Version: 20090519

Protect Your Dreams

H.264 Standalone DVR

User's Manual



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CHAPTER 1 INTRODUCTION

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INTRODUCTION

1.1. Contents







4CH SYSTEM

9CH / 16CH SYSTEM







User's Manual

MOUSE

REMOTE CONTROLLER

*** Contents are subject to change without notice.**

CAUTION

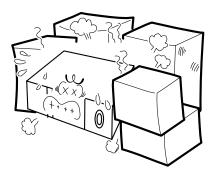
Danger of explosion if battery is incorrectly replaced. Replace only with the same or equivalent type

1.2. Installation Guide

To ensure the product's best performance, it is recommended to follow below instructions.

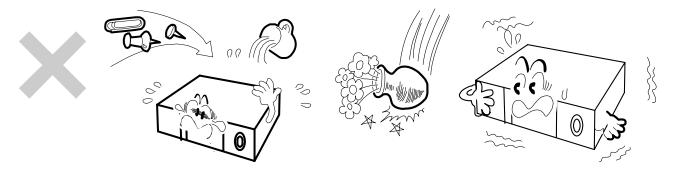
□ VENTILATION

To prevent from overheating, do not block cover or ventilation.



☐ SHOCK

Place the product where can be free from outer physical shock.

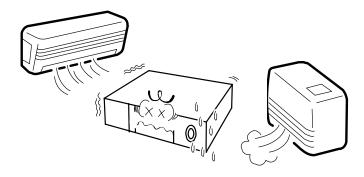


□ HUMIDITY

Do not place a humidifier near the product as extreme humidity can badly affect the product's normal operation

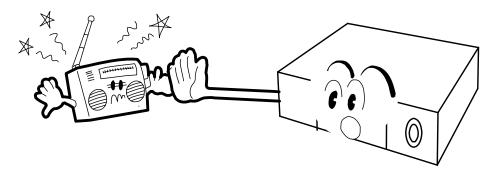
□ TEMPERATURE

Avoid dust, humidity and do not place the product where temperature changes extremely.



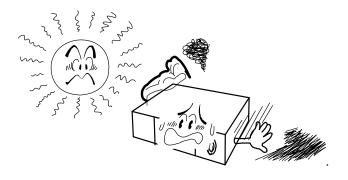
☐ ELECTRIC NOISE

Do not place the product near a microwave, Radio or TV which can generate signal noise due to radio frequency.



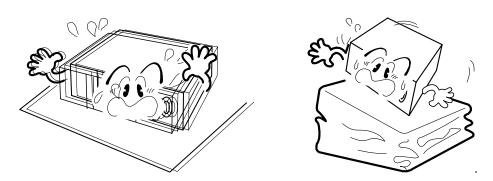
□ DIRECT RAY OF LIGHT

Direct ray of light can cause abnormal operation. Keep the product away from direct ray of light



□ VIBRATION

Install the product on even place where no vibration



□ INSTALLATION

The socket-outlet shall be installed near the apparatus and shall be easily accessible.

1.3. Part Name: 4CH

■ Front Panel



- 1 POWER SWITCH: Used to turn the product on/off and when logging off.
- 2 **POWER LED:** The LED is turned on when the power is on.
- 3 **NETWORK LED:** The LED is on when network is in active.
- (4) **HDD LED:** The LED is on when HDD is in active.
- 5 **USB:** USB Flash drive can be connected to backup and firmware upgrade.

(Notice: Mouse connection is not available on Front USB)

■ Rear Panel



| ① VIDEO INPUT | ② MONITOR OUTPUT |
|-----------------------------------|------------------|
| ③ SPOT OUTPUT | ④ VGA |
| ⑤ AUDIO INPUT | © AUDIO OUTPUT |
| ⑦ LAN | ® MOUSE |
| RS485, SENSOR INPUT, RELAY OUTPUT | POWER INPUT |

■ Remote Controller (4CH)





MENU BUTTON

CANCEL BUTTON

LIVE MODE BUTTON

TIME SEARCH BUTTON

CONFIGURATION CONTROL BUTTON

QUAD SCREEN BUTTON

EVENT SEARCH BUTTON

BACKUP MENU BUTTON

CHANNEL SELECTION BUTTON

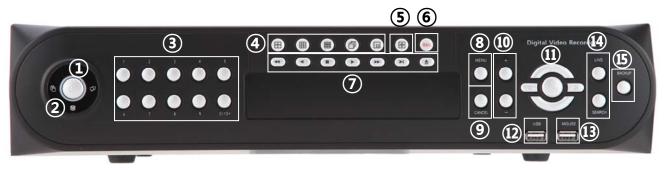
+ / - BUTTON

PLAY CONTROL BUTTON



1.4. Part Name: 9CH / 16CH

■ Front Panel



- 1) POWER SWITCH: Used to turn the product on/off and when logging off.
- 2 FRONT LED: The LED is turned on when the power is on, when the HDD is in use.
- (3) **CHANNEL SELECTION:** Used to select channel by one channel screen.
- (4) **SPLIT:** Used to channel screen division;

4 / 9 / 16, Auto Sequential and PIP (Picture In Picture)

- 5 PTZ: Used for "PTZ Control" screen
- 6 Force Recording: Change recording mode to force recording mode

(Change setting by full frame on all channels.)

- PLAYBACK BUTTONS: Used for operation in playback mode.
- (8) **MENU BUTTON:** Used to enter menu mode.
- (9) **CANCEL BUTTON:** Used to cancel and exit.
- ① +, BUTTONS: Used to control PTZ, zoom in/out of time bar and change configurations.
- (i) AUTO/OK , < > △ → BUTTONS: Used to control/change configuration.
- ② **USB:** USB storage devices can be connected for backup and upgrade.
- MOUSE: Used for mouse connection only.
- (4) LIVE / SEARCH: Used to change to live / search mode
- (5) **BACKUP:** Used to backup data.

■ Rear Panel

<9CH>



<16CH>



| ① POWER | ② VIDEO INPUT |
|---------------------|----------------------------|
| ③ VIDEO LOOP OUTPUT | 4 MULTIPLEX OUTPUT |
| § SPOT OUTPUT | ⑥ AUDIO INPUT (4 CHANNEL) |
| ② AUDIO OUTPUT | ® LAN |
| 9 RS232 | ⑩ VGA |
| ① SENSOR INPUT | @ RS485 |
| ③ RELAY OUTPUT | |

■ Remote Controller (9CH / 16CH)









MENU BUTTON



LIVE MODE BUTTON







PTZ CONTAROL BUTTON

SPLIT SCREEN MODE BUTTON

SWITCH SCREEN MODE BUTTON

BACKUP MENU BUTTON



1.4. Specifications

■ Specifications

| SPECIFICATIONS | 4CH | 9СН | 16CH |
|--------------------------------|--|---|---------------------------------|
| Operating System | Embedded Linux | | |
| Compression | H.264 Hardware Codec | | |
| Multiplexer Functionality | Triplex (Live, Record, Playback, Network at the same time) | | |
| Recording Resolution | D1, Half D1, CIF | | |
| Displaying Speed | PAL 100fps, NTSC 120fps | PAL 225fps, NTSC 270fps | PAL 400fps, NTSC 480fps |
| Recording Speed | PAL 100fps, NTSC 120fps @ CIF resolution | | |
| Video Input/Loop Output | 4 / 0 BNC | 9/9 | 16 / 16 |
| Video Output | 2 BNC Composite (Spot, and Monitor), 1 VGA | | |
| Audio Input/ Output(RCA cable) | 1 line / 1 line | 4 line / 1 line | |
| Sensor Input/Relay Output | 4 line / 1 line | 8 line / 4 line | 16 line / 4 line |
| Display Mode | 1/4 and sequential, PIP | 1/4/9 and Sequential, PIP | 1/4/9/16 and Sequential, PIP |
| Backup Media | USB Flash Drive, Network Backup | USB Flash Drive, DVD/RW(Option), Network Backup | |
| Storage Media | Max 1 HDD, Front 1 USB | Max 3 HDDs, 1 USB memory | |
| Recording Mode Method | Motion detection and Sensor | | |
| System Control | Mouse and Remote controller | Mouse, Remote Controller and Front Key Button | |
| Communication Port | RS-485 | RS232C, RS485 | |
| Network | LAN(Ethernet RJ-45, 10/100 base), DDNS, TCP-IP | | |

| Dimension | 4CH | 9СН | 16CH |
|-----------------------|---------------------|-------------------------|------|
| Size(mm) | 320(W)x255(D)x60(H) | 430(W)x440(D)x88(H) | |
| Weight | 3Kg | 7.5Kg | 8Kg |
| Power | 12V DC 3.33A | AC 100V ~ 240V, 50/60Hz | |
| Operating Temperature | 0°C~40°C | | |
| Operating Humidity | 10~80% RH | | |

^{*} The contents of this specification may change without notice.

CHAPTER 2 MAIN SYSTEM APPLICATION

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2.1. Startup Screen

To start DVR system, press power switch on front panel or power button on remote controller.



As DVR starts, the system will detect NTSC/PAL automatically.

In a few seconds, live images would be displayed.

The above screen will appear as DVR system starts when booting is finished.

This may take up to 1 minute to check the system status.

2.2. Login



The factory default values for User and Password are "admin" and no password.

How to login DVR system:

- 1. Use to change the user level.
- Insert Password by click input area. Max 8 numeric characters are required.(You will see the numeric buttons to select)
- 3. Click to execute DVR system.

To specify password to users, certain configurations are required (Menu/System/Password).

Only "admin" will have access right to the setup menu.

User Authority:

There are 5 total users: admin, user1, user2, user3 and anonymous

Admin: Access right to Live, Search, Setup and Shutdown User1, User2, User3: Access right to Live and Search

Anonymous: Access right to live only

2.3. Exit/Log Out



How to end DVR system:

- 1. Press power switch on front panel or power button on remote controller.
- Select "Exit" and input password and then click "OK" button.
 (To logout DVR system, select "Logout" and input password and click "OK" button.)

2.4. Panel Menu



To activate the panel menu as above picture, just right click on screen. To hide "panel menu", right click on screen again.

- Exit button: Log out user or shuts down DVR system.
- System Setup button: Setup system configuration.
- **Search button:** Displays search mode.
- PTZ button: Displays PTZ control button.
- Preset/Tour button: Configure PTZ preset / tour button.
- PIP button: Enable PIP (Picture in Picture) function.
 On PIP mode, click PIP button to change channel in PIP.
- Full screen button: Enlarges the selected camera as full screen view.
- Split screen button: Shows split screen view (4 / 9 / 16).
- Channel switch mode: Full screen mode with the cameras switching.

How to run SETUP menu.

- 1. Press "System Setup (MENU) button" to activate setup menu
- 2. On the password input screen, input admin password and click "OK" button to continue.



2.5. System Configuration

This chapter explains menu for configure system settings.



"SYSTEM" consists of 4 different groups; "OVERVIEW", "DATE", "PASSWORD" and "INITIALIZE"

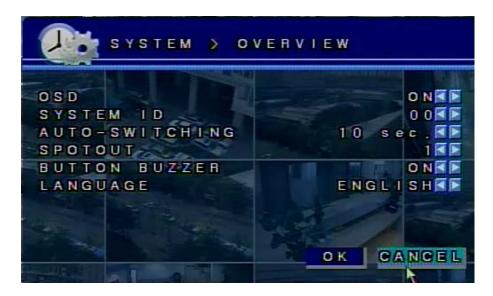
Overview: Setup OSD, System ID, Auto Switching, Spot Out and Button Buzzer

Date: Setup Date, time, locale and server information.

Password: Setup password for specified user.

Initialize: Initialize log, setting and HDD.

■ OVERVIEW



OVERVIEW menu enables to set the system ID number of the DVR to synchronize the remote controller, OSD, Auto-Switching, Spot out channel and Button buzzer.

OSD: Select an OSD(On Screen Display) setting whether to show or not. (ON / OFF)

How to setup ID:

- 1. Select desired ID. (Default ID of 4CH DVR is "11" and 9/16CH DVR is "00".)
- 2. For Synchronization with remote controller, on Remote Controller, Press "Cancel" button until power light is on, then press the ID selected above. (Example: If System ID is "12", press "Cancel" button until power light is on and then press "1" and "2")

AUTO-SWITCHING: Auto-switching interval is a function that allows a camera to move to next one at the interval set. (From 1 to 30 seconds can be specified.)

e.g.) Camera1 → 10 sec. → Camera2 → 10 sec. → Camera3 ...

SPOTOUT CHANNEL: Select a spot out channel.

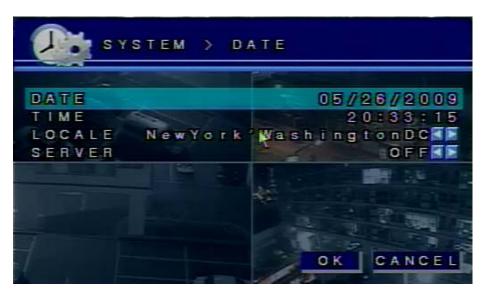
(Mode: Channel 1/2/3/4 and auto switch screen)

BUTTON BUZZER: Enable buzzer when button is pressed.

LANGUAGE: Changes language setting. (Default: English)

Support 16 languages: English, French, Polish, Russian, Spanish, Italian, Portuguese,
Greek, Hungarian, Danish, Czech, Deutsch, Finnish, Hebrew Swedish and Turkish.

■ Date



Date and time can be changed in different ways, User setting and synchronize clock with time server setting.

DATE: Set the date. [Month / Day / Year]

TIME: Set the time. [Hour : Minute : Second]

LOCALE: Select a local time zone.

SERVER: Set the time server to synchronize the time with.

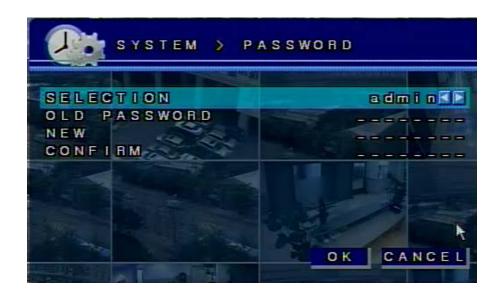
How to setup time server:

- 1. Select a local time zone on locale.
- 2. Select time server. If "OFF" is selected, time synchronization will not active.
- 3. Click "OK" button to apply date configuration.

System will reboot automatically after setup date and time.

Notice) To change the value, select text to change and scroll it by using middle mouse wheel.

■ Password



SELECTION: Select the user to change the password.

(admin / anonymous / user1 / user2 / user3)

OLD PASSWORD: Enter a old password to change password.

NEW: Enter a new password. (Max 8 numeric characters are available)

CONFIRM: Enter the new password again for confirmation.

■ Initialize



LOG: Select "ON" to initialize log data.

SETTING: Select "ON" to initialize setting of system configuration.

HDD: Select "ON" to initialize HDD data.

FACTORY: Select "ON" to revert to factory default.

This option initializes LOG, SETTING and HDD at once.

Configure each setting for initialize and press **OK** button to run initialization.

2.6. Camera Configuration

This chapter explains menu for configure camera settings.



"CAMERA" consists of 5 different groups; "CHANNEL", "SCHEDULE", "COLOR", "PTZ" and "AUDIO"

CHANNEL: Channel Video/Audio Setup menu to set ON/OFF video and audio.

SCHEDULE: Schedule Setup menu to set recording by schedule.

COLOR: Color Adjust menu to adjust brightness, contrast, saturation and hue value.

PTZ: PTZ configuration menu to setting PTZ device.

AUDIO: Audio configuration menu to assign. (HR09/16 Only)

■ Channel



TOTAL FRAME: shows current frame / total max frame when channel configuration is set.

There are two categories to setting channel configuration: COMMON / INDIVIDUAL

[COMMON]: Setting affects all camera channels.

CAMERA: Displays camera number to change settings.

Use buttons to move to the next channel.

AUDIO: Select audio recording condition of all cameras. (ON / OFF)

(Only **4CH DVR** supports this option: 1 CH audio)

RESOLUTION: Select recording resolution of all cameras. (D1 / Half D1 / CIF)

D1: Max 30fps(NTSC) / 25fps(PAL) Half D1: Max 60fps(NTSC) / 50fps(PAL) CIF: Max 120fps(NTSC) / 100fps(PAL)

DE-INTERLACE: Select interlace image process condition of all cameras (ON / OFF)

[INDIVIDUAL]: Setting affects each camera channels.

FRAME: Configure frame setting for each cameras

(**Notice!**: Sum of frames cannot exceed max total frame.

Frame cannot exceed value of event frame.)

EVENT FRAME: Configure frame setting for each cameras when event occurs.

(Notice!: Sum of frames cannot exceed max total frame.

QUALITY: Select level of video image quality of all cameras.

Very High, High, Normal, Low, Very Low, Network

("Network" value get lowest image quality but frequent remote view.)

■ SCHEDULE



Use buttons to determine cameras to set schedule.

Use IIII buttons to select day to set schedule.

The two digit numbers of column indicate 24 hours. (01~24)

The numbers of row indicate camera channels. (1~4)

There are 5 recording conditions to set recording schedule.

T: REC, Data will be recorded continuously.

E: Event REC, Data will be recorded when events (Sensor and Motion) are happened.

- -: NO REC, Data will not be recorded at any point in time.
- **S : Sensor**, Data will be recorded when sensor event is happened.

M: Motion, Data will be recorded when motion event is happened.

How to set recording schedule.

Select day by using **u** button to configure recording schedule.

Move selection to **Change All** icon (v) and press **OK** button or click **Change All** (v) icon to change all value of schedule sheet.

Move selection to specified time and press **OK** button or click **Time** to change column value of schedule sheet.

Move selection to specified channel and press **OK** button or click **Channel** to change row value of schedule sheet.

Move selection to specified schedule cell and press **OK** button or click **Schedule cell**, to change each value of point.

APPLY ALL: Apply specified values to all days

Press **OK** button to save changed color settings.

Press **CANCEL** button to cancel the changed color settings.

■ COLOR



CAMERA: Select a camera number to adjust the color settings.

BRIGHTNESS: Adjust the brightness of the camera image using the buttons.

CONTRAST: Adjust the contrast of the camera image using the buttons.

SATURATION: Adjust the color saturation of the camera image using the buttons.

HUE: Adjust the hue value of the camera image using the buttons.

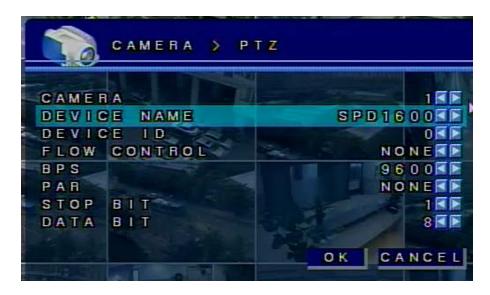
DEFAULT: Changes all values back to default values.

APPLY ALL: Apply specified values to all cameras.

Press **OK** button to save changed color settings.

Press **CANCEL** button to cancel the changed color settings.

■ PTZ



CAMERA: Select a camera number to configure PTZ setting.

DEVICE NAME: Select PTZ controller to configure by using the buttons.

DEVICE ID: Set PTZ ID by using the buttons.

FLOW CNTL: Set Flow Control value by using the buttons.

BPS: Set BPS(Bit per second) value of PTZ by using the buttons.

PAR: Set Parity of PTZ by using the buttons.

STOP BIT: Set stop bit of PTZ by using the buttons.

DATA BIT: Set data bit of PTZ by using the buttons.

(Notice!: It is not recommended to change Flow Control, Parity, Stop Bit, Data Bit)

Please refer to PTZ controller manual from PTZ manufacturer to get more information about PTZ setting.

How to Control PTZ

- 1. Select camera to control PTZ.
- 2. Click PTZ button () on the panel menu to open PTZ control menu. or Press PTZ button () on front key or remote controller.

■ PTZ Control Menu



CAM: Select PTZ camera by pressing buttons.

SPD: Specify PTZ control speed by pressing buttons.



Press arrow buttons to control direction of PTZ camera.

AUTO: Press "AUTO" button to move PTZ direction to auto position.

(Notice!: If camera doesn't support "AUTO" mode, it will not work.

Auto position can't be specified by DVR. It can be specified in PTZ camera.)



ZOOM: Control camera zoom in / out (- / +)

FOCU: Adjust camera focus in / out (- / +)

IRIS: Adjust camera Iris

EXIT: Press EXIT button to finish PTZ control

■ PTZ Preset / Tour Menu



How to open Preset / Tour menu.

1. Select camera to set preset or tour.

Click PTZ Preset / Tour button () on the panel menu to open PTZ Preset / Tour menu.



CAM: Select PTZ camera by pressing buttons.

Press arrow buttons to control direction of PTZ camera.

[PRESET]

SET: Press "SET" button to save preset (Up to 5 presets)

CLEAR: Press "CLEAR" button to clear saved presets.

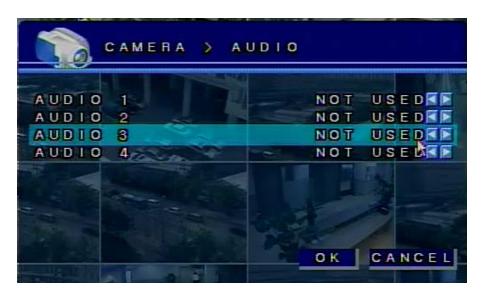
[TOURING]

START: Press "START" button to run tour by saved presets.

STOP: Press "STOP" button to stop tour.

Press **EXIT** button to finish PTZ Preset / Tour menu.

■ AUDIO



This Audio menu is available on 9CH/16CH DVR only.

AUDIO 1/2/3/4: Select a camera number to set audio

2.7. Event Configuration



"Event" consists of 3 different groups; "Sensor", "Motion" and "Video Loss" On this menu, devices can be set to respond to different events.

SENSOR: Set sensor event configuration.

(Set sensor type, alarm, alert and duration.)

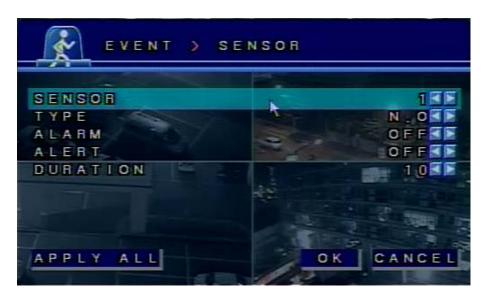
MOTION: Set motion event configuration.

(Set motion zone, sensitivity, alarm, alert and duration.)

VIDEO LOSS: Set video loss event configuration.

(Set video loss settings, alarm, alert and duration.)

■ Sensor



SENSOR: The sensor number to change settings.

Use button to move to next sensor.

TYPE: Set sensor type. (N.C: Normal Close Type / N.O: Normal Open Type)

ALARM: Set alarm settings. (ON / OFF, only effective when schedule mode is E or S)

!(**4CH DVR** supports only 1 alarm.)

ALERT: Alert is the beep inside the system that sounds in the case of event.

Set internal alert settings. (ON / OFF, only effective when schedule mode is E or S)

DURATION: Set duration value of beep sound when alert occurs. (1~10)

Changing value affects to all events.

APPLY ALL: Apply specified values to all sensors.

Press **OK** button to save changed sensor settings.

Press **CANCEL** button to cancel the changed event settings.

■ Motion



Motion is a function that enables DVR system to detect every movements or motions by comparing a frame with its previous frame.

CHANNEL: The channel number to change motion settings.

Use button to move to next channel.

MOTION ZONE: click button to set motion detection area.

Refer to next page to detailed instruction.

SENSITIVITY: Set sensitivity of motion detection (Low / Normal / High)

ALARM: Set alarm settings.

(ON / OFF, only effective when schedule mode is E or M)

! (4CH DVR supports only 1 alarm.)

ALERT: Set alert settings. (ON / OFF, only effective when schedule mode is E or M)

DURATION: Set duration value of beep sound when alert occurs. (1~10)

Changing value affects to all events.

APPLY ALL: Apply specified values to all channels.

Press **OK** button to save changed motion settings.

Press **CANCEL** button to cancel the changed motion settings.

■ Motion Zone



How to select motion detection zone:

- 1. Use mouse to specify detection zone.
- 2. Drag & Drop will change the property of area.(Selected / Unselected)

MODE: Shows current activation (Move / Selection / Unselection)

Clear Screen area: Selected motion detection zone.

Green Screen area: Unselected motion detection zone.

3. Right click to show the menu to select all / unselect all / save / exit.

SELECT ALL: Select whole area as motion detection zone.

UNSELECT ALL: Unselect whole area as motion detection zone.

SAVE: Save current selection and go out from motion zone screen.

EXIT: cancel current selection and go out from motion zone screen.

■ Video Loss



CHANNEL: The channel number to change video signal settings.

Use button to move to next channel.

MODE: Set video signal settings.

(ON / OFF, if mode is OFF, alarm and alert will not active.)

ALARM: Set alarm settings.

(ON / OFF, only effective when mode is ON)

!(4CH DVR supports only 1 alarm)

ALERT: Set Alert Settings.

(ON / OFF, only effective when mode is ON)

DURATION: Set duration value of beep sound when alert occurs. (1~10)

Changing value affects to all events.

APPLY ALL: Apply specified values to all channels.

Press **OK** button to save changed channel settings.

Press **CANCEL** button to cancel the changed channel settings.

2.8. Network Configuration

This chapter explains menu for configure network settings.



"Network" consists of 5 different groups; "TCP / IP", "PORT", "DDNS", "CMS" and "Event Filter"

TCP/IP: Setup TCP / IP settings.

(Sets IP type, Bandwidth, IP address, Gateway, Subnet Mask,)

PORT: Setup TCP / IP port to access by web and application.

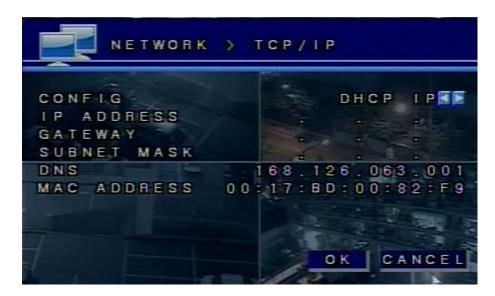
(Sets Web, Playback and live port)

DDNS: Setup Dynamic DNS server settings. (Sets DDNS mode, port, domain name and interval time)

CMS: Setup CMS server settings (Sets CMS mode, IP address and port)

EVENT FILTER: Specify events to send to CMS server.

■ TCP/IP



CONFIG: Set the IP type. (DHCP IP / STATIC IP)

IP ADDRESS: Set the IP address on "Static IP mode".

GATEWAY: Set the gateway address on "Static IP mode".

SUBNET MASK: Set the subnet mask address on "Static IP mode".

DNS: Set the DNS address on "Static IP mode".

!(Notice: If CONFIG is selected as "DHCP IP", "IP Address", "Gateway", "Subnet Mask" and "DNS" will be set automatically)

Press **OK** button to save changed TCP/IP settings.

Press **CANCEL** button to cancel the changed TCP/IP settings.

■ PORT



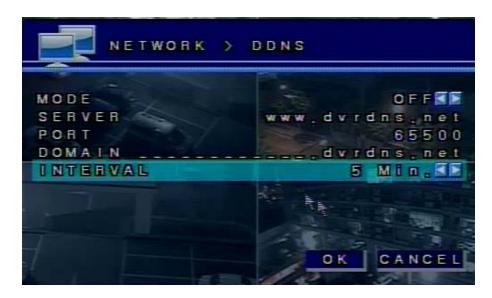
WEB: Set the web(HTTP) port to access through web browser. (Default: 80)

PLAYBACK: Set the playback port to access playback video through client software.

(Default: 9091)

LIVE: Live port to access live video through client software will be specified automatically when playback port is changed. (Default: 9092)

DDNS



DDNS is a service allowing a dynamic IP address to have a static domain name, so users can easily reach the IP address regardless of IP change.

MODE: Set the DDNS server mode as ON to use DNS server. (ON/OFF)

SERVER: Display address of DDNS server (www.dvrdns.net)

PORT: 65500 is port number for access DDNS server and cannot be changed.

DOMAIN: Once you registered an ID onto DNS Server, input ID.

INTERVAL: Select a proper time interval (1~60) so DVR system communicates with the DDNS server to brings IP address at the interval set.

How to register domain name to DDNS server:

- 1. Access" www.dvrdns.net".
- 2. Select language as "English".
- 3. Click link of "Registering New Domain".
- 4. Input domain name and click "Register" button".
- 5. Click link of "Updating IP address".
- 6. Input IP Address of DVR and click "Update" button.
- 7. Specify DDNS setting in the DDNS menu of DVR.



■ CMS



- 1. In DVR system, go to 'Menu > Network > CMS'.
- 2. Switch configurations as "ON" and specify server IP address. (CMS Server's IP address)
- 3. Default Port number is 9100 (Recommended not to modify default value).
- 4. Click **OK** button and exit menu to continue to event filter setting.

■ EVENT FILTER



To receive events from DVR, event filter would be configured in the menu.

- 1. Go to 'Menu > Network > EVENT FILTER'
- 2. Choose events to send and click **OK** button and exit menu to save configurations.

2.9. Information Configuration

This chapter explains menu for configure system information, firmware update and setting update.



"INFO" consists of 4 different groups; "INFORMATION", "SYSTEM LOG" and "F / W UPDATE" and "SET UPDATE".

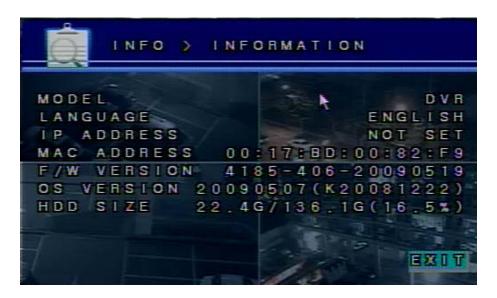
INFORMATION: Displays product information such as model name, IP address and etc.

SYSTEM LOG: Displays system log data.

F/W UPDATE: Running Firmware update is possible in "F/W UPDATE" menu.

SET UPDATE: Setting Backup / Update are possible in "SET UPDATE" menu.

■ Information



MODEL: The model name of the product.

LANGUAGE: Shows the language used in the product.

IP ADDRESS: Shows the IP address setting of the product.

MAC ADDRESS: Shows the Mac address setting of the product.

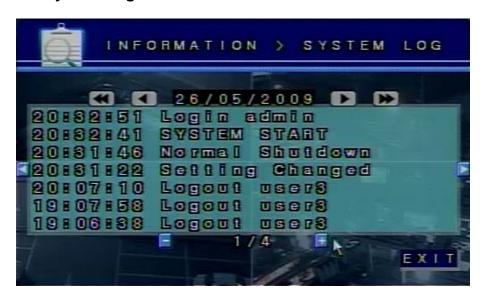
F/W VERSION: The version of the Firmware.

(Shows in order of F/W version – H/W Version – Build date)

OS VERSION: The version of the product. (Shows build date)

HDD SIZE: Shows HDD size info. : HDD Usage / Total HDD (Percentage of HDD usage)

■ System Log



System Log menu shows all of system related log.

- Displays first day of searched log.
- Displays previous day of currently searched log.
- Displays next day of currently searched log.
- Displays last day of searched log.
- -/+: Move to previous / next page of log data.

Log List: System Start, Setting Changed Normal Shutdown, Login, Logout, Disk Full, Abnormal Shutdown and No Video Signal.

■ F/W Update



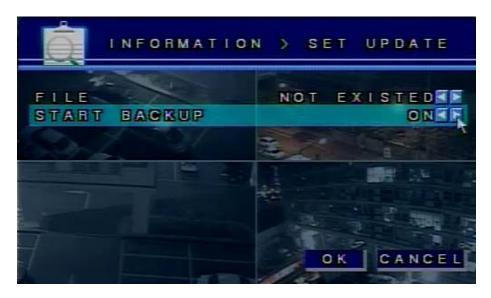
FILE: Select Firmware file to update.

(**Notice:** You can recognize its language and build date by file name)

How to execute Firmware Update

- 1. Put new "Firmware version" file into root folder of USB memory and plug in USB flash drive to front USB port of DVR.
- 2. Select firmware file to update and click "OK" button.
- 3. When the update is completed, DVR will reboot.

■ SET Update



How to backup current configuration.

- Plug in USB memory to front USB port of DVR
 (If USB memory is not plugged, "SET UPDATE" menu will not activate.)
- 2. On "START BACKUP", select "ON" by using button.
- 3. Click "OK" button to run backup current configuration.
- 4. When the backup is completed, save file will be copied to USB flash drive and then, DVR will reboot automatically

How to restore saved configuration.

- Plug in USB memory that backup file is saved.
 (If USB memory is not plugged, "SET UPDATE" menu will not activate.)
- 2. On FILE, Select saved File by using button.
- 3. Press "OK" button to restore saved configuration.
- 4. When the restore is completed, DVR will reboot automatically.

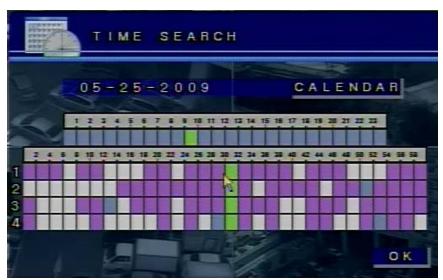
2.10. Search Features



To activate search mode, press button in the panel menu or press "Search" button on the remote controller.

- Time Bar: Display bar to find search data of date and time.
- Event Search: Search system related event.
- Live: Change to real time live mode.
- Backup: Backup image data from saved video.
- Frame play: move to previous one frame / next one frame.
- Fast play: play video frames as fast backward / fast forward (Up to 128 times)
- Play: play video frames as backward / forward.
- Stop: Stop playback.
- Full screen button: Enlarges the selected camera as full screen view.
- Split screen button: Shows split screen view as Quad

■ Time Bar / Calendar



Time Bar: Select time and then click "OK" button to continue search.



Calendar: Select date and then click "OK" button for return to "Time Bar."

Time Search Steps:

- 1. Press putton to open Time Bar.
- 2. Click CALENDAR button to open calendar: Select date.
- 3. Return to Time Bar and select hour and minute to search.
- 4. Click "OK" button to continue playback

■ Event Search



CAMERA: Select a camera to search events.

(CAMERA1 / CAMERA2 / CAMERA3 / CAMERA4 / CAMERA ALL)

Event list: Shows Motion / Sensor / No video Signal events.

Event Search Steps:

- 1. Press 🥦 button to open Event Search menu.
- 2. Click Event list on the screen to select event time.
- 3. Click "PLAY" button to exit and play selected event time.
- 4. Click "EXIT" button to close Event Search menu

■ Backup



DEVICE: Selects backup device (USB / CD-R / CD-RW / DVD-RW).

CAMERA: "SET" button to select cameras to backup. (Selects up to 4 channel)

START RECORD: Shows start time of recorded data.

END RECORD: Shows end time of recorded data.

START BACKUP: Set the start time of backup data.

END BACKUP: Set the end time of backup data.

Backup Steps:

- 1. Select backup device.
- Click "SET" button to select cameras to backup
- 3. Set the start time and end time of backup data.
- 4. Click "OK" to start backup procedure.
- 5. When backup procedure begins, data size calculation and backup data saving will be executed automatically.

(Notice: If free size of USB drive is not enough to save in, backup procedure will be cancelled.)

While backup, backup progress status will be shown as below and live display can be accessed.

Backup progress status:

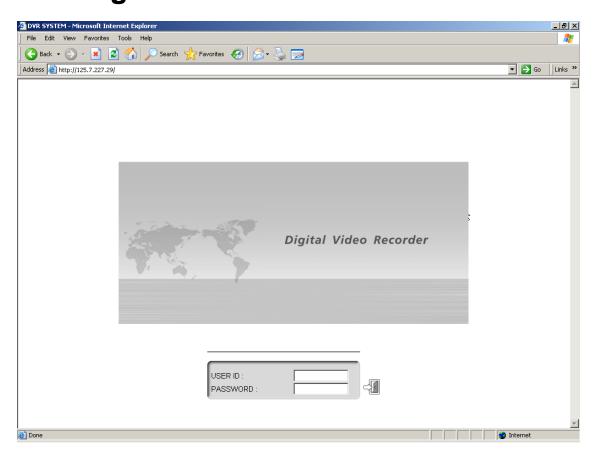
CHAPTER 3 WEB DVR

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Menu may change for enhanced performance without notice.

3.1. Login



- 1. Type in an IP address of DVR server by internet explorer.
- 2. Install ActiveX control first to get image.
- 3. Input User ID and password and then Log in to control mode of Web DVR.

Authority of User

Admin: have all rights; Live, Search and Setting is available

(Multiple accesses are not allowed)

User1, User2, User3: have rights; Live, Search is available

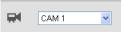
(Multiple accesses are not allowed)

Anonymous: Only live view is available

3.2. Live Mode



(Full Screen Display / 1 / 4 / 9 / 16 CH Display)



Snapshot

Settings

Use Audio

: Select a camera to display or control.



Snapshot: Click to take a snapshot from the live screen.

Settings: Click to set DVR configuration.

Use Audio: Click to enable or disable live audio.

Zoom: Zoom in, Zoom out

Iris: Control iris

Focus: Focus in, Focus out



Logout

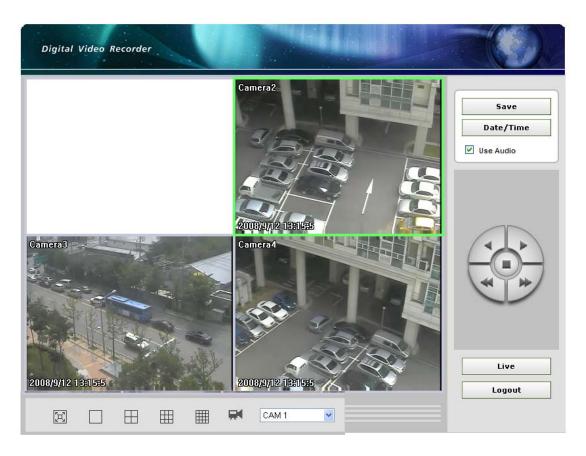
Pan/Tilt Control

Speed: set the speed of PTZ control

Search: Click to load search mode

Logout: Click to logout of WEB DVR

3.3. Search Mode

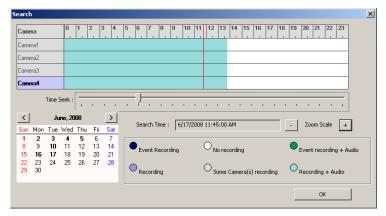




Save: Click to saves data to PC (AVI, BMP and JPEG format)

Date/time: click to open search window to select date and time.

Use Audio: tick to enable audio.





Playback Control Button:

(Play Backward, Play Forward, Fast Backward, Fast Forward, Stop)



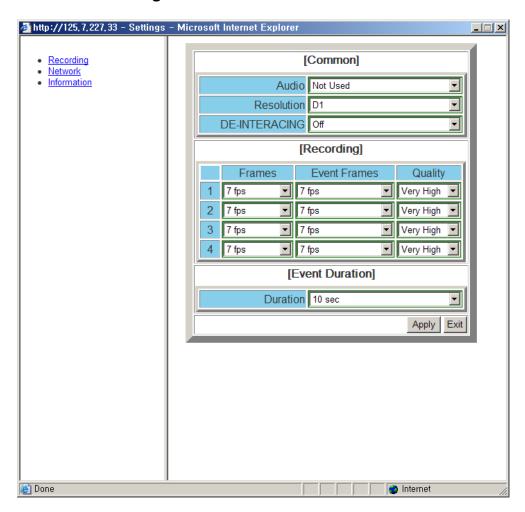
Live: Click to loads live view mode **Logout:** Click to logout of Web DVR

3.4. Setting Mode

Click ____settings ____ button to open Settings configuration menu. (Notice!: Only admin user can access setting mode on web client software.)

Setting menu may differs between HR04 and HR09/16

■ 4CH - Recording



Configure recording setting of DVR: Common / Recording / Event Duration

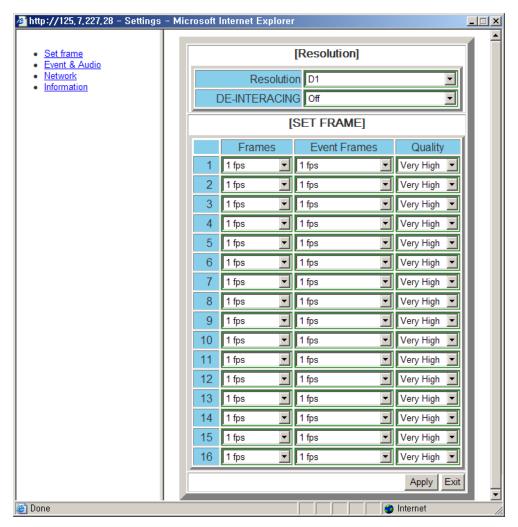
Common: Setting affects all cameras of DVR.

Configure Audio / Resolution / DE-INTERLACING

Recording: Specify setting of each camera: Frames / Event Frames / Quality

Event Duration: Specify duration setting when event happen.

■ 9CH/16CH - Set Frame

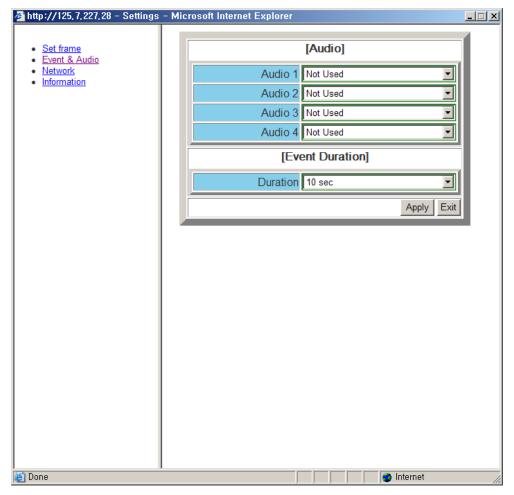


Configure frame setting of HR 09/16: Resolution / Set Frame

Resolution: Specify resolution and De-Interlace mode.

Set Frame: Specify setting of each camera: Frames / Event Frames / Quality

■ 9CH/16CH - Event & Audio

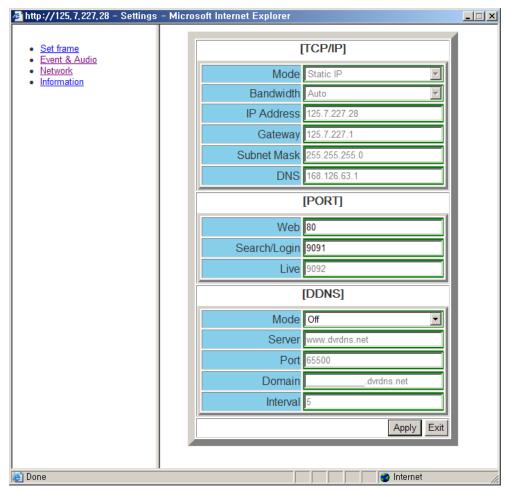


Configure setting of HR 09/16: Audio / Event Recording / Event Duration

Audio: Specify audio for each camera

Event Duration: Specify event duration for Sensor / Motion / Video Loss

■ 4CH/9CH/16CH - Network



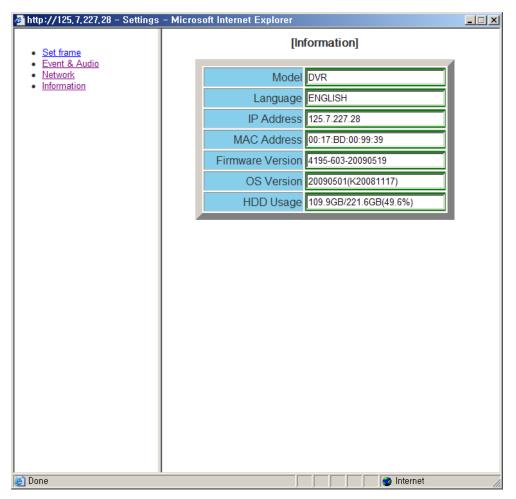
Configure Network setting of HR System: TCP/IP / PORT / DDNS

TCP/IP: Shows current TCP/IP Setting

PORT: Specify ports of web and search/login

DDNS: Specify DDNS setting

■ 4CH/9CH/16CH – Information



Display DVR System information

Show Model name, Language, IP Address, Mac Address, Firmware, OS Version and HDD Usage.