

Advanced H.264 Standalone DVR



SZT-8008 / SZT-8016 Series

User Manual

V2009.05.06

Service Warranty

- * The purchasing date and shop stamp shall mark on the warranty card for your advantage while purchase the product. The product is 1 year warranty for free repair and maintenance services effects from the date of purchased. Be sure to provide the warranty card while sending the product for repair or maintenance services.

The warranty shall NOT apply if the defect was caused through any of the following:

- * Nature Disaster or artificial damage. (Ex: Typhoon, Earthquake, Flood, Electronically accident, rats bit...etc.)
- * Damage or breakdown by faulty usage, self or authorize others to re-equip product, or reparation with non-authorized person from our company .
- * Damage or breakdown by location movement after product installation.
- * Product breakdown by outer reason. (Ex: Video/Audio recording tape, aerial...etc.)
- * Any reparation or adjustment service will be requested some charges after warranty period. (Basic travel fee...etc.)
- * Keep the warranty card completely. There is no warranty if the warranty card records unreality, blank, ripped, damaged, altered, unrecognized, or unauthorized by agent.

Important notice and prevention

- DO NOT hard stumble or shake the machine.
- DO NOT place the machine on the unstable stands or tables.
- DO NOT place the machine near water or any moist place. Set the machine in ventilate place.
- Check all the usage type of power before connecting power to the machine and operating the system.
- Remove the power plug before disassemble the cover of machine if clearance is necessary. DO NOT use liquid or spray cleaner.
- POWER OFF the machine before any installation or un-installation accessory (except USB device).
- DO NOT cover the fan under machine to obstruct air ventilate.



This sign is a reminder of any important operation and maintenance (Reparation) instruction in user manual.



This sign is a reminder of parts of product hardware exist non-protection of “Dangerous Electronic” and strong enough to cause electronically injure.

Important Information

Please read and follow all the instruction and warning in this manual before continue operate. Keep this manual and the purchased receipt for future reference and warranty service. Check the content hardware equipments and accessories after open the package. If there is any missing or damaged part, DO NOT install or continue operate this product and contact with agent for further support.

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I. Product Introduction

The advanced H.264 compression GUI interface standalone DVR combines the long-term video/audio recording, screen splits, video server, and more functions to one recording operation system machine.

Excellent three operational functions provide user to watch live view video or playback record data, and also able to remote the system by connecting through IE while recording. Additionally, efficient management to view the recorded video by selecting desire date and time or choose the event from event lists.

Advanced Functions:

- 3 operational functions: Live view/recording, Playback, Remote network
- Support 2 SATA hard disks
- H.264 high quality video compression
- Support multiple languages
- Support multiple types of Dome camera protocols
- Pre-alarm record
- Motion detection marker
- Surveillance and control through LAN or Internet

Humane Technology:

- ezBurn™ for quick video export
- ezRecord™ for quick recording setting
- Friendly GUI
- USB mouse
- Infrared remote controller

8008 / 8016 H.264 Standalone DVR



Hardware equipment and accessories:

H.264 compression standalone DVR *1

DC12V Adapter *1 Power box *1

Remote Control *1 Mouse *1

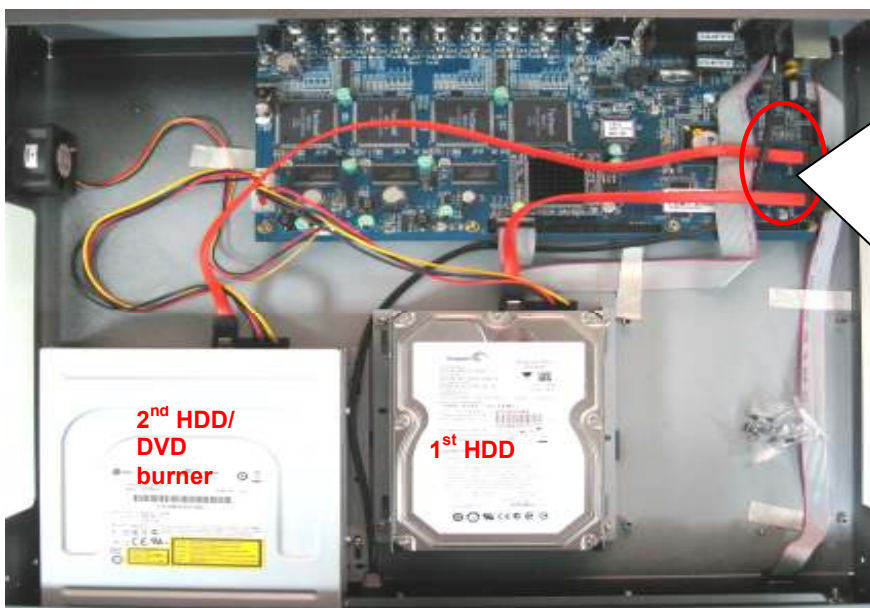
CD *1 (User manual / Installation guide / CMS software / 3G mobile Software)



DVD-R/W : Support LG

Hard Disk : Support HITACHI · SEAGATE · WD

Hardware Installation:



SATA SLAVE
for 2nd HDD or
DVD burner

SATA MASTER
for 1st HDD

DVR Installation

Place and install the DVR in suitable location and power off before connecting any hardware or accessory; the location should be air ventilate to avoid over heat of DVR. The maximum temperature allowance is 40°C.



NOTE: DO NOT REMOVE the rubbers underneath the DVR and keep enough space for air ventilate.

Select Recording Format

The switch for selecting NTSC or PAL recording format.



Rear Board Connection

Main Monitor (BNC/ VGA)

DVR supports VGA and BNC output outlet to connect to Main monitor. The main monitor is able to show in full screen or splits screen view for live/playback view status.



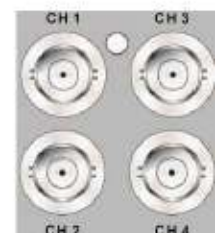
Call Monitor (BNC)

Connect to Call Monitor to activate both 2 monitors screen view.



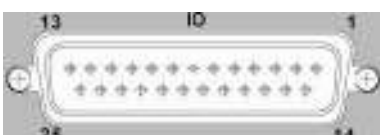
Video Input

16 BNC outlets to connect cameras visual video input.



Alarm I/O & RS485

Supports Alarm I/O and RS485 connection port.



Alarm I/O & RS-485 Connector definition

8 CH series 、 16 CH series :

Connector	Definition	Connector	Definition	Connector	Definition
1	Alarm out_Open White	10	Alarm in 5 Yellow B	19	Alarm in 10 (only 16 CH) Green C
2	Alarm out_COM Brown	11	Alarm in 6 Green B	20	Alarm in 11 (only 16 CH) Blue C
3	RS485 D+ Red	12	Alarm in 7 Blue B	21	Alarm in 12 (only 16 CH) Purple C
4	RS485 D- Orange	13	Alarm in 8 Purple B	22	Alarm in 13 (only 16 CH) Yellow D
5	N/A	14	Alarm out_Close Gray	23	Alarm in 14 (only 16 CH) Green D
6	Alarm in 1 Yellow A	15	Alarm out_GND Black	24	Alarm in 15 (only 16 CH) Blue D
7	Alarm in 2 Green A	16	N/A	25	Alarm in 16 (only 16 CH) Purple D
8	Alarm in 3 Blue A	17	N/A		
9	Alarm in 4 Purple A	18	Alarm in 9 (only 16 CH) Yellow C		

LAN 10/100M Outlet (RJ-45)

LAN connector



USB Outlet (x1)

DVR rear board supports one USB 2.0 outlet for user to connect mouse



Power Outlet

Supports DC 12V 5A voltage power outlet



Audio Input

Connector with audio record equipment



AUDIO IN Connector Definition

Connector	Definition	Connector	Definition	Connector	Definition	Connector	Definition
1	Audio in 1	8	Audio in 15 (only 16 CH)	15	Audio in 4	22	GND
2	Audio in 3	9	GND	16	Audio in 6	23	GND
3	Audio in 5	10	GND	17	Audio in 8	24	GND
4	Audio in 7	11	GND	18	Audio in 10 (only 16 CH)	25	N/A
5	Audio in 9 (only 16 CH)	12	GND	19	Audio in 12 (only 16 CH)		
6	Audio in 11 (only 16 CH)	13	N/A	20	Audio in 14 (only 16 CH)		
7	Audio in 13 (only 16 CH)	14	Audio in 2	21	Audio in 16 (only 16 CH)		

Audio Output – Main Monitor and Call Monitor

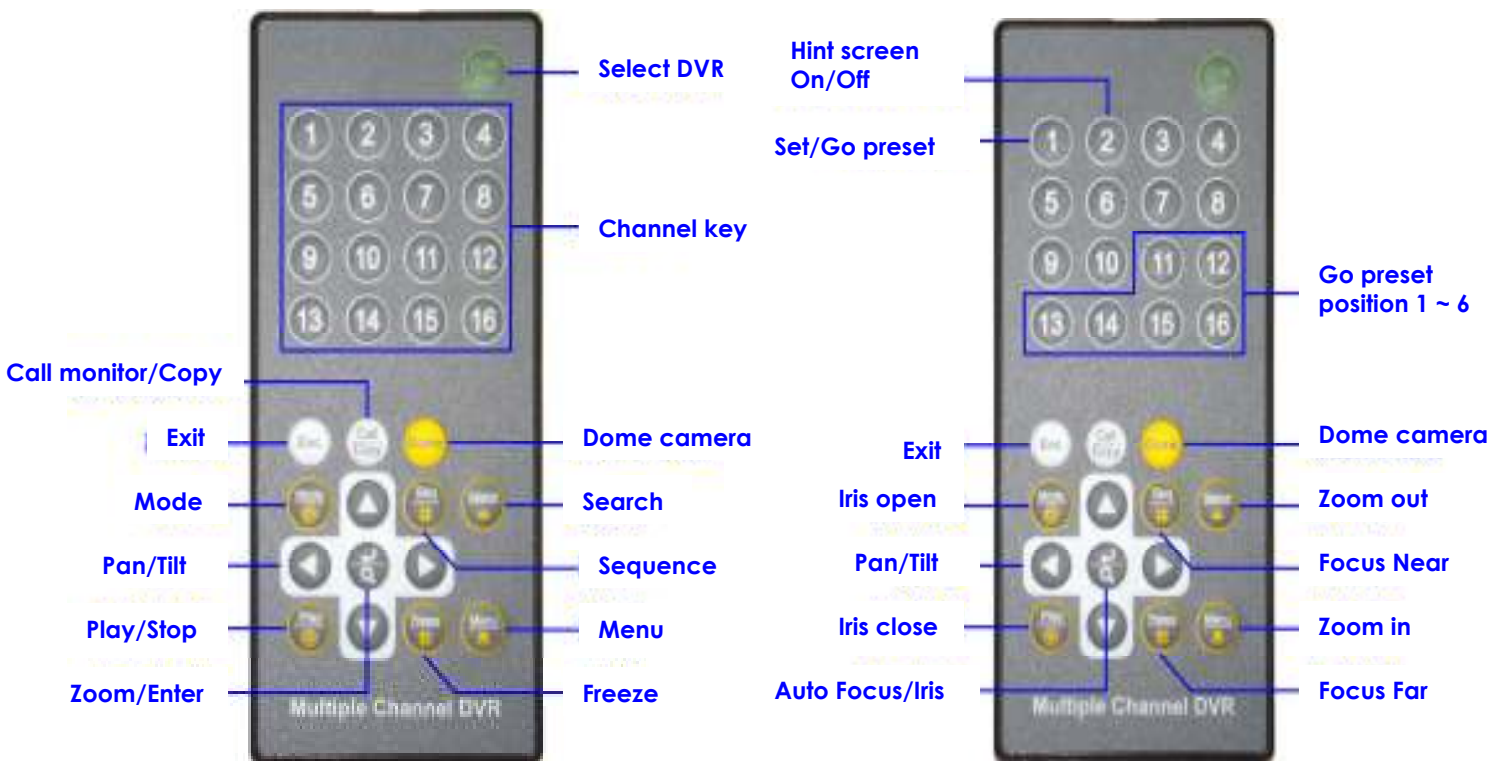
RCA connector connects DVR and the speaker; “Main” output the main monitor audio and “Call” output the call monitor audio.



Infrared Remote Controller (DVR main system control mode and Dome camera control mode controller buttons description)

DVR Main System control mode

Dome camera control mode



The remote controller buttons are basically same as the buttons on the DVR front panel.

The only difference is that remote controller has <DVR SEL> button at the top right side corner. Shift and control multiple DVR by pressing this button.

Every remote controller can setup and control maximum 16 DVR. Setup each DVR unit ID number differently before setup the remote controller.

Press the “Menu” on the DVR front panel to enter OSD system and edit unit ID number. Setup path <Menu> → <SystemSetup> → <RS485 Setup> → <Unit ID>.

Edit DVR unit ID to a number between 224 ~ 239 then confirmed and exit OSD setup menu.

II. DVR Basic Usage and Turn On/Off

DVR ON: DVR plug the power box (within the shipping carton) will be boot automatically.

Color bar and system check information pop up on the monitor which will be vanished after DVR is completed.

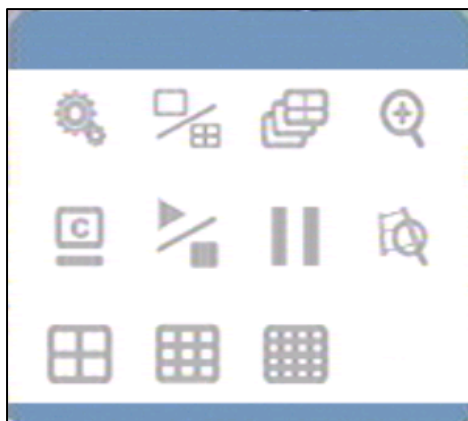


Hard disk drive will be formatted automatically.

DVR System Usage

Press <MENU> on the front panel / remote controller or right click on the mouse to enter OSD configuration

★OSD Setup MENU by right click on the mouse, (left click as “OK”, right click as “cancel”, the wheel as “change parameters”)



: MENU



: Split Screen



: Sequence



: Zoom



: Call Monitor (pop-up)



: Play /Stop



: Pause



: Search recording file



: 4 split screen




: 9 split screen



: 16 split screen

Power off while the DVR system is operating

Press MENU key or right click on the mouse, insert the password of the administrator for entering the OSD configuration, Select  (Power off) in the manual and press ENTER key for option below:

Power Off	
1. Power off	Yes
2. Restart	Yes

<Power off>

To turn off the DVR during the operating, do not take off the power adapter and power jack until the “you can safely turn off DVR now!” sign show up.

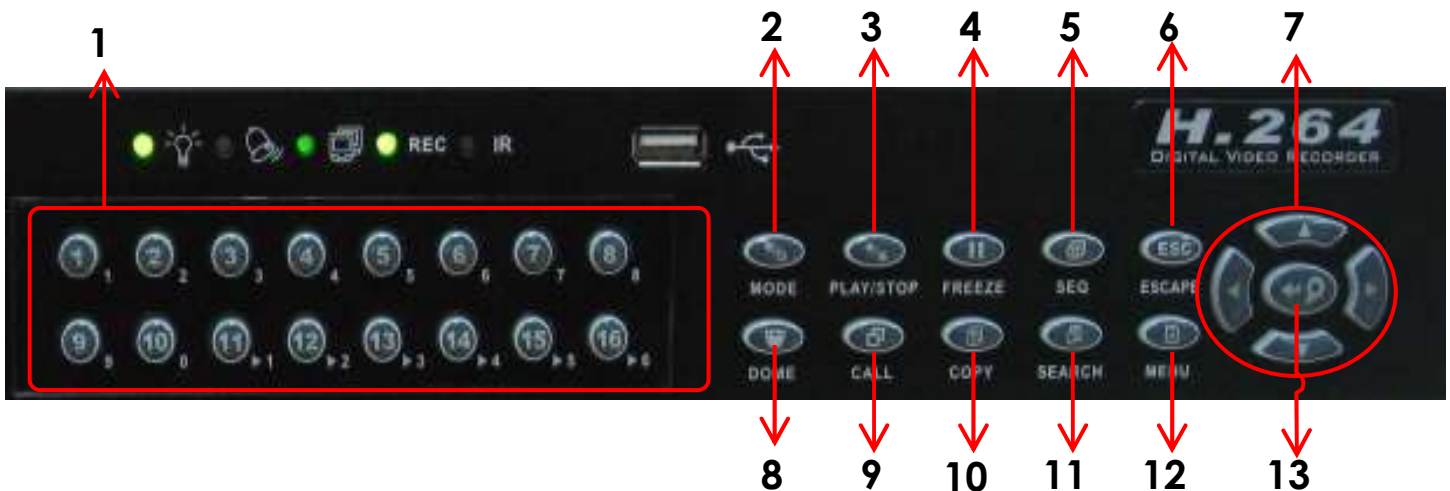


DVR power off: please refer to the instruction by avoiding damage the DVR.

<Restart>

To restart the DVR; Color bar and system information will pop out until the DVR is ready to record

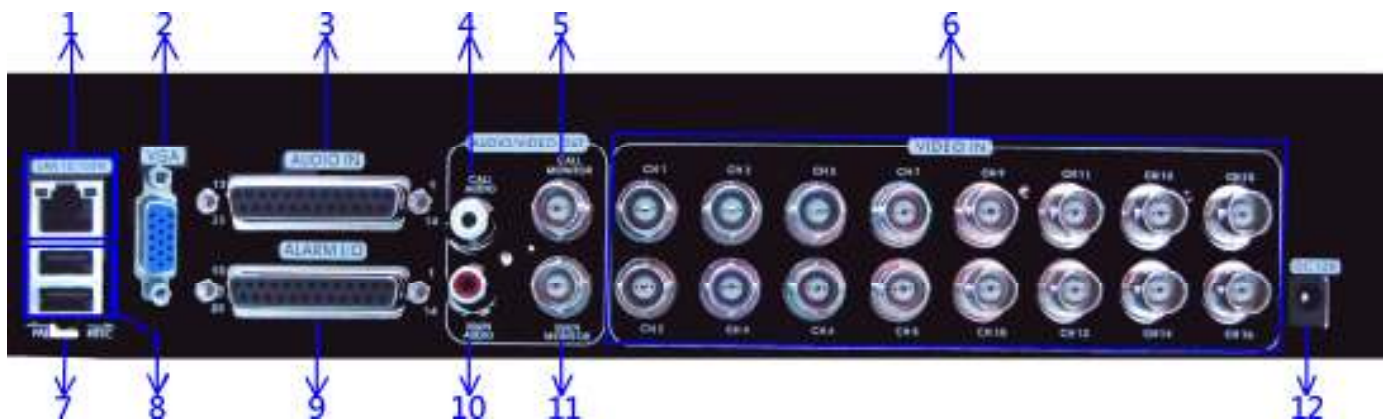
III. Front Panel




1	Channel Button (1~16 ch)	1. full screen for live view and playback 2. Press number "1" ~ "10" button for inserting information 3. In PTZ mode "1" button means Set/ Preset; "2" button mean "hide" / "display" PTZ ID; "11"~ "16" buttons directs to PTZ "1" ~ "6" position
2	MODE	Adjust full screen 2x2 、 3x3 、 4x4 display
3	PLAY / STOP	Switch display between live view / playback
4	FREEZE	Press FREEZE button while live view / playback. The image will be stopped
5	SEQ	Full screen, 2x2 、 3x3 sequence display
6	EXIT (ESC)	Cancel / exit
7	Up, down, left, right ↑↓←→	1. Adjustment under Zoom Mode 2. In OSD manual setting , press button to enter / adjust configuration .
8	PTZ (Dome) Control	PTZ control panel
9	CALL MONITOR	Enter sub monitor setting, adjust camera display / sequence
10	COPY (backup)	In playback, press button for (ezBurn™) function
11	SEARCH	Date / Time / Event searching for footages
12	MENU	OSD main setting page .
13	ENTER / ZOOM	1. OSD manual setting, press ENTER to select and save setting 2. In live view, press ENTER to view image x2; press again return to default 3. After image is zoomed, use mouse / control panel to emphasize area

***Support USB-mouse control**

IV. Rear Panel Icon



1	LAN 10/100M (RJ-45)	The DVR is capable of networking. Once the unit is connected to the LAN network, users can remotely access the unit through the remote software on a PC.
2	VGA Monitor	Monitor support VGA
3	Audio input	15 PIN D-sub provided for audio input which connects to the DVR and sound received equipment.
4	Call Monitor Audio output	Call monitor audio output RCA connect to the DVR and speaker
5	BNC Sub-screen	Use BNC connector to the sub monitor for camera display sequence and event pop out function
6	BNC image input	Support 8 ch / 16 ch video input
7	Video Format	 Video format setting
8	USB connector 2.0	Support USB 2.0 Mouse
9	Alarm I/O & RS-485	In order to connect to related equipments, an alarm I/O and a RS485 connector are provided on the rear panel of the DVR.
10	Main Monitor Audio output	Audio output RCA from main monitor is used to connect the DVR and amplifying devices such as speaker
11	BNC Main Monitor	Main monitor can connect into VGA connector
12	Power Input	Please use the provided cable and adaptor to connect the DC 12V port of the DVR

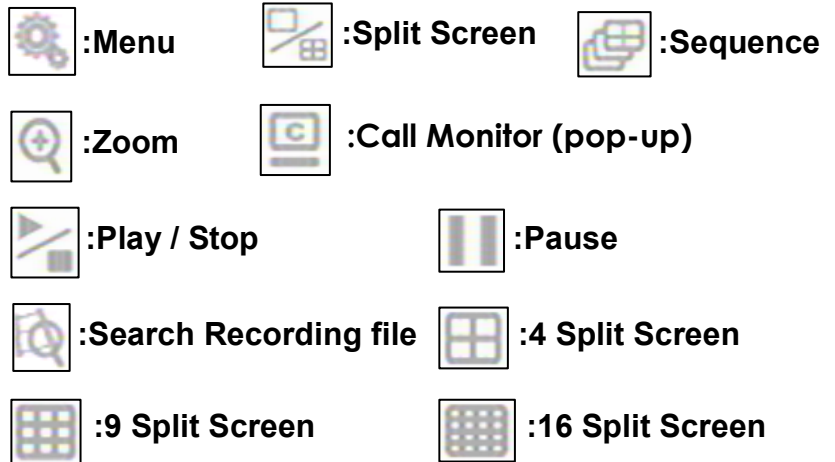
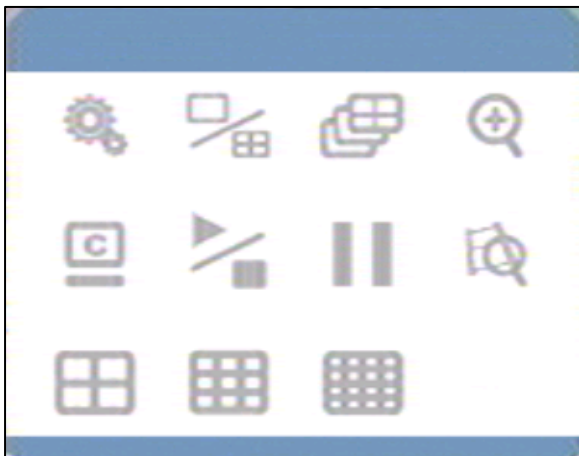
USB Mouse Button:

Button	Left Click Mouse	Mouse Wheel	Right Click Mouse
Function	Select / O.K	Adjust settings	Cancel / OSD Main Menu

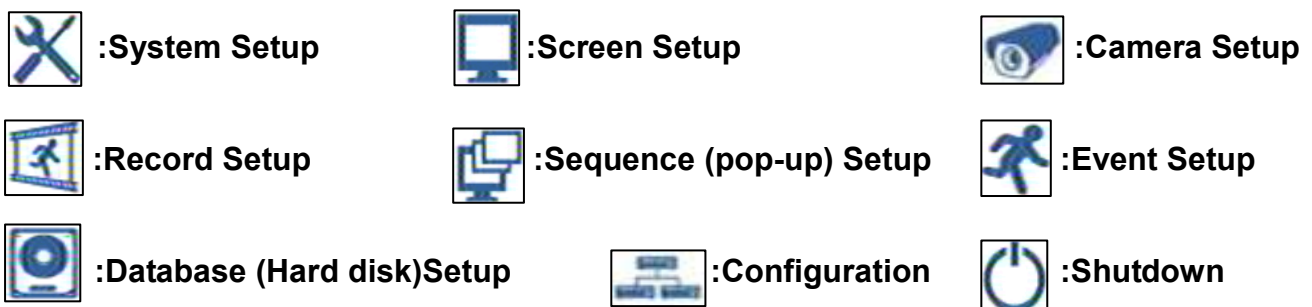
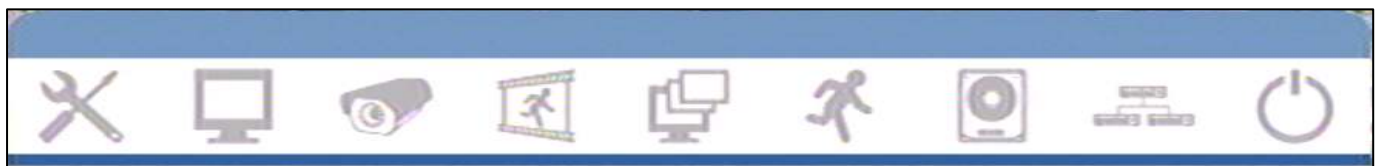
V. Basic Settings

★ OSD Menu

(OSD setup menu by right click on the mouse, **left click** as “OK”, right click as “Cancel” , **the wheel** as “Change parameters”)



◆ Menu Description



1. System Setup



1.1 Version



1.1.1 Model Name.

1.1.2 **Video System:** Shown the present format of video visual.

1.1.3 **Hardware:** Shown the version of hardware.

1.1.4 **Software:** Shown the version of software.

1.1.5 **MAC Address 1:** MAC (Media Access Control) address of the Network card.

1.1.6 **Software Upgrade via Local Device:** able to use USB flash drive to upgrading software.

1.2 Language

1.2.1 **Support:** Traditional Chinese, English, Simply Chinese, Arabic, Portuguese, French, Italian, German, Spanish, Russian, And Japanese.

1.3 Date/Time



1.3.1 **Date:** Date setting

1.3.2 **Time:** Time setting

1.3.3 **Date / Time display:**

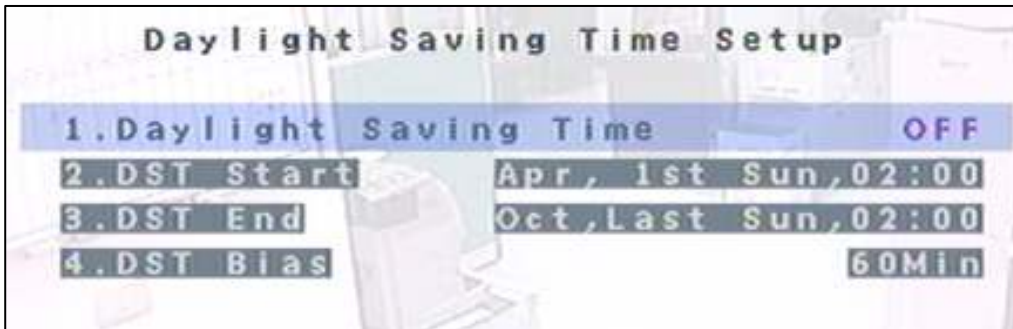
- None: Not to display Date/Time.
- 1 row: Display Time/Date in 1 row.
- 2 row: Display Time/Date in 2 rows.

1.3.4 **Date display Mode:** Adjust date shown as **y/m/d, d/m/y, or m/d/y**

1.3.5 Time display Mode: Adjust date shown as **12 HR mode or 24 HR mode.**

1.3.6 Date/Time Order: To select the order of **Date** and **Time** which display on the bottom of screen.

1.3.7 Daylight Saving Time (DST) Setup



※ Daylight Saving Time (Summer Time)

Summer daylight time is earlier than winter, so adjust life activity time 1 hour earlier to save electronic illumination in summer time. (The area of enforcing daylight saving is based on the regulation of every country's government.)

▷ Daylight Saving time:

- **On:** To use the DST function. (Because of time is 1 hour faster than the standard time, the system needs to format the hard disc, and create a new database.)
- **Off:** Turn off this function.

▷ **DST Start:** Setups start time of DST.

▷ **DST Ends:** Setups ending time of DST.

▷ **DST Bias:** Setups to advance time of DST.

1.4 Unit Name

▷ Default unit name is DVR, and is able to click the mouse on screen channel keys to change the English name.

1.5 User Management



1.5.1 Password Protection:

- **On:** Enable DVR system access ID password verification.
- **Off:** Disable DVR system access ID password verification.

1.5.2 Account Setup: 8 IDs including “admin” available.

Account	ID	PWD	Authority
admin	Edit	Edit	Level 8
user	Edit	Edit	Level 4
user1	Edit	Edit	Disable
user3	Edit	Edit	Disable
user4	Edit	Edit	Disable
user5	Edit	Edit	Disable
user6	Edit	Edit	Disable
user7	Edit	Edit	Disable

▶ **ID Edit:** Setup ID name (ID “admin” name is NOT able to edit) , and is able to click the mouse on screen channel keys to change the ID name.

▶ **PWD Edit:** Password setup, and is able to click the mouse on screen channel keys to change the password.

▶ **Authority:** Setup the activate authorization level of every user. The authorization level is from **Level 1~Level 8**, higher level with higher authority to maintain the system. (“admin” authority default is **Level 8** and NOT able to edit.) Use the mouse wheel to select user’s authority level and “Disable” will close the user’s operating function.

1.5.3 Authority Setup:

Item	Authority
Playback/Search	Level 4
Dome Control	Level 4
Call Control	Level 4
Export Data	Level 4
Menu Access	Level 4
System Setup	Level 8
Monitor Setup	Level 8
Camera Setup	Level 8
Event Setup	Level 8
Database Setup	Level 8
Configuration	Level 8
Text Setup	Level 8
Shutdown	Level 8

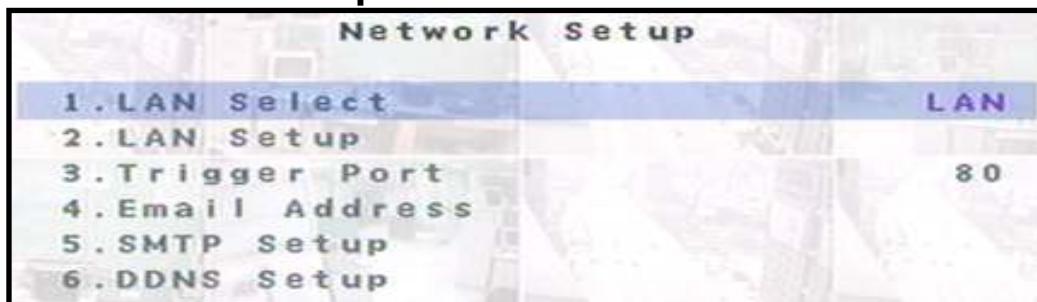
* There are 15 items for to setup the authority on levels from Level 1 ~ Level 8. The users are able to activate the items once their authorization levels has been setup as same as Item Authority Level or higher. If the item authority setup as “Disable” then no need to have ID to activate the function. (Menu Access CANNOT be setup as “Disable”.)

1. Play back / Search	6. System Setup	11. Event Setup
2. Dome Control	7. Monitor Setup	12. Database Setup
3. Call Control	8. Camera Setup	13. Configuration
4. Export Data	9. Record Setup	14. Text Setup
5. Menu Access	10. Sequence Setup	15. Shutdown

1.5.4 Load Default Setting:

- Yes: Restore “Account Setup” and “Authority Setup” to default setting.
- No:

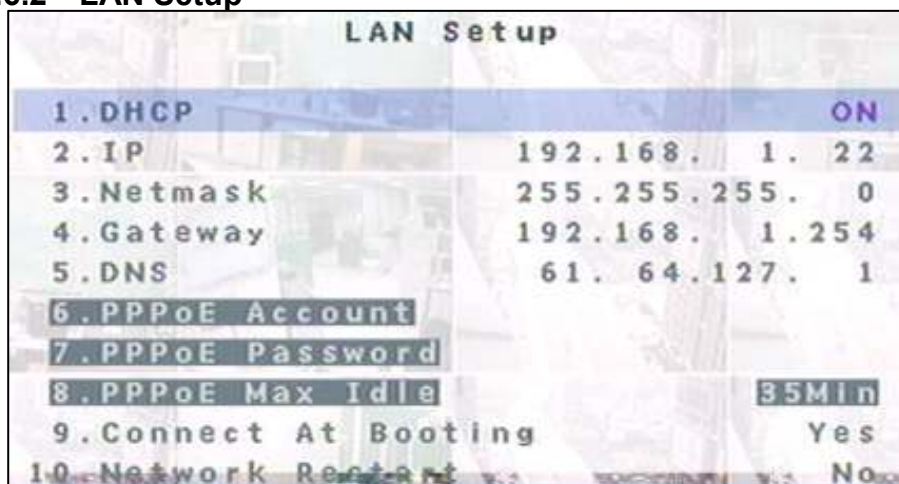
1.6 Network Setup



1.6.1 LAN Select

- **LAN:** Connect to internet through DHCP Router.
- **PPPoE:** Connect to internet through PPPoE (Point-to-Point Protocol over Ethernet) with DSL, or CABLE MODEM.
- **None:** Close internet window.

1.6.2 LAN Setup



▶ DHCP

- **On:** To get a DHCP (dynamic IP) automatically, no need to setup IP manually.
- **Off:** Key in the IP, net mask, gateway, and DNS address which provided from ISP (Internet Services Provider.)

▶ **IP:** Press number buttons on the panel to fill in IP address after select.

▶ **Net mask:** Press number buttons to fill in net mask address.

▶ **Gateway:** Press number buttons to fill in gateway information.

▶ **DNS:** Press number buttons to fill in DNS address.

▶ **PPPoE Account:** Click on key channels on screen by using mouse to fill in PPPoE internet connecting ID.

▶ **PPPoE Password:** Click on key channels on screen by using mouse to fill in PPPoE internet connecting password.

▶ **PPPoE Max Idle:** Maximum idle time of PPPoE internet connecting time. Able to setup from 0 ~ 600 minutes. Setup "0" as to disable idle time restrict.

▶ **Connect at Booting:**

- **Yes:** Automatically connect to Internet after DVR turns on.
- **No:** Not to connect to Internet after DVR turns on.

▶ **Network Restart:**

- **Yes:** Reconnect to Internet.
- **No:** Disable this function.

1.6.3 Trigger Port

DVR main system provides the need of port from remote connection which default sets as 80 ports. Use mouse wheel to adjust the port number.

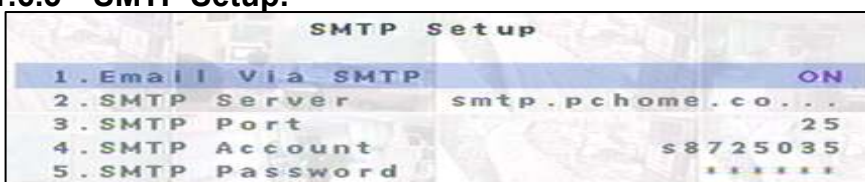
※ Ex: Web server port No. set as 81, DVR IP address is 219.84.190.26

Remote connect the DVR IP address will be **http://219.84.190.26:81**

1.6.4 Email Address: Click on key channels to fill in Email account for DVR system to send the message.

Email address and SMTP server need to be setup CORRECTLY to use the [Email Notice] function.

1.6.5 SMTP Setup:



▶ Email Via SMTP

- **On:** Enable **SMTP** mail sending function.
- **Off:** Disable this function.

▶ **SMTP Server:** Fill in **SMTP Server** address by clicking on key channels after select.

▶ **SMTP Port:** **Default as 25 ports, DO NOT change it.**

▶ **SMTP Account:** Click key channels to fill in SMTP verification account.

▶ **SMTP Password:** Click key channels to fill in SMTP verification password.

1.6.6 DDNS Setup:



▶ Enable DDNS

- **On:** Enable the setup DDNS functions.
- **Off:** Disable this function.

▶ **Host Name:** The name shall be the network name while “Registering DDNS”.

The website will be: **http://(host name).ddns.iview-ddns.com** after registered.

▶ **DDNS Port:** This port number needs to be the same as connection port in “Internet Setting”, and DDNS will connect to settled port.

▶ **Submit/Update:** Submit and update with DDNS server when changing the “host name” or “DDNS port”.

▶ ezDDNS:

- **On:** “Host name” will be provided by DDNS server automatically.
- **Off:** Disable this function.

1.7 RS485 Setup



1.7.1 Unit ID: The Unit ID number needs to be from **224 ~ 239** to represent the remote match setting code **1 ~ 16**.

DVR Unit ID	224	225	226	227	228	229	230	231	232	233	234	235	236	237	238	239
Remote match setting code	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16

※ Setting way of remote controller: Press  button + press “**match setting code**”

1.7.2 Baud Rate: Needs to setup based on the Baud Rate of “Speed Dome Camera”.

1.7.3 Bits: Needs to setup based on the Bits Rate of “Speed Dome Camera”.

1.7.4 Stop: Needs to setup based on the Stop Rate of “Speed Dome Camera”.

1.7.5 Parity: Needs to setup based on check of Parity of “Speed Dome Camera”.

1.8 Audio Output / Key Beep



1.8.1 Audio Output:

Click and zoom the audio recorded channel will output the recorded sounds captured from microphone.

- **Live/PB:** Output the recorded sound for Instant live surveillance and Playback recorded files.
- **Maintain Live:** Only output the surveillance live audio.
- **None:** Not output the audio.

1.8.2 Key Beep:

- **On:** To have “Beeping” sounds when using the main system panel or pressing the key button on the remote controller.
- **Off:** Turn off the key beep function.

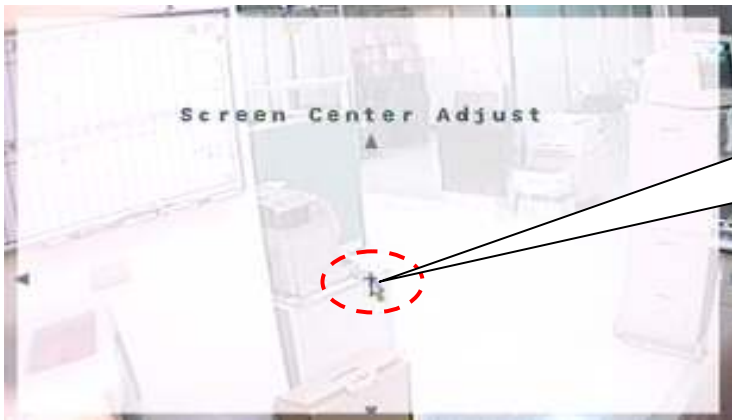
2. Monitor Setup



2.1 Show Monitor Title:

- **Yes:** To display all camera names on the screen.
- **No:** Not to display camera names on the screen.

2.2 Screen Center Adjust:



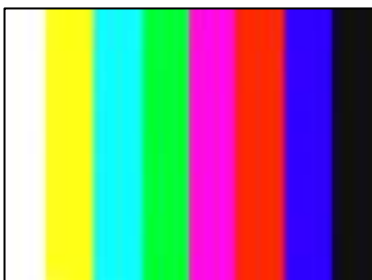
Move the cursor to the middle of indicated location on the screen, click and hold the left click on the mouse and are able to drag and adjust the screen display location,

2.3 VGA Resolution:

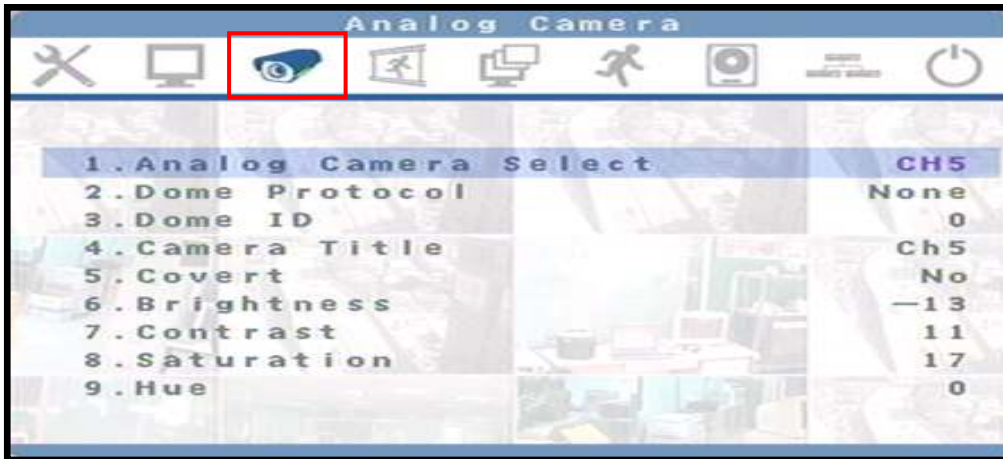
Support 800 X 600 、 1024 X 768 、 1280 X 1024 three types of VGA screen resolution.

2.4 Show Color Bar:

To determine the color of screen is whether correct or not by referring to the Color Bar.



3. Analog Camera Setup



3.1 Analog Camera Select:

Click on this event and then roll the mouse wheel to select the camera number to setup.

3.2 Dome Protocol:

Support Dome communication connect agreement of Panasonic_N、JVC、Fastrax 2、PELCO-P、PELCO-D、AD422、DynaColor.

3.3 Dome Camera ID:

The ID number should be the same as the setting of connected Dome ID.

3.4 Camera Title:

By using screen channel keys to edit the camera name after click. (Only support in English characters)

3.5 Convert (Hidden camera):

Setting of to either hide the camera display on the screen or not. The frame won't be shown on the screen after camera hidden, and the recording won't be affected.

Cameras can be adjusted separated.



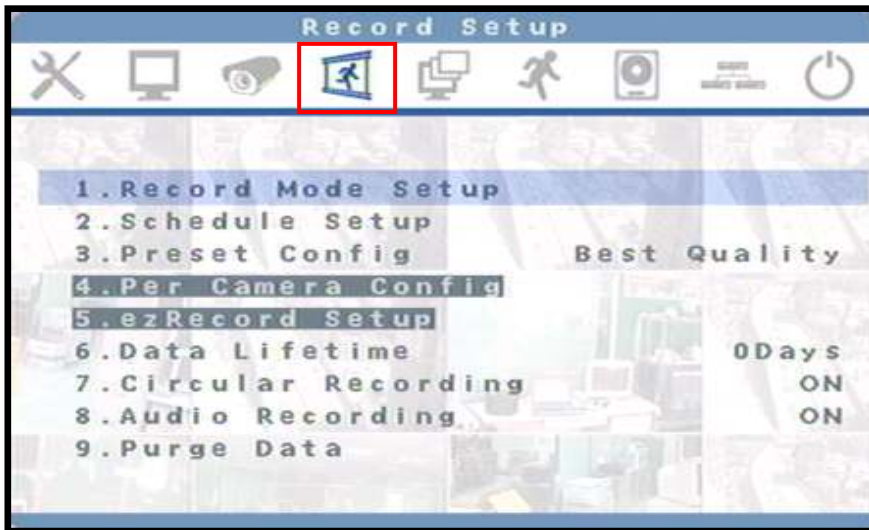
3.6 Brightness

3.7 Contrast

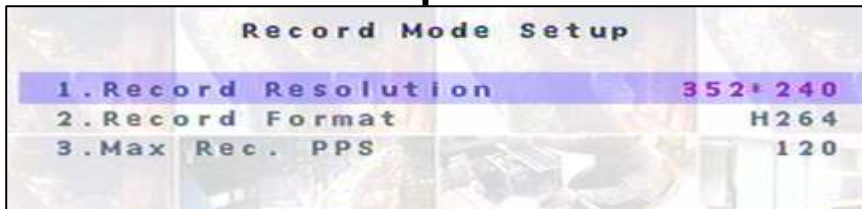
3.8 Saturation

3.9 Hue

4. Record Setup



4.1 Record Mode Setup:



4.1.1 Record Resolution:

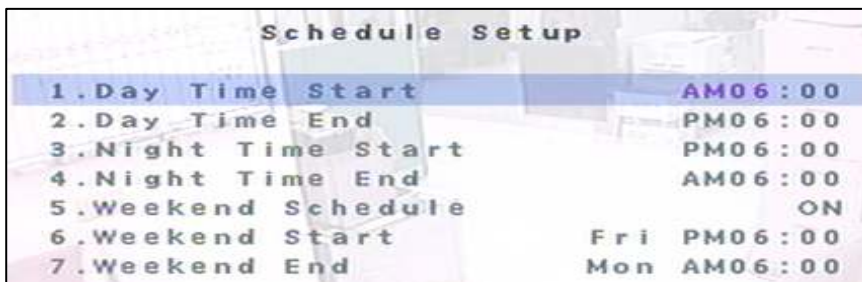
Record resolution support 352 X 240、720X240、720X480, **Restart is necessary to change the resolution.**

4.1.2 Record Format:

The record compression format is H. 264.

4.1.3 MMax Rec. pps

4.2 Schedule Setup:



The default day time start is AM06:00, day night time start is PM06:00, weekend start from Friday, and weekend end from Monday.

4.3 Preset Config

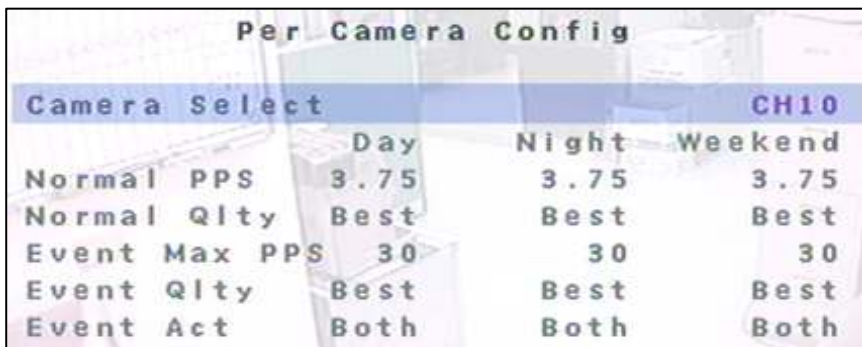
Use the wheel of the mouse to select **<OFF>** / **<Best Quality>** / **<Standard>** / **<Extended Record>** / **<Event Only>** / **<ezRecord>** Etc.

Only select <<OFF>> for entering the 'Per Camera Config' to adjust every camera recording frame rate.

Select Best Quality/ Standard/ Extended Record/ Event Only that the system will automatically adjust the camera config.

4.4 Per Camera Config Setup

Advance recording setting ("Preset Config" with "Off" to use this function.)



Per Camera Config			
Camera Select	CH10		
	Day	Night	Weekend
Normal PPS	3.75	3.75	3.75
Normal Qlty	Best	Best	Best
Event Max PPS	30	30	30
Event Qlty	Best	Best	Best
Event Act	Both	Both	Both

Camera Select: To select the camera number which user wants to setup the parameter of recording.

Normal PPS: Frame rate adjustment.

Adjust the frame rate to "0" for disconnected camera channel to increase other cameras recording frame rate.

Normal Qlty: Quality adjustment **<Best, High, Mid, Fair, Low>**

Event Max PPS: Default set as **30 PPS**

Event Qlty: Event quality adjustment **<Best, High, Mid, Fair, Low>**

Event Act: **<No, Motion, Alarm, Both>**

4.5 ezRecord Setup (“Preset Config” needs to select “ezRecord” to use this function.)



ezRecord Setup	
How Many Days To Record	11Days
Daytime Record	Yes
Night Record	Yes
Weekend Record	Yes
Record Info	
Average Normal PPS	3.75
Average Normal Quality	Best

Click **<ezRecord setup>** to enter the ezRecord configuration page; **users are able to adjust the desire recording days, normal PPS, and quality, and the DVR system will AUTOMATICALLY calculate hard disk space and display the << recording days>>, <<recording frame rate>> and <<resolution>> DIRECTLY on the screen.**

4.6 Data Lifetime:

Under enough hard disk space condition, is able to setup retain records data from 1 ~ 365 days. Sets up “0” as disable this function.

4.7 Circular Recording

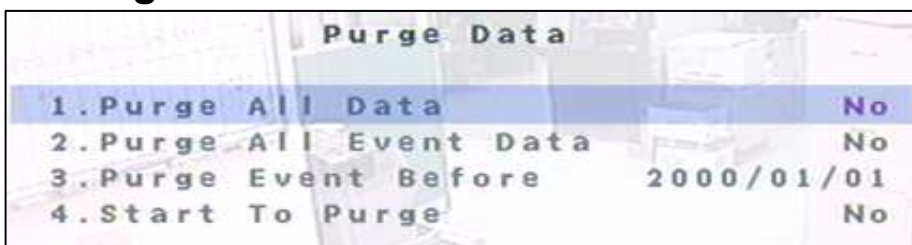
On: Automatically cover old data by recording new data when the hard disk is full.

Off: Stop recording when the hard disk is full.

4.8 Audio Recording

On: DVR support 16/8/4 CH audio recording. Set up “On” to start recording.

4.9 Purge Data



Purge Data	
1. Purge All Data	No
2. Purge All Event Data	No
3. Purge Event Before	2000/01/01
4. Start To Purge	No

▷ **Purge All Data:** Select “**Yes**” to start purge all data. (It takes very long time to purge all the data; therefore, suggest using “format hard disc” to shorten the purge time.)

▷ **Purge All Event Data:** Select “**Yes**” to start purge all event data.

▷ **Purge Event Before:** To purge the previous old data from the time selected.

▷ **Start to Purge**

- **Yes:** Select “Yes” to start the purge.

4.10 Additional statement of Record Setup

Corresponding reference for Recording Resolution/Frame-Rate and Playback/IE Transmission Speed:

1. Recording frame rate:

NTSC:<720x480@60PPS>、<720x240@120PPS>、<352x240@240PPS>
PAL: <720x576@50PPS>、<720x288@100PPS>、<360x288@200PPS>

Playback State:

- ※ Single camera full screen display 15FPS
- ※ Multi-camera display 1FPS
- ※ Backup video file on 4 / 9 / 16 split screen, every camera display 15FPS

IE Browser Remote View State:

- ※4、9、16 split screen every camera display 1 FPS.

2. Recording frame rate :

NTSC:<720x480@30PPS>、<720x240@60PPS>、<352x240@120PPS>
PAL: <720x576@25PPS>、<720x288@50PPS>、<360x288@100PPS>

- ※ **Example:** In NTSC: <352@240@120 FPS>

Under 《**Preset Config**》 Select 《**OFF**》 to enter 《per camera config》 setup to change the recording frame rate of any camera. Total frame rate at 120FPS


Playback State:

- ※ 4、9、16 split screen, each camera display the frame rate as setup.

IE Browser Remote View State

- ※ 4、9、16 split screen, every camera display the frame rate as setup by the network bandwidth available.


Playback Operation:

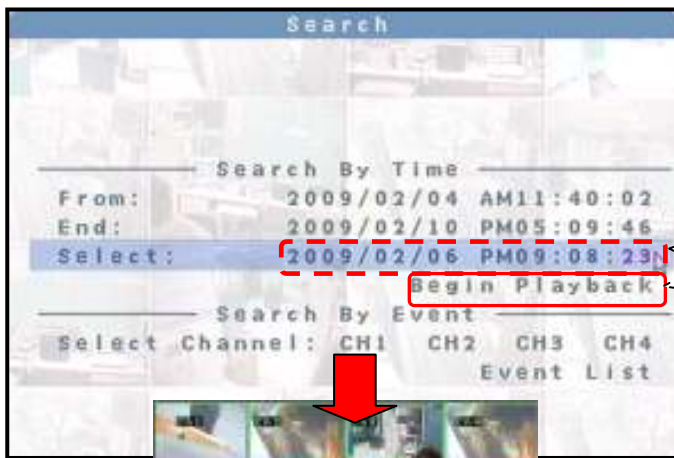
- Press **SEARCH** button on the front panel or use mouse click  to enter the Search menu.
- “**From**” --- Represent the beginning of recorded data, press (Enter) to play the recorded video from this time.
- “**End**” --- Represent the present lasting time of recorded data.
- “**Select**” --- Use ↑↓←→ panel keys to select request date and time, select 《**Begin Playback**》 and then press (Enter) to start playing. Press (**Play/Stop**) or (**ESC**) to return to the main screen.



NOTE: If there is no matching data for time or date selected, the system will play the closest selected time of data.

Search Recorded Video by Time / Date:

- Press **SEARCH** button on the front panel or use mouse click  to enter the Search menu.




Left click on the mouse on the option and use mouse wheel to adjust search time. Click “Begin Playback” to play data of selected time.

- “**From**” --- Represent the beginning of recorded data, press (Enter) to play the recorded video from this time.
- “**End**” --- Represent the present lasting time of recorded data.
- “**Select**” --- Use ↑↓←→ panel keys to select request date and time, select 《**Begin Playback**》 and then press (Enter) to start playing. Press (**Play/Stop**) or (**ESC**) to return to the main screen.



NOTE: If there is no matching data for time or date selected, the system will play the closest selected time of data.

Search Recorded Video by Event:

- Press **SEARCH** button on the front panel or use mouse click  to enter the Search menu.
- To search event video that was recorded on a specific camera, use **LEFT/RIGHT** keys to move the cursor and press **ENTER** to select or de-select the channels.
- Move the cursor to <**Event List**> and press **ENTER** to list out the event video of the selected channels.
- The list displays each event by date, time, triggered camera and alarm type. The latest recorded event video will be listed on the top, and the oldest will be on the bottom. To exit the event list, press **ESC**.
- Use **UP/DOWN** keys to scroll through the Event List. Press **ENTER** to play back the selected event record.



NOTE: The event list displays only the first 1024 events; as some events are deleted, others are displayed.

Search By Event:



Highlighted camera will not be under search range.

Click "List" to list out all events of camera

Event List				
FIRST PAGE				
Date	Time	Ch	Type	
2009/02/10	16:03:10	10	Motion	
2009/02/10	16:02:41	10	Motion	
2009/02/10	16:01:47	10	Motion	
2009/02/10	15:58:36	10	Motion	
2009/02/10	15:58:05	10	Motion	
2009/02/10	15:57:23	10	Motion	
2009/02/10	15:56:57	10	Motion	
2009/02/10	15:56:25	10	Motion	
2009/02/10	15:55:45	10	Motion	
2009/02/10	15:52:24	10	Motion	



Playback Control of Front Panel Buttons

Button	Description
Left	The button is used to play the recorded video fast backward. Press the button repeatedly to increase the speed of reverse playback by 1×, 2×, 4×, 8×, 16×, or 32×.
Right	The button is used to play the recorded video fast forward. Press the button repeatedly to increase the speed of forward playback by 1×, 2×, 4×, 8×, 16×, or 32×.
Freeze	Press FREEZE to pause the playback video. When the recorded video is paused, press LEFT / RIGHT to move single step backward / forward respectively. Press FREEZE again to resume playing back video.
Play/Stop	Press to start the playback, or to stop playing back video and return to live mode.

Backup Video files

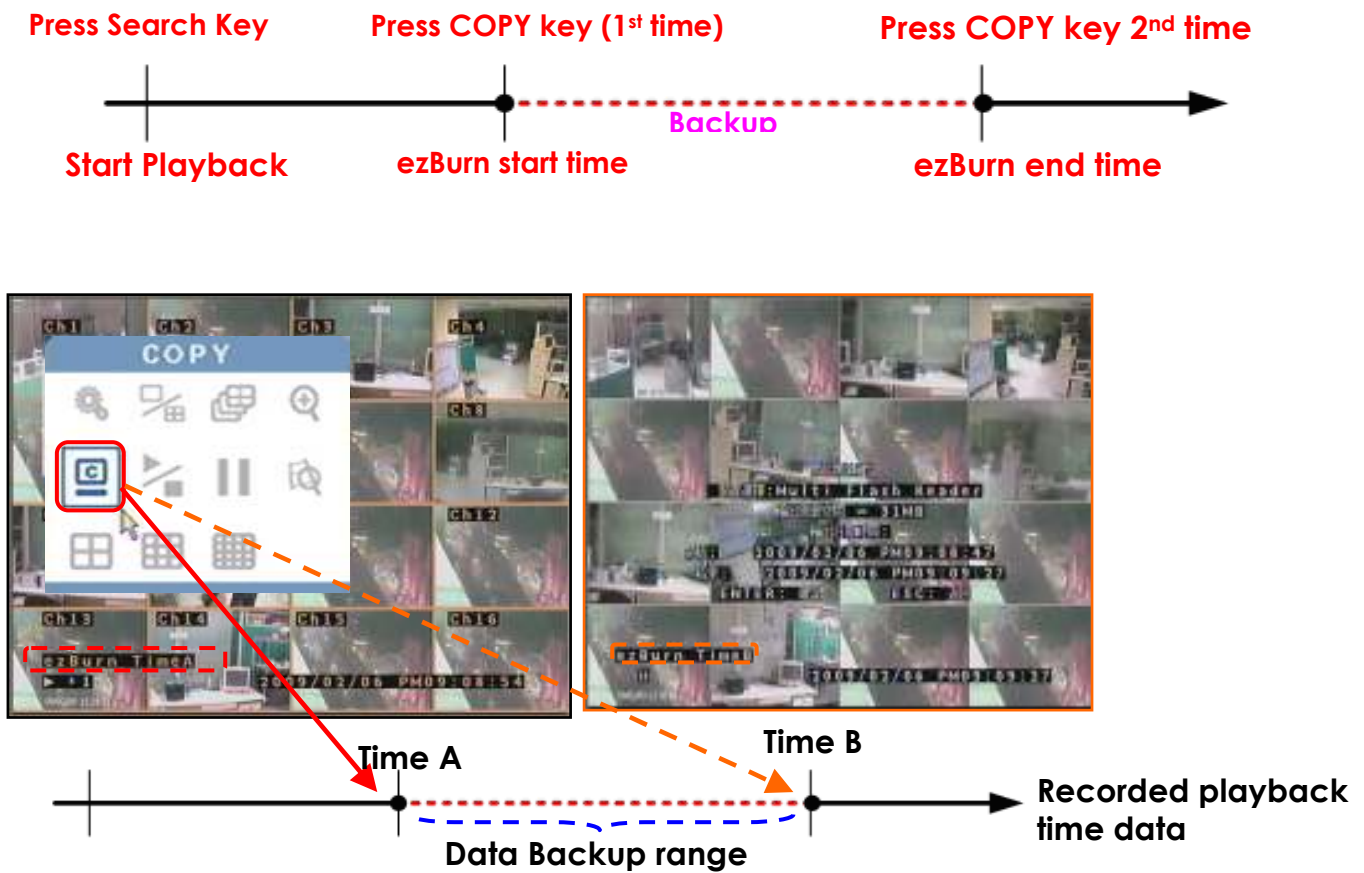
Backup process time is according to the size of the video file.

USB-disk device backup file will save as *.drv format. (CD provides the player)

Burn / Backup process

TWO keys (**SEARCH** and **COPY**) are all what's needed for completing the export. The entire exporting process can be done through the front panel or use mouse to enter the OSD setup menu.

ezBurn backup while playback :



- Press **SEARCH** and enter desired date and time.
- After entering playback mode, press **COPY** first time to mark the starting point of the export video.
- Press **COPY** again to mark the ending point of the export video.

Then the window will display as below figure :

```

ezBurn confirmation

Selected Device: External Device
All data on the disc will be erased.
Exported Required Size = 11 MB
Real Export Range:
From: 2008/05/07 AM10:41:13
To: 2008/05/07 AM10:41:21
Enter: YES ESC: NO
    
```

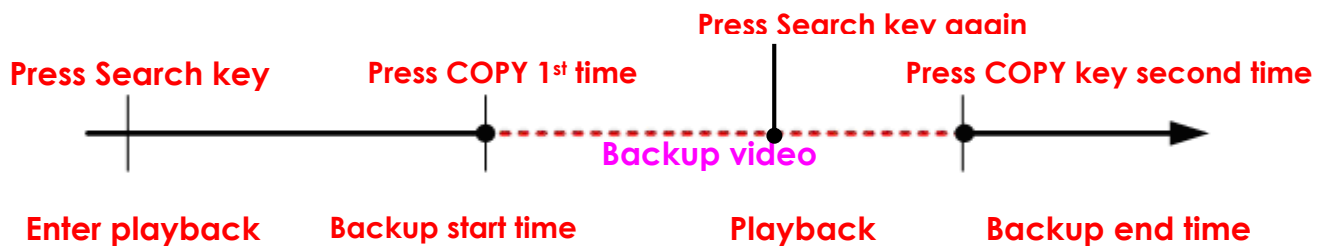
**Press ENTER to start the export;
press ESC to abort.**

- After ezBurn backup process, press **ESC** twice or right click on mouse twice for return back to live video mode.

If there is no any exportable device connected to the DVR unit, then a warning message will be showed on the screen, as below figure:

Press ENTER to re-detect, or press ESC to exit.

Export Video file 《backup start & end time self-selected》



- Press **SEARCH** key then entering desired time and date for play video. During the playing mode, press **COPY** key to activate backup start.
- After entering the playback mode, press **SEARCH** key → entering time and date → play, after video show up, **PRESS COPY** key again as backup end time.

The window will display as below figure:

```
ezBurn confirmation
Selected Device: External Device
Exported Required Size = 11 MB
Real Export Range:
From: 2008/05/07 AM10:41:13
To: 2008/05/07 AM10:41:21
Enter: YES   ESC: NO
```

Backup Events Record file

- Press **SEARCH** and click on desired events playback file for backup.
- Playback the file and press **COPY** key.

The window will display as below figure:

```
ezBurn confirmation
Selected Device: External Device
Exported Required Size = 11 MB
Export events info:
Date           Time           Ch           Type
2008/05/07    AM10:42:35    13           Motion detection
Enter: YES    ESC: NO
```

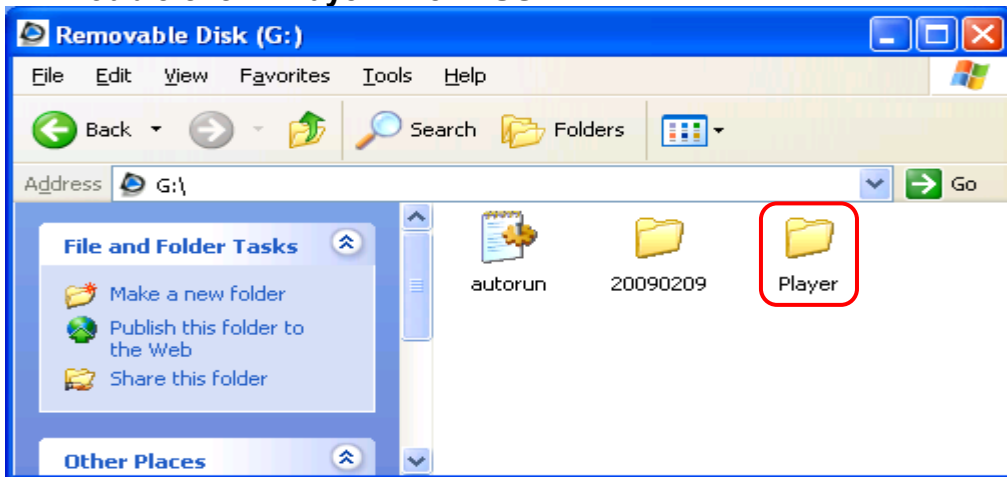
- If there is no any exportable device connected to the DVR unit, then a warning message will be showed.
- Press **ENTER** to start backup the events selected to the external device, or press **ESC** to cancel backup.

```
No exportable device detected.
Please install the target device/media
To the DVR.

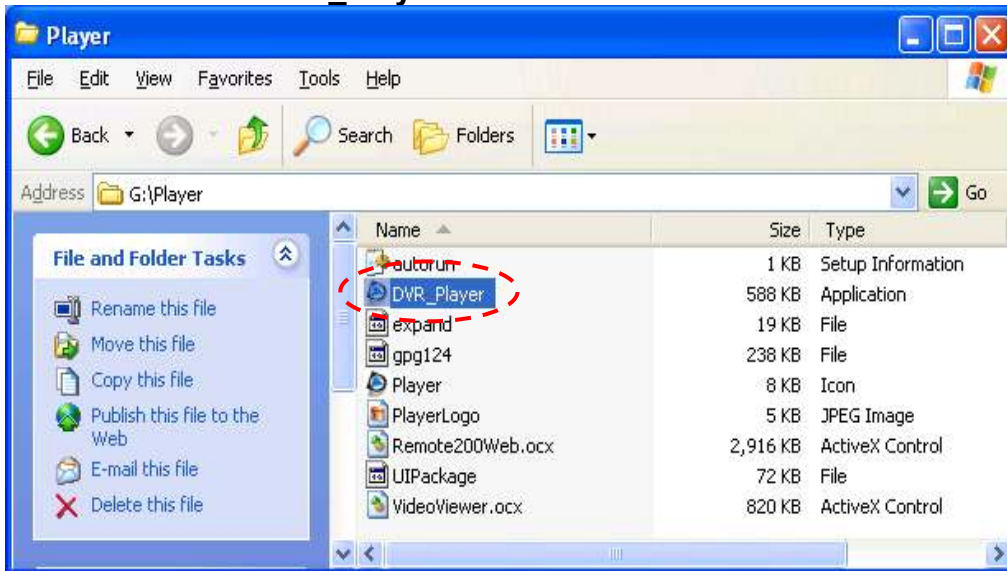
Enter: Retry   ESC: Exit
```

Steps for playback from USB flash drive recorded data:

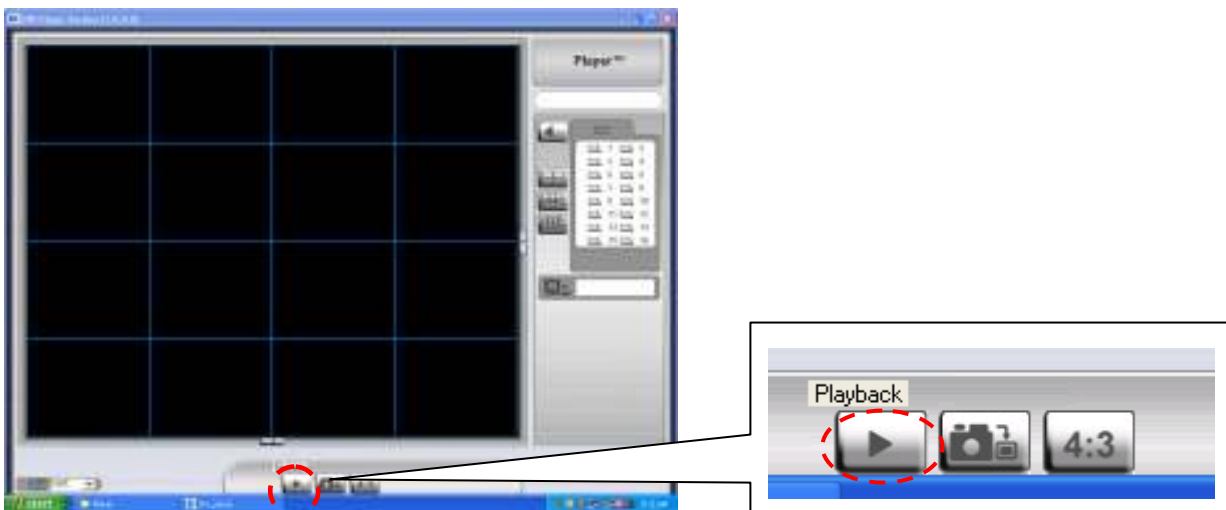
1. Double click "Player" file in USB



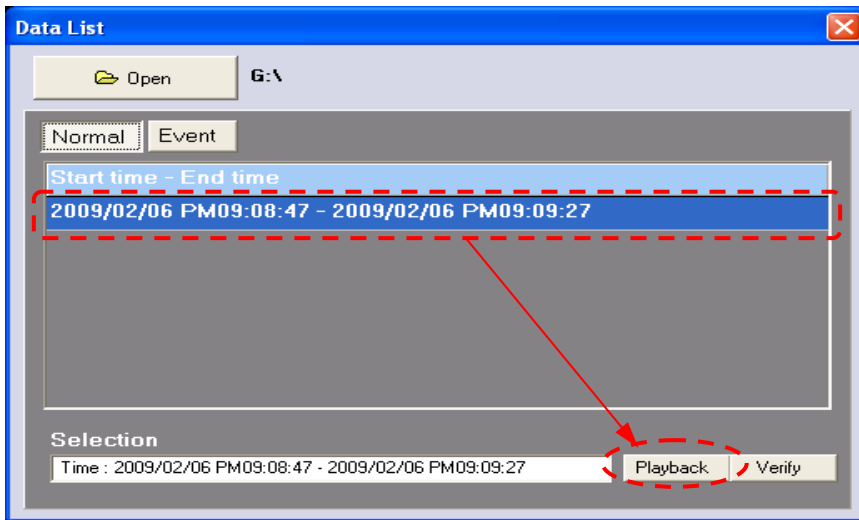
2. Double click DVR_Player.exe



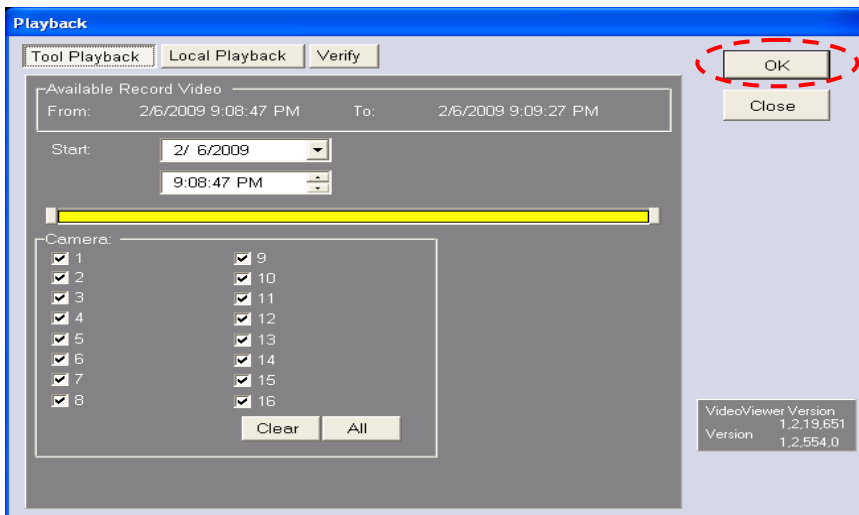
3. Press "Playback" button



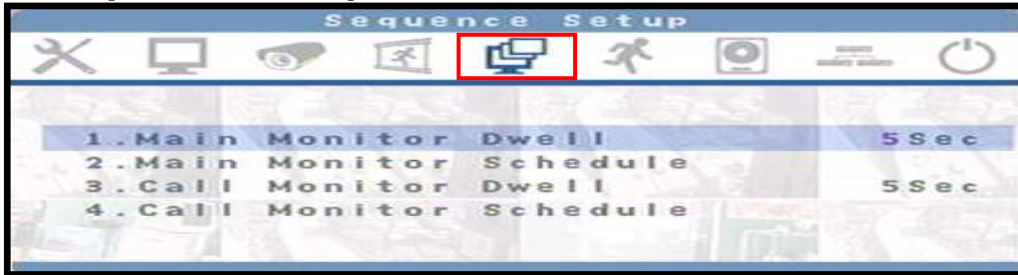
4. Select desire data, then click “Playback” button.



5. Click “OK” to start playing the recorded video.



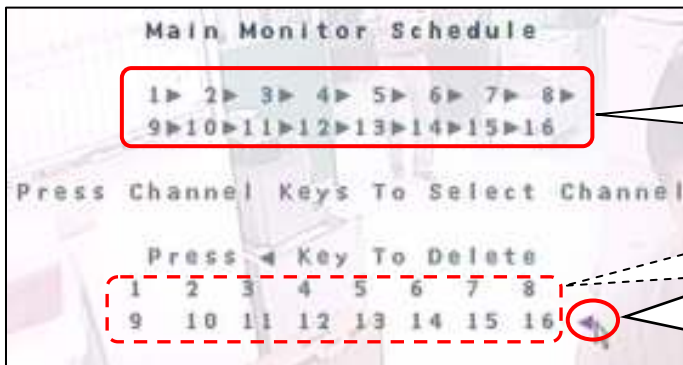
5. Sequence Setup



5.1 Main Monitor Dwell:

Setup interval time of main monitor sequence, time range from 1 ~ 120 seconds.

5.2 Main Monitor Schedule



Default sequence channel number 1 to 16

First, click "◀" to clear the default sequence, and then click the numbers on above to arrange sequence channel.

5.3 Call Monitor Dwell:

Setup interval time of call monitor sequence, time range from 1 ~ 120 seconds.

5.4 Call Monitor Schedule:

Setup method as "Main Monitor Schedule".

◆ Call Monitor (Call)

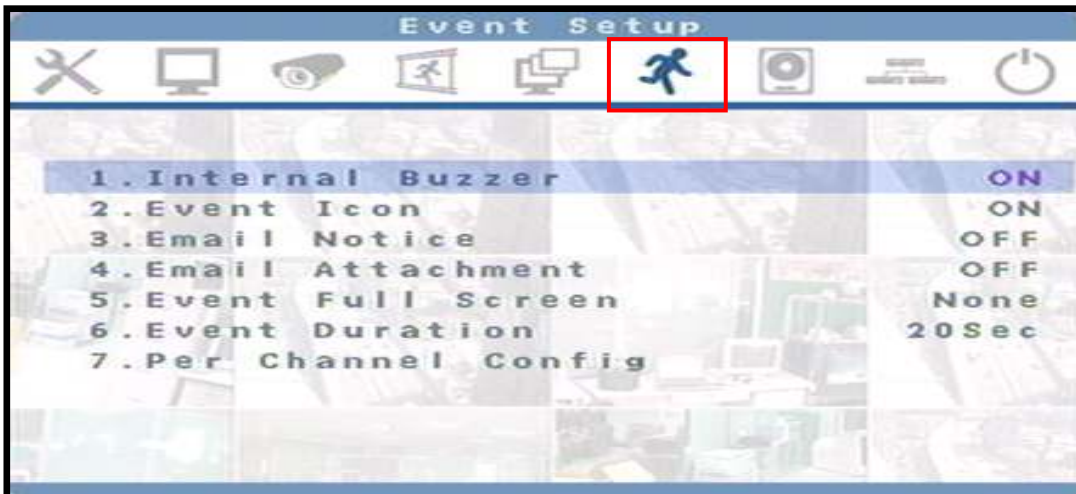
It is "Copy" backup button under playback mode

Live View Mode: Call Monitor



Click on the numbers of 1 ~ 16 to select camera display on the Call Monitor screen, or click "Seq" to start displaying Sequence screen on Call Monitor.

6. Event Setup



6.1 Internal Buzzer:

On: By turn on this function, there will have alarm while detecting lost image, motion, and perception sensor.

Off:

6.2 Event Icon:

On: By turn on this function, the recording camera screen will show up the letters of alphabet "M" at down left side corner when camera detecting the motion.

Off:

6.3 Email Notice:

On: Send email notice when detect events of motion or alarm. (To use this function, the network, Email, and SMTP has to be settled up correctly.)

Off:

6.4 Email Attachment:

On: Attaches video images when send out email notice of events detection.

Off:

6.5 Event Full Screen

- **None:** Disable this function.
- **Main:** Show the defected events only on Main Monitor in full screen.
- **Call:** Show the defected events only on Call Monitor in full screen.
- **Both:** Show the defected events on both Main and Call monitor in full screen.

6.6 Event Duration:

The sustain time of event status on the screen after event occurred. Available adjustment range from 5 ~ 999 seconds.

6.7 Per Channel Config

Per Channel Config	
1. Channel Select	CH10
2. Video Loss Detect	OFF
3. Motion Detect	ON
4. Motion Detect Indicator	ON
5. Detection Config	
6. Alarm In	OFF
7. Alarm Out	OFF

6.7.1 Channel Select:

Use mouse wheel to select camera number for setting after clicking this option.

6.7.2 Video Loss Detect

- On: Main system will alarm with beeping sound when detecting loss-signal of the camera.
- Off

6.7.3 Motion Detect

- On
- Off

6.7.4 Motion Detect Indicator

- On: Showing the area range block of moving object.
- Off

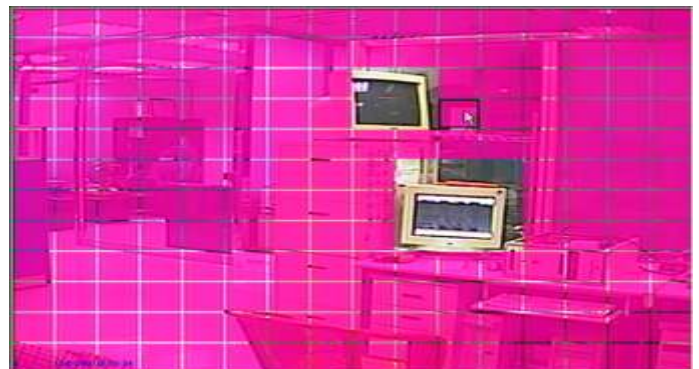


▶ Detection Config

Detection Config	
1. Detected Area Setup	
2. Sensitivity	60%
3. Block Threshold	4

▶ Detected Area Setup:

The detecting area is represented by 12 X 16 red square block, and default as all area on the screen. Using mouse left click to select or deselect the detecting square block.



▷ Sensitivity:

Higher number with higher sensitivity. Default as 60%, and able to adjust from 1% ~ 100%.

▷ Block Threshold:

Set the block range of motion detection to determine the motion alarm. Default with 4 blocks, and adjustable block range is from 1 ~ 16 blocks.

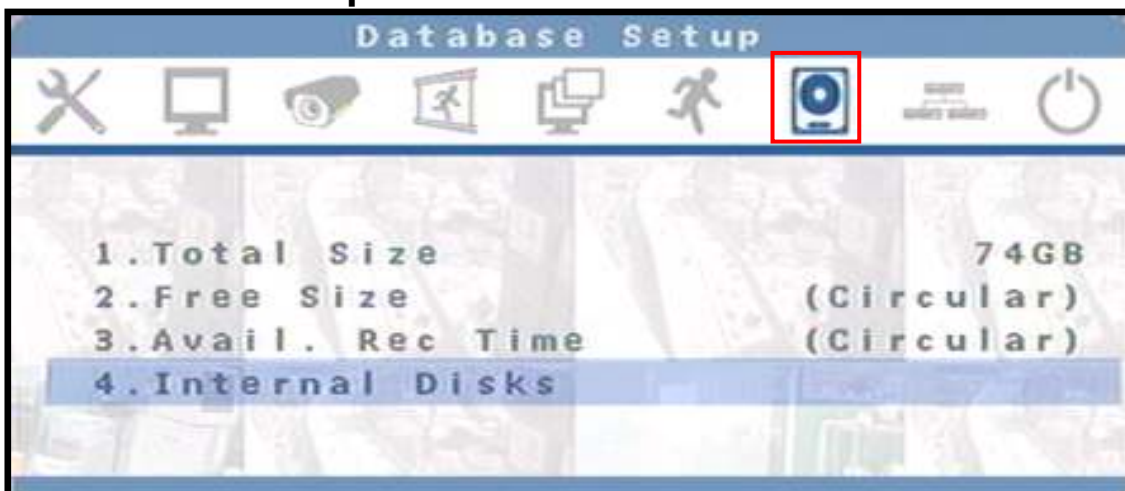
▷ Alarm In:

- **N/O**: Setup perception sensor status as “N/O” (Normal Open).
- **N/C**: Setup perception sensor status as “N/C” (Normal Close).
- **Off**

▷ Alarm Out:

- **On**: Export the alarm status to I/O switch.
- **Off**

7. Database Setup



7.1 Total Size:

Displays the total size of hard disk in DVR host system.

7.2 Free Size:

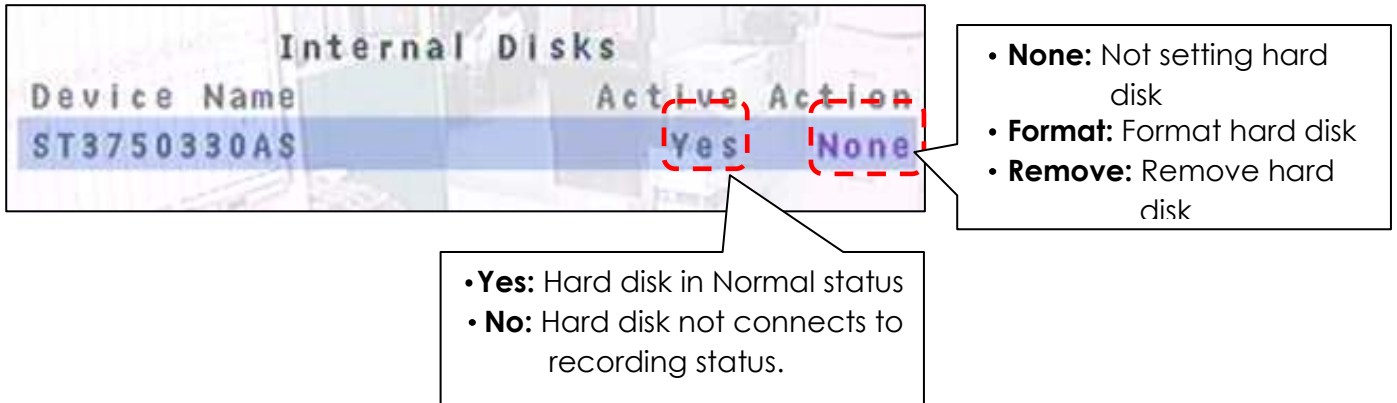
Select “**off**” under “**Circular Recording**” in “**Record Setup**” to show the space left of hard disk.

7.3 Avail. Rec Time:

Select “**off**” under “**Circular Recording**” in “**Record Setup**” to show how many available times of hard disk space to record.

7.4 Internal Disks:

Display DVR internal hard disk status of host system, and able to setup the hard disk status.



Device Name	Active	Action
ST3750330AS	Yes	None

- **Yes:** Hard disk in Normal status
- **No:** Hard disk not connects to recording status.

- **None:** Not setting hard disk
- **Format:** Format hard disk
- **Remove:** Remove hard disk

8. Configuration



Configuration

- 1. Load Factory Default No
- 2. Import Config
- 3. Export Config

8.1 Load Factory Default:

- **Yes:** Reload data to factory default, except "Record Mode Setup".
- **No:**

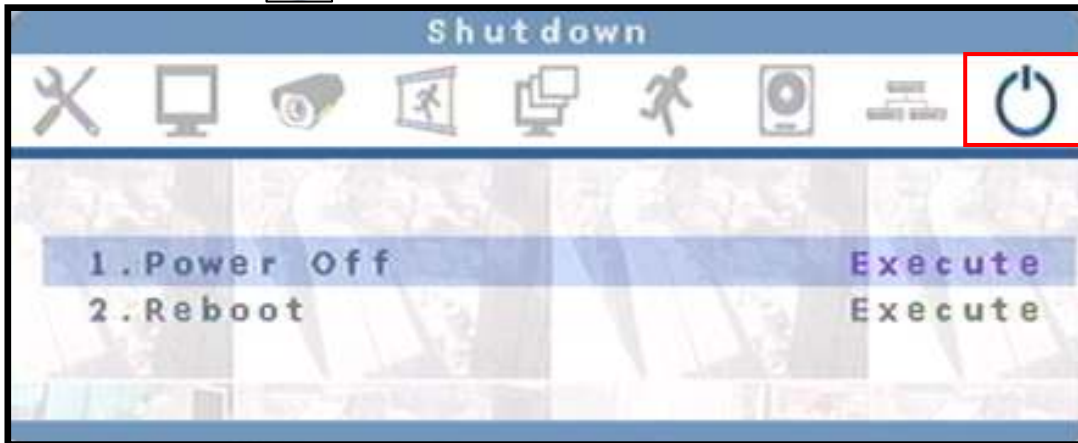
8.2 Import Config:

To import config setting from other host to this host by using external device. (Such as USB flash drive)

8.3 Export Config:

To export config setting file of this host to an external device. (Such as USB flash drive)

9. Shutdown



9.1 Power Off:

Able to remove the power supply after screen shows “you can safely turn off DVR now!”

9.2 Reboot

Reboot directly after click.

10. Zoom



Click the direction key to shift zoom area.

To zoom out x2 image under live mode view full screen.

- Press channel panel key (1~16) to view in full screen.
- Click “Enter” on the front panel to view x2 screen.
- Use direction panel buttons to shift the zoom area.
- Press “Enter” key again or “ESC” to exit the zoom view.

11. Network Setup

11.1 DHCP Setup Steps:

- Enter **<System Setup>** of main Menu, select **<Network Setup>** → **<LAN Setup>** .
- Select DHCP **<ON>** to get a DHCP (dynamic IP) for DVR automatically. IP and sub mask settings are not requested. The DVR system will detect new dynamic IP by restart system, and need to check manually.
- DHCP as **<OFF>** to set the static IP. Fill up the IP, sub mask, gateway information is a need. Use **UP / DOWN / LEFT / RIGHT** panel keys to adjust IP, sub mask, gateway and DNS settings then press **<ENTER>** to confirm setting. Press **<ESC>** to cancel / exit.
- **Activate DDNS auto detect function to setup the dynamic IP. Enter <System Setup> of main Menu → <Network setup> → 《DDNS Setup》 then activate DDNS function as 《ON》 , Auto setup DDNS as 《YES》 DDNS server will automatically provide 1 DDNS IP via network connection.**



11.2 Remote PC network setup:

- Start the IE browser; select **<Tools>** → **<Internet Options>** and then click the **<Security>** tab.
- Select **<Trusted sites>** and click **<Sites>** to specify its security settings.
- Uncheck **“Require server verification (https:) for all sites in this zone”**. Type the IP address of the unit in field and click **<Add>** to add this website to the zone.
- In the Security Level area, click **<Custom Level>**. Under **<ActiveX controls and plug-ins>**, set all items to **<Enable>** or **<Prompt>**.
- Click **<OK>** to accept the settings and close the **<Security Settings>** window.

11.3 Install and guide for IE remote:

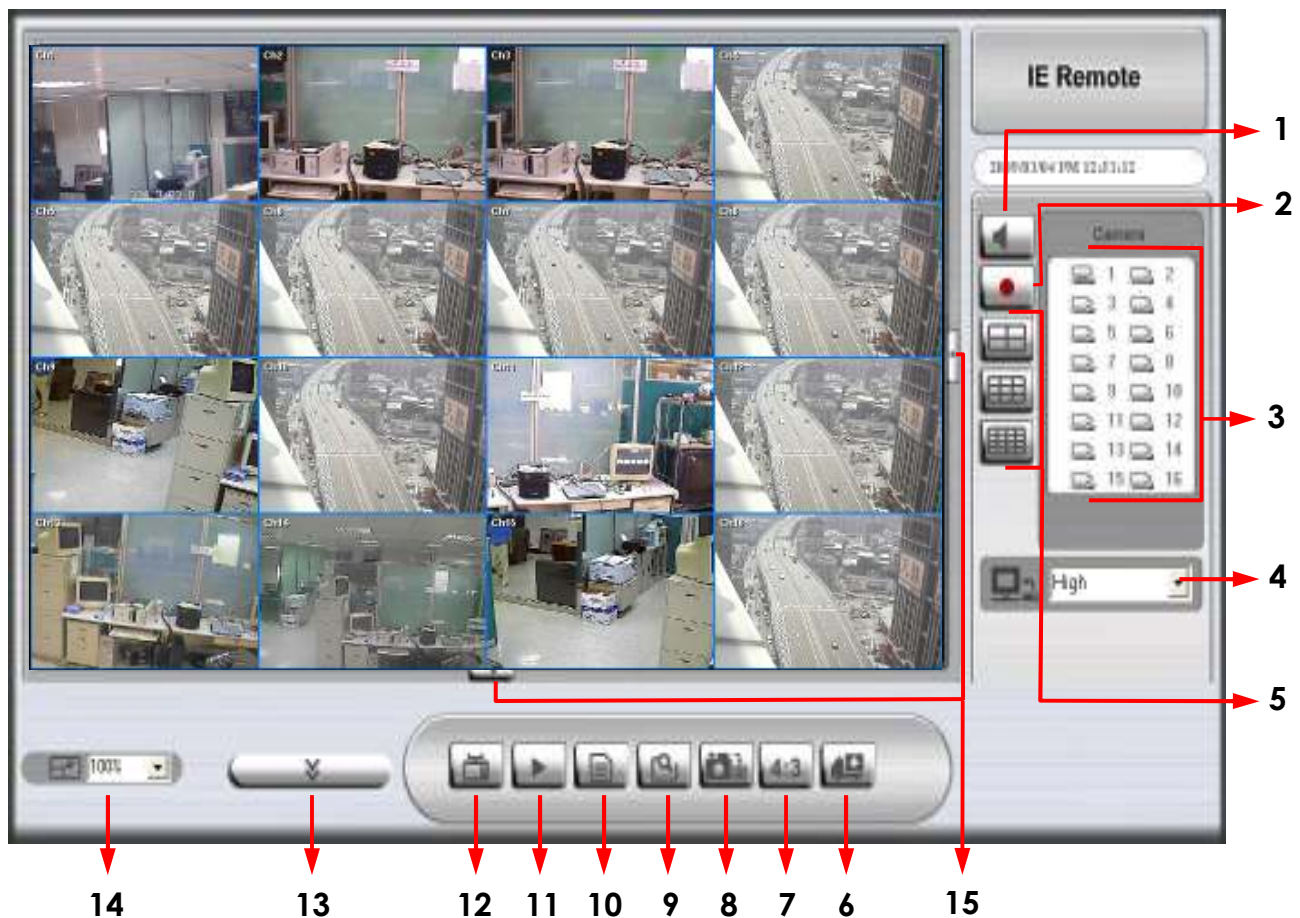
- Enter IE browser, key in the DVR IP address
- ActiveX download window pop up twice and click **《install》** . After connected, IE browser will download **<<DVRRemote>>** program automatically in the remote PC.
- **DVRRemote download process takes about 30 seconds**
- **DVRRemote after download and installed the program; inserts the correct user name and password in the form window.**
- **The DVR host and remote side only allow two users to log-in the system at one time.**
 1. admin
 2. user
- **Default password → admin: 1234 (administrator privilege)
user: 4321 (regular user privilege)**



NOTE: If the default trigger port (80) is changed into another one, port 81 for example, Then the IP address should be entered as **“192.68.80.6:81”**.

12. IE Remote Interface As Below


※ VISTA O.S of PC, Remote access IE Browser by Administrator.



Functions Reference:

Item	Function	Item	Function
1	Audio On / Off	9	Search Event List
2	Instant Recording	10	Setup Menu
3	Camera Selection	11	Playback Video
4	Select Bandwidth Speed	12	Live View, Playback Control
5	Display Mode	13	Download DVRPlayer
6	HDD status	14	Select Picture Size
7	4:3 Viewing Aspect	15	Hide the control bar
8	Capture Snapshot		

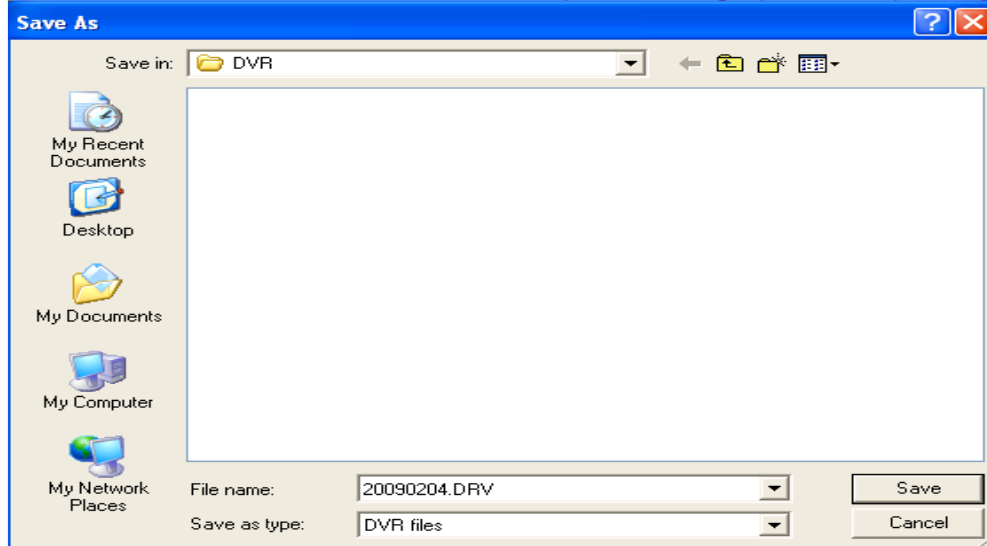
12.1 Audio

Live audio: click  enable audio by selecting the camera .




(In the status of audio on, press live record can backup video with audio) .

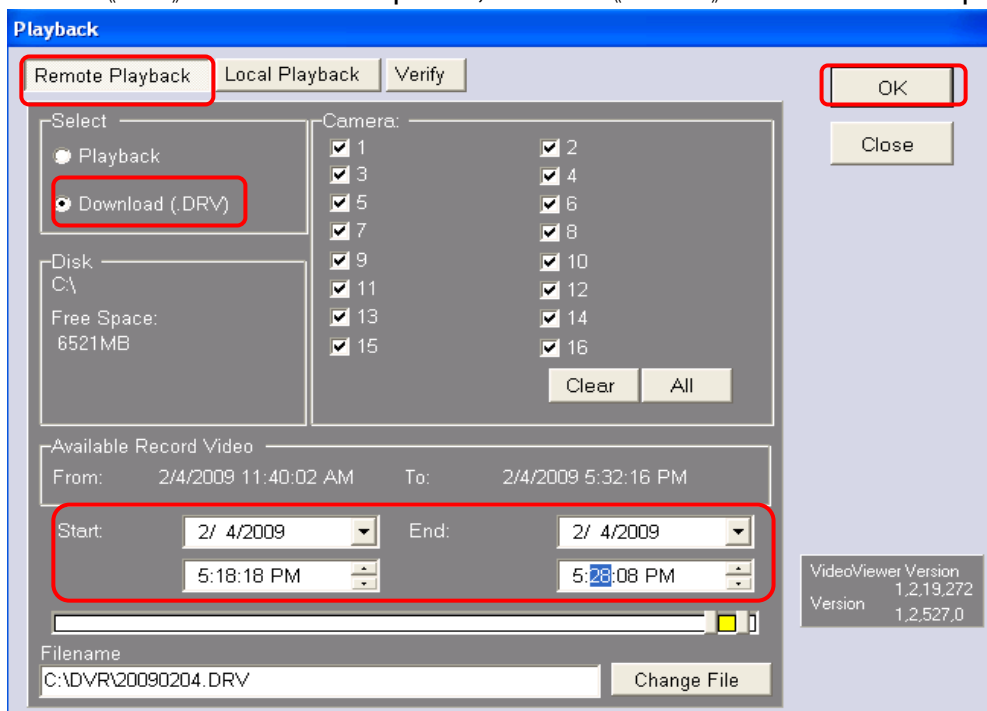
12.2 Live Record Video

Click  enter file name and setup the storage path and press [**SAVE**] for live record.






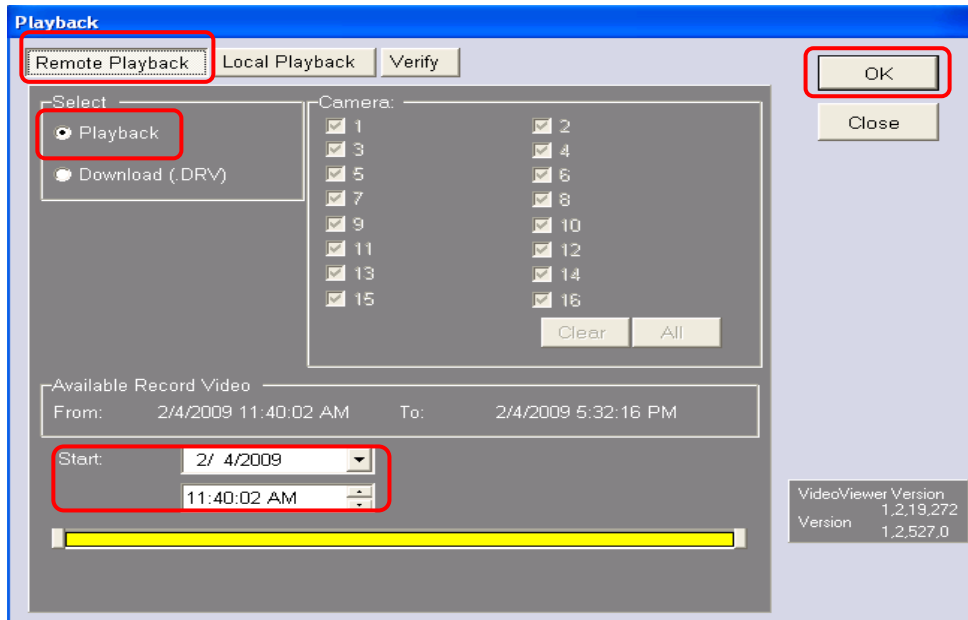
12.3 Backup the recording file of the DVR host << *.drv>>

- Click  《Remote playback (DVR host)》 Select 《download *.drv》 enter the name of backup video file and setup the storage path.
- Down at the window 《start》 、 《end》 select the backup file start and end time.
(Use keyboard or  /  to select the time / date)
- Click 《**OK**》 to start backup files, or click 《Close》 to cancel backup processing.




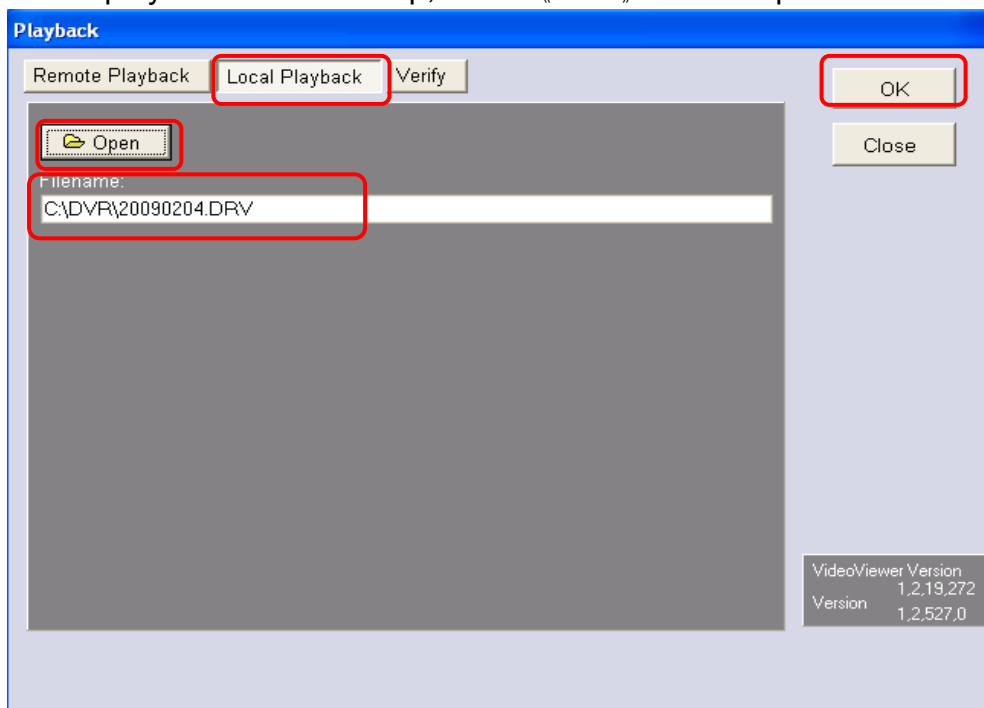
12.4 Playback the recording file of the DVR host

- Click  then select 《remote playback》.
- Down at the window 《start》、《end》 display the recording file start / end time of the DVR.
- 《START》 column enter the start time by press keyboard or  /  to select the time / date.
- Click 《OK》 to start playback or click 《Close》 to cancel playback processing.




12.5 Playback the recording file of the DVR / remote live recorded file

- Click  then select 《DVR Playback》 then press 《OPEN》 choose the file *. Drv format for playback.
- Press 《OK》 to playback the video clip, press 《Close》 to cancel playback selected file.
- After playback the video clip, click 《Live》 on the top to back in live view mode.



12.6 Playback Event video file

- Click  «**SEARCH**» to show event file list.
- Select the event file for event playback.
- After the file is chosen, double click on the file to play.

Event List

Number	Date/Time	T	CH
1	2009/02/04 PM 05:48:41	M	4
2	2009/02/04 PM 05:49:44	M	4
3	2009/02/04 PM 05:50:10	M	2
4	2009/02/04 PM 05:51:11	M	4
5	2009/02/04 PM 05:51:11	M	2
6	2009/02/04 PM 05:54:07	M	4
7	2009/02/04 PM 05:55:46	M	4
8	2009/02/04 PM 05:57:02	M	4
9	2009/02/04 PM 05:58:24	M	2
10	2009/02/04 PM 05:58:51	M	4
11	2009/02/04 PM 06:00:52	M	4
12	2009/02/04 PM 06:01:28	M	4
13	2009/02/04 PM 06:02:03	M	2
14	2009/02/04 PM 06:02:30	M	4
15	2009/02/04 PM 06:02:31	M	2
16	2009/02/04 PM 06:02:51	M	2

Download Previous Next

T = Type (A=Alarm In ,M=Motion detection, L=Video loss, S=Over speed)
CH = Channel (1,2,3...etc)

12.7 Download DVRPlayer program

Must install DVRPlayer program to play *.drv format file.

12.8 Play Icon Definition

