

User Manual
4-CHANNEL H.264 DVR

Warning

- To reduce the risk of fire or electric shock, do not expose this appliance to rain or moisture.
- All the safety and operating instructions must be read before the unit is operated.

Precaution

- Make sure to switch the power off before you install the DVR.
- Avoid using the DVR outside of the reference temperature and humidity indicated in the specification.
- Avoid exposing the DVR to violent movement or vibration.
- Do not use or store the DVR in direct sunlight or near to any source of heat.
- Do not place any object into the holes used for air circulation.
- Always use the DVR in the well ventilated location to prevent overheating.
- Do not disassemble or reassemble the product. It may cause malfunction or fire.
- There is the danger of an electric shock if DVR is repaired by an unqualified service engineer or installer.

Power Supply

- Please use the provided adaptor. The DVR provide DC12V,3A power adaptor. Please select the correct voltage and power if using other adaptor.
- Keep the adaptor and power cord dry and protect from humidity.
- When this machine is not using for a long time, please remove the connection of power adaptor.

Features

- Non-pc stand-alone security digital video recorder with embedded operation system
- H.264 compression format
- Mobile monitoring
- Email for alarm
- Chinese/English languages supported
- Audio and video real time recording and playback
- Support NTSC/PAL video system
- 4CH video inputs, 1CH BNC monitor output, VGA output
- 4CH audio inputs, 1CH audio output
- High quality image, brightness, contrast and color adjustable for each channel
- Recording modes: manual recoding, always recording and scheduled recording include sensor alarm recording and motion detection recording
- Multi Recording image quality
- CIF Audio/Video real-time playback, support D1, 1/2D1 resolution
- Searching modes: time & data searching, folder list searching, log list searching
- Support fast forward and fast rewind: ×2, ×4, ×8
- Backup modes: network backup, USB 2.0 backup, moveable USB HDD and USB DVRROM backup
- Support RS-485 PTZ control
- Support USB mouse operation
- Support 1 SATA port HDD.
- 4 CH alarm input, 1 CH alarm output
- Multiplex operation: live & record & playback & network can be operated at the same time
- Support IE browser, email for alarm, DDNS function
- Network function: IE browser monitor/playback/record/backup/setup

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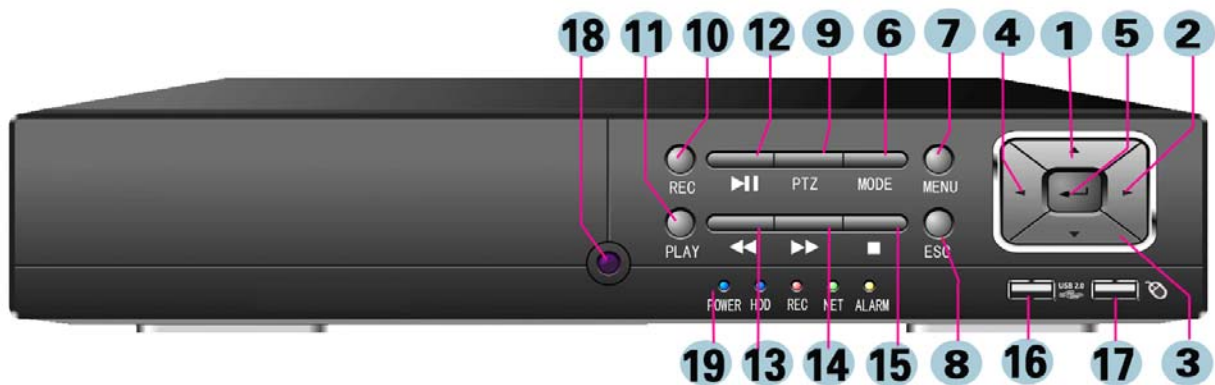
V SPECIFICATION

I INSTALLATION

1.1 Packing Detail

1. DVR console x 1 unit
2. User's manual x 1 unit
3. DC12V/3A power adaptor x 1 unit
4. Screws x 1 set
5. Infrared remote controller x 1 unit
6. USB mouse x 1unit

1.2 Front Panel Controls



1. "UP" button

In the live display mode, press this button to display CH1. In the setup menu, press this button to move the cursor up to the next line.

2. "RIGHT" button

In the live display mode, press this button to display CH2. In the setup menu, press this button to move the cursor in right direction.

3. "DOWN" button

In the live display mode, press this button to display CH3. In the setup menu, press this button to move the cursor down to the next line.

4. "LEFT" button

In the live display mode, press this button to display CH4. In the setup menu, press this button to move the cursor in left direction.

5. "ENTER" button

In the setup menu press this button to enter sub-menu or confirm setting.

6. "MODE" button

In the single channel display mode, press this button to change to QUAD display mode.

7. "MENU" button

In the live or record mode, press this button to enter main setup menu, press "ESC" button to quit menu.

8. "ESC" button

In the setup menu or PTZ operation mode, press this button to quit setup menu or PTZ operation mode.

9. "PTZ" control button

In the live or record mode, press this button to enter PTZ operation of single channel, press "ESC" button to quit PTZ operation.

10. "REC" button

When set recoding mode to TIMER RECORD and set schedule recording mode to "OFF" or "ALARM" Mode, press this button to start manual record, Press "STOP" button to stop manual record.

Note: When set recoding mode to POWER UP or ALWAYS, this button can not be used.

11. "PLAY" button

In the live or record mode, press this button to enter "RECORD SEARCH" menu. Press "UP", "DOWN", "LEFT" or "RIGHT" button to select the playback setting and press "ENTER" button to play back. In the playback mode, if it's not in the playback, press this button to start playback.

12. "PAUSE" button

In the playback mode, press this button to pause the image, press it again for step forward the image.

13. "REWARD" button

In the display mode, repeat pressing this button to speed-up playback backward at the speed of 2x, 4x or 8x.

14. "FORWARD" button

In the display mode, repeat pressing this button to speed-up playback forward at the speed of 2x, 4x or 8x.

15. "STOP" button

In the manual record mode, press this button to stop the manual record.

16. USB 2.0 port

Connect with USB disk for updating firmware and backup files.

17. Mouse port

Connect with USB mouse. Not used for USB disk.

18. Receiver port of remote controller.**19. DVR indicator**

POWER: ON when DVR power on.

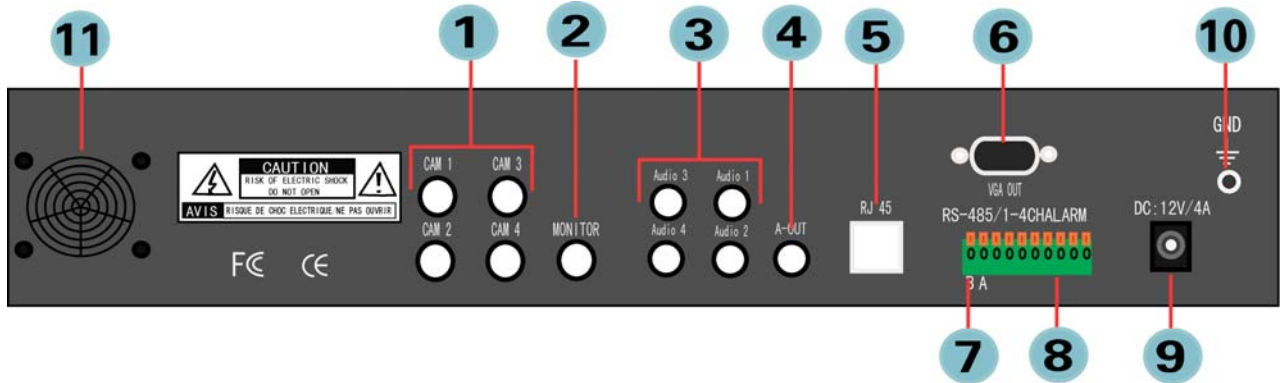
HDD: Blink when backup from hard disk.

REC: ON during the DVR recording.

NET: Blink when network connected.

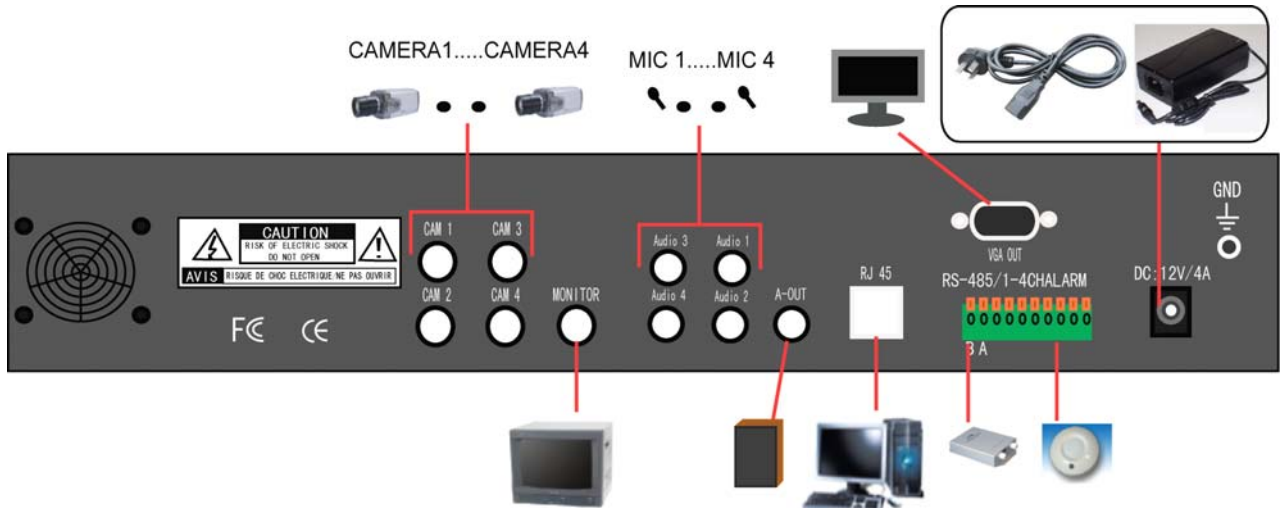
ALARM: ON when alarm signal detected (video loss, HDD loss, sensor alarm or motion alarm).

1.3 Rear Panel Connectors

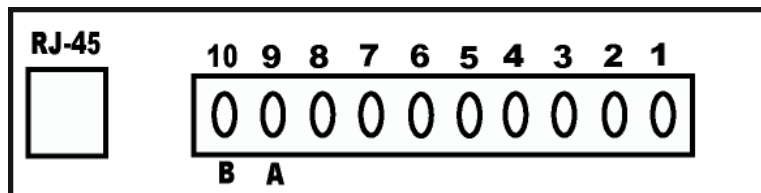


- 1. CAMERA IN(CH1~CH4)
- 2. MONITOR OUT
- 3. AUDIO IN(CH1~CH4)
- 4. AUDIO OUT
- 5. RJ-45NET
- 6. VGA OUT
- 7. RS-485 PTZ
- 8. ALARM IN
- 9. DC: 12V/3A POWER IN
- 10. GROUND
- 11. DVR FAN

1.4 Rear Panel Connection

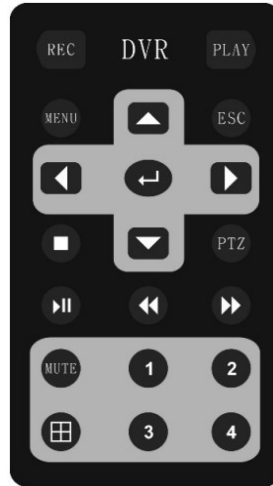


ALARM IN:



- No. 1 ~ No. 4: Alarm signal input
- No. 5: Alarm output: GND (Ground)
- No. 6: Alarm output: N.C. (Normally Close)
- No. 7: Alarm output: N.O. (Normally Open)
- No. 8: Alarm output: COM (Common)
- No. 9: RS-485 + (A)
- No.10: RS-485 - (B)

1.5 Remote Controller



Remote Controller Introduction:

1. **REC:** Begin and stop manual recording.
2. **PLAY:** Enter the playback mode and display the RECORD SEARCH menu.
3. **MENU:** Display the MAIN setup menu in the live display mode.
4. **UP:** Press this button to move the cursor up to the next line in the setup menu.
5. **ESC:** Return to the previous mode in the setup menu.
6. **RIGHT:** Press this button to move the cursor in left direction in the setup menu.
7. **ENTER:** Enter in the setup menu.
8. **RIGHT:** Press this button to move the cursor in right direction in the setup menu.
9. **STOP:** In the manual record mode, press this button to stop the manual record.
10. **DOWN:** Press this button to move the cursor down to the next line in the setup menu.
11. **PTZ:** Enter PTZ operation mode.
12. **PAUSE:** Press this button to display a still picture during the playback, press this button again to step forward the image.
13. **REWARD:** Repeat pressing this button to speed-up playback backward at the speed of X2, X4 or X8 during the playback.
14. **FORWARD:** Repeat pressing this button to speed-up playback forward at the speed of X2, X4 or X8 during the playback.
15. **MUTE:** Turn audio on/off during the live display mode or playback mode.
16. **No.1:** Display channel 1 picture on the monitor.
17. **No.2:** Display channel 2 picture on the monitor.
18. **QUAD:** Display quad picture on the monitor.
19. **No.3:** Display channel 3 picture on the monitor.
20. **No.4:** Display channel 4 picture on the monitor.

1.6 Installation Process

1. Turn off the power of DVR.
2. Open the top cover of the DVR and mount HDD with the screws. Connect power cord and SATA cable between HDD and DVR main board. Then install the top cover.
3. Connect BNC for CAMERA IN port, MONITOR OUT port and JACK for AUDIO IN, AUDIO OUT port from the relevant equipments.
4. Connect the power cord of adaptor.

II OPERATION

2.1 Power On

1. After installation correctly, connect power adaptor to switch the power of DVR on.
2. The HDD must be formatted by DVR when using the HDD first time.

2.2 Power Off

1. Remove the power adaptor cord. It's better not to remove the power of DVR during recording, playback or system setup.
2. If the DVR is not in use for a long time, please remove the connection of the power cord of adaptor.

2.3 Display Mode

1. Press the "MODE" button to display quad picture in the live display mode. Press "UP", "DOWN", "LEFT" and "RIGHT" button to select single camera and the single live view is displaying on the screen.
2. Use mouse double click the mouse to select single camera and the single live view is displaying on the screen in the live display mode. Double click again to return back to display quad picture.

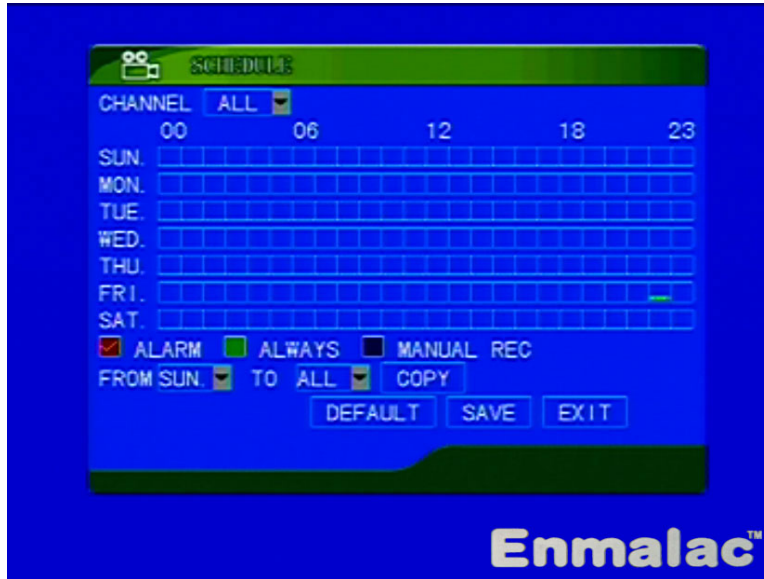
2.4 Manual Recording

1. Set recording mode to TIMER RECORD in the RECORD MODE menu. Set all channel and all date/time to MANUAL REC mode in the SCHEDULE menu.
2. In the live mode, press the "REC" button on the front panel or remoter controller to start manual recording. Or right click mouse and select MANUAL REC to start manual recording. A red symbol R will be displayed on the picture of the channel. Press STOP button on the front panel or remoter controller to stop manual recording. Or right click mouse and select STOP REC to stop manual recording.
3. If the hard disk is full during recording, the system may stop recording when selecting OVERWRITE to CLOSE in the HDD MANAGEMENT setup menu. The system may not stop recording and automatically overwrite the oldest recorded file when selecting OVERWRITE to OPEN in the HDD MANAGEMENT setup menu.

2.5 Alarm Recording

1. Stop manual recording.
2. Connect ALARM IN port of DVR with outside sensor alarm equipments.
3. Set recording mode to TIMER RECORD in the RECORD MODE menu. Set relevant channel and date/time for ALARM REC mode in the SCHEDULE menu.
4. When a sensor alarm input signal or motion alarm is detected, the relevant single screen will begin ALARM recording. The red symbol R and I will be displayed on the image of the channel for sensor alarm recording. The red symbol R and M will be displayed on the image of the channel for motion alarm recording. For this recording mode, the alarm setting and motion setting in the ALARM SETUP and MOTION DETECT menu must be set up correctly.

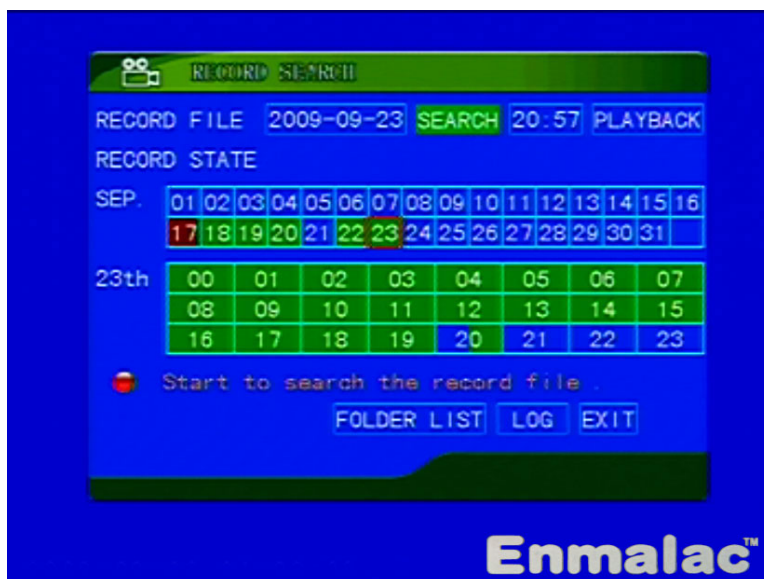
2.6 Schedule Recording



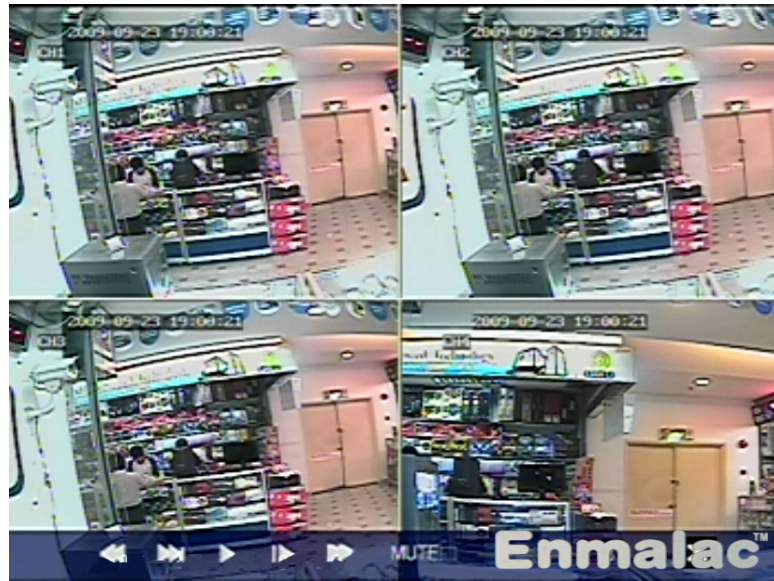
1. Stop manual recording.
2. Make sure the current date and time are correct.
3. Set recording mode to TIMER RECORD in the RECORD MODE menu. Set relevant channel and date/time for this mode in the SCHEDULE menu.
4. The system begins or stops schedule recording automatically according to the SCHEDULE setup.

2.7 Playback

1. Press "PLAY" button on the front panel or remote controller to display RECORD SEARCH menu in the live display mode.
2. Press "UP", "DOWN", "LEFT" or "RIGHT" button on the front panel or remote controller to move the cursor to RECORD FILE. Press "ENTER" button to select date. Press "ENTER" and "ESC" button to change date and finish date setting.
3. Move the cursor to SEARCH button in the RECORD SEARCH menu and press "ENTER" button on the front panel or remote controller to get detailed recording date and time.
4. Press "UP", "DOWN", "LEFT" or "RIGHT" button to select recording date and time, press "ENTER" to play back.



- In the playback mode, press "PAUSE" button to pause the image. Repeat pressing "PAUSE" button to step forward the image. Press "PLAY" button to restart playback.



- In the playback mode, press "FORWARD" button or "BACKWARD" button to speed-up playback backward or forward at the speed of 2x, 4x or 8x.
- In the playback mode, press "ESC" button on the front panel or remote controller to stop playback and return to previous mode.

• Mouse

- Right click mouse to display QUICK MENU in the live display mode. Click on the VIDEO SEARCH button to display RECORD SEARCH menu.
- Click on the RECORD FILE box to set date and click on SEARCH button to get detailed recording date and time. Click on a button of recording date and time to play back.
- In the playback mode, click on the relevant button of the status bar on the bottom screen to select the playback mode: fast forward, rewind, pause, step forward and normal playback. Click on the mute button to turn off the audio of playback.
- Click "ESC" button to stop playback and return to previous mode.

2.8 Time Searching Playback

- Press "PLAY" button on the front panel or remoter controller to display RECORD SEARCH menu in the live display mode.
- Press "UP", "DOWN", "LEFT" or "RIGHT" button on the front panel or remote controller to select RECORD FILE. Press "ENTER" button to set date. Press "ENTER" and "ESC" button to change date and finish date setting.
- Select the searching time beside the PLAYBACK button in the RECORD SEARCH menu. Select PLAYBACK button in the RECORD SEARCH menu and press "ENTER" button on the front panel or remote controller to play back.
- In the playback mode, press "ESC" button on the front panel or remote controller to stop playback and return to previous mode.

• Mouse

1. Right click mouse to display QUICK MENU during the live display mode. Click on the VIDEO SEARCH button to display RECORD SEARCH menu.
2. Click on the RECORD FILE to set date and click on the searching time beside the PLAYBACK button in the RECORD SEARCH menu to select recording time. Click on the PLAYBACK button in the RECORD SEARCH menu to play back.
3. Click on the relevant button of the status bar on the bottom screen to select the playback mode: fast forward, rewind, pause, step forward and normal playback. Click on the mute button to turn off the audio of playback.
4. Click "ESC" button to stop playback and return to previous mode.

2.9 Folder List Playback

1. Press "PLAY" button on the front panel or remoter controller to display RECORD SEARCH menu in the live display mode.
2. Select SEARCH button in the RECORD SEARCH menu and press "ENTER" button on the front panel or remote controller to get detailed recording date and time.
3. Select FOLDER LIST button in the RECORD SEARCH menu and press "ENTER" button on the front panel or remote controller to enter FILE LIST menu.
4. Select channel and type in the FILE LIST menu to get the detailed recording folder list.
5. Select the FIRST, PRE, NEXT, LAST, ALL and OTHER button in the FILE LIST menu and press "ENTER" button on the front panel or remote controller to select the page. Select a folder in the FILE LIST menu and press "ENTER" button on the front panel or remote controller to play back.

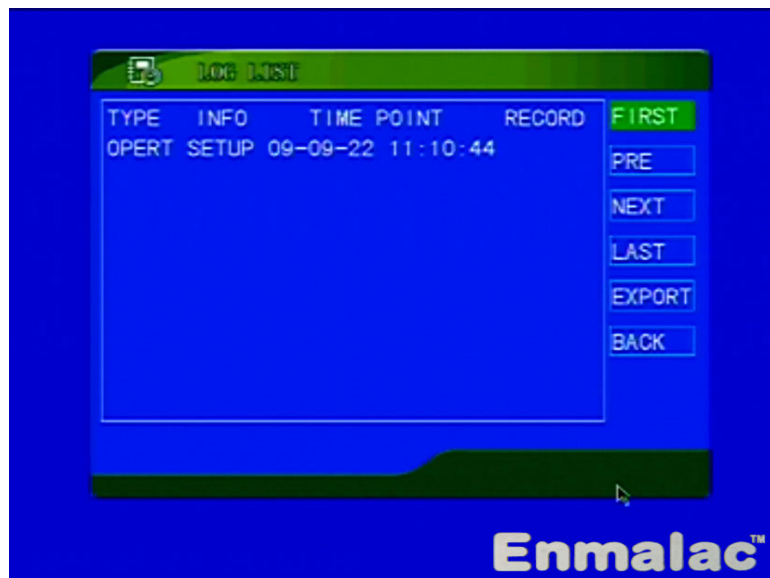
• Mouse

1. Right click mouse to display QUICK MENU in the live display mode. Click on the VIDEO SEARCH button to display RECORD SEARCH menu.
2. Click on the SEARCH button in the RECORD SEARCH menu to get detailed recording date and time. Click on the FOLDER LIST button in the RECORD SEARCH menu to enter FILE LIST menu.
3. Click to select channel and type in the FILE LIST to get the detailed recording folder list.
4. Click to select the FIRST, PRE, NEXT, LAST, ALL and OTHER button in the FILE LIST menu to select the page. Click on a folder in the FILE LIST menu to play back.

2.10 Log List Playback



1. Press "PLAY" button on the front panel or remoter controller to display RECORD SEARCH menu in the live display mode.
2. Select LOG button in the RECORD SEARCH menu and press "ENTER" button on the front panel or remote controller to enter LOG SEARCH menu.



3. Select LOG TYPE, START date and END date in the LOG SEARCH menu and select SEARCH button in the LOG SEARCH menu, press "ENTER" button on the front panel or remote controller to enter LOG LIST menu.
4. Select the FIRST, PRE, NEXT and LAST button in the LOG LIST menu and press "ENTER" button on the front panel or remote controller to select the page. Select a log in the LOG LIST menu and press "ENTER" button on the front panel or remote controller to play back.

• Mouse

1. Right click mouse to display QUICK MENU in the live display mode. Click on the VIDEO SEARCH button to display RECORD SEARCH menu.
2. Click on the LOG button to enter LOG SEARCH menu.
3. Click to select LOG TYPE , START date and END date in the LOG SEARCH menu and click on the SEARCH button in the LOG SEARCH menu to enter LOG LIST menu.
4. Click to select the FIRST, PRE, NEXT and LAST button in the LOG LIST menu to select the page. Click on a log in the LOG LIST menu to play back.

2.11 USB Backup

1. Connect the USB backup device to DVR USB port.
2. Press "PLAY" button on the front panel or remoter controller to display RECORD SEARCH menu in the live display mode.
3. Select SEARCH button in the RECORD SEARCH menu and press "ENTER" button on the front panel or remote controller to get detailed recording date and time.
4. Select FOLDER LIST button in the RECORD SEARCH menu and press "ENTER" button on the front panel or remote controller to enter FILE LIST menu.
5. Select channel and type in the FILE LIST to get the detailed recording folder list.
6. Select the FIRST, PRE, NEXT, LAST, ALL and OTHER button in the FILE LIST menu and press "ENTER" button on the front panel or remote controller to select the page. Select a BAK box beside the folder list in the FILE LIST menu and press "ENTER" button on the front panel or remote controller to select backup files.
7. Select the BACKUP button in the FILE LIST menu and press "ENTER" button on the front panel or remote controller to start backup recording files.

• Mouse

1. Right click mouse to display QUICK MENU in the live display mode. Click on the VIDEO SEARCH button to display RECORD SEARCH menu.
2. Click on the SEARCH button in the RECORD SEARCH menu to get detailed recording date and time. Click on the FOLDER LIST button in the RECORD SEARCH menu to enter FILE LIST menu.
3. Click to select channel and type in the FILE LIST to get the detailed recording folder list.
4. Click to select the FIRST, PRE, NEXT, LAST, ALL and OTHER button in the FILE LIST menu to select the page. Click on a BAK frame beside the folder list in the FILE LIST menu to select backup files.
5. Click on the BACKUP button in the FILE LIST menu to start backup recording files.

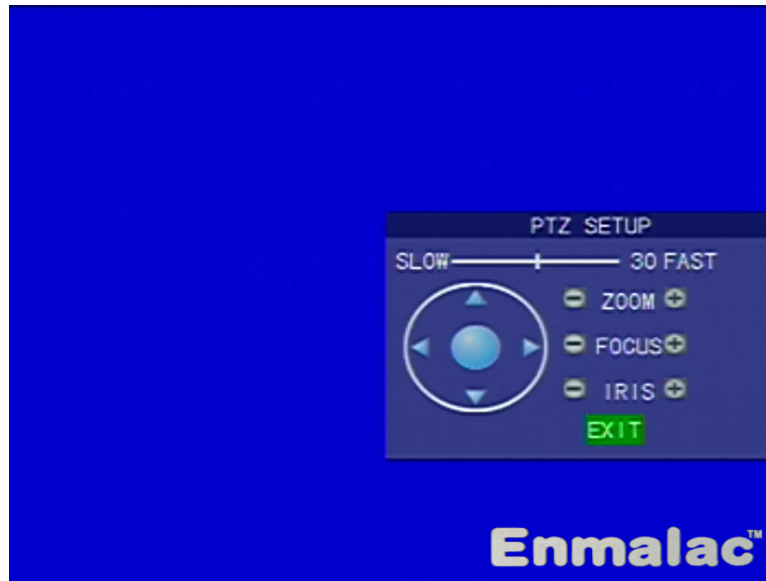
Note: The backup recording file is .264 format, it can be played by Windows Media Player or the player on the CD in the packing. Using removable USB HDD to backup, it needed to format the HDD system into "FAT32".

2.12 System Information

1. Press "MENU" button on the front panel to display MAIN menu in the live display mode.
2. In the MAIN menu, Press "UP", "DOWN", "LEFT" and "RIGHT" buttons to select ADVANCE button on the MAIN menu and press "ENTER" button to enter ADVANCE setup menu.
3. Press "UP" or "DOWN" button on the front panel to move the cursor to the INFO icon. Press "ENTER" button on the front panel to enter SYSTEM INFO menu.
4. Press "ESC" button on the front panel or remote controller to return to previous mode.



2.13 PTZ Control



1. Press the "UP", "DOWN", "LEFT" or "RIGHT" button to select desired camera you wish to display on the monitor in the live display mode. Then press "PTZ" button on the front panel or remoter controller to display PTZ control menu and enter the PTZ operation mode.
2. Press "UP", "DOWN", "LEFT" or "RIGHT" button to control pan, tilt, zoom plus, zoom minus, focus plus, focus minus, iris plus, iris minus and speed of pan & tilt.

Note: Only keep pressing "UP", "DOWN", "LEFT" or "RIGHT" button to control pan and tilt function. When these buttons released, the system may stop pan and tilt control function.

Press "ESC" button on the front panel or remote controller to quit PTZ operation.

• Mouse

1. Right click mouse to display QUICK MENU in the live display mode. Click on the PTZ button to display PTZ control menu and enter the PTZ operation mode.
2. Click on the relevant buttons in the PTZ control menu to control pan, tilt, zoom plus, zoom minus, focus plus, focus minus, iris plus, iris minus and speed of pan & tilt.
3. Click on the EXIT button in the PTZ control menu to quit PTZ operation.

2.14 Password

If the password protection is enabled, the password will be required when the system enter MAIN MENU. To set or change password, please refer to SYSTEM PASSWORD setup.

1. Press "MENU" button on the front panel or remote controller, it will display USER LOGIN dialog box to ask you to input correct password if password is required.
2. Press "UP", "DOWN", "LEFT" or "RIGHT" button on the front panel or remote controller to move cursor to DEVICE ID and PASSWORD. Press "ENTER" button and press "ENTER" button again to input correct ID number and password. After input the correct password, press "ESC" button to close input and press "ESC" button again, move the cursor to APPLY on the USER LOGIN box, press "ENTER" button on the front panel or remote controller to enter the MAIN menu.
3. Setting password: Enter the MAIN menu, select BASIC button on the main menu and press "ENTER" button to enter BASIC setup menu. Press "UP" or "DOWN" button on the front panel to move the cursor to the PASSWORD icon. Press "ENTER" button on the front panel to enter the SECURITY menu. Set DEVICE ID and set PASSWORD to ENABLE. Input 6 digits user password and administrator password.

III SYSTEM MENU SETUP

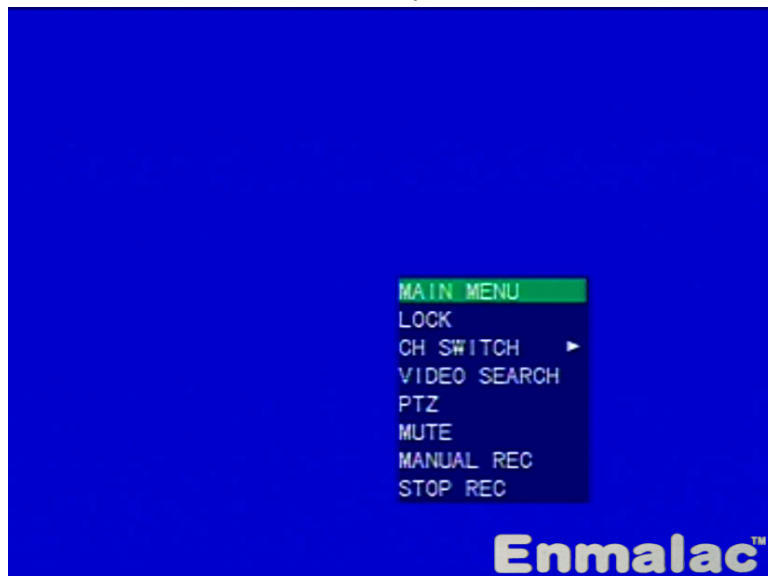
3.1 Main Menu Setup

1. Press "MENU" button on the front panel to display MAIN menu in the live display mode.
2. In the MAIN menu, Press "UP", "DOWN", "LEFT" and "RIGHT" buttons to select submenu icon and press "ENTER" button to enter relevant submenu.
3. In the MAIN menu, Press "ESC" button to quit the MAIN menu.



- Mouse

1. Right click mouse to display QUICK MENU in the live display mode.
2. At the QUICK MENU, Click on the MAIN MENU button to enter MAIN menu.
3. In the MAIN menu, click on the "EXIT" icon to quit the MAIN menu.



MAIN MENU: Enter MAIN menu.

LOCK: Password needed

CH SWITCH: Select the live display mode.

VIDEO SEARCH: Search recording files for playback

PTZ: Enter PTZ operation mode

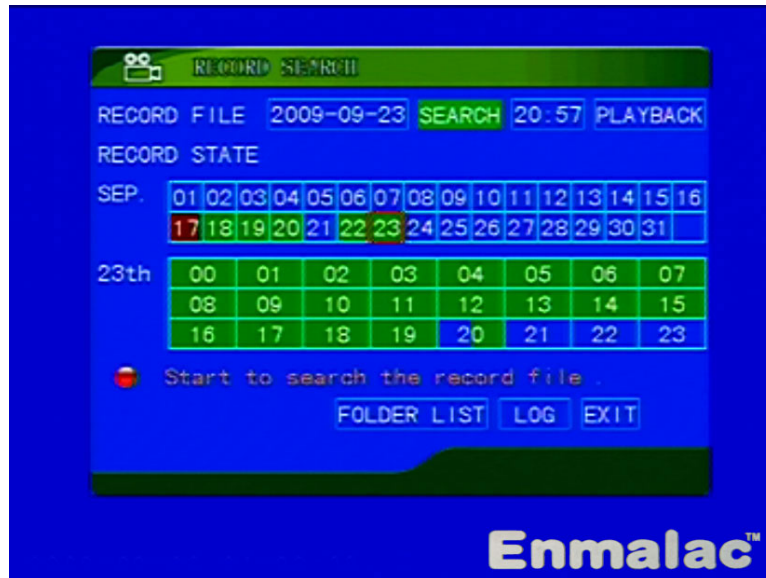
MUTE: Turn off the live audio

MANUAL REC: Start manual recording

STOP REC: Stop manual recording

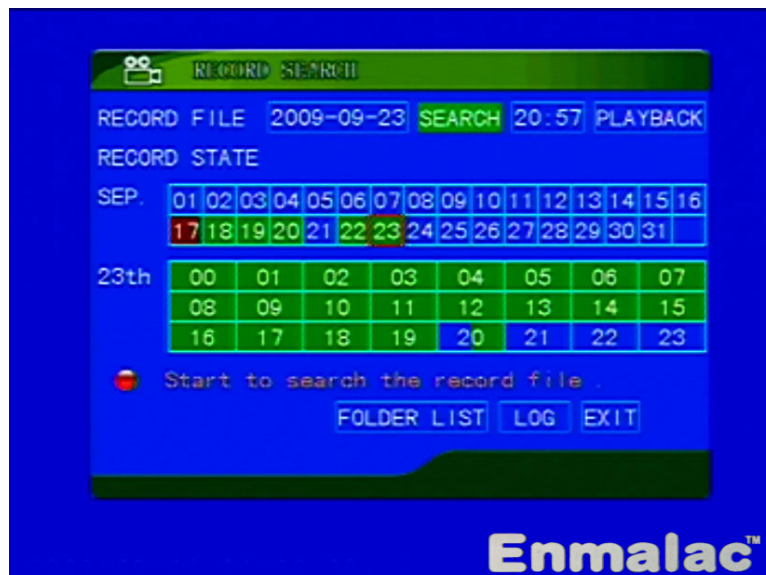
3.2 RECORD SEARCH

Press "MENU" button on the front panel or remote controller to display MAIN menu in the live display mode. Press "UP", "DOWN", "LEFT" and "RIGHT" buttons to select SEARCH icon in the MAIN menu and press "ENTER" button to enter RECORD SEARCH menu.



1. NORMAL SEARCHING

In the RECORD SEARCH menu, press "UP", "DOWN", "LEFT" or "RIGHT" button on the front panel or remote controller to select RECORD FILE and press "ENTER" button to select date. Press "ENTER" and "ESC" button to change date and finish date setting. Select SEARCH button in the RECORD SEARCH menu and press "ENTER" button on the front panel or remote controller to get detailed recording date and time.



Press "UP", "DOWN", "LEFT" or "RIGHT" button to select recording date and time, press "ENTER" to playback.



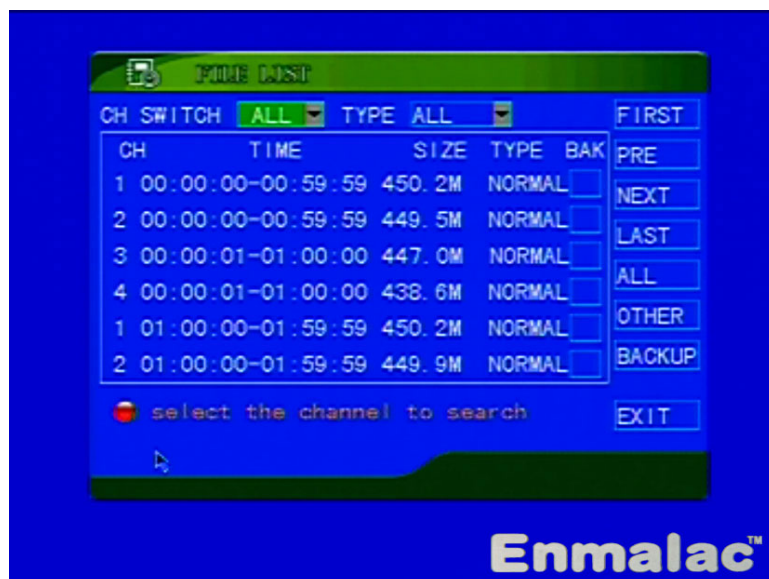
In the playback mode, press "PAUSE" button to pause the images. Repeat pressing "PAUSE" button to step forward the images. Press "PLAY" button to restart playback. Press "FORWARD" button or "REWARD" button to speed-up playback backward or forward at the speed of 2x, 4x or 8x.

2. TIME SEARCHING

- In the RECORD SEARCH menu, press "UP", "DOWN", "LEFT" or "RIGHT" button on the front panel or remote controller to select RECORD FILE and press "ENTER" button to select date. Press "ENTER" and "ESC" button to change date and finish date setting.
- Select the searching time beside the PLAYBACK button in the RECORD SEARCH menu. Select PLAYBACK button in the RECORD SEARCH menu and press "ENTER" button on the front panel or remote controller to play back.

3. FOLDER LIST SEARCHING

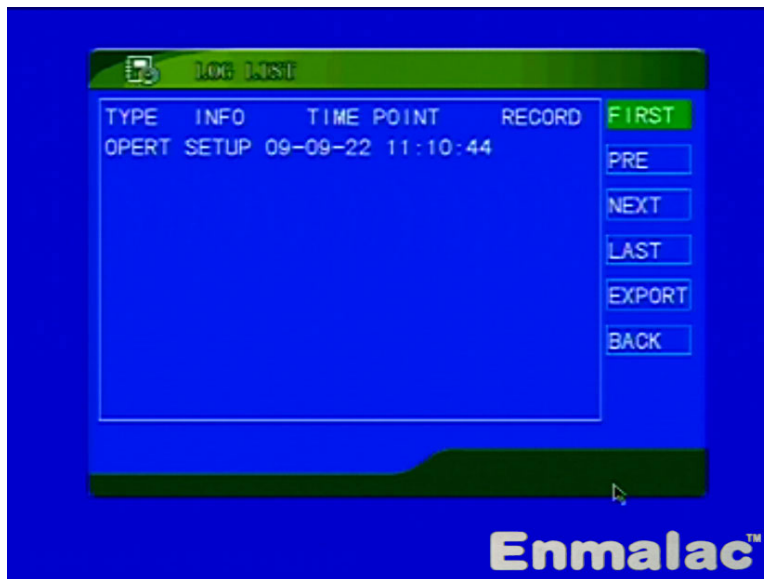
- In the RECORD SEARCH menu, select SEARCH button and press "ENTER" button on the front panel or remote controller to get detailed recording date and time.
- Select FOLDER LIST button in the RECORD SEARCH menu and press "ENTER" button on the front panel or remote controller to enter FILE LIST menu.



Select channel and type in the FILE LIST menu to get the detailed recording folder list . Select the FIRST, PRE, NEXT, LAST, ALL and OTHER button in the FILE LIST menu and press "ENTER" button on the front panel or remote controller to select the page. Select a folder in the FILE LIST menu and press "ENTER" button on the front panel or remote controller to play back.

4. LOG LIST SEARCHING

- In the RECORD SEARCH menu, select LOG button in the RECORD SEARCH menu and press "ENTER" button on the front panel or remote controller to enter LOG SEARCH menu.
- Select LOG TYPE, START date and END date in the LOG SEARCH menu and select SEARCH button in the LOG SEARCH menu, press "ENTER" button on the front panel or remote controller to enter LOG LIST menu.



- Select the FIRST, PRE, NEXT and LAST button in the LOG LIST menu and press "ENTER" button on the front panel or remote controller to select the page. Select a log in the LOG LIST menu and press "ENTER" button on the front panel or remote controller to playback.

3.3 RECORD MODE

Press "MENU" button on the front panel or remote controller to display MAIN menu in the live display mode. Press "UP", "DOWN", "LEFT" and "RIGHT" buttons to select RECORD icon in the MAIN menu and press "ENTER" button to enter RECORD MODE menu.



1. CHANNEL

Turn on or off the channel recording.

2. RESOLUTION

HIGHEST: D1, 6.25fps for each channel (not real time).

HIGH: 1/2D1, 12.5fps for each channel (not real time).

NORMAL: CIF, 25fps for each channel (real time).

3. QAULTY

The quality of recording image can be set to BEST, FINE and NORMAL.

4. AUDIO

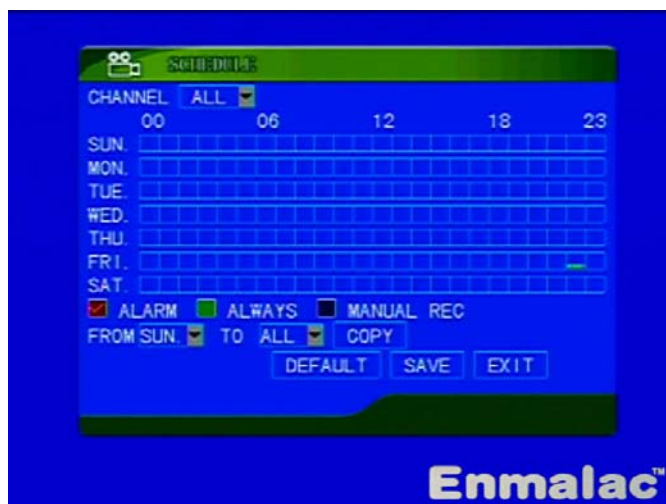
ON: Enable audio record of all channels.

OFF: Disable audio record of all channels.

5. RECORDING MODE

POWER UP: Record all the time.

TIME RECORD: Record mode can be set to ALARM record, ALWAYS record and MANUAL record according to date and time setting. In the RECORD MODE menu, select RECORDING MODE to TIMER RECORD, select SCHEDULE button in the RECORD MODE menu and press "ENTER" button on the front panel or remote controller to enter SHEDULE menu.



CHANNEL

Select the channel for schedule recording mode. ALL to select all channels.

ALARM

Start record when alarm signal detected, include sensor alarm and motion alarm.

ALWAYS

Recording all the time.

MANUL REC

Start or stop record manually.

COPY

After setting recording mode of one day, press "COPY" to copy this recording mode to other days. Setting schedule recording mode: press "UP", "DOWN", "LEFT" and "RIGHT" buttons move the cursor to ALARM, ALWAYS or MANUAL REC and pres "ENTER" button to select a recording mode. Move cursor to any time of any day, press "ENTER" button to set the selected recording mode for this date and time. After the setting, move the cursor to SAVE button in the SCHEDULE menu and press "ENTER" button.

6. FOLDER SIZE

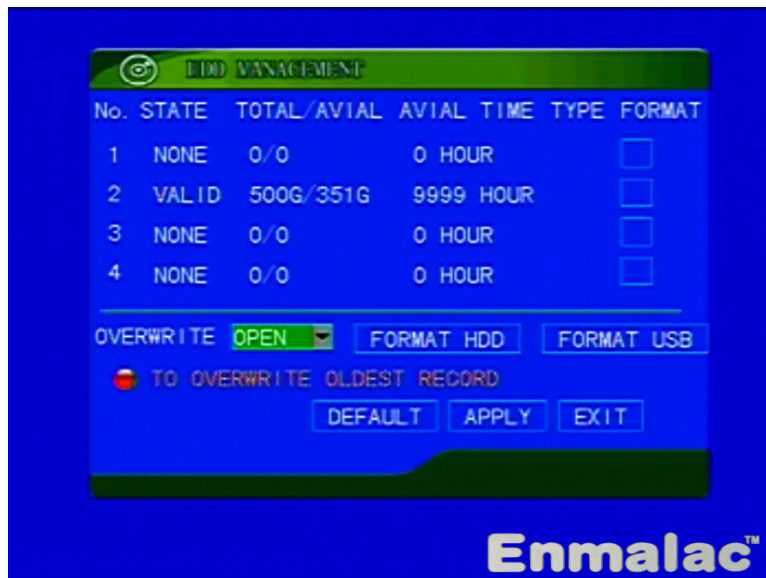
Select the each folder size recorded in HDD.

7. DEFAULT

Default recording mode.

3.4 HDD MANAGEMENT

Press "MENU" button on the front panel or remote controller to display MAIN menu in the live display mode. Press "UP", "DOWN", "LEFT" and "RIGHT" buttons to select HDD icon in the MAIN menu and press "ENTER" button to enter HDD MANAGEMENT menu.

**1. HDD LIST**

Total size, available size and available time of each HDD.

2. OVERWRITE

OPEN: If the hard disk is full during recording, the system may not stop recording and automatically overwrite the oldest recorded file.

OFF: If the hard disk is full during recording, the system may stop recording.

3. FORMAT HDD

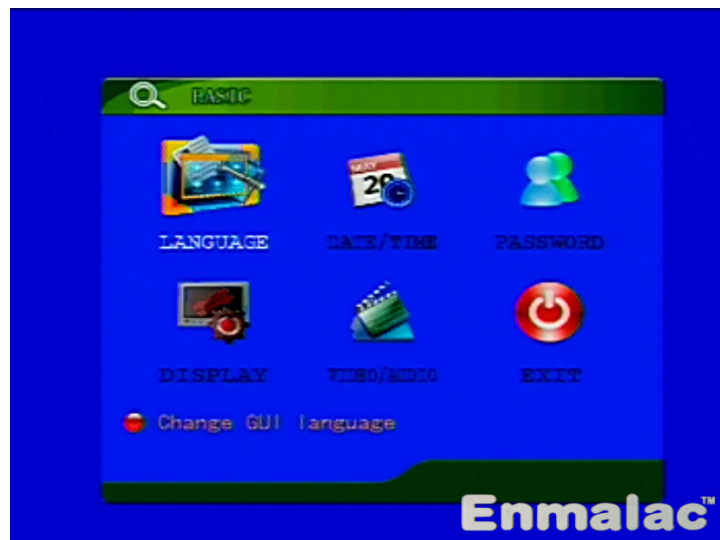
In the HDD MANAGEMENT menu, press "UP", "DOWN", "LEFT" or "RIGHT" button on the front panel or remote controller to move the cursor to the HDD in the HDD list and press "ENTER" to select HDD needed to format. Move the cursor to FORMAT HDD button in the HDD MANAGEMENT menu and press "ENTER" to format the HDD. Select OK and press "ENTER" button when WARNING box appears. After HDD format is complete, select "APPLY" and press "ENTER" to restart system.

4. FORMAT USB

Connect the USB device to the DVR. In the HDD MANAGEMENT menu, press "UP", "DOWN", "LEFT" or "RIGHT" button on the front panel or remote controller to move the cursor to FORMAT USB and press "ENTER" to format the USB device.

3.5 BASIC

Press "MENU" button on the front panel or remote controller to display MAIN menu in the live display mode. Press "UP", "DOWN", "LEFT" and "RIGHT" buttons to select BASIC icon in the MAIN menu and press "ENTER" button to enter BASIC menu.



1. LANGUAGE:

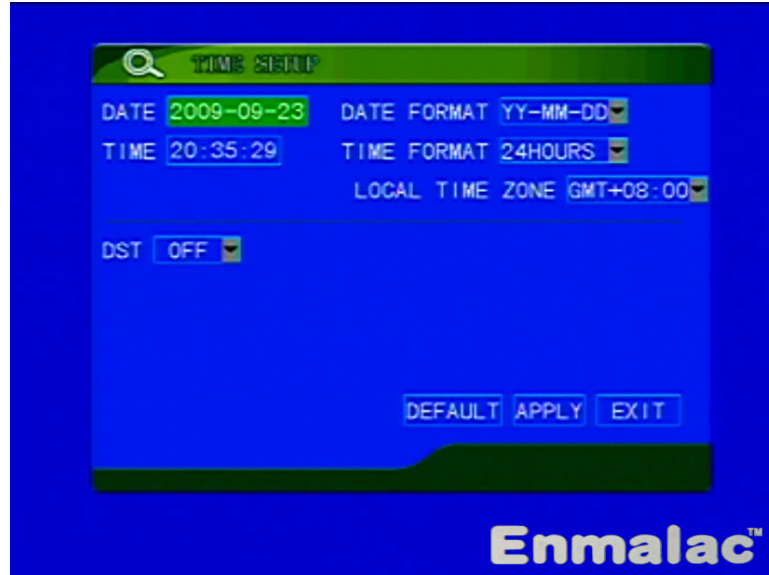
Press "UP", "DOWN", "LEFT" and "RIGHT" buttons to move cursor to LANGUAGE icon in the BASIC menu and press "ENTER" button to enter SYSTEM LANGUAGE menu.



Move the cursor to SYSTEM LANGUAGE in the SYSTEM LANGUAGE menu. Press "ENTER" button and "UP", "DOWN" button on the front panel or remote controller to select language. Move the cursor to APPLY and press "ENTER" to select the language. After confirming, the system will be restarted.

2. TIME SETUP:

Press "UP", "DOWN", "LEFT" and "RIGHT" buttons to move cursor to DATE/TIME icon in the BASIC menu and press "ENTER" button to enter TIME SETUP menu.



a. DATE

Set current date.

b. DATE FORMAT

Set the date display mode.

c. TIME

Set current time.

d. TIME FORMAT

Set the time display mode.

e. LOCAL TIME ZONE

Set the time zone for DVR using place.

f. DST

Enable or disable daylight saving time.

g. DEFAULT

Reset to default time setup.

h. APPLY

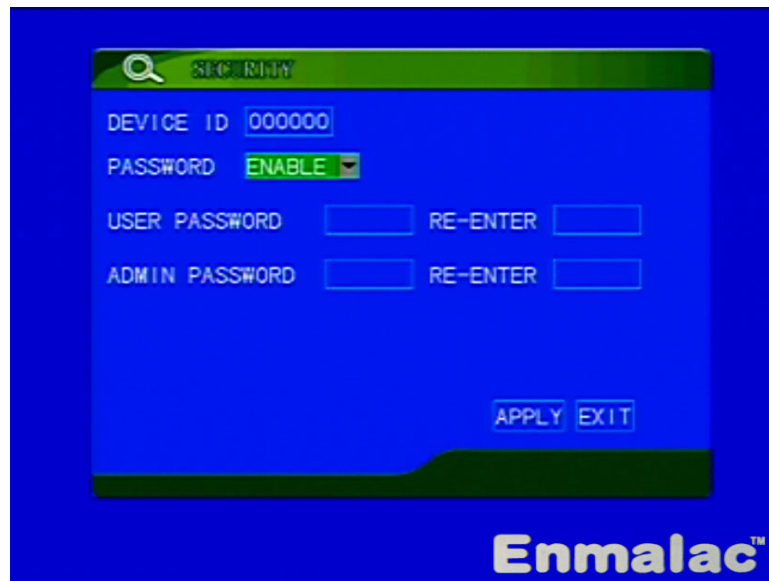
Move the cursor to this button and press "ENTER" button on the front panel or remote controller to save the setting.

i. EXIT

Move the cursor to this button and press "ENTER" button on the front panel or remote controller to quit the TIME SETUP menu.

3. PASSWORD

Press "UP", "DOWN", "LEFT" and "RIGHT" buttons to move cursor to PASSWORD icon in the BASIC menu and press "ENTER" button to enter SECURITY menu.



a. DEVICE ID

Different DVR can set a different device id.

b. PASSWORD

Enable or disable password setting.

c. USER PASSWORD

Move the cursor to USER PASSWORD box. Press "ENTER" button on the front panel or remote controller to enter password setting and press "ENTER" button again to set user password. For this password it needs to input same password again in RE-ENTER box.

d. ADMIN PASSWORD

Move the cursor to ADMIN PASSWORD box. Press "ENTER" button on the front panel or remote controller to enter password setting and press "ENTER" button again to set administrator password. For this password it needs to input same password again in RE-ENTER box.

e. APPLY

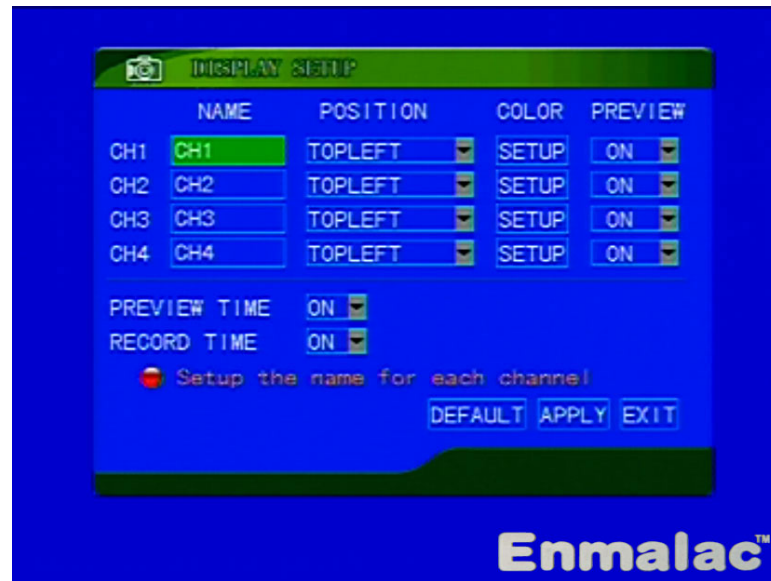
Move the cursor to this button and press "ENTER" button on the front panel or remote controller to save the setting.

f. EXIT

Move the cursor to this button and press "ENTER" button on the front panel or remote controller to quit the SECURITY menu.

4. DISPLAY SETUP

Press "UP", "DOWN", "LEFT" and "RIGHT" buttons to move cursor to DISPLAY icon in the BASIC menu and press "ENTER" button to enter DISPLAY SETUP menu.



a. NAME

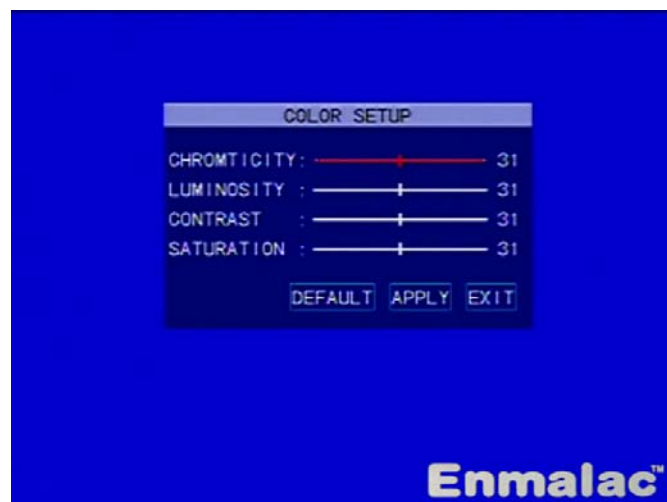
Move the cursor to NAME box of any channel. Press "ENTER" button on the front panel or remote controller to enter channel name setting and press "ENTER" button again to set channel name.

b. POSITION

Move the cursor to POSITION box of any channel. Press "ENTER", "UP" and "DOWN" button on the front panel or remote controller to select the display position of each channel title. Press "ENTER" button again to confirm.

c. COLOR

Move the cursor to COLOR SETUP button of a channel and press "ENTER" button on the front panel or remote controller to enter COLOR SETUP menu. In the COLOR SETUP menu, press "ENTER", "UP" and "DOWN" button on the front panel or remote controller or use mouse to change the brightness, contrast, hue and saturation of each channel image. Move the cursor to APPLY and press "ENTER" button to save the setting. Move the cursor to EXIT and press "ENTER" button to quit COLOR SETUP menu.



d. PREVIEW TIME

Select ON to display date and time in the live display mode. Select OFF not to display date and time in the live display mode.

e. RECORD TIME

Select ON to record date and time. When playback it will display date and time. Select OFF not to record date and time.

5. VIDEO/AUDIO SETUP

Press "UP", "DOWN", "LEFT" and "RIGHT" buttons to move cursor to VIDEO/AUDIO icon in the BASIC menu and press "ENTER" button to enter VID/AUD SETUP menu.

**a. VGA RESOLUTION**

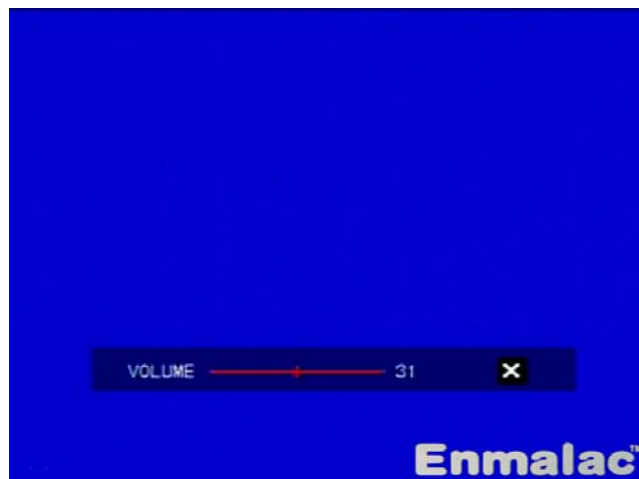
Move the cursor to VGA RESOLUTION box. Press "ENTER", "UP" and "DOWN" button on the front panel or remote controller to select the VGA resolution and press "ENTER" button again to select. After confirming, it will restart system automatically.

b. CAMERA SYSTEM

Move the cursor to CAMERA SYSTEM box. Press "ENTER", "UP" and "DOWN" button on the front panel or remote controller to select PAL or NTSC and press "ENTER" button again to select. After confirming, it will restart system automatically.

c. VOLUME SETUP

Move the cursor to VOLUME SETUP button and press "ENTER" button on the front panel or remote controller to enter VOLUME setup menu. In the VOLUME setup menu, use mouse to adjust audio volume.



6. EXIT

Move the cursor to EXIT icon and press "ENTER" button on the front panel or remote controller to quit BASIC setup menu.

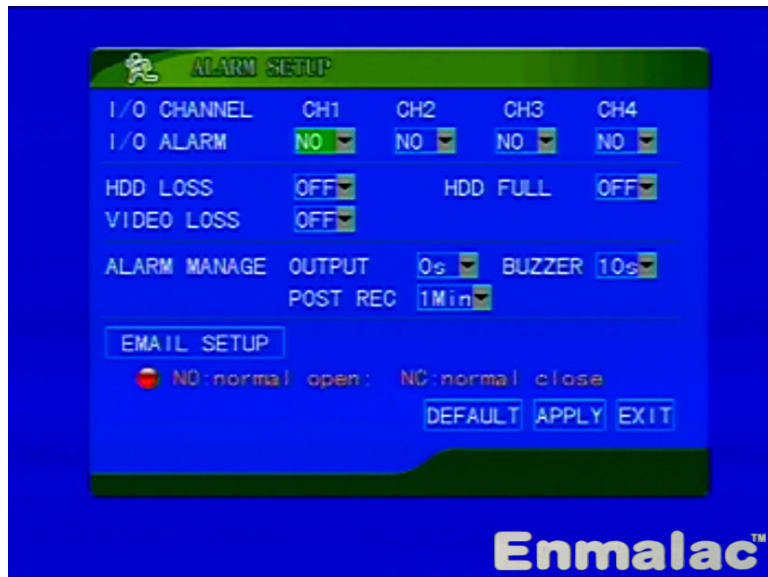
3.6 ADVANCE:

Press "MENU" button on the front panel or remote controller to display MAIN menu in the live display mode. Press "UP", "DOWN", "LEFT" and "RIGHT" buttons to select ADVANCE icon in the MAIN menu and press "ENTER" button to enter ADVANCE menu.



1. ALARM

Press "UP", "DOWN", "LEFT" and "RIGHT" buttons to move cursor to ALARM icon in the ADVANCE menu and press "ENTER" button to enter ALARM SETUP menu.



a. I/O ALARM

Move the cursor to I/O ALARM box of any channel. Press "ENTER", "UP" and "DOWN" button on the front panel or remote controller to select sensor alarm input type and press "ENTER" button to confirm: NORMAL OPEN, NORMAL CLOSE or OFF.

b. HDD LOSS

Move the cursor to HDD LOSS box. Press "ENTER", "UP" and "DOWN" button on the front panel or remote controller to select ON or OFF to enable or disable HDD LOSS alarm.

c. HDD FULL

Move the cursor to HDD FULL box. Press "ENTER", "UP" and "DOWN" button on the front panel or remote controller to select ON or OFF to enable or disable HDD FULL alarm.

d. VIDEO LOSS

Move the cursor to VIDEO LOSS box. Press "ENTER", "UP" and "DOWN" button on the front panel or remote controller to select ON or OFF to enable or disable VIDEO LOSS alarm.

e. ALARM MANAGE OUTPUT

Move the cursor to ALARM MANAGE OUTPUT box. Press "ENTER", "UP" and "DOWN" button on the front panel or remote controller to select alarm output time. If select 0s, there is no alarm signal output.

f. BUZZER

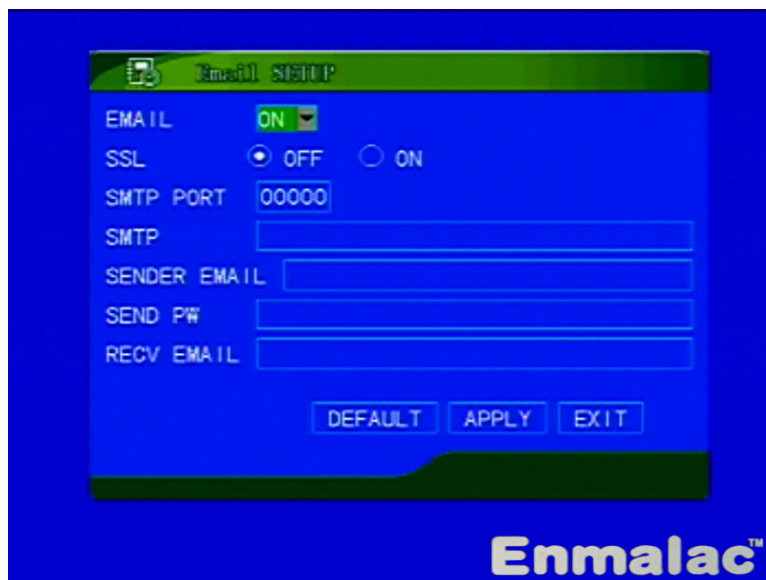
Move the cursor to BUZZER box. Press "ENTER", "UP" and "DOWN" button on the front panel or remote controller to select beep sound time when alarm signal detected. If select 0s, the beep does not sound when alarm occurred.

g. POST REC

Move the cursor to POST REC box. Press "ENTER", "UP" and "DOWN" button on the front panel or remote controller to select post-alarm recording time.

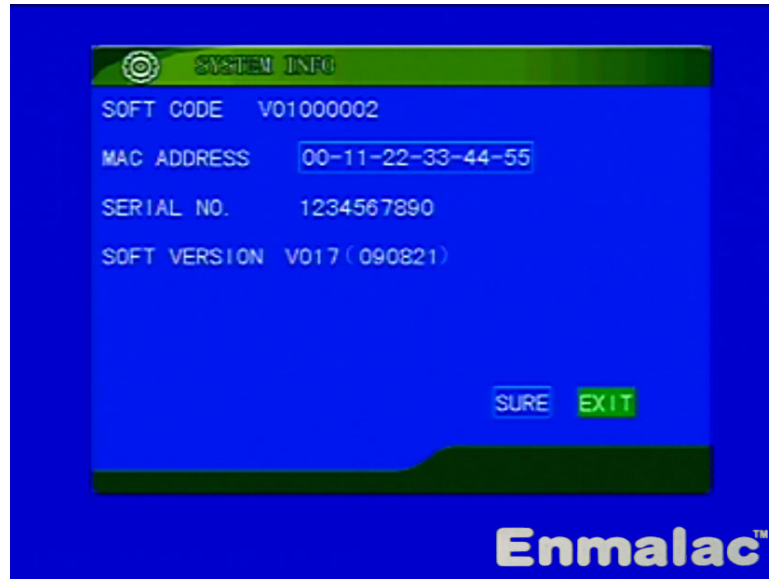
h. EMAIL SETUP

Move the cursor to EMAIL SETUP box. Press "ENTER" button on the front panel or remote controller to enter EMAIL SETUP menu. In the EMAIL SETUP menu, move the cursor to EMAIL box. Press "ENTER" button on the front panel or remote controller to select ON or OFF to enable or disable email setup. Select SSL ON or OFF, set SMTP PORT, input SMTP address, sender email address, password and receiver email address. After confirming, it will capture picture and send an email to receiver address when alarm occurred.



2. INFORMATION

Press "UP", "DOWN", "LEFT" and "RIGHT" buttons to move cursor to INFO icon in the ADVANCE menu and press "ENTER" button to enter SYSTEM INFO menu.

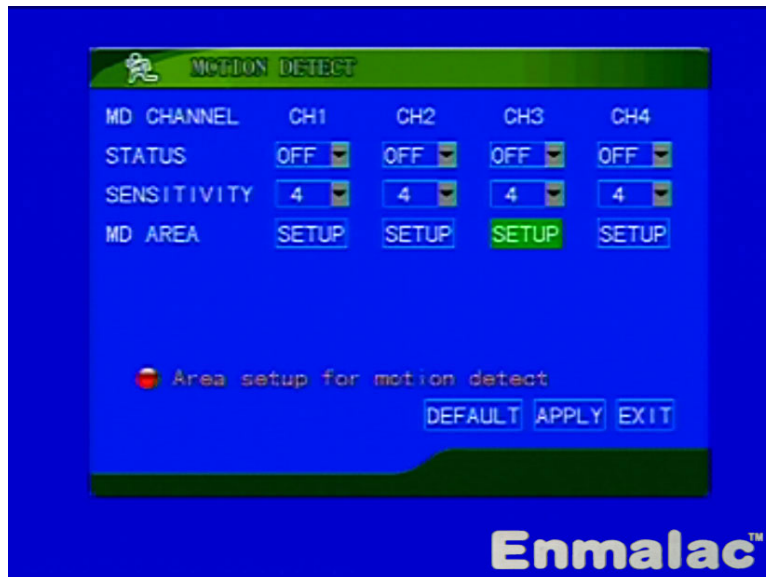


MAC ADDRESS

Move the cursor to MAC ADDRESS box and press "ENTER" button on the front panel or remote controller to enter MAC address and press "ENTER" button again to modify the MAC address. After modification, press "ESC" button to finish modification and press "ESC" button again to quit MAC address modification.

3. MOTION DETECTION

Press "UP", "DOWN", "LEFT" and "RIGHT" buttons to move cursor to MD icon in the ADVANCE menu and press "ENTER" button to enter MOTION DETECT menu.



a. STATUS

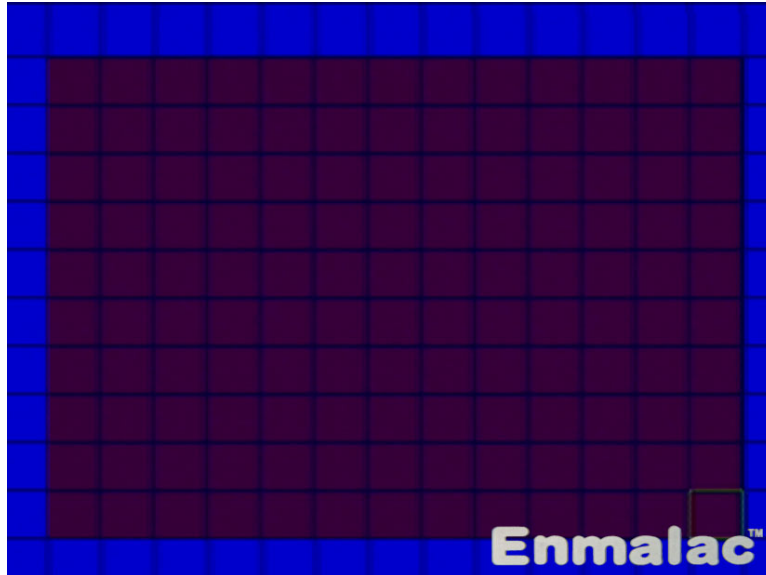
Move the cursor to STATUS box of a channel. Press "ENTER", "UP" and "DOWN" button on the front panel or remote controller to select ON or OFF to enable or disable motion detecting alarm and press "ENTER" button to confirm.

b. SENSITIVITY

Move the cursor to SENSITIVITY box of a channel. Press "ENTER", "UP" and "DOWN" button on the front panel or remote controller to select the sensitivity of motion detecting alarm.

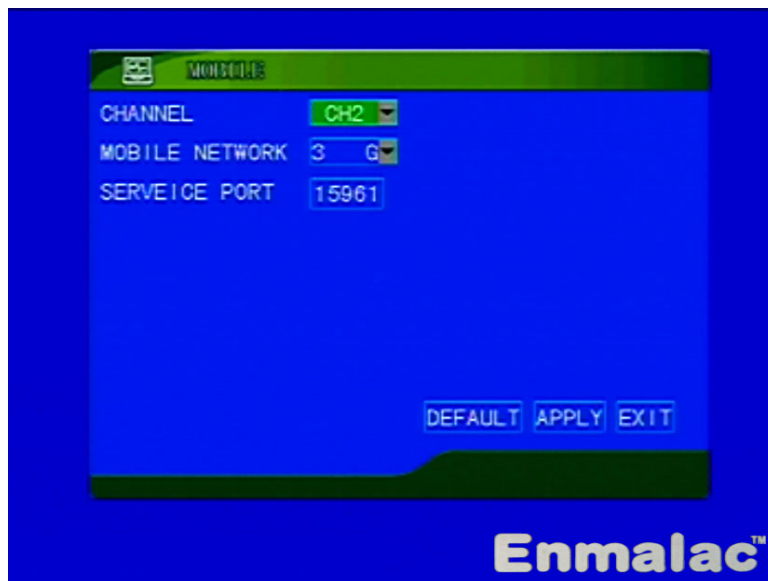
c. MD AREA

Move the cursor to MD AREA SETUP button of a channel. Press "ENTER" button on the front panel or remote controller to enter motion area selecting picture. In the motion area selecting picture, press "LEFT", "RIGHT", "UP" and "DOWN" button on the front panel or remote controller to move the cursor to any position of the picture. Press "ENTER" button to select a motion area and its color will change to red. Press "ENTER" button again not to select a motion area and its color will change to white. After setting, press "ESC" button to return back to MOTION DETECT menu.



4. MOBILE

Press "UP", "DOWN", "LEFT" and "RIGHT" buttons to move cursor to MOBILE icon in the ADVANCE menu and press "ENTER" button to enter MOBILE menu. The mobile with windows mobile system or symbian system can be used to connect with the DVR.

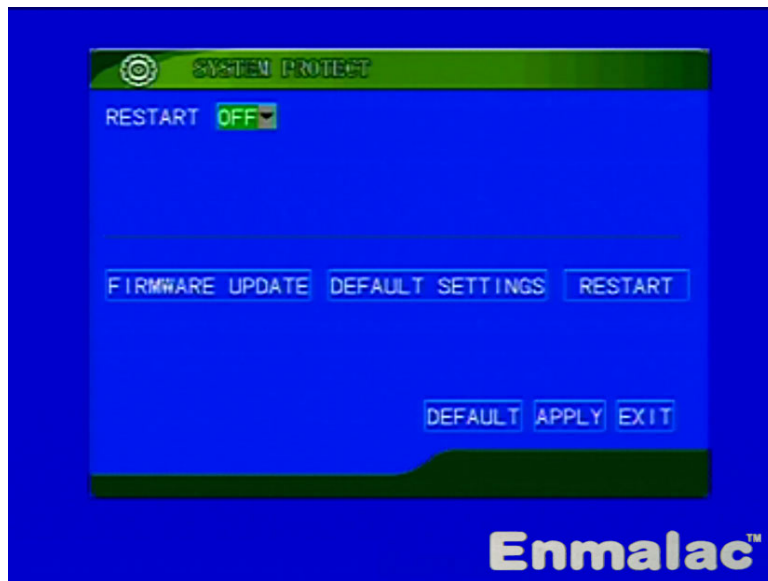


SERVICE PORT

Move the cursor to STATUS box of a channel. Press "ENTER" button on the front panel or remote controller to set service port number that must be the same with your mobile.

5. MAINTENANCE

Press "UP", "DOWN", "LEFT" and "RIGHT" buttons to move cursor to MAINTAIN icon in the ADVANCE menu and press "ENTER" button to enter SYSTEM PROTECT menu.



a. RESTART

Move the cursor to RESTART box. Press "ENTER" button on the front panel or remote controller to select ON or OFF to set restart period or not restart periodically. If select ON, move the cursor to SETTING box and press "ENTER", "UP" and "DOWN" button on the front panel or remote controller to select a period for restarting system automatically. Move the cursor to time box and press "ENTER" button on the front panel or remote controller to set restart time.

b. FIRMARE UPDATE

Prepare a USB disk for firmware updating. Set up a folder named dvrupgrade in USB disk and copy upgrading firmware(.sw file) in this folder. Connect the USB disk to the DVR USB port and move the cursor to FIRMARE UPDATE button. Press "ENTER" button on the front panel or remote controller to start firmware updating. After updating start, system will restart automatically and then display upgrading picture. It will take several minutes to upgrade new firmware.

c. DEFAULT SETTINGS

Move the cursor to DEFAULT SETTINGS button and press "ENTER" button on the front panel or remote controller to reset setting to factory default setting.

d. RESTART

Move the cursor to RESTART button and press "ENTER" button on the front panel or remote controller to restart the DVR.

6. PTZ

Press "UP", "DOWN", "LEFT" and "RIGHT" buttons to move cursor to PTZ icon in the ADVANCE menu and press "ENTER" button to enter PTZ SETUP menu.



a. PROTOCOL

Move the cursor to PROTOCOL box of a channel. Press "ENTER", "UP" and "DOWN" button on the front panel or remote controller to select PELCO-D or PELCO-P protocol for your PTZ device.

b. BAUD RATE

Move the cursor to BAUD RATE box of a channel. Press "ENTER", "UP" and "DOWN" button on the front panel or remote controller to select the baud rate for your PTZ device.

c. DATA BIT

Move the cursor to DATA BIT box of a channel. Press "ENTER", "UP" and "DOWN" button on the front panel or remote controller to select the data bit number for your PTZ device.

d. STOP BIT

Move the cursor to STOP BIT box of a channel. Press "ENTER", "UP" and "DOWN" button on the front panel or remote controller to select the stop bit number for your PTZ device.

e. VERIFY

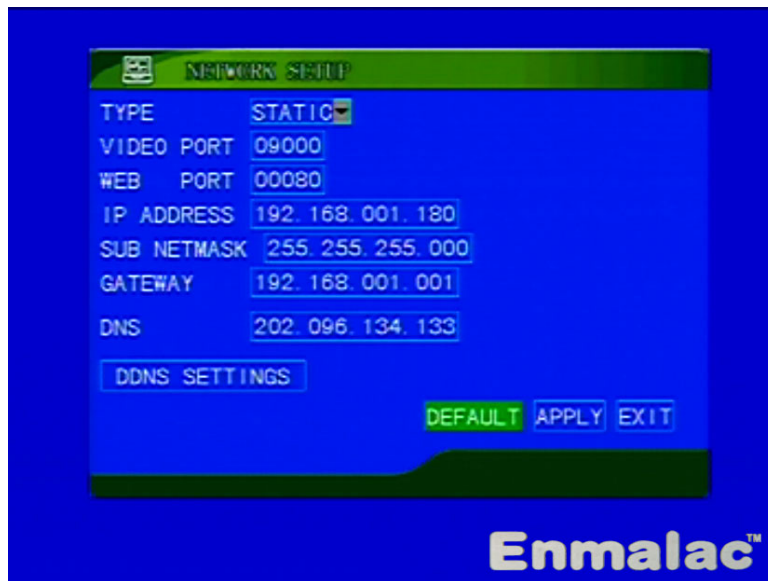
Move the cursor to VERIFY box of a channel. Press "ENTER", "UP" and "DOWN" button on the front panel or remote controller to select the verify mode for your PTZ device.

f. ADDRESS

Move the cursor to ADDRESS box of a channel. Press "ENTER" button on the front panel or remote controller to enter address setting and press "ENTER" button again to modify address for a channel.

7. NETWORK

Press "UP", "DOWN", "LEFT" and "RIGHT" buttons to move cursor to NETWORK icon in the ADVANCE menu and press "ENTER" button to enter NETWORK SETUP menu.



a. TYPE

Move the cursor to TYPE box of a channel. Press "ENTER", "UP" and "DOWN" button on the front panel or remote controller to select STATIC, DHCP or PPPOE for your network type.

b. VIDEO PORT

Move the cursor to VIDEO PORT box. Press "ENTER" button on the front panel or remote controller to enter video port setting and press "ENTER" button again to modify the port number of image file transmitting.

c. WEB PORT

Move the cursor to WEB PORT box. Press "ENTER" button on the front panel or remote controller to enter web port setting and press "ENTER" button again to modify the port number of network web.

d. IP ADDRESS

Move the cursor to IP ADDRESS box. Press "ENTER" button on the front panel or remote controller to enter IP address setting and press "ENTER" button again to set IP address of your network.

e. SUB NETMASK

Move the cursor to SUB NETMASK box. Press "ENTER" button on the front panel or remote controller to SUB NETMASK setting and press "ENTER" button again to set SUB NETMASK of your network.

f. GATEWAY

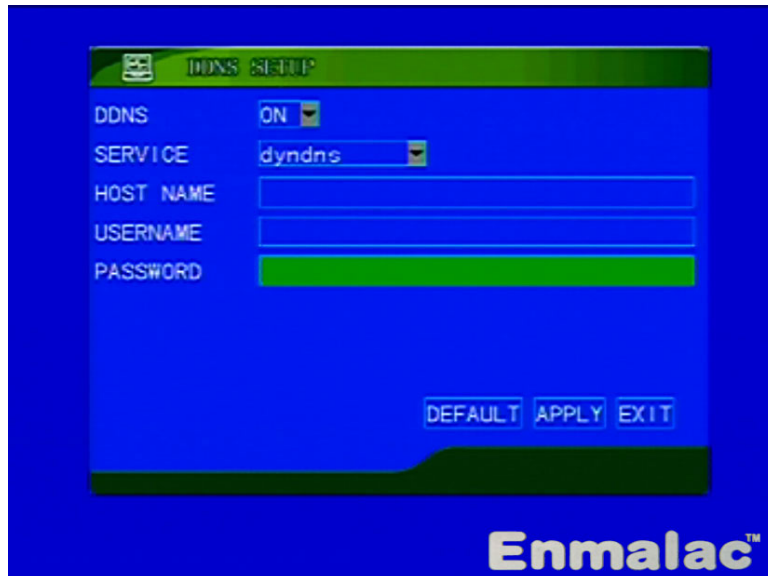
Move the cursor to GATEWAY box. Press "ENTER" button on the front panel or remote controller to enter GATEWAY setting and press "ENTER" button again to set GATEWAY of your network.

g. DNS

Move the cursor to DNS box. Press "ENTER" button on the front panel or remote controller to enter DNS setting and press "ENTER" button again to set DNS of your network.

h. DDNS SETTING

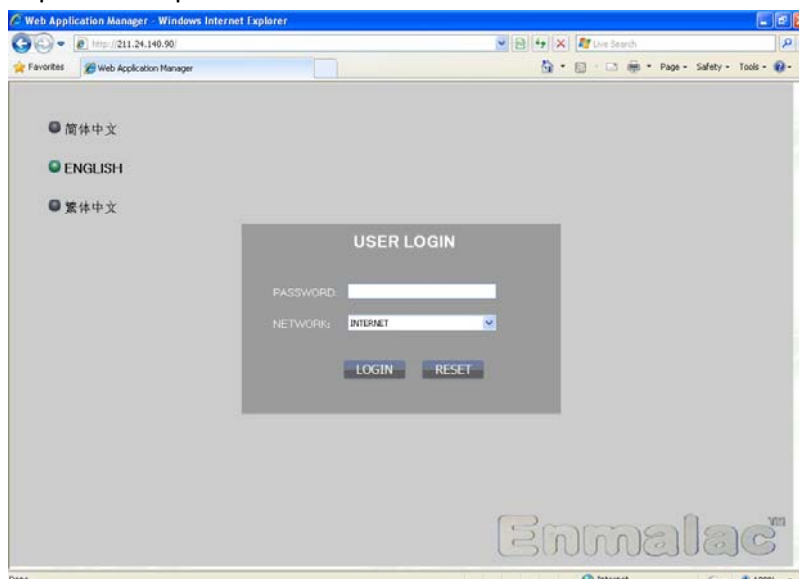
Move the cursor to DDNS SETTING button. Press "ENTER" button on the front panel or remote controller to enter DDNS SETUP menu. In the DDNS SETTING menu, move the cursor to DDNS box. Press "ENTER" button on the front panel or remote controller to select ON or OFF to enable or disable DDNS setup. Select SERVICE name, input DDNS host name, user name and password. After confirming, move the cursor to EXIT button and press "ENTER" button on the front panel or remote controller to return back to NETWORK SETUP.



IV IE BROWSER

4.1 USER LOGIN


1. Enter IE browser of your computer, input the IP address of the DVR or DDNS name of DVR. If it is first time to use computer to connect with DVR, it will ask to download software and it will take several seconds to download. If it succeed you will enter the USER LOGIN website.
2. On the USER LOGIN website, select ENGLISH language and select network type. If it has password, you need to input correct password.



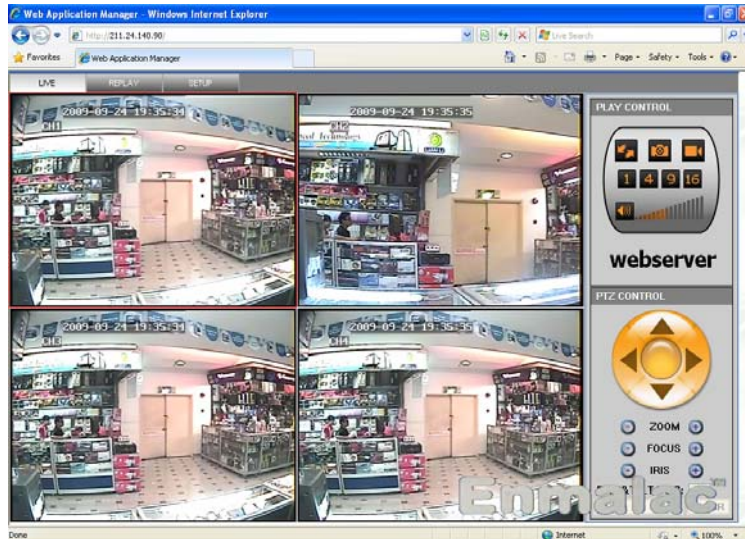
3. Click on the LOGIN button to enter monitoring website.




4.2 LIVE

1. In the live monitoring mode, double click on one channel screen to display one channel image.

Double click on the single channel screen to display back to quad screen. Or click on  button to change display mode.

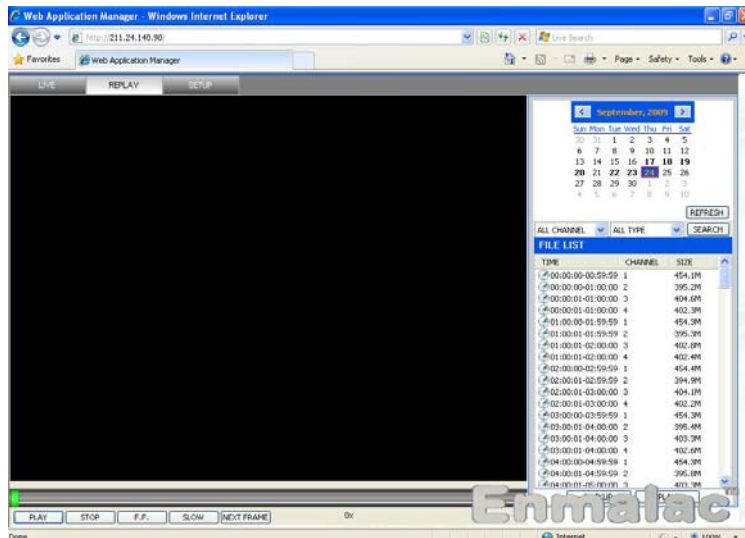
2. Click on  button to adjust volume.





3. Click on PTZ CONTROL buttons to control PTZ that connected with DVR.
4. Click on  icon to close or open monitoring window.
5. Click on  icon to capture current image as a BMP picture and save it in the local directory of your computer that can be set by yourself.
6. Click on  icon start DVR recording and save recorded files in the local directory of your computer that can be set by yourself. Click on the icon again to stop recording.

4.3 REPLAY

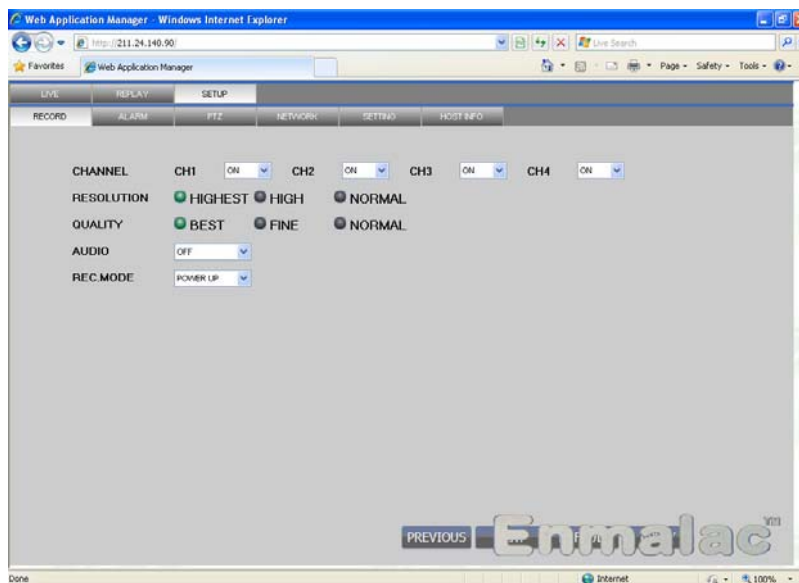
1. Click on the REPLAY button to enter REPLAY mode.



2. Click on REFLASH button on the right screen and select the date. Select the channel and recorded file type, click on SEARCH button to get the recorded files in the FILE LIST. If the icon before recorded file is , the type of recorded file is normal record. If the icon before recorded file is , the type of recorded file is alarm record.
3. Click and select one of the recorded file, click on the BACKUP button to save the recorded file in the local directory of your computer that can be set by yourself.
4. Click and select one of the recorded file, click on the REPLAY button or double click on the recorded file name to play back the recorded file.
5. When play back the recorded file, you can click on the PLAY/PAUSE, STOP, FF, SLOW and NEXT FRAME buttons to control playback.

4.4 SETUP

1. Click on the SETUP button to enter SETUP mode.



2. Click on RECORD, ALARM, PTZ, NETWORK, SETTING or HOST INFO button to enter relevant DVR setup menu. The changed setting will be saved in DVR same as the menu setting by operation of DVR.
3. After remote setting and confirm, the DVR will restart automatically.

V SPECIFICATION

Compression Method	H.264
Video System	NTSC/PAL
Video Input	Composite 1.0Vp-p/75Ω, BNC×4
Monitor Output	Composite 1.0Vp-p/75Ω, BNC×1
VGA Output	Analogue RGB 60 Hz, 1024x768, 800x600, 600x480
Resolution	NTSC(720x480) PAL(720×576)
Audio Input	-8db22kΩ,RCA connector×4
Audio Output	-8db3kΩ,RCA connector×1
Alarm Input	4CH
Alarm Output	1CH
Frame and Resolution	CIF: NTSC 120fps /352x240 PAL 100fps /352x288 1/2D1: NTSC 60fps /720x240 PAL 50fps /720x288 D1 : NTSC 30fps /720x480 PAL 25fps /720x576
Occupation Space	All 4 channels record at high quality mode:800M/H
HDD Port	SATA hard disk
Network Port	10M/100M Ethernet port
Confidential Function	User and Administrator Password Protection
Backup	Network, USB Disk, USB moveable Hard Disk, USB DVD ROM
Network Function	IE Browser Monitoring, Playback and Setup, Mobile Monitoring, Email for Alarm, DDNS
Power Supply	DC:12V/3A
Power Consumption (No HDD)	20W
Environment	Operating Temperature:+5°C ~ +50°C; Storage Temperature:-20°C ~ +70°C; Humidity: 30~95%
Dimension	430×390×70mm
Weight	3.2Kg