with the HNDR via the HNDR-Net.
- **Control HNDR Preferences**
Allows you to set up HNDR preferences such as camera usage, schedule management, and sensor settings via the HNDR-NET.
- **Receiving Automatic Notification via HNDR**
When something moves or sensors go off in the HNDR system, a system with the HNDR-Net installed is notified (HNDR-Net icon blinking) to launch HNDR-Net, enabling HNDR system monitoring.
- **Multiple OS Support**
HNDR-Net can be installed on various platforms including Windows 98 /2000 /XP.

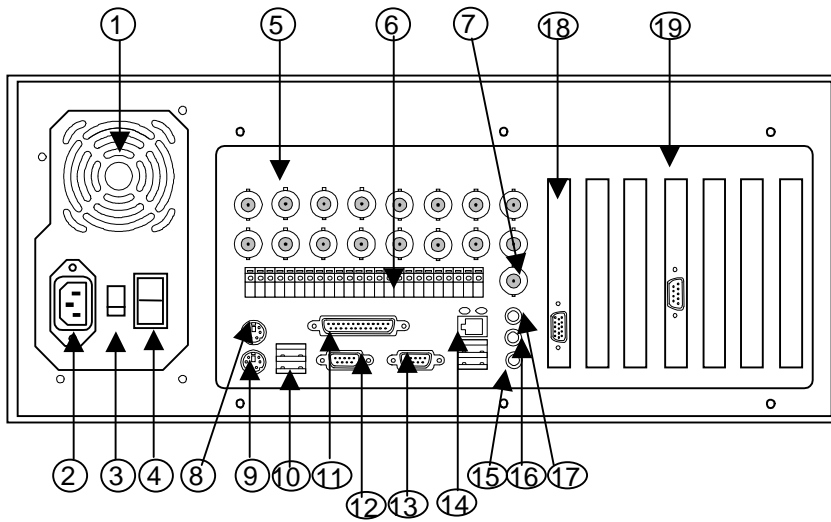
HNDR-Net: Supports Multi-Net that allows you to access multiple HNDR sites. Enables monitoring, retrieval, and setting up preferences of the HNDR system.
HNDR-Web: Enables monitoring multiple HNDR systems via a web browser.

3. Glance of HNDR

Door Cover Open/ Close



Item	Function
① Rack Mount	19" Rack Mount
② POWER LED	Power Status indicator (Red Color)
③ RUN LED	Abnormal Status indicator (Green Color)
④ HDD LED	HDD Status indicator (Yellow Color)
⑤ Filter	Noise filter
⑥ Power Switch	Power Switch
⑦ CD- ROM/R- HDD Rack	CD-ROM /Removable HDD Rack (Option)
⑧ CD- RW / DVD- RW	CD-RW/ DVD-RW (Option)
⑨ FDD	3.5" FDD Disk
⑩ Honeywell Logo	Honeywell Logo
⑪ Product Logo	Product Name (Digital Video Recorder)
⑫ Ventilation	Ventilation of HNDR
⑬ Locker	Locker
⑭ Cover Door	Cover Door



Item	Function
① Power Fan	Power Fan
② Power Input	Power Input
③ Power Select	Power Select switch (230/115V)
④ Power In/Out Select	Power In/Out Select Switch
⑤ Camera In (1~16)	Camera Input (1~16) terminal
⑥ Sensor In(16)/Out(4)	Sensor In(16), Out(4) terminal
⑦ Extra Monitor Output	Composite signal output
⑧ Mouse	Mouse port
⑨ Keyboard	Keyboard port
⑩ USB Port	USB port
⑪ Parallel Port	Parallel port
⑫ Com1 Port	Serial com port 1
⑬ Com2 Port	Serial com port 2
⑭ LAN Port	LAN port
⑮ MIC Port	MIC Input port
⑯ Speaker Port	Speaker output port
⑰ Aux Port	Extra AUX Input port
⑱ AGP Slot	VGA Card slot
⑱ PCI 1 ~6 Slot	PCI slot (1 ~6)

Chapter 2. Monitoring

1. Main Monitoring



① [Split Screen settings]

- Select the 1, 4, 6, 9, 10, or 16 split button with the mouse to display images on the selected split screen.

② [Manual Switching]

- Select the manual switching button with the mouse on the 1, 4, 6, 9, or 10 split screen to switch manually and display images.

③ [Automatic Switching]

- Select the automatic switching button with the mouse on the 1, 4, 6, 9, 10 split screen to switch automatically and display images.

④ [Full Screen]

- Select the full screen button with the mouse to enlarge the split screen to full screen.



Caution 1. Before running the main program, make sure the proper allocation under Image Database Tool on SETUP.

- By default, out of 40 GB disk capacity, 36 GB (500 Volumes) is allocated to the database structure, 4 GB to OS/Backup area.
- The default user name and the password are both set to be "1."
(Use them for search, setup, and Net access.)



⑤ [Split Screen Settings]

- Select the 1, 4, 6, 9, 10, or 16 split button with the mouse to display images on the selected split screen.

⑥ [Manual Switching]

- Select the manual switching button on the 1, 4, 6, 9, or 10 split screen to switch manually and display images.

⑦ [Automatic Switching]

- Select the automatic switching button with the mouse on the 1, 4, 6, 9, or 10 split screen to switch automatically and display images.

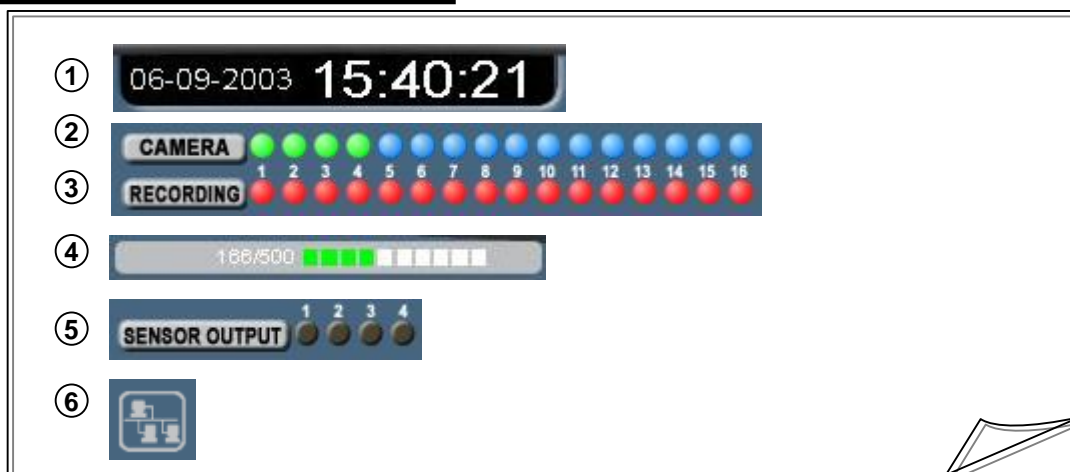
⑧ [Monitor Screen]

- Select the monitor screen button with the mouse to display the monitor screen as full screen.



Caution 2. You may adjust split screens of the initial screen and of the full screen based on the initial screen settings under Setup.

2. Monitoring Status



- ① **[Time Status Display]** Displays year/month/day and hour/minute/second of the HNDR.
- ② **[Video Status Display]** Shows the status of display for 1~16 cameras.
- A LED lit in green indicates that images are being displayed on the screen.
 - A blinking green LED indicates that the camera is not connected yet after “Camera enabled” is selected on “Setup.”
- (Please note that alarm will be not generated continuously unless “Audible warning on event” is selected on “Setup” or select “Camera enabled.”)**
- (Please note that alarm will be not generated continuously unless “Advanced / Watchdog option/ Use Beep Sound” is selected on “start.exe” or select “Advanced / Watchdog option/ When user finish program, enable watchdog.”)**
- A LED lit in blue indicates a camera not shown on the screen, being linked to the split screen button. Also, a black LED indicates that “Camera disabled” is selected on “Setup.”
- ③ **[Video Recording Status Display]** Displays the status of recording images for 1~16 cameras.
- A LED lit in red indicates that images are being recorded by the camera.
 - A blinking red LED indicates that the camera is not connected yet after “Camera enabled” is selected on “Setup.”
 - A black LED indicates that images are not being recorded.
- ④ **[Volume Capacity Status Display]** Displays the volume capacity being used by the HNDR.
- Number display: The number on the left represents the number of volumes being used, and the number on the right the number of volumes set.
 - Bar graph display: Display in light green indicates the state in use, and white graph the standby state.
- ⑤ **[Sensor Status Display]** Displays the status of output of sensors.
- You can check the status of 1~4 relay outputs (siren, etc.). Pressing the button allows you to carry out relay output manually. The sensor output button lit in green indicates relay output, and in black no relay output.
- ⑥ **[Network Status Display]** Displays the access IP of the HNDR-Net or Web connected to the HNDR.
- Displays if any network program has been executed for the access.

3. Monitor Controls



① [Control Button Display]

- Select the “Control” button with the mouse to display a window (④), where you can control the camera equipped with a Pan/Tilt device.
- A switch button (⑥) also appears that can control “Image” and “PTZ”.

② [Search Button]

- Select the search button with the mouse to run "DVR Search" (without exiting the main program) and open a search window, where you can retrieve desired image/voice data.


③ [Setup]

- Select the setup button with the mouse to run “DVR Setup” and open a search window, where you can change HNDR settings.

④ [PTZ Control]

- Select the “PTZ ” button with the mouse to display “PTZ Control” buttons, with which you can move cameras equipped with Pan/Tilt device to upward, downward, to the left, to the right, or diagonally. Zoom/Focus adjustments are also available.
- Selecting camera directions using the direction switch button is available.
- It can be used to control our Scan Dome (HSD-251, HSDN-251), Zoom (GC-655/755) Camera, and RX (HRX-1000, HRX-2000).

⑤ [IMAGE Control]

- Select the “IMAGE” button with the mouse to display “IMAGE CONTROL” buttons, with which you can choose a desired camera and adjust the “Brightness”, “Contrast”, “Saturation”, and “Hue” of images.
- Default value: resets the control settings of all images to default values. ()

⑥ [Control Switch Button Display]

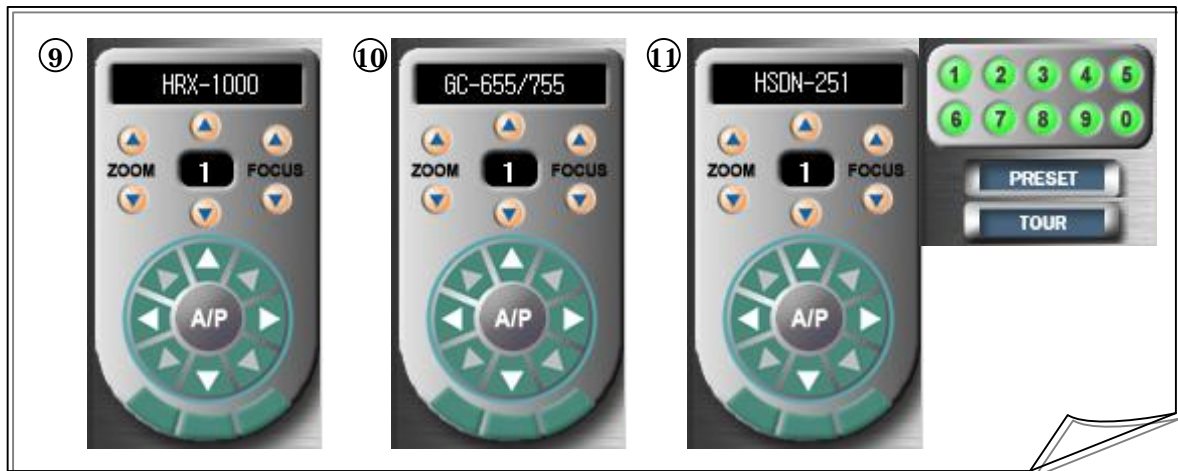
- Select the “PTZ” button with the mouse to display a window (④), where you can control the camera equipped with a Pan/Tilt device.
- Select the “IMAGE” button with the mouse to display a window (⑤), where you can control camera images.

⑦ [Version Display]

- Displays the version of the HNDR program.

⑧ [Exit System]

- Select the exit button with the mouse to display a password verification window to verify shell-monitoring the HNDR. When password authentication is verified, the HNDR system is terminated with a buzzer sounding for about 1 minute, and the system is re-booted.
- **Please note that exiting will be not generated continuously unless “Hot key” is selected on shell monitoring.**



⑨ [HRX-100, HRX-2000 Control]

- Select “HRX-1000” or “HRX-200” PTZ on “Pan/Tilt Settings” of Setup to display the windows (⑨).

[HRX-1000]

- Moving Zoom In/Out and Focus In/Out is available.
- Moving Up/Right Up/Right/Right down/Down/left down/left/left Up is available.

[HRX-2000]

- Moving Zoom In/Out and Focus In/Out is available.
- Moving Up/Right Up/Right/Right down/Down/left down/left/left Up and Auto pan is available.
- Moving Aux1 and Aux2 is available.
- Controlling Camera menu is available. (GC-655/755 on Honeywell)

⑩ [GC-655/755 Control]

- Select “GC-655/755” PTZ on “Pan/Tilt Settings” of Setup to display the windows (⑩).
- Moving Zoom In/Out, Focus In/Out and Controlling Camera menu are available.

⑪ [HSDN-251 Control]

- Select “HSDN-251” PTZ on “Pan/Tilt Settings” of Setup to display the windows (⑪).

[Preset/ Autoscan/ Tour Function]

- Moving 10 Pre-positions is available. (①~⑩)
- Monitoring 1 Auto scan zone is available.
- Continuous monitoring 10 pre-set pre-positions is available (Tour).

[Preset Control]

- Press the “PRESET” button and 1 ~ 10 pre-set Preset buttons to enable operation.

[Tour Control]

- Press the “TOUR” button to enable operation.

[Auto scan Control]

- Press the “A/P” button to enable operation.

[P/T , Z/F, Direction Control]

- Pan/Tilt, Zoom/Focus, and direction change (Up/ Right Up/ Right/ Right Down/ Down/ Left Down / Left/ Left Up) are available.



9 [HSD-251 Control]

- Select “HSD-251” PTZ on “Pan/Tilt Settings” of Setup to display the windows (9).
- Following are major functions of Honeywell Scan Dome Camera (HSD-251).

[Preset/ Auto scan/ Tour Function]

- Moving 10 Pre-positions is available. (1 ~ 0)
- Monitoring 1 Auto scan zone is available.
- Continuous monitoring 10 pre-set pre-positions is available (Tour).

[Preset/ Auto scan/ Tour/ Camera Menu Setup]

- Preset: Press the “PTZ SETUP” button () of “SET UP”, the “PRSET” button () of “FUNCTION”, and direction change buttons () to press one of the 10 Preset buttons (1) to complete the Preset Setup. All ten Presets can be set up similarly.
- Auto scan: Press the “PTZ SETUP” button () of “SET UP”, “AUTOSCAN” button () of “FUNCTION”, and set the Left Zone Monitoring with the Left button (), set the Right Zone Monitoring with the Right button () to complete the Zone Setup.
- Tour: Press the “PTZ SETUP” button () of “SET UP”, the “TOUR” button () of “FUNCTION”, and the Preset button that you want to monitor consecutively among the set Preset buttons (1) to complete the Tour Setup. If 10 Presets are set in advance, all 10 zones can be monitored consecutively, but only 1 Tour function is possible.
- Camera Menu: Press the “CAMERA MENU” button () of “SET UP” and the direction change buttons () (Enter), () (ESC), () (Up), () (Down)) to set the camera Menu.

[Preset/ Auto scan/ Tour Control]

- Press the “PRESET” button of “FUNCTION” and 1 ~ 10 pre-set Preset buttons to enable operation, and press the “PRESET” button again to disable the operation.
- Press the “Auto scan” button of “FUNCTION” to enable operation, and press the “Auto scan” button again to disable operation.
- Press the “TOUR” button of “FUNCTION” to enable operation, and press the “TOUR” button again to disable operation.

[P/T Speed, Z/F Speed Control]

- Controls the Zoom/Focus speed as well as the Pan/Tilt speed in 1 ~15 stages.

[P/T , Z/F, Direction Control]

- Pan/Tilt, Zoom/Focus, and direction change (Up/ Right Up/ Right/ Right Down/ Down/ Left Down / Left/ Left Up) are available.

4. Shell Monitoring



① [Shell Display]

- Adjusts push the Main Monitoring in exit button for Shell display, and 1 stage for detailed search.
- You may adjust reply of recording data and manual backup of recording data under Alt + Tap.
- Exiting of HNDR system can be pushed “Ctrl + Alt + Shift + Q “ on keyboard.
- **Before adding other devices , make sure the proper installation under Honeywell Call Center.**

② [Monitoring Icon]

- Select the Main Monitoring icon with the mouse to display Monitoring screen.

③ [Search Icon]

- Select the Search/Replay icon with the mouse to display single view search screen.

④ [Setup Icon]

- Select the Setup icon with the mouse to display setup of HNDR screen.

⑤ [Application program Icon]

- Select the Application icon with the mouse to display icon of Application program (Authentication tool, Backup tool, Backup viewer tool) screen.



Caution 3. When program loading of each program screen is being delayed, press Alt + Tab or One click each icon, to make sure that the each program (Monitoring, search, setup, Application tool) screen is active.

Chapter 3. Search/Replay

1. Single View Search/Replay



① [Single Screen Display]

- Allows you to search images stored in single screen. It also allows you to enlarge or reduce retrieved images.
- Allows you to marking the area using the right-button of mouse for enlargeable digital image(X1.5, X2.0) in single screen.

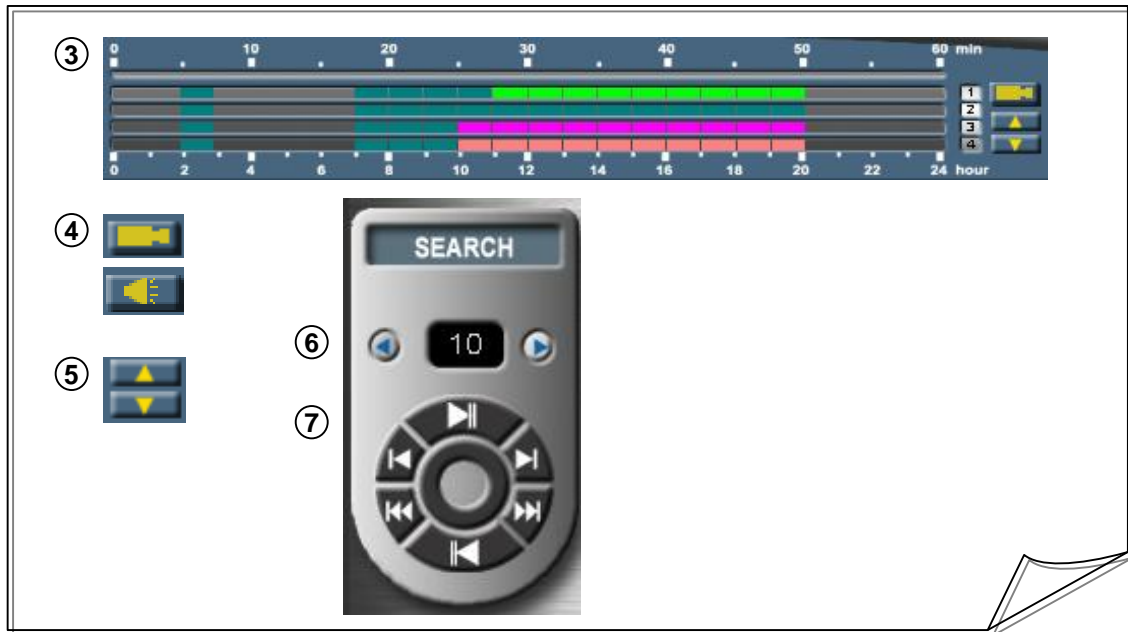
(Allows you to shifting replay using the right-button of mouse for multi screen)

② [Search Date Selection Display]

- Allows you to select a date to search with the mouse. It also allows you to select a month to search. (A Red color Indicates where a video data recording date.)

③ [Search Date GOTO Display]

- Allows you to select a date to quick search with the GOTO button.
- On this menu, select time and date to be searched directly and Click “GOTO”. Then the stored image files appear if the stored data exists as effective of that data and time.



③ [Hour/Minute Display for Stored Data]

- Displays information on stored images in single screen by hour and minute.
- Display on the top represents the minute axis, and the stored data are represented by square blocks.

Selecting a red spot with the mouse will display images on the screen. Display at the bottom represents an hour axis, and the stored data are represented by square blocks.

- According to the colors of square blocks, you may identify the type of stored data (Continuous (■), Sensor (■), Motion (■), Sensor/Motion (■), Event (■)).

Selecting a time of data represented in red with the mouse will display the minute axis data on the top.

④ [Image/Voice Data Display]

- Stored data in images are displayed by default. Select the image button (■) with the mouse to enable the voice button (■) and display stored voice data (■).

⑤ [Select Storage Group]

- Select the upward scroll button with the mouse to display data in the order of storage groups in 1~4, 5~8, 9~12, 13~16 channels. Select the downward scroll button with the mouse to display data in the order of storage groups in 13~16, 9~12, 5~8, 1~4 channels.
- According to this group selection, the stored data in selected channels are displayed by hour/minute.

⑥ [Adjust Replay Speed]

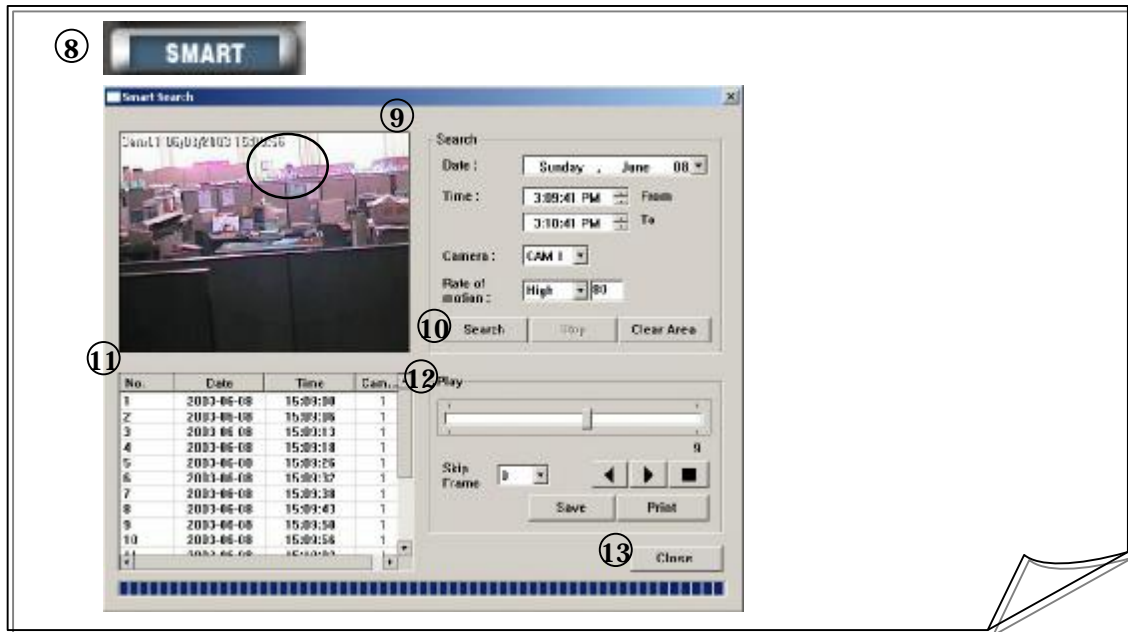
- The replay speed of retrieved data can be adjusted in 1~10 stages.
- Adjusts replay speed in 10 stages for quick search, and 1 stage for detailed search.

⑦ [Adjust Replay Direction]

- Allows you to adjust directions of replay videos and still pictures (forward, backward). It also allows you to adjust the replay of first or last image in the selected time.



Caution 4. You can toggle between Replay/Stop videos by selecting the same button once again with the mouse.



8 [Smart Search Control]

- This is a new features which can get rapid searching for each of desired conditions such as every time and every camera.

9 [Adjust Smart Search]

- Smart searching for each of desired conditions such as every date/time/camera, by limiting the searching parameter to specific “Rate of motion” and searching of specific area (marking the area using the left-button of mouse).
- Date : date to be searched ,
Time : time to be searched (From : starting search time, To : ending search time)
Rate of motion : No. of recording sensitivity at the area to be searched . (The Lower No. : the higher sensitivity it has more precise detection,)

10 [Smart Search]

- Search : search the images per present data
Stop : It stops smart searching.
Clear Area : It deletes the designated area for smart search.

11 [Smart Replay list]

- It indicates the No. of image files searched by smart searching lists.

12 [Smart Replay]

- It indicates the total No. of image files searched by smart searching .
- Allows you to adjust directions of replay videos and real pictures (forward, backward).
- Skip Frame : If you feel inconvenient in handling the huge stored data, you can make the data file reduced to compact data file by skipping as much as the set values.
- Save : It makes saving of data searched by smart searching function.(When used JPEG compression, Save file is made with JPG format file. But if it is MPEG, Saved file will have BMP format file.)

13 [Smart Search Stop]

- Close the smart searching process.

2. Multi View Search/Replay



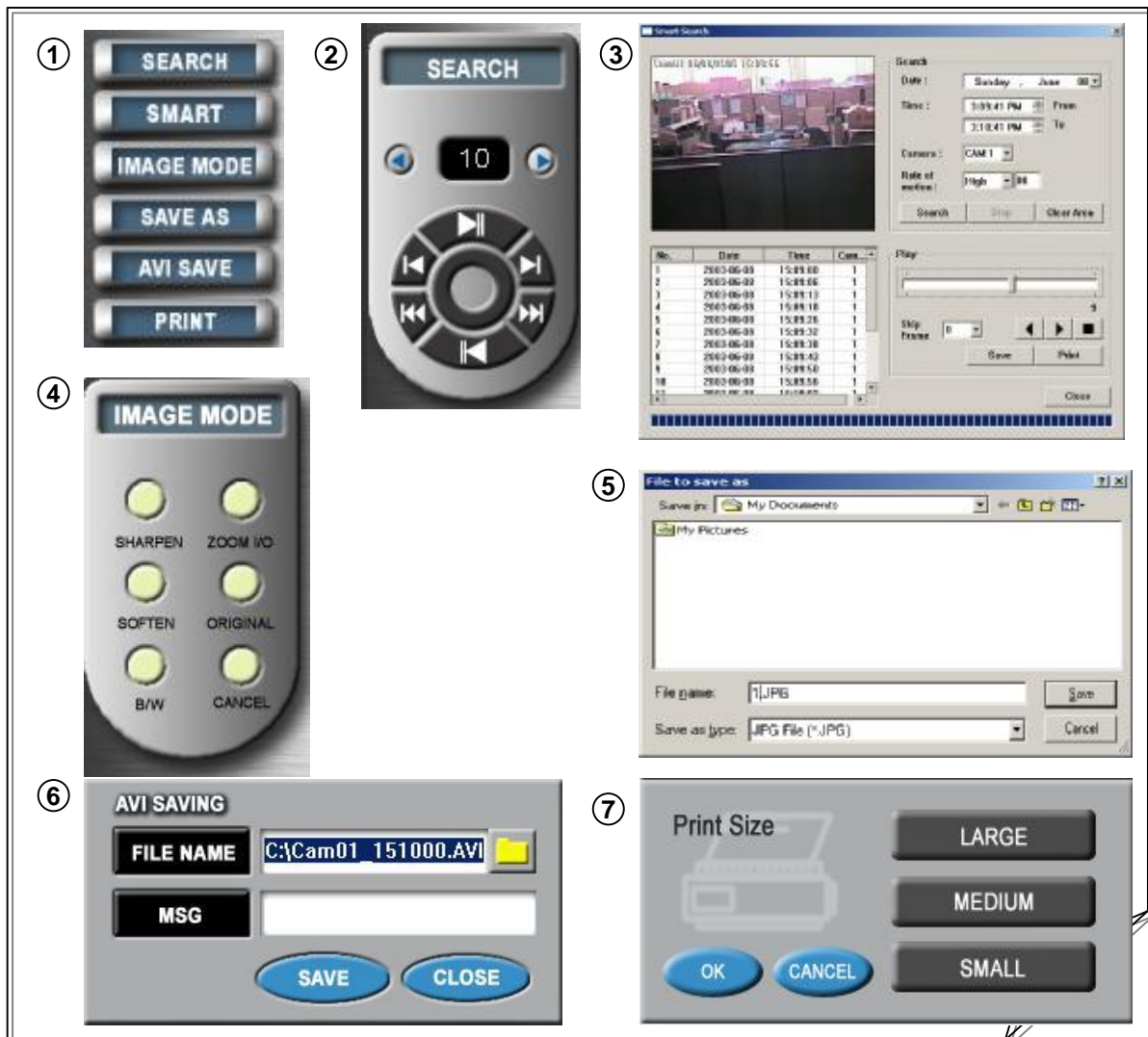
① [Multi Screen Display]

- Allows you to search images stored in multi screen. It also allows you to select multi screen (4, 6, 9, 16) with the mouse.
(Allows you to shifting replay using the right-button of mouse for single screen)

② [Search Date Selection Display]

- Allows you to select a date to search with the mouse. It also allows you to select a month to search.

3. Search/Replay Controls



① [Search Controls]

- Replay Mode: Select the “SEARCH” button with the mouse to display the “SEARCH” window (②), where you can search stored data.
- Smart Search mode: Select the “SMART” button with the mouse to display the “SMART Search” window (③), where you can search stored data rapidly.
- Image Mode: Select the “IMAGE” button with the mouse to display the “IMAGE MODE” window (④), where you can adjust images of stored data.
- Image Saving: Select the “SAVE AS” button with the mouse to display a window (⑤), where you can save the image being displayed in JPG format.
- AVI Saving : Select the “AVI SAVE” button with the mouse to display a window (⑥), where you can save the images of the channel being displayed in AVI format.
- Print: Select the “PRINT” button with the mouse to display a window (⑦), where you can adjust adjust the document output size of the image being displayed.

② [Replay Mode]

- Adjust Replay Speed : can adjust data searching speed in 1~10 stages.
- Adjust Replay Direction : can adjust replay directions (forward, backward) of videos and still pictures, replay of first and last images.

 **(Pressing the button once again will stop the operation.)**

③ [Smart Search]

- This is a new features which can get rapid searching for each of desired conditions such as every time and every camera.

④ [Image Mode]

- SHARPEN Adjustment : adjusts outline correction for the detailed view of image.
Select the “SHARPEN” button over and over again to produce stronger outline.
- SOFTEN Adjustment : adjusts outline correction to soften the rough image at a close distance.
- B/W : Changes a color image into a black and white image.
- ZOOM I/O Adjustment : allows you to enlarge an image by dragging it with the mouse.
- ORIGINAL : Changes the image back to its original size.
- CANCEL : Returns the image to its previously adjusted screen.

 **(Available for single screen search only.)**

⑤ [Image Saving]

- Saves an image displayed in single screen as a file in JPG format.
- Saves an image displayed in Smart search mode as a file in BMP format.
(When used MPEG compression, Save file is made with BMP format file.)

 **(Formats other than JPG are not available for saving In Single search mode.)**

⑥ [AVI Saving]

- Saves images of the channel displayed in single screen as a file in AVI format.

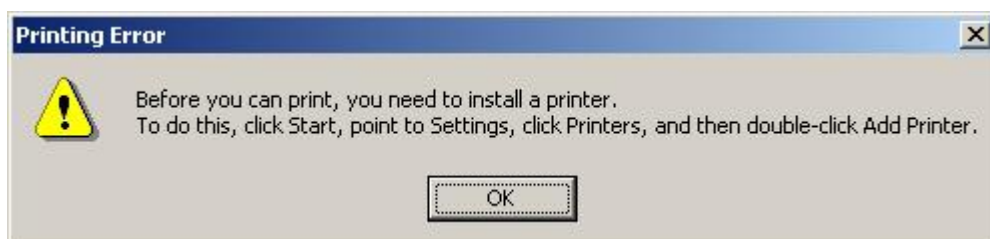
Selecting the “SAVE” button on the “AVI SAVING” window will start saving. Clicking the “CLOSE” button to stop saving. Press the OK button on the “Video Compression” window that appears during the saving.

 **(You can open saved files with a media player supported in your OS.)**

⑦ [Print]

- Prints out images displayed in single screen as a document.
- Selecting output size on the “PRINT SIZE” window and the “OK” button with the mouse will start saving. Press the “CLOSE” button to stop saving. Press the OK button on the “Video Compression” window that appears during the saving.

 **(If a printer is not installed, an error message will prompt you to install a printer.)**



Chapter 4. Setup

1. Image Database Tool

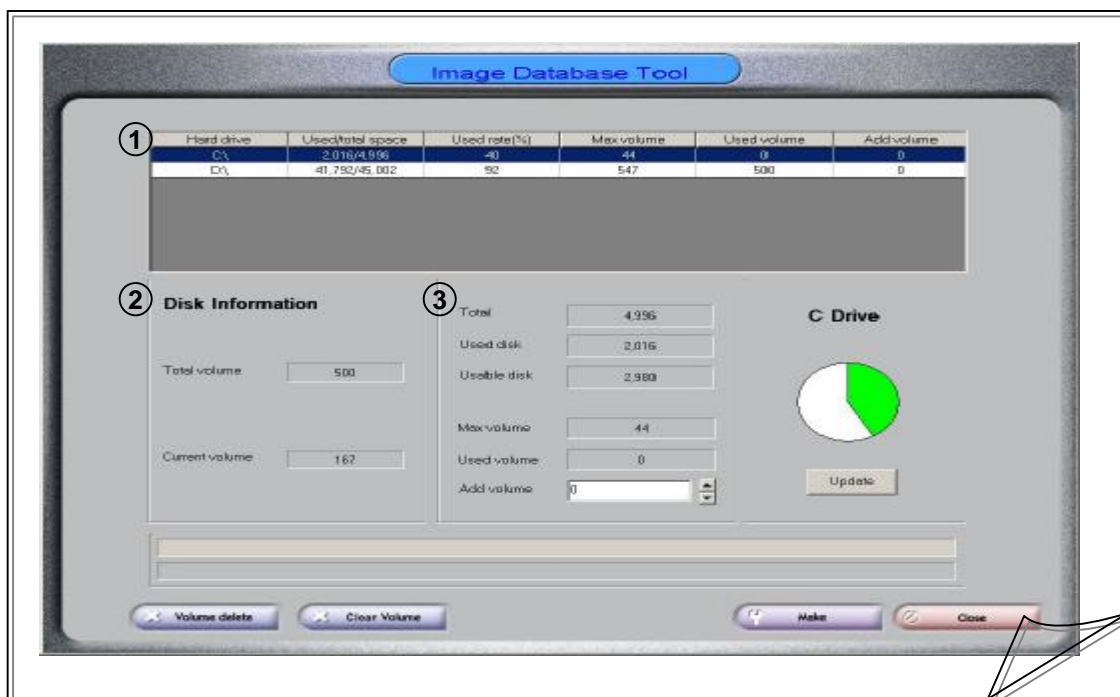
- Pressing the DVR Setup button will generate the following window.



- ① **[Image Database Tool]**
 - Generates a file system for the HNDR. (It generates a stable file system exclusively for the HNDR to ensure data stability and prevent system overload.)
- ② **[System Setup]**
 - Sets the settings for network access, initial screen, voice, watch dog, etc.
- ③ **[Camera Setup]**
 - Sets the default settings for camera, recording schedule, motion/image, and Pan/Tilt etc.
- ④ **[Sensor Setup]**
 - Sets input/output and interoperation of sensors.
- ⑤ **[Backup Setup]**
 - Sets an automatic backup schedule.
- ⑥ **[User Setup]**
 - Sets user name, class, permissions, etc.



Caution 5. To apply and save settings for each item, be sure to press the “Apply” button and then the “Save &Close” button.



Set the number of volumes to use in "Add Volume" and press the "Update" button. Check "Add Volume" in the figure and press the **"Make"** button to generate the HNDR file system in the selected drive.

① [Database Information]

- Shows you the information on the hard drive, used/total space, used ratio, maximum volume, current volume, and add volume set in the HNDR file system.

② [Volume Information]

- Shows you the information on the total volumes assigned in the HNDR file system.
- Total volume is the number of volumes assigned in the HNDR, and the current volume is the number of volumes currently in use.

③ [Disk Information]

- Shows you the information on the disk in the HNDR file system.
 - Total: Total disk space
 - Used disk: Disk space currently in use
 - Usable disk: Available disk space
 - Max volume: Total number of available volumes
 - Current volume: Number of volumes currently in use
 - Add volume: Specifies the number of volumes to be used in the disk.
 - Clear volume: Delete all of the information of the stored volume.



Caution 6. Volume Delete

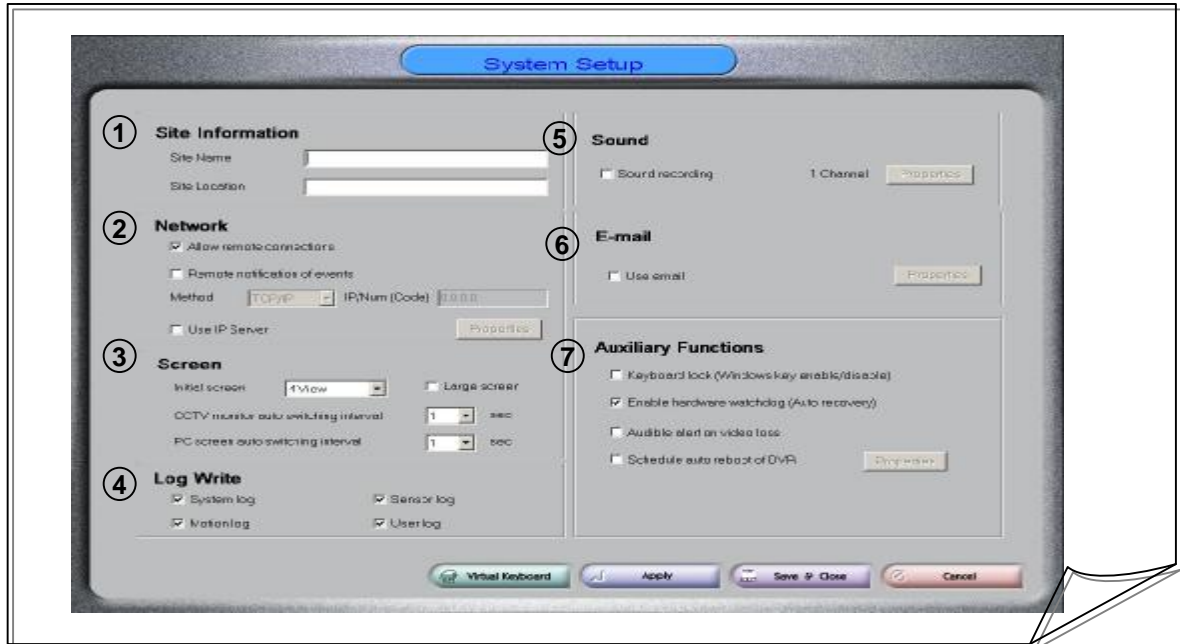
- **Delete Volume_ - Deletes all volumes in the selected drive.**
(Please note that pressing Delete will erase all data and database information.)
- **Clear Volume_ - Deletes all of the stored data of the volume.**
(Please note that pressing Clear will erase all data.)



Tips 1. What is Volume?

Volume refers to a unit in the HNDR file system. One volume occupies 67.xx MB of disk space. Image data are stored in the volume. When a volume is filled with data, data will begin to be overwritten. (Always backup important data.)

2. System Setup



① [Site Setup]

- Site Name: Site name of HNDR
- Site Location: Location of HNDR

② [Network Setup]

- Allow remote connection: Check to allow the connection to the HNDR Network from HNDR-Net.
- Remote notification of events: Check to notify the occurrence of motion or sensor to HNDR-Net. (In order to notify an emergency situation to HNDR-Net, be sure to record IP address of the HNDR system in "IP Address.")
- Use IP Server : Specially developed Program to control Dynamic IP
 - * Code : The unique Code to be set in DVR instead of dynamic IP.(alphabet and numeric.(5 digit))
 - * IP Server : IP server address (Manage to address of HNDR, HNDR-Net IP)
 - * Notify Interval : Notify interval time

③ [Screen Setup]

- Initial screen: Select how to split the screen when booting the HNDR for the first time. (Specified number of camera images will be displayed on the single screen.)
- Large screen: Select to display the full screen at startup.
- CCTV monitor auto switching interval: Set the switching interval between which images are displayed through the Composite-Out terminal.
- Auto switching interval: Specify the time to automatically switch the camera images being displayed on the PC monitor. (Applicable when Auto Switching button is selected on the monitor screen.)

④ [Log Setup]

- Allows you to save system log, sensor log, recording type log, and user log as B612log.Data file in C:\ when setting up those information. (You can view it with a text editor such as WordPad.)

⑤ [Sound Setup]

- Sound recording: Check to record sound
- Audio device select : Select to audio device and volume value.
- Save path / Storage : Check to path of the sound data and the maximum space for storage and specify the available space.
- Sound channel : 1,2,4 channel recording available. (4 channel (Option))
(Should be used none-amplification MIC. for 1 Channel sound recording and amplification MIC. for 2 ~4 Channel sound recording . Sound data are recorded only when motion or sensor occurs.)
- Camera select : Check to path of the camera for which to save video image together.

⑥ [E-mail Setup]

- Allows you to use E-mail functions.
- Reboot Notify: check to be notified of the starting time and IP address when the HNDR Main Program starts via email. (Email notification allows you to access HNDR-Net at any time even if IP is changed if you use dynamic IP.)
- Event Notify: check to be notified of any event (motion, sensor) when it occurs via e-mail.

You should specify following items send an E-mail.

- SMTP Server: Specify the address of the from mail server.
Verify first the mail server address in use. (If the from mail server address is unknown, contact the Network manager or lines provider.)

Ex.)

Communication Service Provider	Mail Server Address
KTF ADSL	Kornet.net
Hanaro Telecom	mail.hanarotel.net
Thrunet	smtp.Korea.com

- From : Specify an E-mail address from which E-mails will be sent.
If there is no specified E-mail address, E-mails will be sent using the site name.
- To : Specify an E-mail to which E-mails will be sent.
- Subject : Enter the title of E-mail.
- Content : Enter the content of E-mail.
- When entering Subject and Content, refer to the following definition characters and descriptions.

Definition Character	Description
\$\$0	Camera No.
\$\$1	Event type
\$\$2	When it Occurred
\$\$3	IP Address

- Send Interval: Specify the time interval of E-mails to be sent.
E-mails are sent according to the specified Send Interval even if events occur continuously.

⑦ [Other Setup]

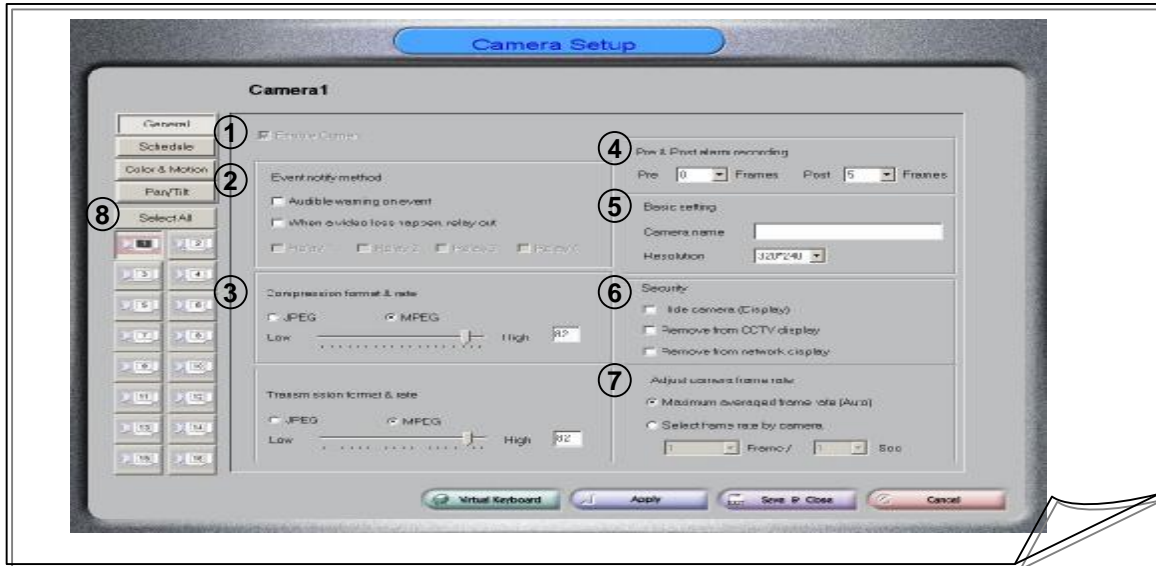
- Screen lock: you may choose to disable Shift, Ctrl, and Alt keys.
- **Use Hardware Watchdog: You may set HNDR to reboot automatically in case of a trouble or system termination. You can set the Watchdog function ("start.exe" changeable)**
- **Audible alert on Video Loss : It makes beep alarm go off when camera video loss happens.**
- **Schedule auto reboot of HNDR : You can set the weekday and time, as you want, so that HNDR system can be rebooting automatically regardless of watch-Dog function.**



Caution 7. Use Hardware Watchdog

Hardware Watchdog is enabled by default.
Keep in mind that Hardware Watchdog reboots the system even when you close the HNDR system intentionally.

3. Basic Setup for Camera



1 [Camera Setup]

- Camera use: Check to enable the camera. (Keep in mind that HNDR reboots the system when you don't connect to all videos on BNC board.)

2 [Event Notify method]

- Audible warning on event : Check to select an alarm by camera channel when an alarm occurs. When events come out by detecting motion or sensor, it goes off the beep sound.
- When a video loss happen, relay output : 1~4 port relay output available. (Only remove from relay output on manually available.)

3 [Image Compression Method/Rate Setup]

- Image storage compression method/Rate
Specify the format (JPEG, MPEG) of image to store, and adjust the compression rate. (The smaller the settings for storage compression rate is, the smaller the size of image will become. In addition, the poorer the image quality will become.)
- Image transmission compression method/Rate
Specify the format (JPEG, MPEG) of image to transmit on the HNDR-Net system, and adjust the compression rate. (The smaller is the setting for transmission compression rate, the smaller will be the size of image, but the image quality is also lowered.)
- The compression method is set to be MPEG format by default. To enhance the quality of images recorded, set the compression format to JPEG.

4 [Pre/Post Alarm Recording]

- Pre: Saves as many images as specified from the previous image when motion or sensor occurs.
- Post: Saves as many images as specified after motion or sensor occurred.

5 [Basic Setup]

- Name: Enter where the camera is located. **(Use 8 characters or less.)**
- Select the resolution of images.(In HNDR-48(24)24, the resolution is fixed at 320*240 mode.)
- The higher the resolution, the better the image quality becomes, but the size of image is increased.

6 [Image Hide]

- Hide camera (Display): check to hide camera images from PC monitor.
- Remove from CCTV display: Does not send Composite-Out signal to external monitors.
- Remove from network display: check to hide camera images from Network.

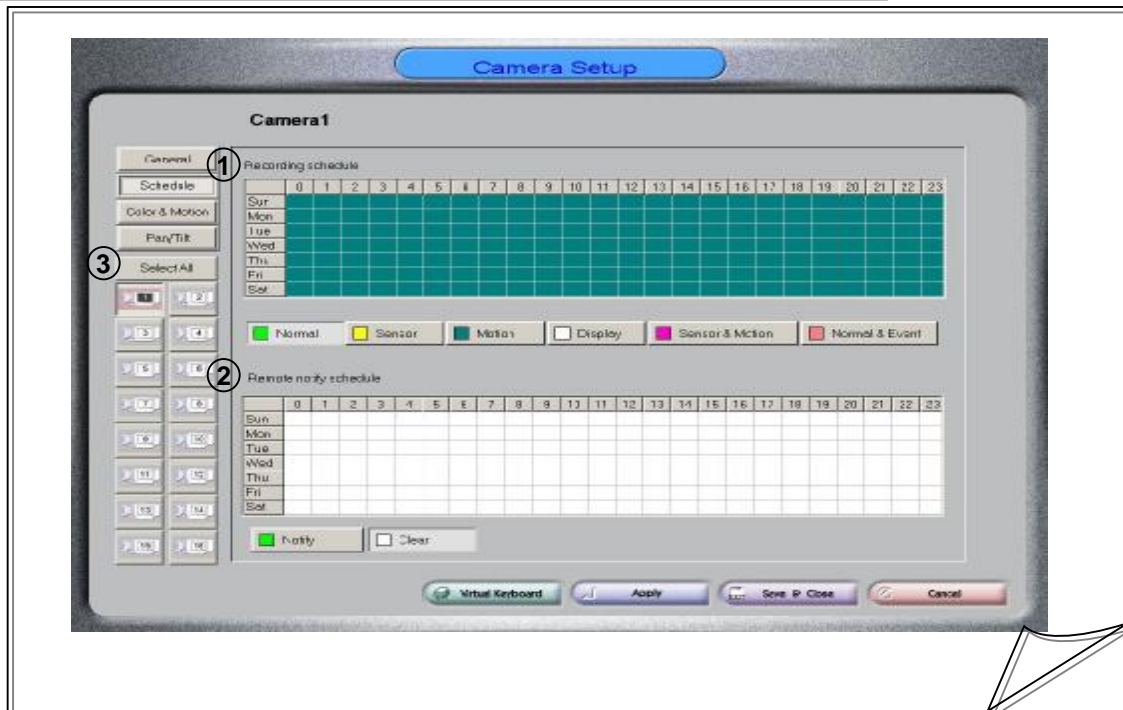
7 [Adjust camera frame rate]

- Maximum averaged frame rate (Auto): Select to save images with the best frame on the Board.
- Select frame rate by camera: Specify the number of frames to store per second.

8 [Select All]

- If click this, Every of settings in "General" becomes same as for all of camera.
- This button is effective when all of settings for all camera shall be same as setting in No. X

4. Camera Recording Schedule Setup



Specifying recording schedule by camera will enable saving images by day of the week and time zone.

① [Recording schedule]

- Normal: Records all the images from the camera.
- Sensor recording: Records images only when there is a sensor occurs.
- **Motion Recording**: Records images only when there is motion.
- Not recording: Just displays images, but not recording.
- Sensor/Motion recording: Stores images only when there is an occurrence of sensor or motion.
- Event recording: You may set to record images in accordance with recording volume adjustment when there is no motion, but otherwise to the maximum.

② [Remote notify schedule]

- Allows you to transmit data on the HNDR-Net system during the scheduled time zone or day of the week. (Available for Motion and Sensor setup only.)
- Setup: Specify the desired time zone or day of the week.
- Clear: Deletes set schedules.

③ [Select All]

- If click this, Every of settings in "Schedule" becomes same as for all of camera.
- This button is effective when all of settings for all camera shall be same as setting in No. X



Caution 8. Motion recording – Set to Motion recording by default.

Recording motion occurs depending on the Motion detection area/sensitivity settings. **Please note that the larger the setting for adjusting change volume/rate is, the larger the data to record becomes (V1.120 higher).** For more information, see p. 35.

5. Camera Motion/Image Setup



① [Motion detection area setting]

- Whole area: Select to monitor motion in all areas covered by the camera.
- Partial area: Allows you to monitor motion in specific areas by pressing the “Add” button and specify specific regions.
You may specify up to 20 areas, and erase them by pressing “Delete.”
- Display detected area: Select and click the “Detection test” button to start monitoring the motions when it occurs. (“Detection display” indicates that motion is detected with color change and red dots.)

② [Relay options]

- Relay options are applicable to motion detection only.
- Use Relay: Select to use relay output
- Ports 1~4: Select all the devices to use.
- Latch time: Relay output operate during the specified time when a motion occurs.

③ [Color control]

- Brightness / Contrast / Saturation / Hue: allows you to adjust color of images.
- Default value: resets the control settings of all images to default values.

④ [Motion setting]

- Sensitivity adjustment
Allows you to adjust the rate of motion (volume). The large percentage (%) is, the subtler motion the camera can detect, that is, the recording data increases.
- Rate of motion
Allows you to adjust color and sensitivity of a moving object. The large percentage (%) is, the subtler difference of a moving object and the surrounding color the camera can detect, that is, the recording data increases.
- You may decide the motion settings by clicking “Detection test” with various motion area and viewing the displayed movement of a motion in Dot units on the screen.

⑤ [Select All]

- If click this, Every of settings in “Color & Motion” becomes same as for all of camera.
- This button is effective when all of settings for all camera shall be same as setting in No. X

6. Camera Pan/Tilt Setup



① [PTZ Protocol Setup]

- Use PTZ: Check to use the PTZ camera.
- PTZ type: Select the type of receiver or camera used for the PTZ device.
- Port: Specify the serial port connected to the computer. (**Specify COM 1 Port.**)
- Speed: Specify the speed of PTZ device. (varies depending on the device.)
- Parity, data bit, stop bit : Specify in accordance with the manual for PTZ device.
- Following example is for only when Honeywell equipment are used (HRX-1000, HRX-2000, HSD-251, HSDN-251, GC-655/755).

* PTZ type: HRX-1000, HRX-2000, HSD-251, HSDN-251, GC-655/755

* Port: COM1, * Speed: 9600, * Parity: NONE, * Data bit: 8, * Stop bit: 1

② [Communication connection]

- Open / Close : Allows you to connect start port and stop port.

③ [Speed setup]

- P/T, F/Z, A.P : Allows you to control speed of Pan/Tilt ,Focus/Zoom and Auto pan.

④ [Auto Scan/Preset setup]

- Auto scan: Allow you to control start point of Auto scan and stop point
(Press the "Camera menu" button and "Auto scan" button to enable setup .=> HSDN-251)
- Preset : Allow you to control preset (1 ~10)
(Press the "Preset setup" , move preset position and press the preset No.(1~10) to enable setup)

⑤ [P/T , Z/F Direction Control]

- Pan/Tilt, Zoom/Focus, and direction change (Up/ Right Up/ Right/ Right Down/ Down/ Left Down / Left/ Left Up) are available.

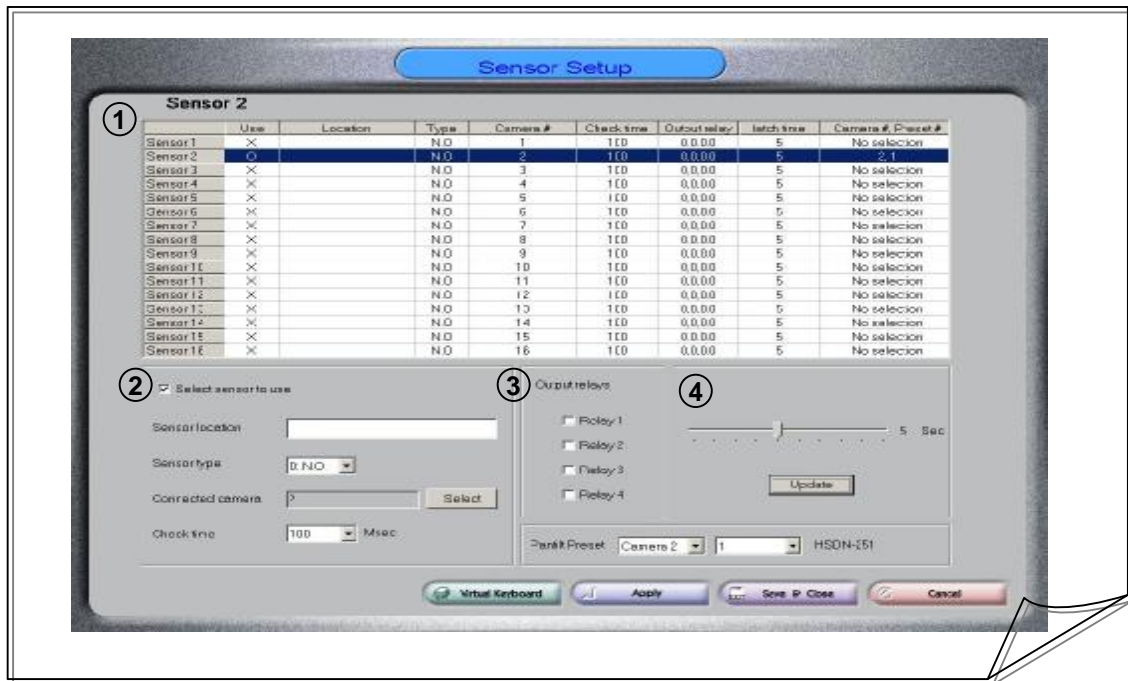
⑥ [Camera menu setup]

- Allow you PTZ camera menu to setup. (Preset, Auto scan and Tour to enable setup. =>HSDN-251)

⑦ [Select All]

- If click this, Every of settings in "Pan/Tilt " becomes same as for all of camera.
- This button is effective when all of settings for all camera shall be same as setting in No. 1 camera.

7. Sensor Setup



1 [Sensor information]

- Use: Verify whether specific sensor are used.
- Location: Verify the locations of the sensors.
- Type: Verify the sensor types (N.C., N.O.).
- Camera#: Verify the connected cameras.
- Check time: Verify the check time settings of the sensors.
- Output relay: Verify the output relay port settings.
- Latch time: Verify the latch time settings.
- Preset : Verify the preset of ptz camera settings. (ex. HSDN-251)

2 [Sensor input information]

- Use sensor: Select to use the sensor.
- Sensor location: Specify the location of the sensor. (Use 8 characters or less.)
- Sensor type: Specify the sensor type (N.C, N.O).
- Connected camera: Specify the camera to connect.
- Check time: Set check time of the sensor.

3 [Output Relay]

- Select output ports (Relay 1 ~4).

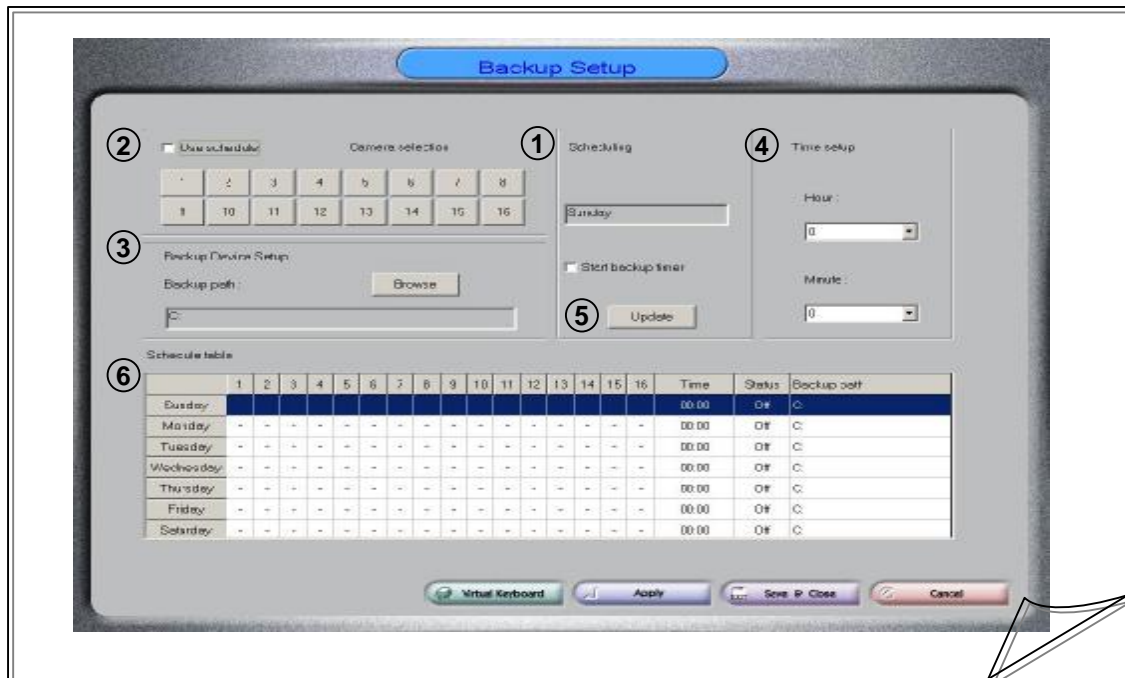
4 [Latch time]

- Specify the time for relay operation.

5 [Pan/Tilt Preset]

- Select preset to number (1~10) when camera can use preset function.

8. Auto Backup Setup



1 [Scheduling]

- Select a day of the week for backup on the backup schedule table with the mouse.
- Make sure that the backup day of the week has changed.
- Allow you to use automatic start backup timer.

2 [Select Backup]

- Use schedule: check to use automatic backup.
- Camera selection: Select cameras for backup.

3 [Backup Device Setup]

- Backup device setup
Allows you to select the backup device specified as the driver.
- Backup path
Clicking the “Change” button will activate a window for finding a folder. Select the path you want for backup and press “OK”.

4 [Time setup]

- Specify the time when automatic backup will start in “hour” and “minute”.

5 [Backup setup completed]

- When backup setup is completed, press the “Apply” button to finish.
- You can view the backup setup on the backup schedule table.

6 [Scheduling table]

- Verify the backup settings by day of the week.
- Verify whether backup is used and camera settings.
- Verify the time settings.
- Verify the status of backup (On/Off).
- Verify the backup path settings.



Caution 9. After the setup, be sure to execute “Manual Backup” in the file to enable backup operation. (Automatic backup hasn’t been set by default when the program was installed.)

9. User Setup



① [User setup]

- To add a user, select the empty table in the user list, and to change a user select the table you want to change with the mouse.

② [User name]

- Name: Enter the user name using 10 characters or less.
- Password: Enter the password using 10 characters or less.
- Confirm password: Reenter the password for confirmation.

③ [Security level]

- Allows you to set the user level in 3 levels.
- Authority may vary depending on the user level.
 - Level 1: Administrator level with full authority.
 - Level 2: User 1 level with full authority except for Setup, system shutdown and PTZ/Image.
 - Level 3: User 2 level with authority for network access .

④ [Use authority]

- Allows you to specify authorities depending on the User level.
- Selections under Use authority include Setting, System shutdown, Backup, Network access, PTZ/Image and Search.

⑤ [User setup Complete]

- When user setup is completed, you may press “Add” to add users.
- When user setup is completed, you may press “Change” to change the settings.
- Press “Delete” to delete users.

⑥ [User list]

- Allows you to verify if User level/Use authority is properly set for a user name.
- Select the table in the User list with the mouse and press the Add/Change buttons to add or change users.
- You can set up up to 20 users.



Caution 10. Note the user level and user authority when setting up a user. The user name/password are set to be “1” and “1”, and the User Level to be Level 1 (Admin) by default.

Chapter 5. Application

1. Manual Backup

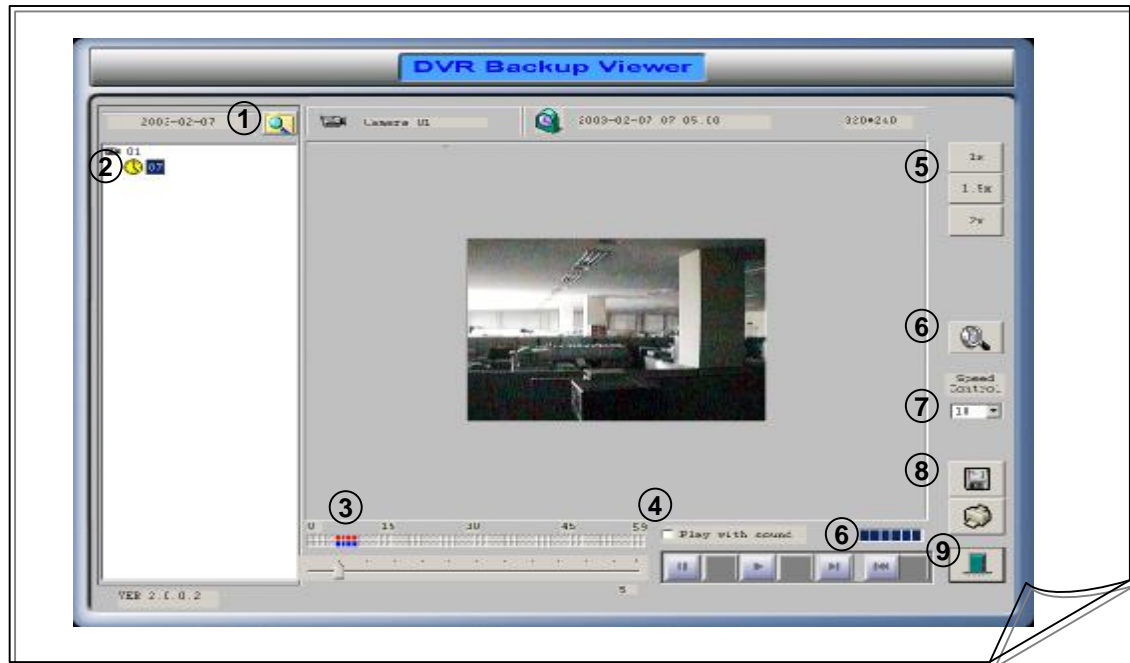
- This program allows you to back up manually in the desired device. If you set up a backup schedule in Setup, this backup program executes backup automatically in accordance with the backup schedule.



- 1 [Backup Process]**
 - Allows you to select the date, camera, time, and minute for the desired backup on the left window.
 - Allows you to verify the process of established backup on the right window.
 - Allows you to backup the Video data and Sound data simultaneously.
- 2 [Media Path Information]**
 - Make a folder for back up, and double-click the desired drive and folder.
- 3 [Auto Startup]**
 - When the backup setup is completed, if you exit the program with “Auto Startup” checked and without executing the backup immediately, the “backup program” will start backup automatically based on the settings next time it is executed.
- 4 [Refresh]**
 - Deletes all of settings for the backup process.
- 5 [Backup Start]**
 - Starts backup in accordance with the settings. (Pressing the “Backup Start” button will open a dialog box to verify the drive and folder for backup. (Be sure to confirm the backup data.))
- 6 [Log Viewer]**
 - Shows you the information on start time and end time of backup.
- 7 [Backup Viewer]**
 - Allows you to replay the Video data and Sound data simultaneously.
 - You can copy and use **Utility.exe**, an application in the enclosed CD.
- 8 [View Hide]**
 - Puts the backup program in standby mode. (If you set up a backup schedule in Setup, make sure that the backup program is run and in standby mode.)
- 9 [Close]**
 - Exits the backup program.

2. Backup Viewer

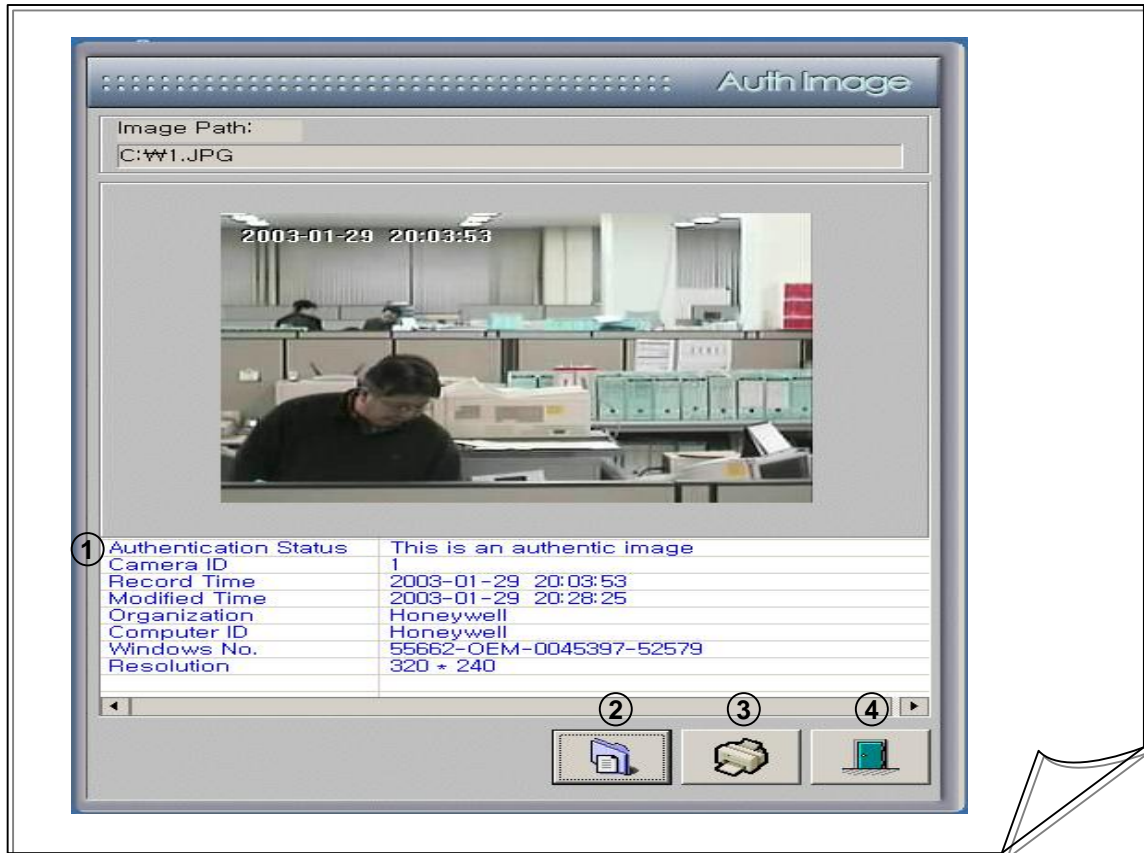
Only "Backup Viewer" can search backed up data and read data by date.



- ① **[Data Explorer]**
 - Allows you to search backed up data by date.
 - Select a backed up folder in the Find Folder window and press the "OK" button.
- ② **[Data selection]**
 - Backed up data are displayed by camera and by time zone.
 - Select the camera and time zone you want to search.
- ③ **[Data display]**
 - Allows you to view data backed up by minute.
 - Backed up data are displayed in red/blue, a scale representing one minute.
 - Sound data are indicated in blue and Video data are indicated in blue
 - Use the scroll bar above to move to the desired minute.
- ④ **[Data replay]**
 - Allows you to replay backed up data.
 - Each button represents "Stop/Replay Forward/Still Replay Forward/Start image" in that order.
 - If stored sound data co-exists, by checking this "Play with sound " mode maybe viewing with sound performances.
- ⑤ **[Enlarged Image]**
 - It can be enlarged as much as 100%, 150%,200% in image size by selecting these Tap.
- ⑥ **[Digital Zoom Image]**
 - If you take a selection to be zoomed by dragging the mouse the area can be shown as zoom-In
- ⑦ **[Speed Control]**
 - Replay speed is adjusted by selection the number. (1 ~ 10)
- ⑧ **[Save/Print]**
 - Allows you to save backed up data as still images in JPG format.
 - Allows you to print out backed up data as images with a printer.
- ⑨ **[Close]**
 - Exits the program for searching backed up data.

3. Data Authentication

This is a program that determines whether the images stored by the Search Program or the Backup Viewer were edited at will. (Determines whether they are genuine or false.)



1 [Data authentication information]

• If the data are found to be genuine, the following information are displayed:

- Authentication Status: Shows whether the images are genuine or false.
- Camera ID: Displays the Camera ID.
- Record Time: Displays the time when the images were recorded.
- Modified Time: Displays the time when the images were stored.
- HNDR Organization: Displays the organization that is using the HNDR system.
- HNDR ID Computer ID: Displays the HNDR ID.
- Windows Serial ID: Displays the unique serial ID of OS.
- Resolution: Displays the resolution status.

2 [Load Data]

• Allows you to load the images to read. If the images are genuine, information for the images are displayed. Otherwise, it is displayed.

3 [Load Data]

• Prints out images displayed in single screen as a document.

4 [Close]

• Exits the Data Authentication Program.

Chapter 6. HNDR-Net

1. Connecting to HNDR-Net

- Honeywell-Net Program is included in the HNDR system or in the enclosed CD.
HNDR => C:/Backup/HNDR-xxxx/Honeywell/HNDR-PROGRAM/HNDR-Net/Setup.exe
CD => CD:/HNDR-xxxx/Honeywell/HNDR-PROGRAM/HNDR-Net/Setup.exe
- **See Chapter 8. Appendix to find out how to install the HNDR-Net Program.**
- When HNDR-Net Program is successfully installed, click the Honeywell-Net icon on Desktop.
- “Honeywell-Net” is executed, activating the “Login Connection” window.
- Enter the login name and the password and press the “LOGIN” button to activate the HNDR-Net monitor screen.
- **To create a new connection to the HNDR, follow the procedure described below:
(See the figures shown on pages 44~45.)**
 - ① Click the “New” button with the mouse on the “Connect on Login” window.
 - ② Enter the login name, description, password, confirm password on the “New Login Registration” window, and click the “OK” button with the mouse.
 - ③ Click “New” button with mouse on the “Add, Delete and Edit site information” window. Enter Site name, Connecting method, IP & Tel address, Site access user, Site access password on the “Site Information” window, and press the “OK” button.
 - ④ Check if all the site information are correct on the “Add, Delete and Edit site information” window and click the “Close” button.
 - ⑤ Click the third item or Setup Connection Mode on the “Configuration Setting” window with the mouse.
Select Single site or Multiple site on the “Site Connection” window, and click the “OK” button.
On single site, select Site name and check Auto connection. On multiple site, set Connect on login, Site selection, and Camera number.
 - ⑥ Click the fourth item or Display Configuration on the “Configuration Setting” window with the mouse. Set Initial view screen, Data location, Log file, Switching interval, On screen display, and Name display, and press the “OK” button.
 - ⑦ Click the “Close” button with the mouse on the “Configuration Setting” window. (Configuration Setting has been completed.)
 - ⑧ Enter ID/Password on the “Connect on Login” window.
 - ⑨ Monitor screen is displayed when the login connection is successfully completed.



Caution 11. If a new connection fails, check to see if following items are correct:

- **IP address (site) on the “Site Information” window**
- **User/Password on the “Site Information” window.**
(User/Password should be identical with those in the “Setup (User setting)” of HNDR.)
- **Default values for both User name and Password are “1”.**

LOG IN ID

LOG IN P/W

Minimized Screen

1

LOGIN NEW EDIT CANCEL

Create new login user

Device name:

Log name:

Password:

Confirm P/W:

2

OK Cancel

Site Information

Site name:

Method:

IP/URL no.:

User name:

Password:

3

OK Cancel

Add, Delete and Edit site information

Site name	IP/URL no.	Method
Honeywell	220.82.97.12	TCP/IP

4

How Edit Delete Close

Setup Connection Mode

Single site connected

Site name:

Connection Log:

Multiple site connected

5

OK Cancel

Display Configuration

Interval: Seconds

Device location:

Log file:

Switched interval: Seconds

Onscreen display: Position number Site name Connection Name

Header style:

User IP Service: Port: Servo:

6

OK Cancel

Configuration Setting

7

Close

LOG IN ID

LOG IN P/W

Minimized Screen

8

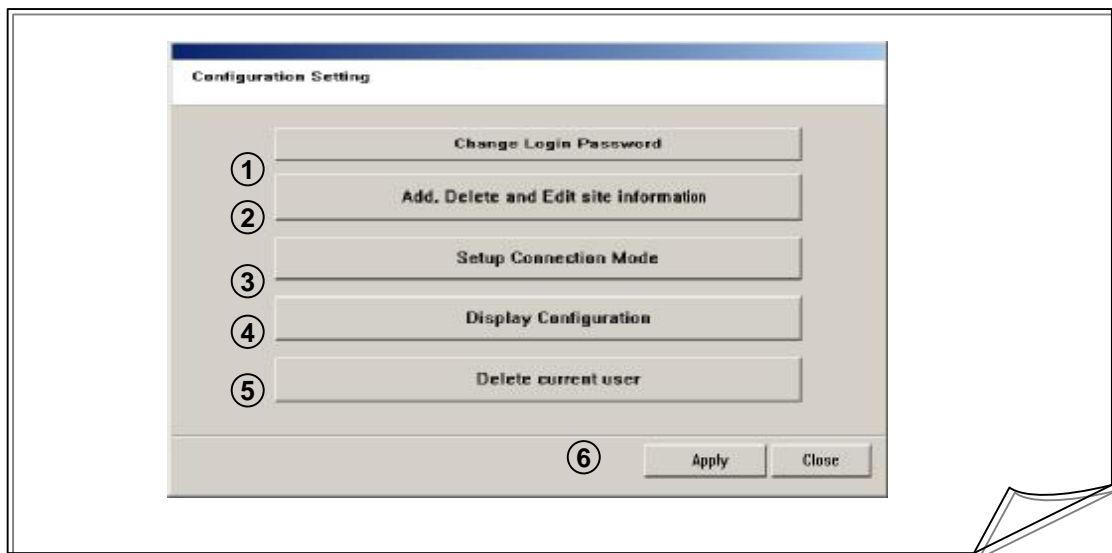
LOGIN NEW EDIT CANCEL

9



2. HNDR-Net Configuration Setting

- This window allows you to change settings for Site (single or multiple) connection, initial screen, etc. after logging in the HNDR-Net Program. If you don't change connection settings, you may skip it. Click the "Config" button on the Monitor screen to activate the dialog (See the figure on page 41).



① [Change Login Password]

- Allows you to change the password for log in.

② [Site Setup]

- Allows you to change settings (New(Add)/Modify/Delete) for the site to connect.

③ [Setup Connection Mode]

- Allows you to connect to single or multiple site.
- Multiple site connection is used when the HNDR systems are installed in several locations.

④ [Display Configuration]

- Allows you to setup split screen, storage directory, log file, switching interval, on screen display, name display, etc. when connecting to HNDR-Net.

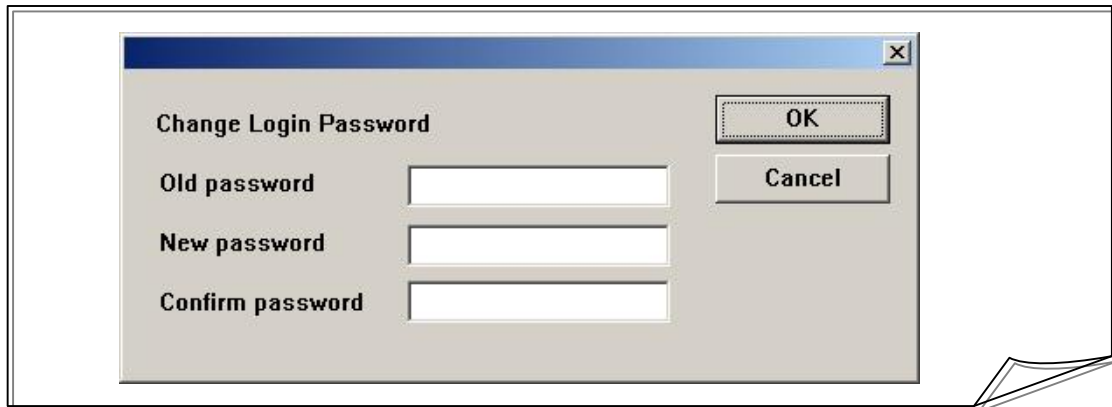
⑤ [Delete Current User]

- Allows you to delete all existing login users.
- For login use, you should renew configuration settings (See page 43).

⑥ [Apply/Close]

- Applies or cancels the settings on each item.

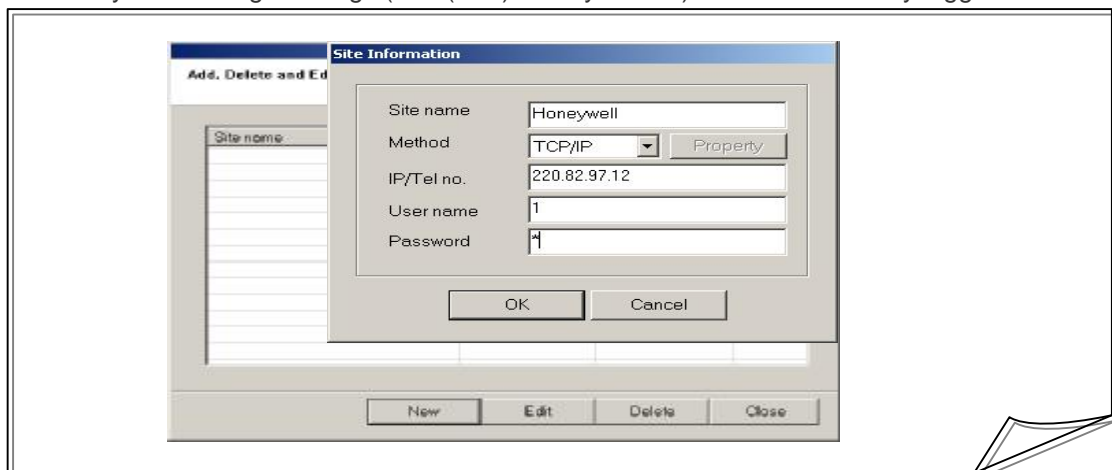
① [Change Login Password]



- Allows you to change the password for login.
- Enter the existing password, new password, and confirm password, and press the “OK” button to apply.

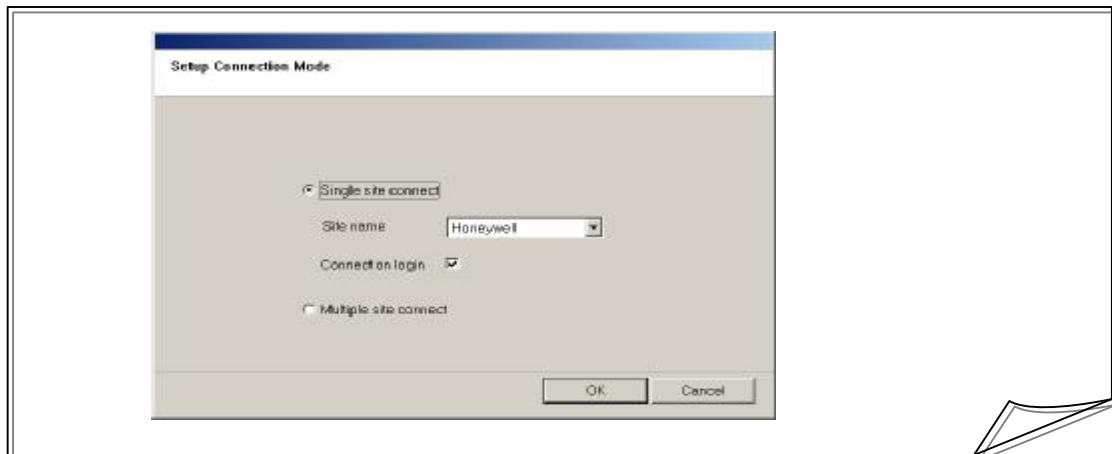
② [Add, Delete and Edit site information]

- Allows you to change settings (New/Add)/Modify/Delete) for the site already logged in.

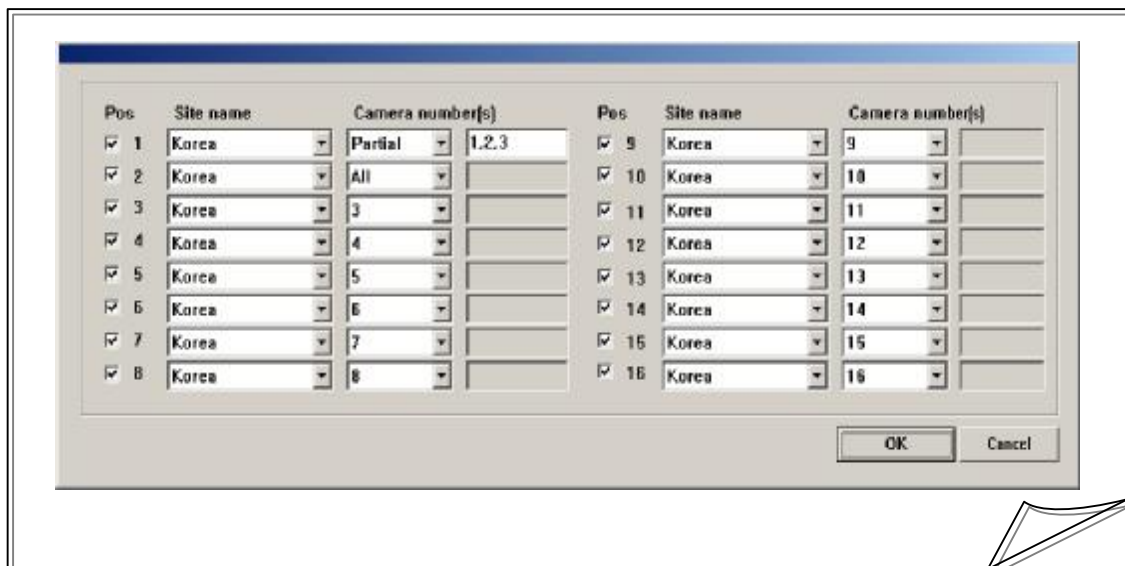


- **Site name** - Enter the name or the location of the HNDR system.
- **Method** - Enter the connection method (Modem or TCP/IP) to the HNDR system.
- **IP/Tel no.** - Enter the site IP address or Tel number of the HNDR system.
(Should be identical with the site address entered on page 30.)
- **User name** - Enter the name of the site that will connect to the HNDR system.
(Should be identical with the site address entered on page 38.)
- **Password** - Enter the password of the site that will connect to the HNDR system.
(Should be identical with the password of the site entered on page 38.)
- **OK/Cancel**
 - Press the “OK” button to display the information on the entered site.
 - Press “Edit” or “Delete” to change the site information. Press the “New” button to add a new site, and press the “Close” button to activate the ”Configuration Setting” window.

③ [Setup Connection Mode]



- Single site connect: Establishes a single site connection to the HNDR system.
Select an already established site.
- Connect on login: Automatically connects to the selected site on login.
- Multiple site connect: Establishes a multiple site connection to the HNDR system.
Press the “OK” button to activate the multiple site connection window.



- Connect on login: Connection is established automatically on login.
- Site name: Select the site name to connect.
- Camera number: Select camera number from 1 to 16, and Partial or All. When Partial is selected, target camera is switched in order in accordance with automatic switching time.
- Press the “OK” button to apply.

④ [Display Configuration]

The screenshot shows a 'Display Configuration' dialog box with the following settings:

- Initial view: 4 (dropdown), Screen
- Data location: C:\backup (text box), Browse button
- Log file: c:\dvslog.txt (text box), Browse button
- Switching interval: 10 (text box), Second
- On screen display: Position number, Site name, Camera No/Name
- Name display: On mouse-over (dropdown)
- Use IP Server: Code: (text box) Server: (text box)

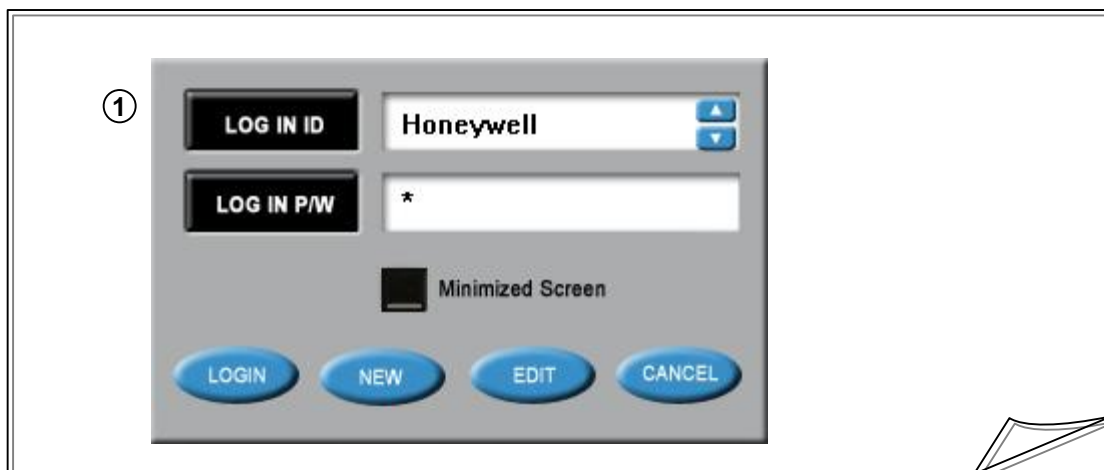
- Initial view screen: Set the type of split screen window to be displayed on HNDR-Net login.
- Data location: Set the data location to be used when pressing the “Save” button on HNDR-Net. (Be sure to specify a data location. Otherwise, data may not be saved.)
- Log file: Set the file name to be used to save the event log.
- Switching interval: Set the switching interval for multiple screens when you view them on a single screen.
- On screen display: Select when you want to display Position number of image, Site name, or Camera No/Name.
- Name display: Select how the selected information should be displayed.
Use “Always” to display on screen display information all the time.
Use “On mouse over” to display on screen display mode information only when you move the mouse over the image screen.
- Press the “OK” button to apply.
- Use IP Server : Set the IP Server for management of dynamic IP address.
(Please note that IP Server must use fixed IP .)
* Use IP Server : Select IP server to use
* Code : Enter the code of the site that will connect to the HNDR system.
* Server : Enter the IP address of the IP server that will connect to the HNDR system.

⑤ [Apply/Cancel]

- Applies or cancels the settings on each item.

3. HNDR-Net Monitoring

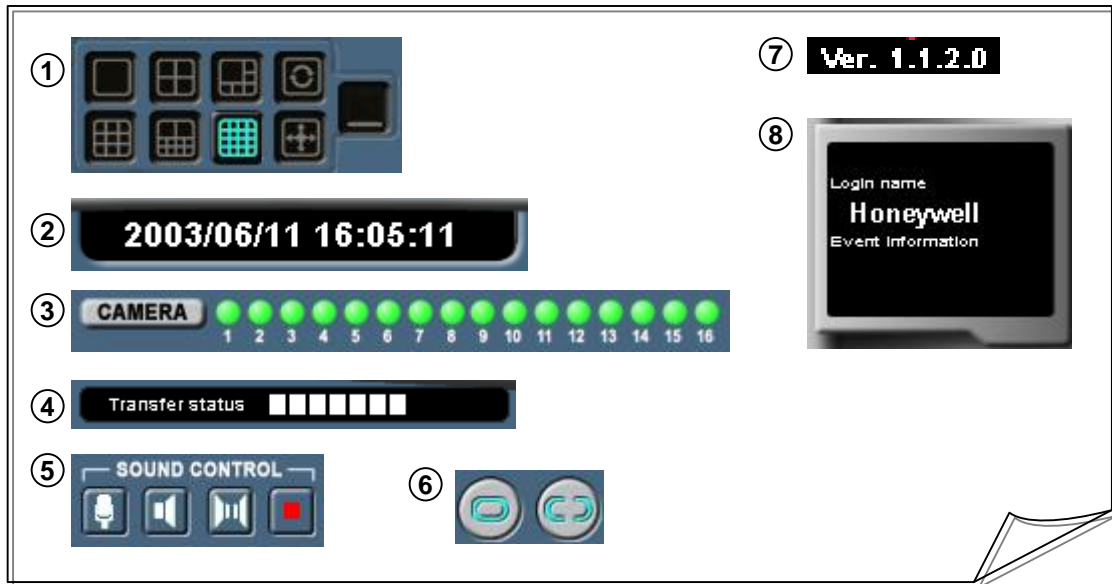
- Run the program by clicking the “Honeywell-Net” icon on Desktop, then the following Connect On Login window will be activated.



① [Connect on login]

- Enter the login name on “LOG IN ID” and the login password on “LOG IN P/W”, and then press the “LOGIN” button to connect to the HNDR. The following monitoring screen will be displayed.

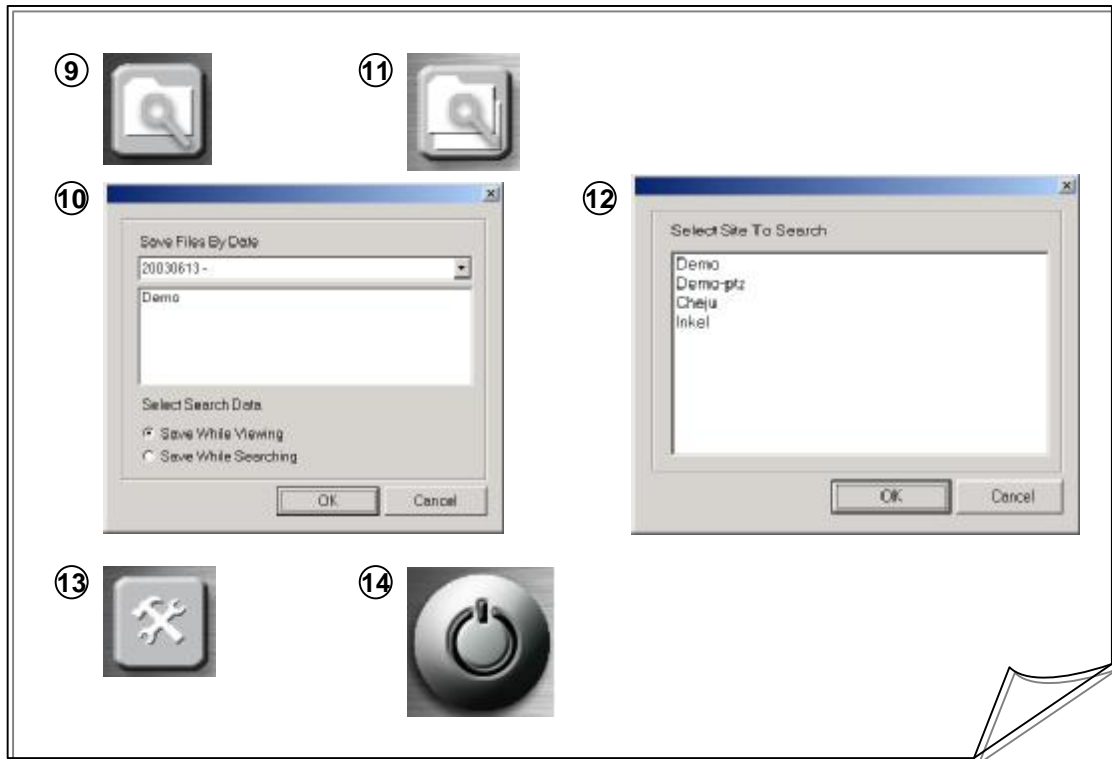




- ① **[Split Screen/Manual Switching/Full Screen/Minimized Screen]**
 - Allows you to display the selected video image on 1, 4, 6, 9, 10, or 16 split screen.
 - Allows you to display images with Manual Switching, Full Screen, and Minimized Screen.
- ② **[System Data/Time Display]**
 - Displays the date and time of the system on which HNDR-Net is installed.
- ③ **[Camera Status Display]**
 - Displays the status of HNDR cameras when connecting to the HNDR system. You may choose not to receive images from each camera by clicking on the camera status display.
- ④ **[Transfer Status Display]**
 - Transfer status: Indicates the state of connection with HNDR. Moving fast indicates fast data transfer, and moving slowly indicates slow data transfer.
- ⑤ **[Sound Control]**

2-Way voice communication with HNDR (2 WAY Audio)

 - You can send and receive voice, establish 2-way voice communication, or cancel.
 - “Voice Recording” should be selected on HNDR Setup (System Setup).
- ⑥ **[Connect/Non-Connect Control]**
 - Allows you connect to or disconnect from HNDR-Net.
- ⑦ **[Version Display]**
 - Displays the version of the HNDR-Net Program.
(Subject to change with version changes.)
- ⑧ **[Login/Event Information Display]**
 - Login name: Displays the name of HNDR-Net user who is connected to the system on which HNDR is installed.
 - Event information: Displays the type of event (motion or sensor) by which the HNDR system executed HNDR-Net automatically.



9 [Local Search Button]

- Searches the data stored in the HNDR-Net system.

10 [Local Search Control]

- Allows you to select the site name of the HNDR system that is connected to HNDR-Net.
- Select either “Saved while viewing” or “Saved while searching” on the selected site, and press the “OK” button to begin searching.
- “Saved while viewing” allows you to search the data saved while viewing images on the HNDR-Net system by pressing “SAVE”.
- “Saved while searching” allows you to search the data saved by pressing “Save” during the search for the data saved in the HNDR while connected to HNDR by pressing “Remote Search.”

11 [Remote Search Button]

- Searches the data saved in the HNDR system that is connected to HNDR-Net.

12 [Remote Search Control]

- Allows you to select the site name for the data saved in the HNDR system.
- Select the selected site and press the “OK” button to begin searching.

13 [Setup]

- Select the name of the site connected with HNDR-Net and press the “OK” button to set up the connected site.
- HNDR-Net Setup may change some of the HNDR settings.

14 [Exit System]

- Exits the HNDR-Net System Program.



15 [Control Button]

- Press the “COMP RATE” button to control transfer speed of images.
- Press the “PTZ” button to control zoom, focus, auto scan of Pan/Tilt device.
- Press the “IMAGE” button to control brightness, contrast, saturation, and hue of cameras.
- Press the “CONFIG” button to control site setting, multi connect setting, etc.
- Press the “SAVE” button to save the images being displayed.

16 [COMP RATE Control]

- Pressing the “COMP Rate” button, then “COMPRESSION RATE” button will appear. Pressing “HIGH SPEED” increases transfer speed of data but lowers image quality while pressing “LOW SPEED” lowers the transfer speed but enhances the image quality.

17 [PTZ Control]

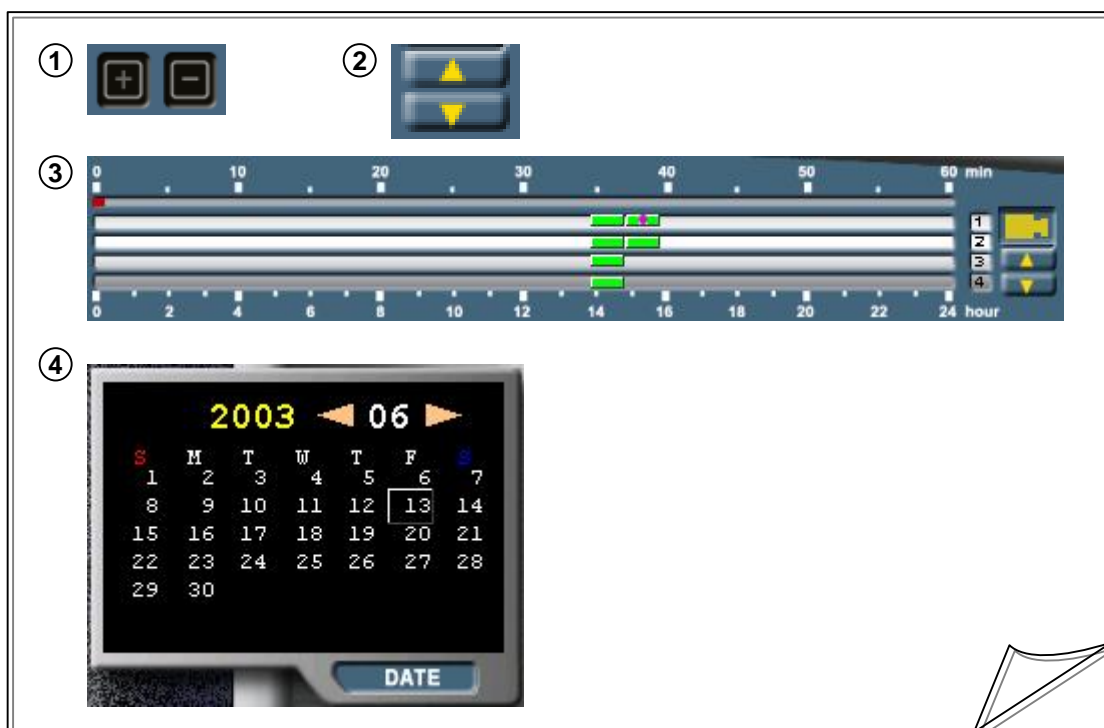
- Pressing the “PTZ” button activates “PTZ CONTROL“, allowing you to control the Pan/Tilt camera that is installed in HNDR by moving it upward, downward, to the left, to the right, or to diagonally, as well as adjusting zoom and focus. You can also set up camera selection using the camera selection button.
- Allow you to control preset, tour and auto scan of Pan/Tilt camera on HNDR-Net.
- You can also set up preset, tour and auto scan using HNDR “Setup” (See the figures shown on pages 36).

18 [IMAGE Control]

- When pressing the “IMAGE” button, “IMAGE CONTROL” appears, allowing you to adjust the brightness, contrast, saturation, and hue of images that are sent by the HNDR system.

4. Local Search Mode

- Allows you to search the data saved in the system on which Honeywell-Net is installed.
- For site selection during local search, select “Saved while viewing” or “Saved while searching” and press the “OK” button to begin searching data.



① [Enlarge/Reduce Button]

- Allows you to enlarge or reduce an image.

② [Search Data Display]

- The saved data are displayed by camera (Number on the right), hour (Number at the bottom), and minute (Number on top). You can search the data by pressing the desired item with the mouse. (You can also specify the minute data directly with the mouse.)

③ [Camera Group Selection]

- By pressing camera images, you can search images that were saved together with voice. Using buttons on the top and at the bottom, you can switch the cameras to 1~4, 5~8, 9~12, 13~16 screens for search.

④ [Date Display]

- Allows you to search the data by date. If date is not displayed, press "Date" at the bottom to display a calendar.



⑤ [Control Buttons]

- Press the "SEARCH" button to replay or search images.
- Press the "IMAGE MODE" button to modify images.
- Press the "SELECT SITE" button to display a list of the data of HNDR saved in other locations.
- Press the "SAVE AS" button to save images being displayed.
- Press the "PRINT" button to print images being displayed.
- Press the "AVI SAVE" button to save data being searched in AVI format.

⑥ [Exit]

- Exits "Local Search".

⑦ [Search Controls]

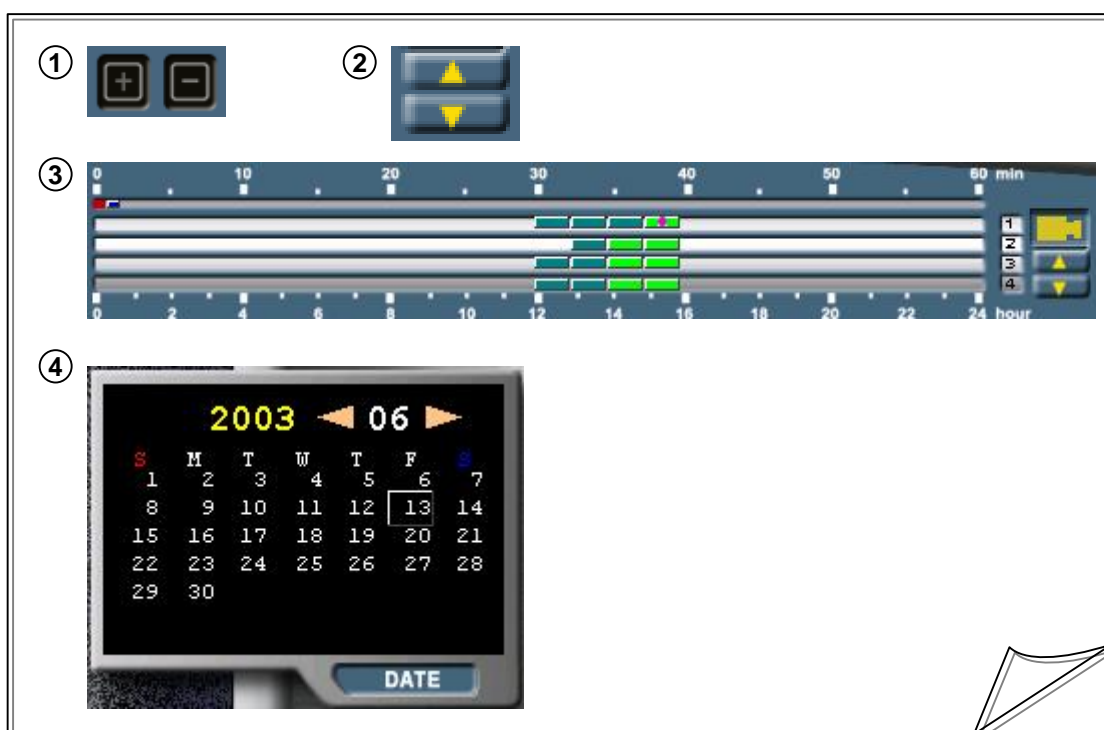
- Pressing the "Search" button displays "SEARCH," where you can replay images forward or backward, or search each image forward or backward.

⑧ [Image Mode Control]

- Pressing the "IMAGE MODE" button displays "IMAGE MODE," where you can modify search images to enlarge (Zoom I/O), sharpen (Sharpen), soften (Soften), return to previous state (Cancel), turn into black and white (B&W), or return to the original state (Original).

5. Remote Search Mode

- Allows you to search the data saved in the HNDR system on the Honeywell-Net system.
- Select the site name of the data saved in the HNDR system and press the "OK" button to begin searching.



① [Enlarge/Reduce Button]

- Allows you to enlarge or reduce an image.

② [Search Data Display]

- The saved data are displayed by camera (Number on the right), hour (Number at the bottom), and minute (Number on top). You can search the data by pressing the desired item with the mouse. (You can also specify the minute data directly with the mouse.)

③ [Camera Group Selection]

- By pressing camera images, you can search images that were saved together with sound. Using buttons on the top and at the bottom, you can switch the cameras to 1~4, 5~8, 9~12, 13~16 screens for search.

④ [Date Display]

- Allows you to search the data by date. If date is not displayed, press "Date" at the bottom to display a calendar.



⑤ [Control Buttons]

- Press the "SEARCH" button to replay or search images.
- Press the "IMAGE MODE" button to modify images.
- Press the "SELECT SITE" button to display a list of the data of HNDR saved in other locations.
- Press the "SAVE AS" button to save images being displayed.
- Press the "PRINT" button to print images being displayed.
- Press the "AVI SAVE" button to save data being searched in AVI format.

⑥ [Exit]

- Exits "Local Search".

⑦ [Search Controls]

- Pressing the "Search" button displays "SEARCH," where you can replay images forward or backward, or search each image forward or backward.

⑧ [Image Mode Controls]

- Pressing the "IMAGE MODE" button displays "IMAGE MODE," where you can modify search images to enlarge (Zoom I/O), sharpen (Sharpen), soften (Soften), return to previous state (Cancel), turn into black and white (B&W), or return to the original state (Original).

6. HNDR-Net Setup

- Pressing the HNDR-Net Setup button will generate the following window.



① [System Setup]

- Sets the settings for site access, network access, initial screen, log write, sound, E-mail, Auxiliary functions etc. **(See the figures shown on pages 59, Chapter 4-2. “System setup” to find out how to setup the HNDR on pages 31.)**

② [Camera Setup]

- Basic setup for camera : Sets the basic settings for camera, event method, image compression method, pre/post alarm recording, basic, security, adjust camera frame etc. **(See the figures shown on pages 59, Chapter 4-3. “Basic setup for camera” to find out how to setup the HNDR on pages 33.)**
- Camera recording schedule setup : Sets the recording schedule settings for camera, remote notify schedule etc. **(See the figures shown on pages 59, Chapter 4-4. “Camera recording schedule setup” to find out how to setup the HNDR on pages 34.)**
- Camera motion/Image setup : Sets the motion/image settings for camera, motion detection area, relay options, color control, motion rate etc. **(See the figures shown on pages 60, Chapter 4-5. “Camera motion/Image setup” to find out how to setup the HNDR on pages 35.)**
- Camera Pan/Tilt setup : Sets the Pan/Tilt settings for camera, ptz protocol, communication connection, speed, auto scan/preset, P/T direction, camera menu etc. **(See the figures shown on pages 60, Chapter 4-6. “Camera Pan/Tilt setup” to find out how to setup the HNDR on pages 36.)**

③ [Sensor Setup]

- Sets input/output and interoperation of sensors. **(See the figures shown on pages 60, Chapter 4-7. “Sensor setup” to find out how to setup the HNDR on pages 37.)**

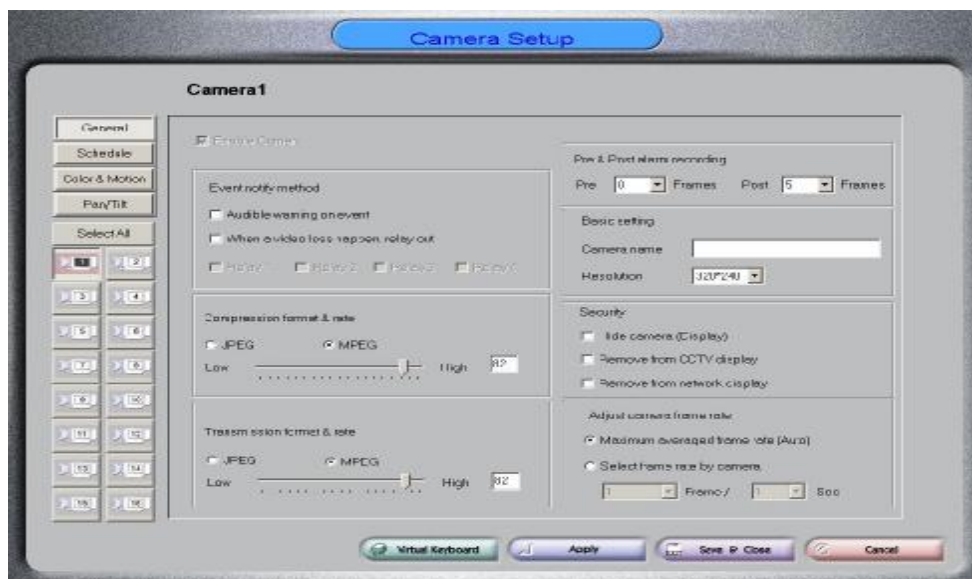
④ [Backup Setup]

- Sets an automatic backup schedule. **(See the figures shown on pages 61, Chapter 4-8. “Auto backup setup” to find out how to setup the HNDR on pages 38.)**

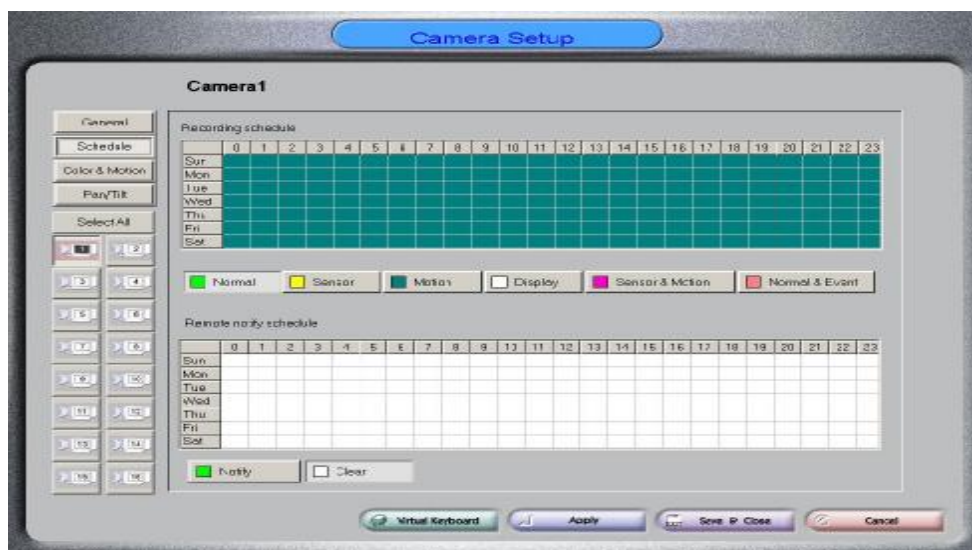
①



②



③



④



⑤



⑥



7

Backup Setup

Use schedule Camera selection

-	2	3	4	5	6	7	8
9	10	11	12	13	14	15	16

Backup Device Setup

Backup path: Browse

Scheduling

Start backup timer

Update

Time setup

Hour:

Minute:

Schedule table

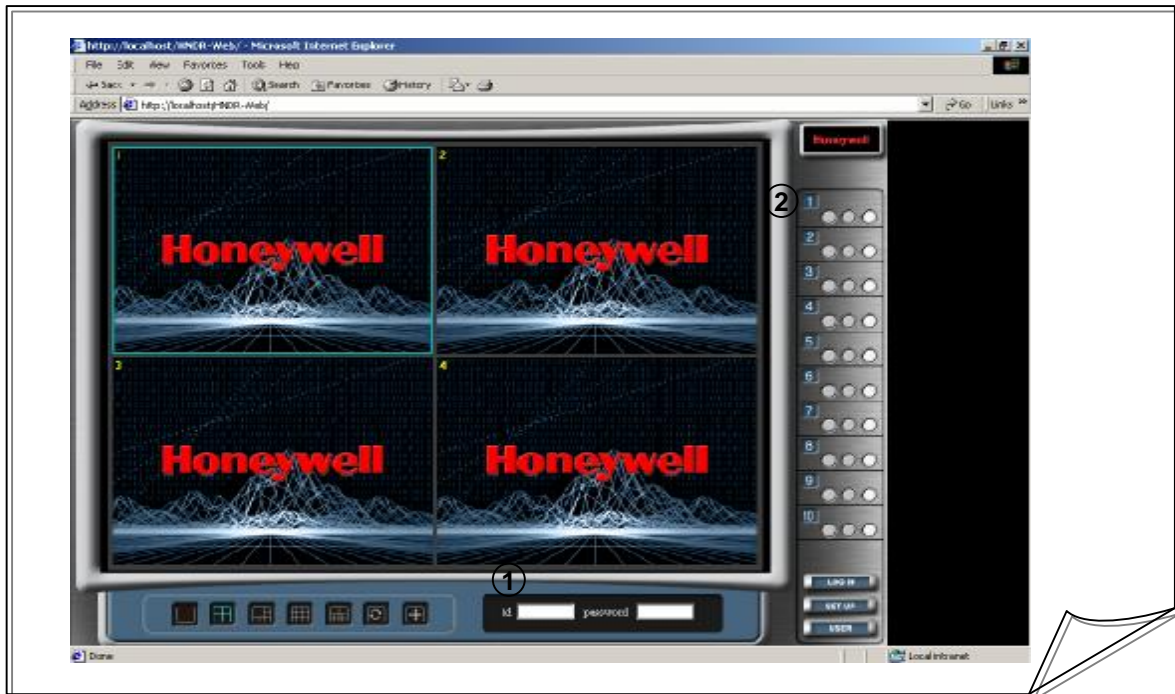
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	Time	Status	Backup path
Sunday																	00:00	Off	C:
Monday	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	00:00	Off	C:
Tuesday	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	00:00	Off	C:
Wednesday	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	00:00	Off	C:
Thursday	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	00:00	Off	C:
Friday	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	00:00	Off	C:
Saturday	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	00:00	Off	C:

Virtual KeyboardApplySave & CloseCancel

Chapter 7. HNDR-Web

1. Connecting to HNDR-Web

- The Honeywell-Web program is included either in the HNDR system or in the enclosed CD.
 - Location within the HNDR system:
(C:/Backup/HNDR-xxxx/Honeywell/HNDR-PROGRAM/HNDR-Web/ *.*)
 - Location in the CD:
(CD:/HNDR-xxxx/Honeywell/HNDR-PROGRAM/HNDR-Web/ *.*)
- For how to install the HNDR-Web program, see the Appendix in Chapter 8.
- To confirm the HNDR-Web program, launch a web browser such as Internet Explorer and enter http://localhost/HNDR-Web in the address window. Make sure that the HNDR-Web application is loaded successfully as below.



① [Login ID/PASSWORD]

- Set up a login name of HNDR-Web.
- HNDR-Web initially contains the default Administrator account.

The login name for the Administrator account is “admin”, and the password is “1111”.

② [Login Button]

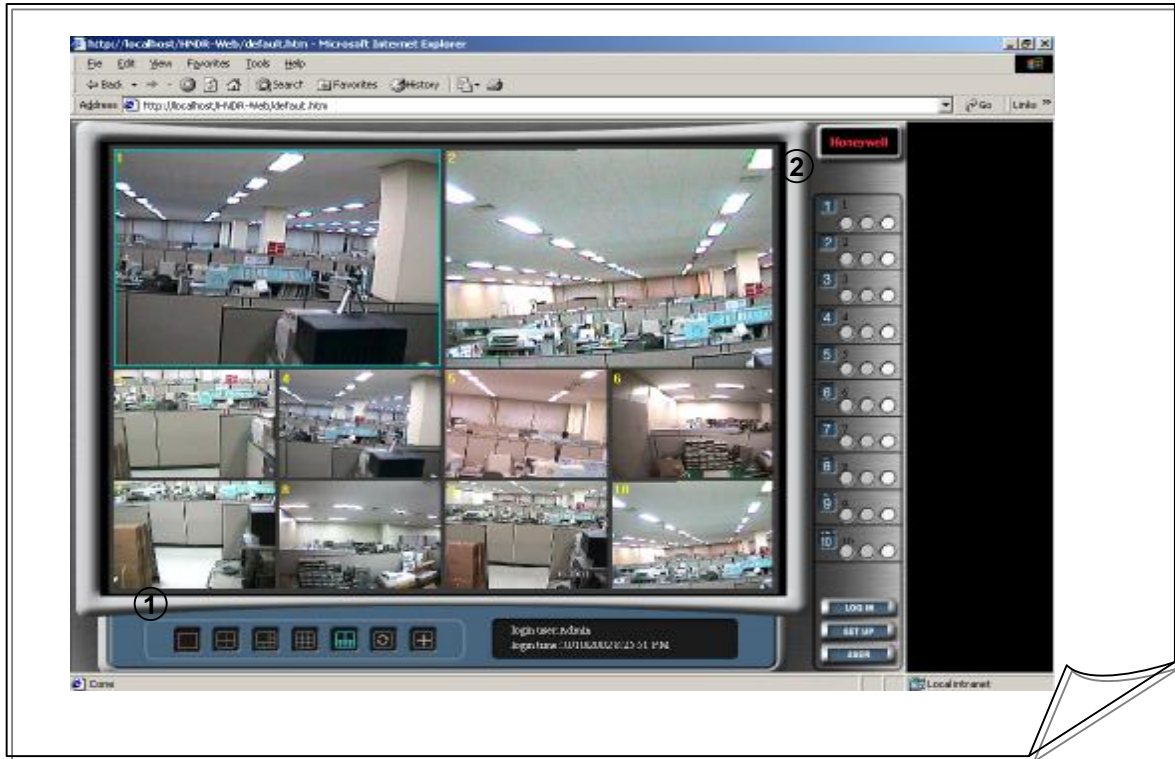
- Pressing the “LOG IN” button establishes the connection, opening the following monitor screen.



Caution 12. Resolution Setting

For a resolution of the user's PC lower than 1024*768, the standard button of the web browser should not be enabled. A resolution higher than that demands no such requirement.

2. HNDR-Web Monitoring



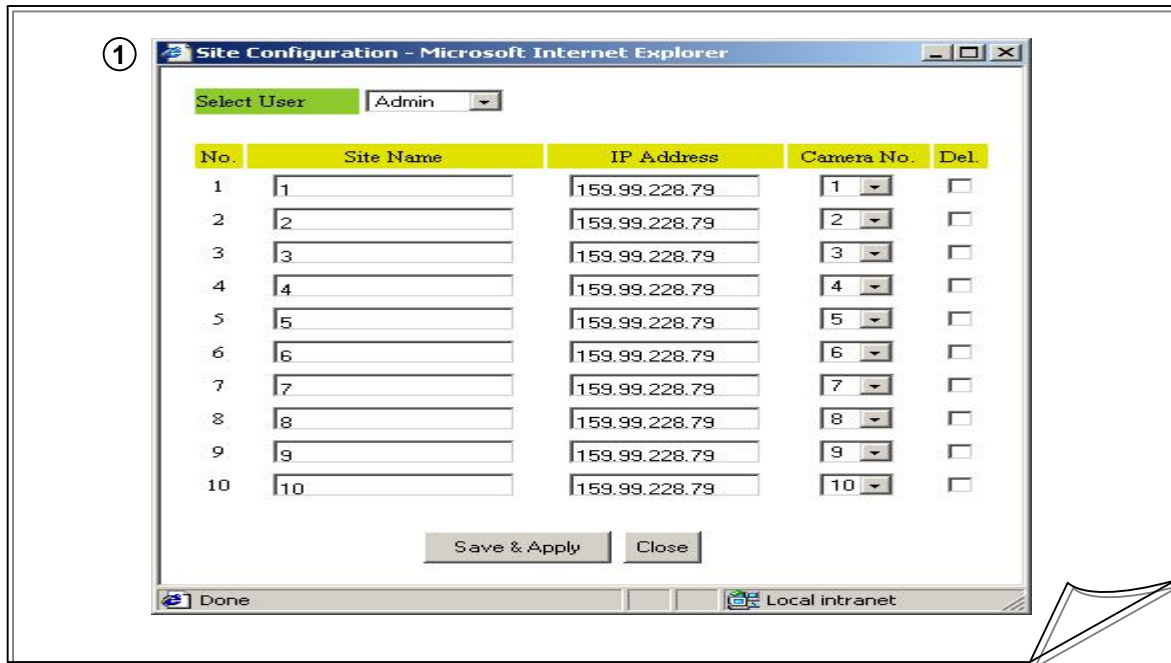
① [Split Screen/Manual Switching/Full Screen Setting]

- Displays the selected video images on the 1, 4, 6, 9, or 10 split screen.
- Displays images on manual switching and full screen.

② [Camera Setting]

- Up to 10 channels are available for each camera. Pressing the “CONNECT” button by each channel displays images of the camera, while pressing the “DISCONNECT” button does not display images on the screen. You may verify the name and IP of the site connected to the camera and the camera number by placing the mouse over the IP button.

3. HNDR-Web Settings



① [SETUP Setting]

- Initial HNDR-Web is not configured with default settings.

To modify configurations, press the “SETUP” button on the lower right after logging in.

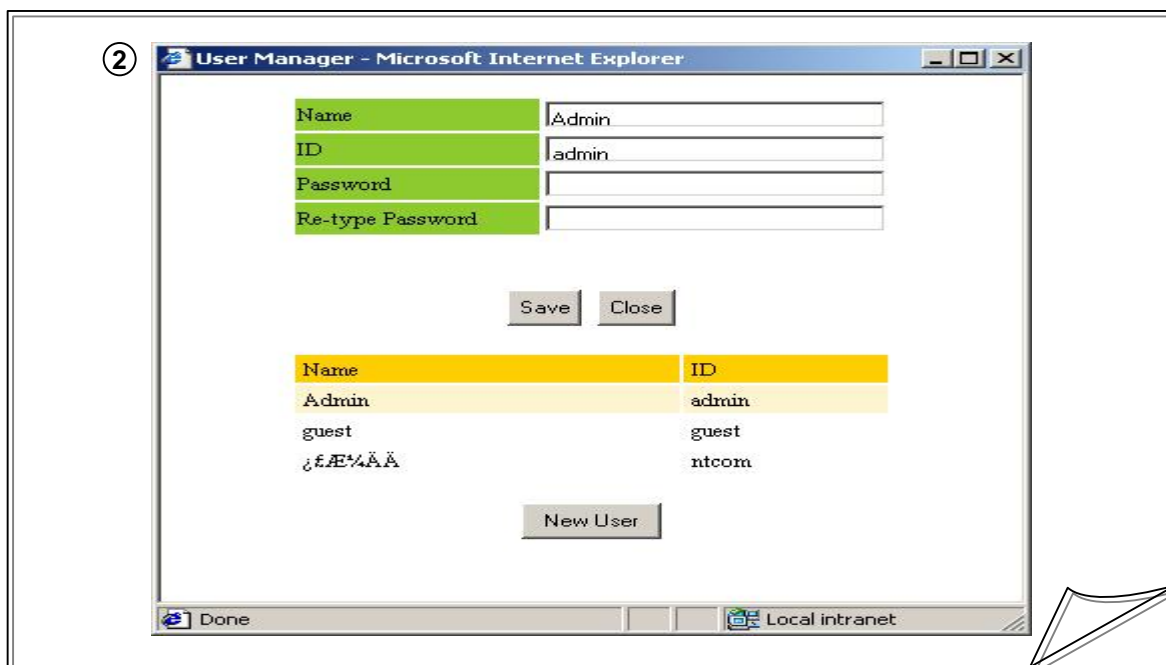
Enter the information of the site to which the HNDR are connected in Site Name, IP,

Camera No., and press the ‘Save & Apply’ button at the bottom. And the Setup window will be automatically closed, immediately applying the information just entered to the

HNDR-Web monitor screen.

To delete the currently set items, check the ‘Del’ box and press the ‘Save & Apply’ button.

- When you log in with the Administrator account, ‘User Select’ appears on the top, allowing you to register or modify configurations for all registered users.
- For ‘guest’ accounts created, for which ‘guest’ users do not have a permission to modify settings, you should login with the ‘admin’ account and adjust the ‘guest’ user’s configurations.



② [USER Settings]

- The initial HNDR-Web has only the 'admin' account as a default user.
- You can create or modify other accounts by logging in as 'admin' user.
- To manage users, press the 'user manager' button on the lower right corner. To register a new user, press the 'New User' button at the bottom, and enter appropriate information in 'Name', 'ID', 'Password', and 'Re-type Password', and press the 'Save' button.

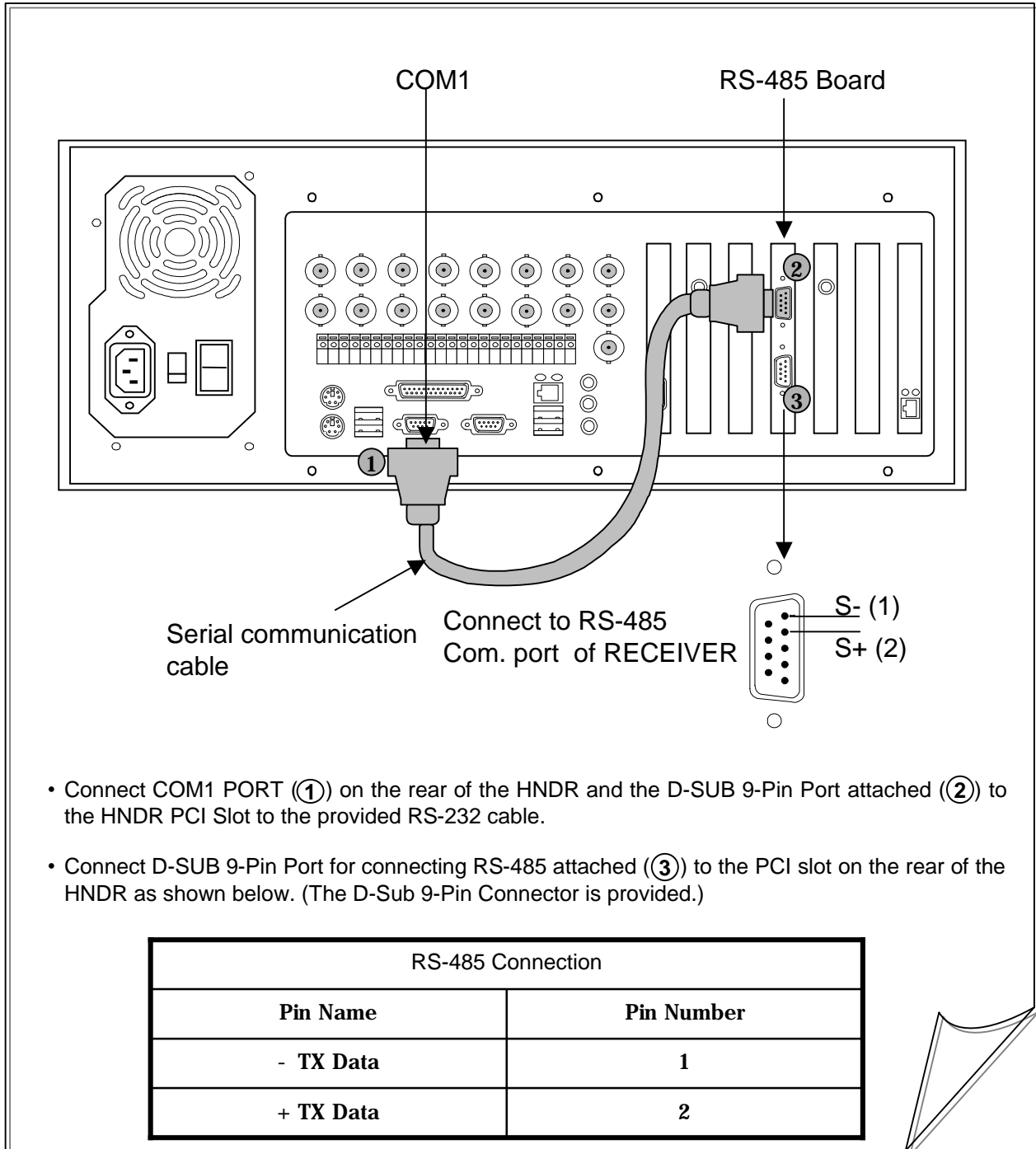
If you want to modify information on already registered users, select user items to modify with the mouse from the user list in the center. Information on selected users are displayed on each input window on the top. Make necessary changes and press the 'Save' button.

- You can neither modify nor delete ID of 'admin' account. Be sure to change the default password before proceeding.

Chapter 8. Appendix

1. Connecting Other Hardware

1.1. Connecting PTZ Device



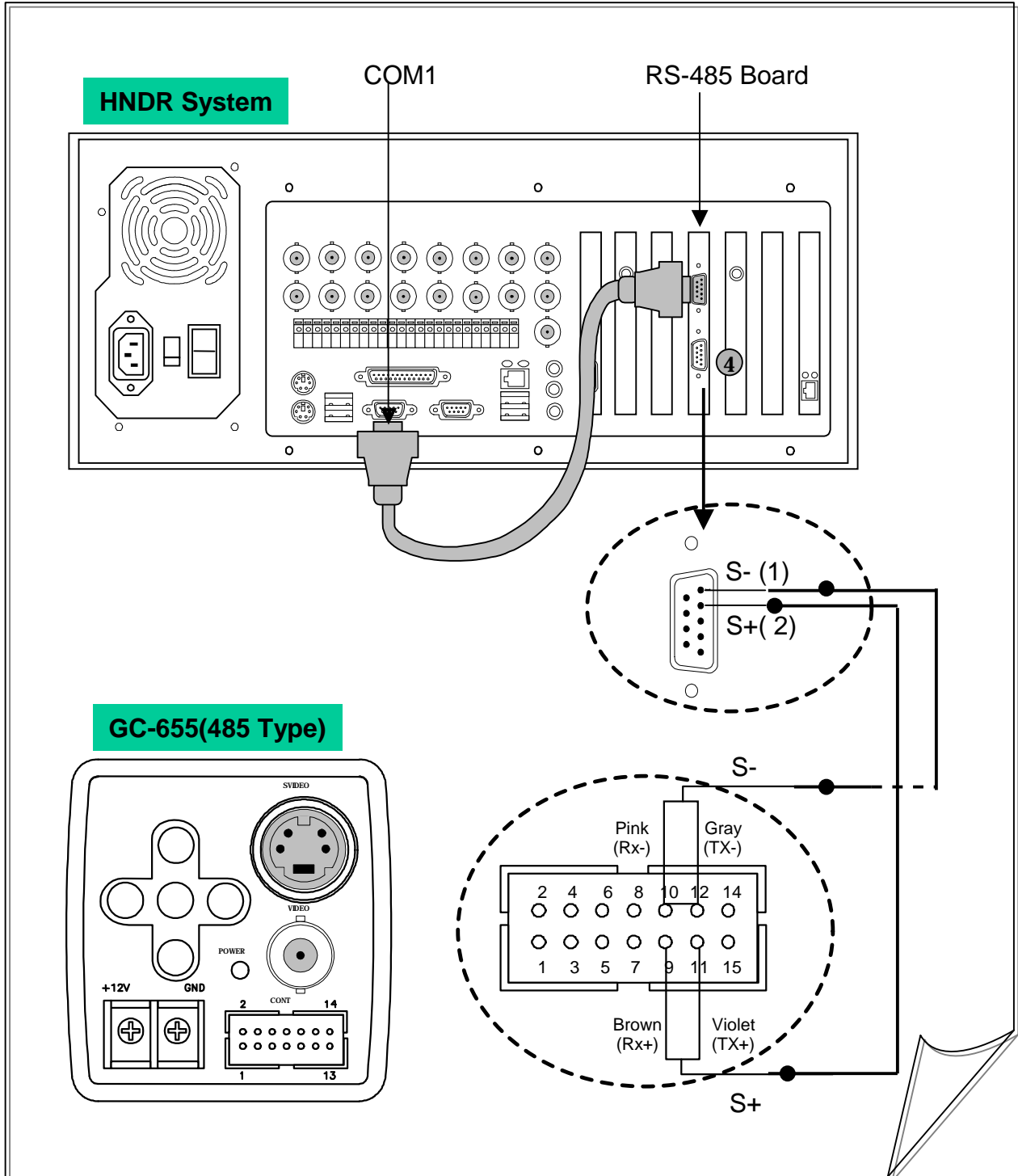
Caution 13. Notes on connecting PTZ

Pay attention to the polarity ((+), (-)) of signal lines.

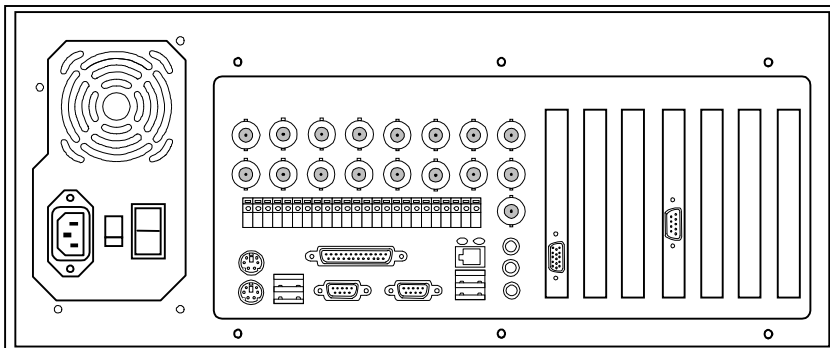
Incorrect wiring combination may result in malfunction of the equipment.

1.1. Connecting method to PTZ Device

- Connect D-SUB 9-Pin Port for connecting RS-485 attached (④) to the PCI slot on the rear of the HNDR as shown below. (The D-Sub 9-Pin Connector is provided.)



1.2. Connecting External Sensor Input/Relay Output



□	□	□	□	□	□	□	□	□	□	□	□	□	□	□	□	□	□	□	□	□	□	□	
○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	
S1	S2	S3	S4	S5	S6	S7	S8	S9	S10	S11	S12	S13	S14	S15	S16	GND	GND	R1	R2	R3	R4	GND	GND

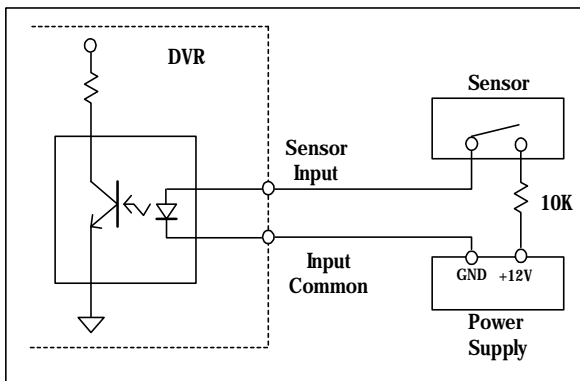
• Connecting External Sensor Input (16 Channels)

- ☞ Connect one of two strands of signal lines for various sensors (Infrared sensor, Heat Wire Detector, Magnetic) to a Signal (S1 ~ S16) terminal. Connect the other line to Ground (GND) terminal. (Specify sensor “NC, NO” type setting on “Sensor Setting”.)

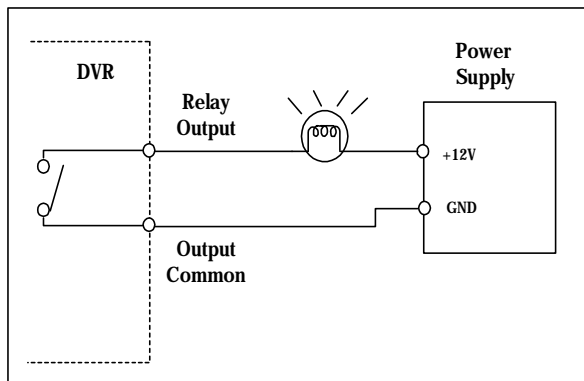
• Connecting External Sensor Relay Output (4 Channels)

- ☞ Factory setting for control output access point is “NC”.
- ☞ For controlled output, access point is output if it is applied when its type is “No.”

• Wiring Diagrams for External Sensor Input / Relay Output



Wiring Diagram for Sensor Input



Wiring Diagram for Sensor Relay Output

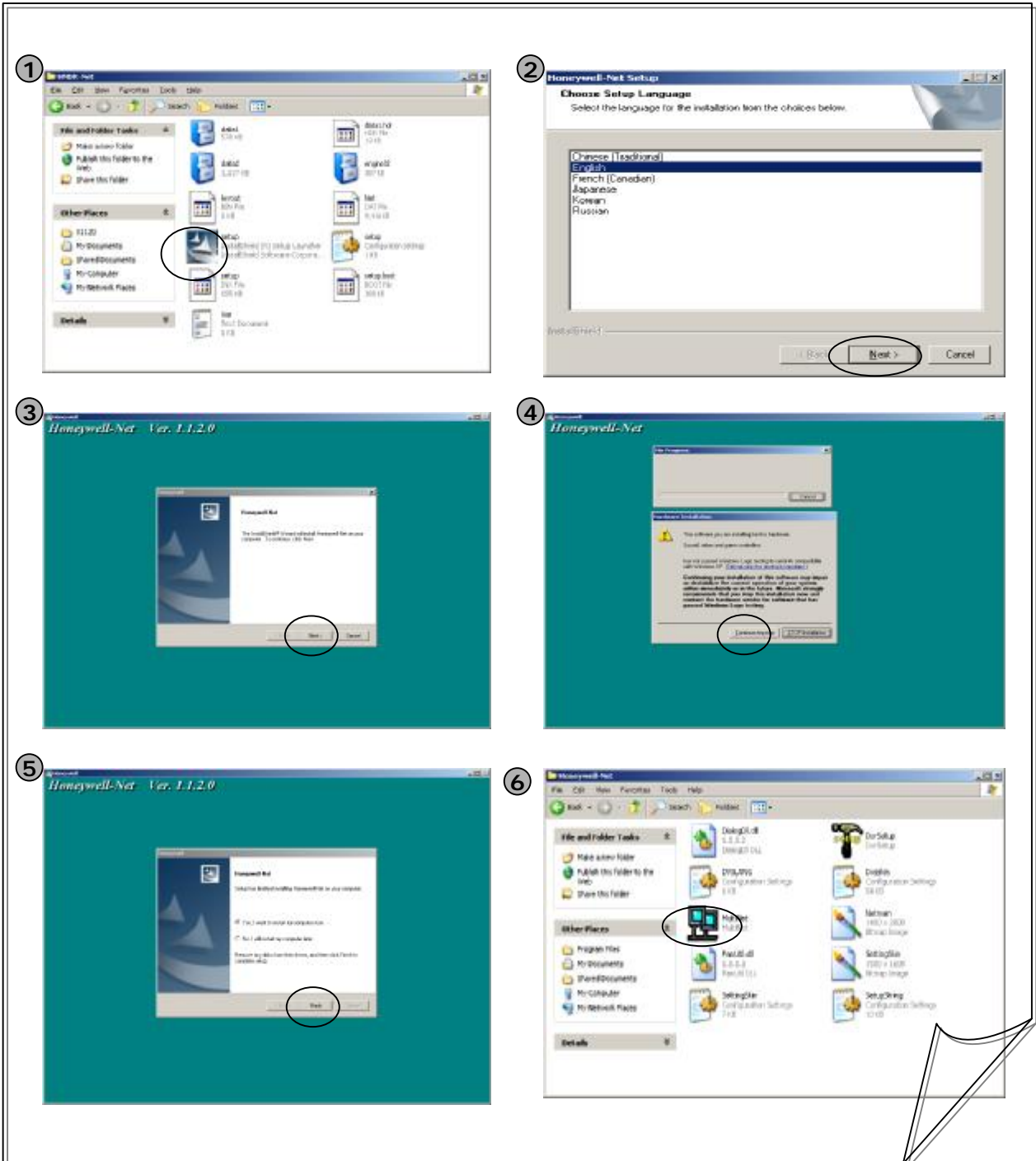


Caution 14. Notes on Using a Separate Power Supply for Sensor Input / Relay Output

- Use an adapter for sensor input power with an operating voltage less than 12V, 300mA.
- Use an adapter for relay output power with an operating voltage less than 12V, 300mA.

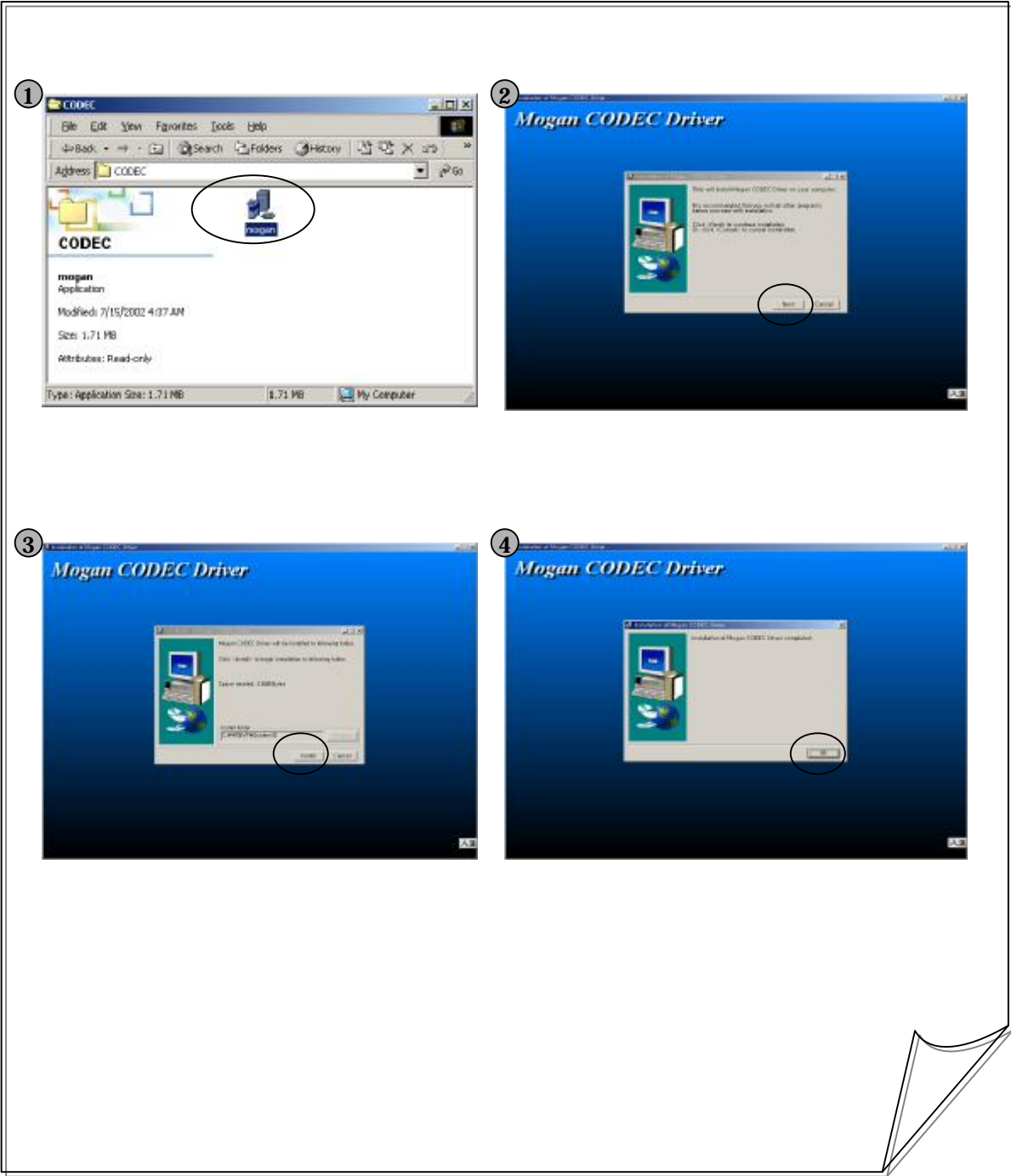
2. Installing HNDR-Net

- Run setup.exe and follow the instructions (① ~ ⑤) to complete the installation.
- When HNDR-Net Program is successfully installed, confirm the HNDR-Net folder (⑥) on Desktop.



3. Installing the HNDR-Web

- Before installing the HNDR-Web server, Run Morgan.exe (Video Codec) and follow the instructions (① ~ ④)



- **Before installing the HNDR-Web server, please have a program ready that meets the specifications of the HNDR-Web Server. (A setup program for the web server is not provided separately.)**

① Specifications of HNDR-Web Server

Windows98 : Personal Web Server
 Windows NT4.0 : Internet Information Server 4.0
 Windows 2000 : Internet Information Server 5.0

② Installation Procedure for HNDR-Web Server

1) Installing IIS Server

For Windows98 or Windows NT, install IIS from the NT Options Pack (on a separate CD).
 For Windows 2000, for which IIS is included in the Windows 2000 setup CD, click 'Add/Remove Program' on Control Panel and select 'Add/Remove Windows Components' to install IIS. (For more information, see the Microsoft homepage.)
 (http://support.microsoft.com/support/iis/install/install_iis4.asp)

2) Confirm the installation of IIS Server

For Windows 98, Personal Web Server icon appears in the tray area on the lower right of the Windows as an indication for the installation of IIS Server.
 For Windows NT or Windows 2000, run 'Service' on Control Panel (or click Control Panel->Management Tool->Service), and make sure that 'World Wide Web Publishing Service' is set to be 'Started.' Or, launch a web browser and enter 'http://localhost' in the address window to make sure that the IIS welcome page, the default page, appears successfully.

3) Copying HNDR-Web Files

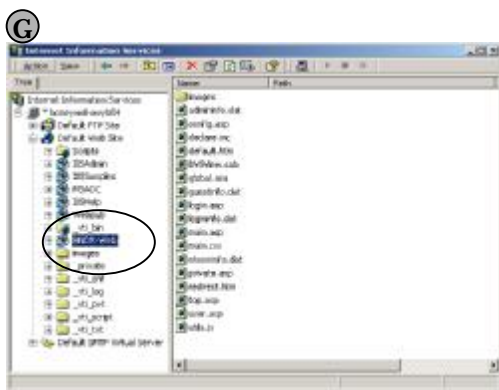
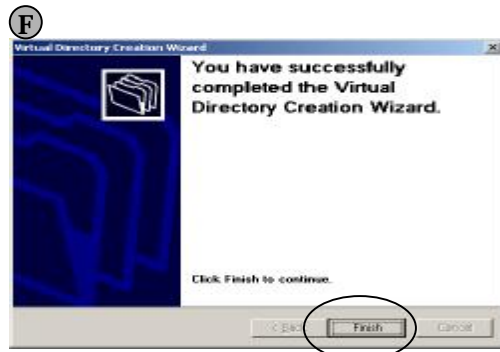
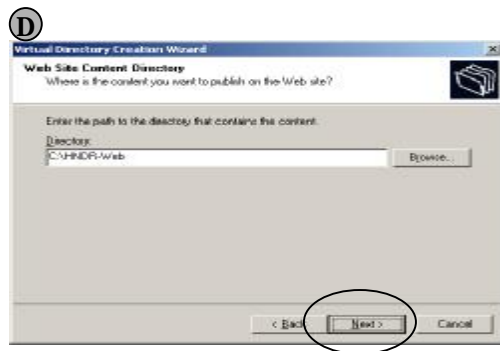
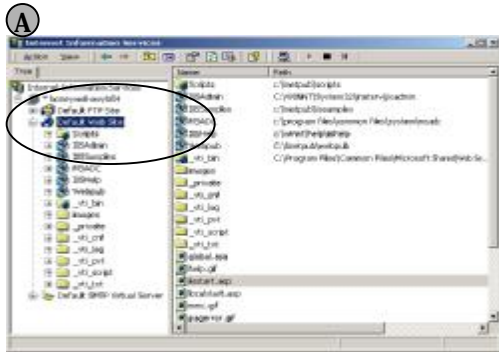
Copy HNDR-Web files to the appropriate directory (C:/).
 HNDR-Web files are included in the HNDR system or in the enclosed CD.

- HNDR => C:/Backup/HNDR/Honeywell/HNDR-PROGRAM/HNDR-Web/ *.*
- CD => CD:/HNDR/Honeywell/HNDR-PROGRAM/HNDR-Web/*.*

4) Creating Honeywell-Web Application

Execute 'Internet Information Service,' the management tool for the installed IIS.
 ('Internet Information Service' can be run by clicking Start->Program->Personal Web Server (or Internet Information Management Tool) for Windows 98 or Windows NT, and on Control Panel->Management Tool for Windows 2000.)

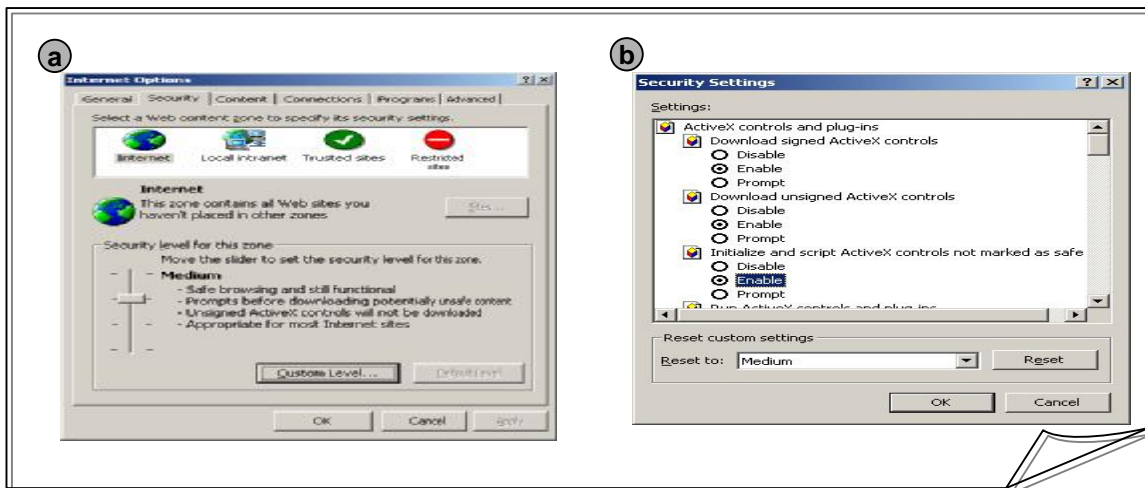
- Select 'Default Web Site' from the left tree menu of the launched 'Internet Information Service', right click to choose 'New->Virtual Directory.'
- On Virtual Directory Wizard, select the 'Next' button with the mouse.
- On Virtual Directory Alias, enter 'HNDR-Web' and select the 'Next' button.
- On Web Site Directory, find the 'HNDR-Web' directory and select the 'Next' button.
- On Access Permission, select the 'Next' button.
- On Create Virtual Directory Wizard, select the 'Next' button in the 'Finish' window.
- Make sure that "HNDR-Web" has correct data on the default web site.



3 HNDR-Web Security Setting

• Since the HNDR-Web has not received the Application Certification yet, you should change the Internet security option as follows:

- A. Select 'Tool->Internet Option' on the web browser menu.
- B. When the 'Internet Options' window appear, select the 'Security' tab at the top of the window.
- C. Set security zone on the security settings screen. Select 'Internet' if you access from outside, and select 'Local Intranet' if you access from a local server. (See **(a)**)
- D. On 'Security level for this zone', press 'Custom Level...' button at the bottom. (See **(b)**)
- E. On the 'Security Settings' window, adjust 'ActiveX controls and plug-ins'. (See **(b)**)

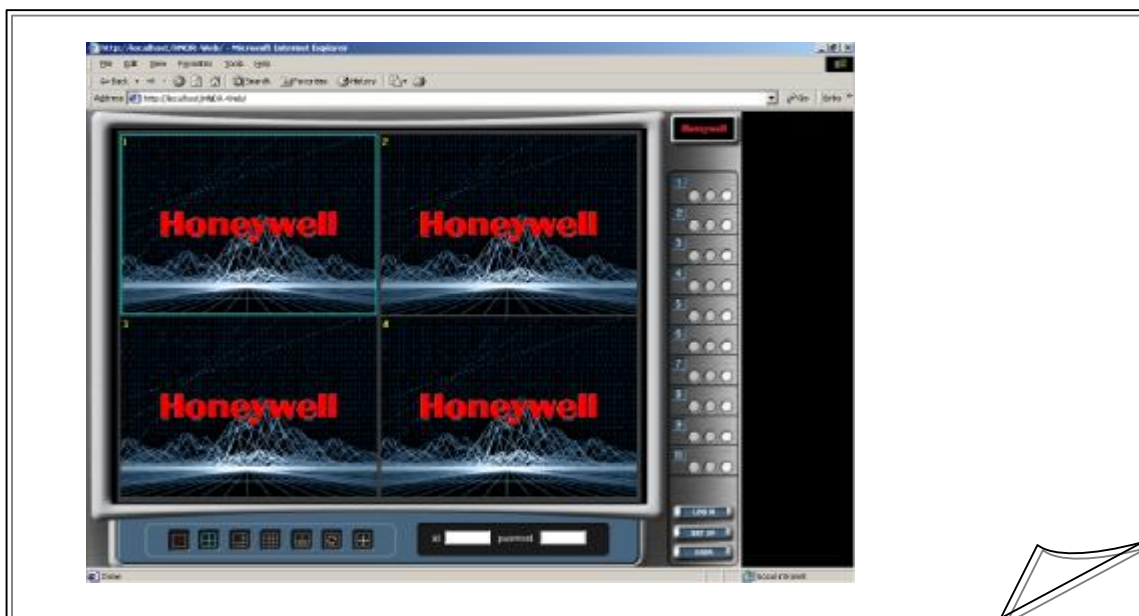


4 Confirming the HNDR-Web Program

Launch a web browser and enter <http://localhost/HNDR-Web> ([http://\[Server Domain Name or IP\]/\[Virtual Directory Name set on Item 3\]](http://[Server Domain Name or IP]/[Virtual Directory Name set on Item 3])) in the address window.

Make sure that the HNDR-Web Application is successfully loaded as shown below.

The following figure indicates that the installation has been completed successfully.



WARANTY GUIDE

Guide

- q Check this warranty sheet first.
- q Please contact the distributor after checking out any defect in the product.
- q The standard for repairing, replacement or reimbursement follows Customer

17F, Kukje Center Building 191, Hangangro-2ga Yongsan-gu, Seoul, 140-702, Korea

Tel : 82-02-799-6202, 6121 fax : 82-02-749-6119 Http://www.Honeywell.co.kr/cctv

Contents

- q Any defect under normal use within the warranty service period we give you free repair service according to the warranty sheet.
- q We charge you with the fee of parts and service despite free warranty service period.
 1. Any breakage made without care.
 2. Breakage or trouble made by natural disaster.
 3. Breakage or trouble made by breaking the product guide or manual.
 4. Breakage or trouble made by wrong power voltage or frequency.
 5. When you want to reassemble for full system or replace parts within warranty service period.
 6. When unauthorized engineer modified or made damage on the product trying to repair it, we may charge you with the fee.
- q We don't support the breakage after warranty service period. If the customer wants to get it repaired, we charge them with the fee.

..... Product Warranty Service Sheet

Customer	Name	
	Tel No.	
	Address	
Date you purchased		
Distributor		
Warranty Period		1 year from the purchasing date
Product	Model No.	
	Serial No.	
	Poor results	

- Ø This warranty sheet may not be provided again.
- Ø Please get this sheet filled when you purchase the product.
- Ø You should show this warranty service sheet when you get a warranty service.



HNDR Series
Digital Video Recorder

Honeywell

**CCTV/HS CoE, Environmental Controls,
ACS Honeywell Co., Ltd**

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Yongsan-gu, Seoul, 140-702, Korea

Phone : **82-2-799-6109** , Fax : 82-2-749-6119

E-Mail : cctv@honeywell.com, security@honeywell.com

<http://www.honeywell.co.kr/cctv>

Specifications may change at any time and without notice