DVR

4/8/16/24/32CH Stand alone digital video recorder

User Manual

4/8/16/24/32 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, 2A(4CH), 3A(8CH), 5A(16/24/32CH) 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
- Multi languages supported
- Audio and video recording and playback at the same time with D1, half D1 and CIF resolution
- Support NTSC/PAL video system
- 4/8/16/24/32CH video inputs, 1CH monitor output, 1CH spot monitor output(for 16/24CH DVR), 2CHx16 spot monitor output(for 32CH DVR)
- VGA output: 800×600, 1024×768, 1280×1024
- 4/8/16CH audio inputs, 8CH audio inputs for 24/32CH DVR, 1CH audio output
- High quality image, brightness, contrast, sharpness and color adjustable for each channel
- Support auto sequence display
- Display modes: PIP, FULL, QUAD, 9 SPLIT(for 8/16/24/32CH DVR), 16 SPLIT(for 16/24/32CH DVR), 25(for 24/32CH DVR) and 36 SPLIT(for 32CH DVR)
- Recording modes: always recording, manual recoding, schedule recording, sensor recording and motion recording
- Image quality and bitrate: highest, high, standard, low
- Detailed event log support
- Searching modes: time / date searching, event searching, urgent searching
- Support fast forward and rewind: ×2, ×4, ×6, support jog-shuttle operation(for 16/32CH DVR)
- Backup modes: network backup, USB backup, DVDRW backup(for 8/16/24/32CH DVR)
- Support RS-485 PTZ control(speed dome camera), and preset positions operation
- Support USB mouse and infrared remote controller operation
- Support 1 SATA port HDD(for 4CH DVR) and 2 SATA port HDD(for 8CH DVR) and 4 SATA port HDD(for 16/24/32CH DVR)
- 4/8/16 CH alarm inputs, 16 CH alarm inputs for 24/32CH DVR. 1 CH alarm output(4/8/16 CH DVR), 2 CH alarm output(24/32 CH DVR)
- Upgrade mode: USB upgrade, DVDRW upgrade(for 8/16/24/32CH DVR), network upgrade
- Support TCP/IP, DHCP and PPPOE
- IE browser monitoring
- Network viewer tool for monitoring, playback, setup, upgrade and log viewing
- Support email, UPNP, NTP, DNS and DDNS, supply a free DDNS for DVR
- Triplex function: simultaneous recording, playback, network viewing
- Telemetry network control: live view, playback, recording, parameter setting and so on

- Support zoom function for both live and playback mode.
- Support live and playback video hide.
- Support video covered.
- Support administrator and normal user management.
- Frame rate in the live display mode：4CH: 120fps(NTSC), 100fps(PAL). 8CH: 240fps(NTSC), 200fps(PAL). 16CH: 480fps(NTSC), 400fps(PAL). 24CH: 720fps(NTSC), 600fps(PAL). 32CH: 960fps(NTSC), 800fps(PAL)
- Frame rate in the recode mode:

  4CH:

  CIF: 120fps(NTSC), 100fps(PAL)
  1/2D1: 120fps(NTSC), 100fps(PAL)
  D1: 60fps(NTSC), 50fps(PAL)

  8CH:

  CIF: 240fps(NTSC), 200fps(PAL)
  1/2D1: 120fps(NTSC), 100fps(PAL)
  D1: 60fps(NTSC), 50fps(PAL)

  16CH:

  CIF: 480fps(NTSC), 400fps(PAL)
  1/2D1: 240fps(NTSC), 200fps(PAL)
  D1: 120fps(NTSC), 100fps(PAL)

  24CH:

  CIF: 720fps(NTSC), 600fps(PAL)

  32CH:

  CIF: 960fps(NTSC), 800fps(PAL)

TABLE OF CONTENT

Ⅰ INSTALLATION

1.1 Packing Detail
1.2 Front Panel Controls
1.3 Rear Panel Connectors
1.4 Rear Panel Connection
1.5 Remote Controller
1.6 Installation Process

Ⅱ OPERATION

2.1 Power On
2.2 Power Off
2.3 Display Mode
2.4 Manual Recording
2.5 Alarm Recording
2.6 Schedule Recording
2.7 Playback
2.8 Time Searching Playback
2.9 Event Searching Playback
2.10 Urgent Searching Playback
2.11 USB backup
2.12 System Information
2.13 PTZ Control
2.13.1 PTZ Operation Function
2.13.2 PTZ Preset Function
2.13.3 PTZ Other Set Function
2.13.4 PTZ Menu/Matrix Function
2.14 Login

Ⅲ SYSTEM MENU SETUP

3.1 Main Menu Setup
3.2 CAMERA Menu Setup
1. CHANNEL
2. COLOR
3. TITLE
4. PTZ PROTOCOL
5. PTZ ADDRESS
6. PTZ BAUDRATE
7. MAIN ROT. TIME
8. AUDIO VOLUME
9. LIVE VIDEO HIDE

10. PLAYBACK VIDEO HIDE
11.COVER AREA
3.3 RECORD Menu Setup
1. CHANNEL
2. RESOLUTION
3. PRE RECORD
4. FPS
5. QUALITY
6. BITRATE
7. RECORD MODE
8. AUDIO
9. SCHEDULE
10. SYSTEM MAINTENANCE
3.4 MOTION Menu Setup
1. CAMERA CHANNEL
2. MOTION ENABLE
3. SENSITIVITY
4. MOTION AREA
5. POST RECORD TIME
6. BUZZER TIME
7. ALARM TIME
3.5 SENSOR Menu Setup
1. SENSOR CHANNEL
2. SENSOR TYPE
3. POST RECORD TIME
4. BUZZER TIME
5. ALARM TIME
6. HDD LOSS
7. VIDEO LOSS
8. HDD FULL
3.6 SCHEDULE Menu Setup
3.7 NETWORK Menu Setup
1. IP MODE
2. PORT
3. IP ADDRESS
4. MAC ADDRESS
5. NETMASK
6. GATEWAY
7. NAME SERVER
8. DDNS
9. EMAIL
10. BITRATE
11. MOBILE PORT
12. IE PORT

3.8 BACKUP Menu Setup
1. DISK
2. DEVICE
3. CHANNEL
4. START
5. END
6. TOTAL
7. AVI
3.9 SYSTEM Menu Setup
1. TIME SETUP
2. ACCOUNT MANAGER
3. SYSTEM INFO
4. VIDEO FORMAT
5. LOG VIEW
6. LOG SET
7. DISK FORMAT
8. FIRMWARE UPGRADE
9. FACTORY RESET
10. LANGUAGE
11. SPOT MONITOR
12. VGA

Ⅳ FACTORY DEFAULT

Ⅴ NETWORK VIEWER

5.1 IE Browser
5.2 NetViewer

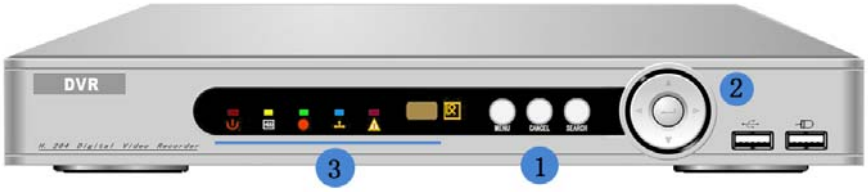
Ⅵ SPECIFICATION

Ⅰ INSTALLATION

1.1 Packing Detail

1. User's manual 1
2. DC12V/2A(4CH), DC12V/3A(8CH) or DC12V/5A(16/24/32CH) power adaptor 1
3. Screws 1 set
4. Infrared remote controller 1 (Optional for Mini 4CH DVR)
5. USB port mouse 1
4. CD with mobile software and net viewer software 1

1.2 Front Panel Controls



Mini 4CH DVR

4/8 CH DVR

16 CH DVR

Mini 16 CH DVR

24 CH DVR

32 CH DVR

● **(1)**

1. “MENU” button

During the live display mode, press this button to display MAIN MENU and enter main setup menu, press “CANCEL” button to exit the main setup menu. After setting parameters in the menu, press “MENU” button to save and exit menu.

In PTZ operation mode and CAMERA COLOR menu, press this button to make the PTZ menu and CAMERA COLOR menu transparent.

2. “CANCEL” button

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

3. Number button (1-10+)(For 16/24/32CH DVR)

Press the desired camera number button you wish to display on the monitor.

4. “MODE” button

Repeat pressing this button to select the different display mode (9 SPLIT, QUAD, PIP, FULL CHANNEL and 16/25/36 SPLIT).

5. "AUTO" button

In the live display mode, press this button to begin auto sequence mode. Each screen displaying will be automatically switching according to the MAIN ROT TIME SETUP.

In PTZ operation mode, press this button to enter PTZ auto pan function, press this button again to exit PTZ auto pan function.

6."MUTE" button

During the live display mode, press this button to turn on and turn off the audio.

7. "BACKUP" button

During the live display mode, press this button to backup the recorded data if the USB device is connected to this DVR. Then select the beginning backup time and end backup time and press "ENTER" button to begin backup. If there is no USB device connected to DVR, it will display BACKUP DEVICE IS NOT FOUND.

8. "PTZ" button

In the single screen mode, press this button to enter PTZ operation mode to control pan, tilt, focus, iris zoom and other functions. Press "CANCEL" button to exit PTZ operation mode.

9. "REC" button

When setting DVR RECORD MODE to OFF in the menu, press this button to begin manual (urgent) recording. The red recording icon will be displayed on the bottom status bar. Press this button again to stop recording.

In PTZ operation mode, press this button to control pan left.

10. "SEARCH" button

During the live display mode, press this button to enter SEARCH menu. Then press "LEFT" or "RIGHT" button to select the playback modes (TIME SEARCH, EVENT SEARCH and URGENT SEARCH) and playback date/time. Press "ENTER" button to begin playback. Press "CANCEL" button to stop playback.

In PTZ operation mode, press this button to control pan right.

For Mini 4CH DVR, in the playback mode, press this button to turn on or off the playback audio. In SCHEDULE setup mode, press this button to select different recording mode.

11. "◀◀" /"REWIND" button

During the playback mode, repeat pressing this button to speed-up playback backward at the speed of 2x, 4x or 6x.

In PTZ operation mode, press this button to control tilt up.

12. "▶❙❙ "/ "PLAY / PAUSE" button

During the playback mode, press this button to display a still picture. To restart playback, press this button again.

In PTZ operation mode, press this button to control tilt down.

13. "▶▶" /"FAST FORWARD" button

During the playback mode, repeat pressing this button to speed-up playback

forward at the speed of 2x, 4x or 6x.

14. "JOG&SHUTTLE" (For 16/32CH DVR)

During the playback mode, turn the SHUTTLE ring to the right and left to select speed of FAST FORWARD and REWIND. Turn the JOG dial in either direction continuously for playback of consecutive frames.

● **(2)**

15. "↵ "/ "ENTER" button

During the live display mode, press this button to display the popup menu. In the setup menu, press this button to enter the next operation. In PTZ operation mode, press this button to enter PTZ operation.

During the power off status by popup menu, press this button to power on the DVR again.

For Mini 4CH DVR, in the playback mode, press this button to enter different playback control mode.

16. "▲"/"UP" button

After pressing "MODE" button, press "▲"/"UP" button to select last camera displaying on the screen.

Press this button to move the cursor up to the next line in the setup menu.

In PTZ operation mode, press this button to move the cursor up to select function.

17. "▼"/"DOWN" button

After pressing "MODE" button, press "▼"/"DOWN" button to select next camera displaying on the screen.

Press this button to move the cursor down to the next line in the setup menu.

In PTZ operation mode, press this button to move the cursor down to select function.

18. "◀"/"LEFT" button

During the live display mode, Repeat pressing this button to select the different display mode (FULL CHANNEL , PIP, QUAD, 9 SPLIT and 16/25/36 SPLIT).

Press this button to move the cursor in left direction in the setup menu.

In PTZ operation mode, press this button to move the cursor left to select function.

For Mini 4CH DVR, in the playback mode, press this button to select different playback control mode (PLAY/PAUSE, BACKWARD, FAST FORWARD, STEP FORWORD).

19. "▶"/"RIGHT" button

During the live display mode, Repeat pressing this button to select the different display mode(9 SPLIT, QUAD, PIP, FULL CHANNEL and 16/25/36 SPLIT).

In the playback mode, press this button to enter step forward playback, press "pause/play" button to return to normal playback.

Press this button to move the cursor in right direction in the setup menu.

In PTZ operation mode, press this button to move the cursor right to select function.

For Mini 4CH DVR, in the playback mode, press this button to select different

playback control mode (PLAY/PAUSE, BACKWARD, FAST FORWARD, STEP FORWORD).

- **(3)**

20. Power indicator

Indicate running state of system. It's on when system power on.

21. HDD status indicator

Flicker when HDD is working.

22. Recording status indicator

It will be on when system is recording.

23. Network status indicator

It will be on when the system network connection is enabled.

24. Alarm status indicator

It will be on when alarm occur.

25. USB Mouse port

Connector for the USB mouse.

26. USB port

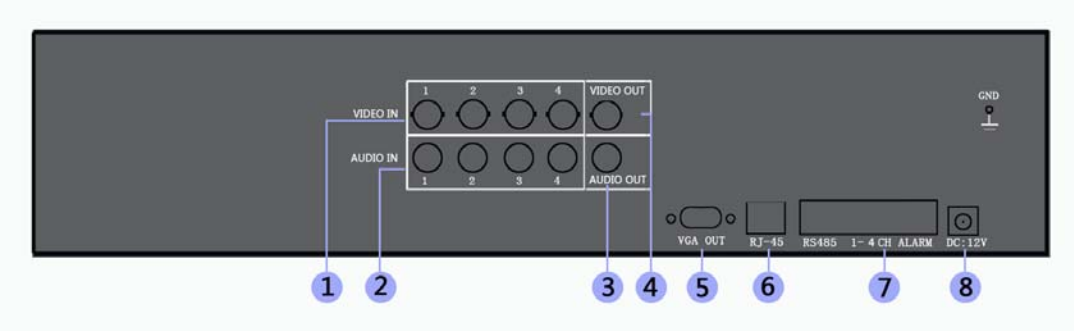
Connection of the USB interface device for upgrading firmware and backup recorded files.

27. DVDRW or CDRW ROM (SATA interface)(For 16/24/32CH DVR)

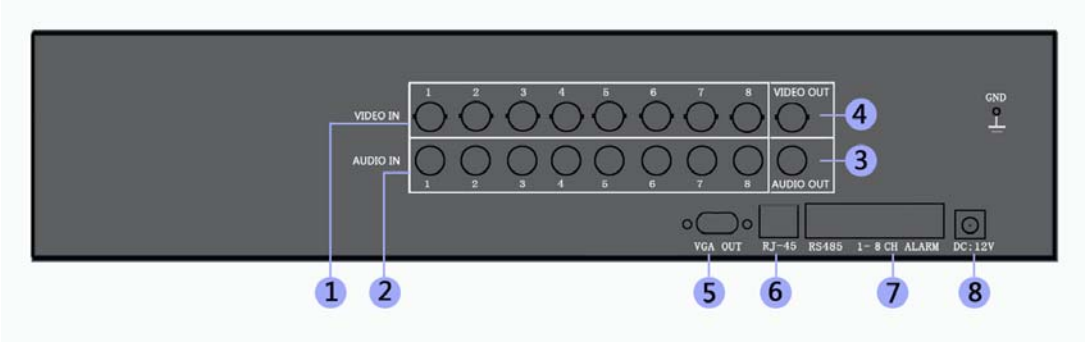
28. Remote sensor

Input sensor for the remote controller.

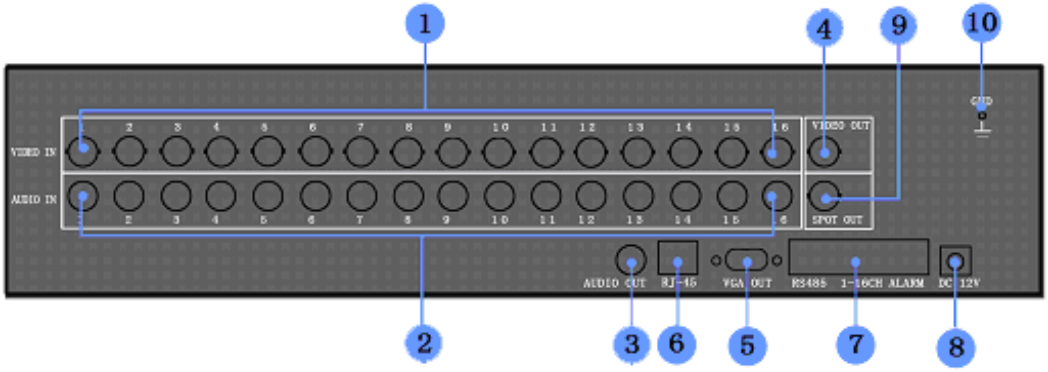
1.2 Rear Panel Connectors



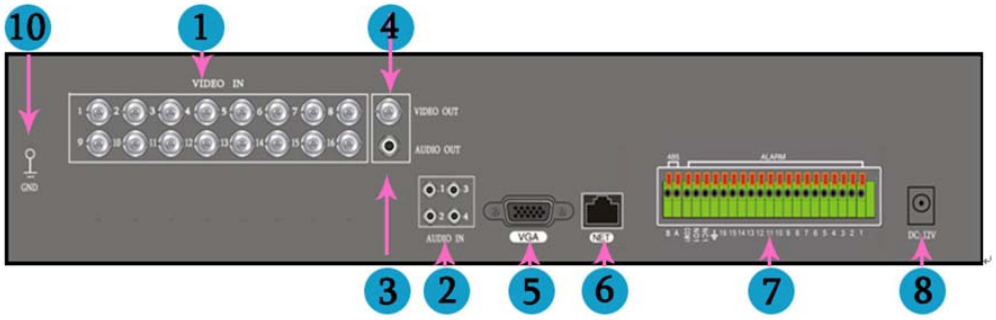
4 CH DVR



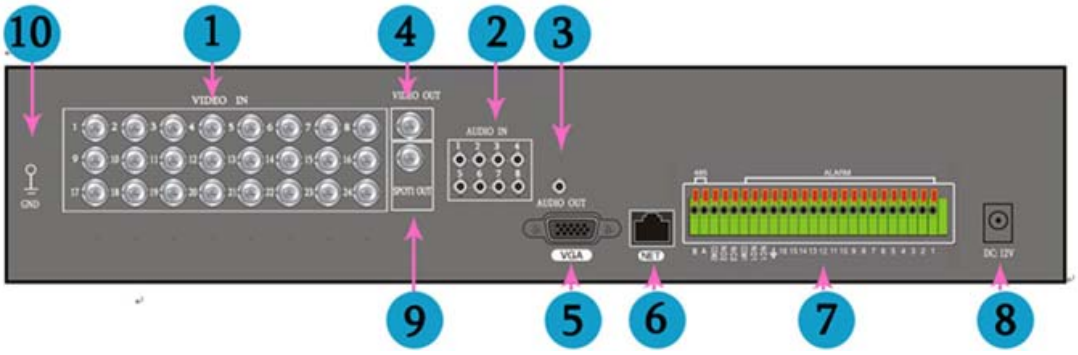
8CH DVR



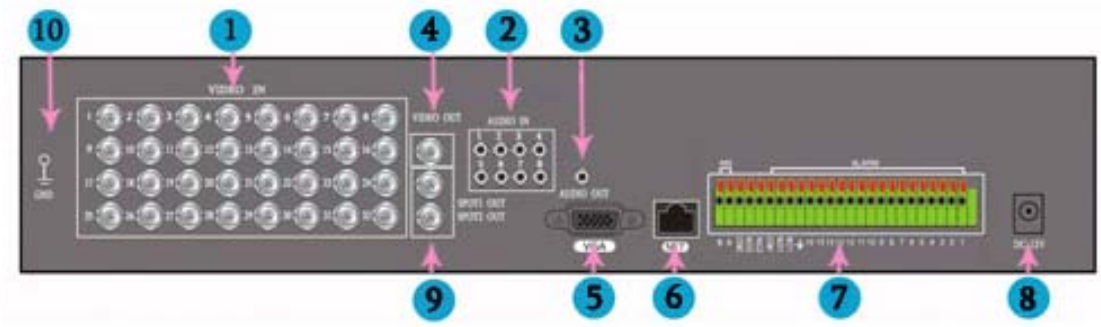
16 CH DVR



Mini 16 CH DVR



24 CH DVR

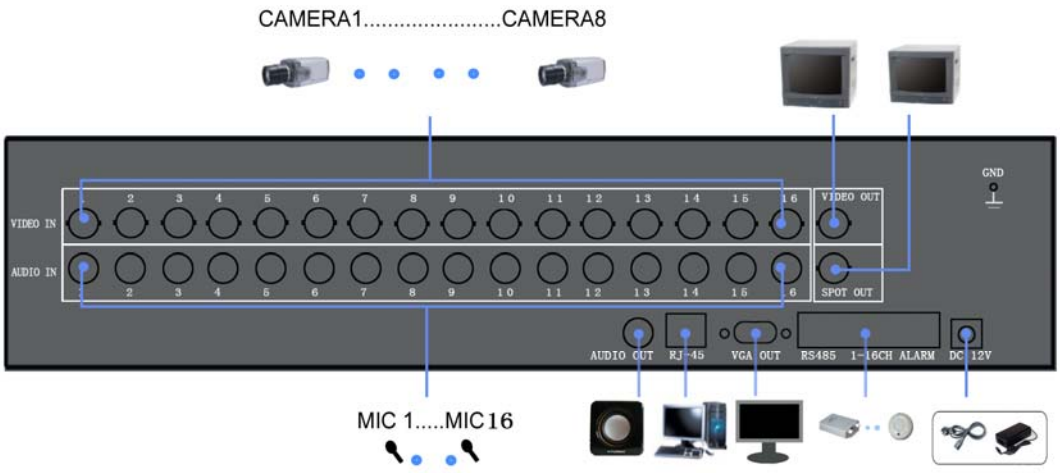


32 CH DVR

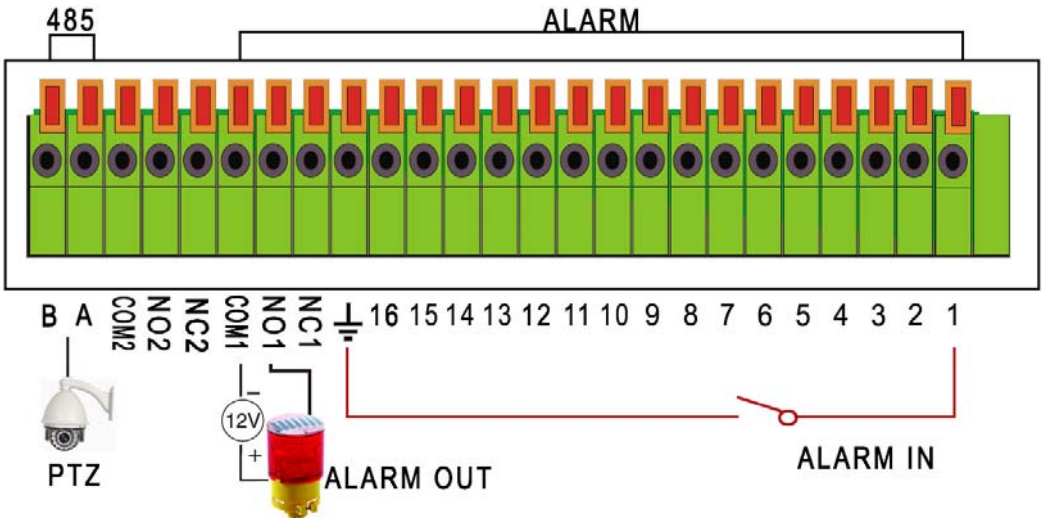
1. **CAMERA IN (CH1~CH32)**
2. **AUDIO IN(CH1~CH16)**
3. **AUDIO OUT**
4. **LIVE MONITOR OUT**
5. **VGA OUT**
6. **RJ-45 ETHERNET**
7. **RS-485 PTZ AND ALARM INPUT**
8. **DV12V POWER IN**
9. **SPOT MONITOR OUT (For 16/24/32 CH DVR) .**
10. **GROUND**

Note: For 32 CH DVR, there are 2 spot monitor output, SPOT1 is for 1-16 channel, SPOT2 is for 17-32 channel.

1.4 Rear Panel Connection(16CH DVR for example)



16 CH DVR



No. 1 ~ No. 16: Alarm signal input. For 32CH DVR there are 1-16 alarm input

No. 17: Alarm output: GND (Ground)

No. 18: Alarm output: N.C.1 (Normally Closed)

No. 19: Alarm output: N.O.1 (Normally Open)

No. 20: Alarm output: COM1 (Common)

No. 21: Alarm output: N.C.2 (Normally Closed) (For 24/32 CH DVR)

No. 22: Alarm output: N.O.2 (Normally Open) (For 24/32 CH DVR)

No. 23: Alarm output: COM2 (Common) (For 24/32 CH DVR)

No. 21: RS-485 + (A)

No. 22: RS-485 – (B)

1.5 Remote Controller

1. **NUMER BUTTON: Press the desired camera number button you wish to display on the monitor.**

2. **◀◀: Repeat pressing this button to speed-up playback backward at the speed of X2, X4 or X6 during the playback. In PTZ operation mode, press this button to control tilt up.**
3. **▶❙❙ : Press this button to display a still picture during the playback, press this button again to restart play. In PTZ operation mode, press this button to control tilt down.**
4. **▶▶: Repeat pressing this button to speed-up playback forward at the speed of X2, X4 or X6 during the playback.**
5. **SEARCH: Enter the playback mode and display the search menu. In PTZ operation mode, press this button to control pan right. For Mini 4CH DVR, in the playback mode, press this button to turn on or off the playback audio. In SCHEDULE setup mode, press this button to select different recording mode.**
6. **■ : Press this button to stop the playback during the playback.**
7. **MENU: Display the setup menu during the live display mode. In PTZ operation mode and CAMERA COLOR menu, press this button to make PTZ menu and CAMERA COLOR menu transparent.**
8. **ESC: In the setup menu or PTZ operation mode, press this button to exit the menu or PTZ operation mode.**
9. **REC: Begin and stop manual recording. In PTZ operation mode, press this button to control pan left.**
10. **PTZ: Enter PTZ operation mode and display PTZ menu.**
11. **MUTE: Turn audio on/off during the live display mode or playback mode.**
12. **BACKUP: Enter the backup mode and display the backup menu during the live display mode.**
13. **AUTO : Begin auto sequence function during the live display mode. In PTZ operation mode, press this button to enter PTZ auto pan control function, press this button again to exit PTZ auto pan control function.**
14. **MODE : Select the different screen display (FULL CHANNEL, PIP, QUAD, 9 SPLIT, 16/25/36 SPLIT) during the live display mode or playback mode.**
15. **▲: Press this button to move the cursor up to the next line in the setup menu. After pressing "MODE" button, press this button to select last camera displaying on the screen. In PTZ operation mode, press this button to move the cursor up to select function.**
16. **◀: Press this button to move the cursor in left direction in the setup menu. In PTZ operation mode, press this button to move the cursor left to select function.**
17. **↵ : During the live display mode, press this button to display the popup menu. In the setup menu, press this button to enter the next operation. In PTZ operation mode, press this button to enter PTZ operation. For Mini 4CH DVR, in the playback mode, press this button to enter different playback control mode.**
18. **▶: Press this button to move the cursor in right direction in the setup menu. In the playback mode, press this button to enter step forward playback. In PTZ operation mode, press this button to move the cursor right to select**

function.

19. **▼: Press this button to move the cursor down to the next line in the setup menu. After pressing "MODE" button, press this button to select next camera displaying on the screen. In PTZ operation mode, press this button to move the cursor down to select function.**

1.6 Installation Process

1. **Remove the power cord of DVR adaptor.**
2. **Remove the screws of the cover and open the top cover of the DVR. Screw and take out the HDD bracket and mount HDD to the bracket with the screws. Mount the bracket with HDD to DVR with the screws. Connect power cord and SATA cable between HDD and DVR main board. Then mount the top cover of DVR with the screws.**
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

: **This icon on the bottom status bar is called the MENU icon in this manual.**

: **This button in the menu is called the SET button in this manual.**

: **This button in the menu is called the CANCEL button in this manual.**

: **This button in the menu is called the OK button in this manual.**

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. Enter the popup menu and select QUIT to power off the DVR. During this time, press ENTER button on the front panel to power on DVR again.

Note: If the DVR power off abnormally during recording, playback or system setup, it will take longer time to power on.

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 or "◀"/"LEFT" and "▶"/"RIGHT" button to select the different screen display (FULL CHANNEL, PIP, QUAD, 9 SPLIT, 16/25/36 SPLIT) during the live display mode. Press NUMBER button or "▲"/"UP" and "▼"/"DOWN" button to select single camera and the single live view is displaying on the screen.

- **Mouse**

Click the mouse on the MENU icon on the bottom status bar to display POPUP MENU during the live display mode, click on the LIVE button and select the different screen display mode.

In the live QUAD or SPLIT display mode, double click the image of a channel to display the single channel. Double click the image again to display QUAD or SPLIT image.

2. Press the "AUTO" button on the front panel to start auto sequence display. Each screen displaying will automatically switch according to the MAIN ROT TIME duration setting in the setup menu.

3. To zoom in images can only be operated by mouse.

- **Mouse**

Select the desired single camera and the single live view is displaying on the screen. Click the mouse on the MENU icon on the bottom status bar to display POPUP MENU during the live display mode, click on the "Zoom" button to enable ZOOM function. Keep pressing the left mouse button and drag it to select zoom area. After release the left mouse button it will zoom in the selected image. Right click the mouse to return back the

normal image. Double click the mouse to exit ZOOM function.

2.4 Manual Recording

1. Select the channel RECORD MODE to OFF at the RECORD setup menu.

2. Press "REC" button on the front panel or remote controller to begin manual recording. Or press the "ENTER" button on the front panel to display POPUP MENU during the live display mode, select the EMG RECORD button to begin manual recording. The red recording icon will be displayed on the bottom status bar. The letter E will be displayed on each channel.

3. If the hard disk is full during recording, the system may stop recording when setting HDD OVERWRITE to OFF at the SYSTEM INFO setup menu. The system may not stop recording and automatically overwrite the oldest recorded file when setting HDD OVERWRITE to ON at the SYSTEM INFO menu.

4. Press "REC" button again on the front panel or remote controller to stop manual recording. Or press the "ENTER" button on the front panel to display POPUP MENU during the live display mode, select the EMG RECORD button to stop manual recording.

2.5 Alarm Recording (Sensor and motion recording)

1. Stop manual recording.

2. Connect ALARM IN port of DVR from outside alarm equipments if selecting SENSOR recording mode.

3. Select the channel RECORD MODE to SENSOR or MOTION at the RECORD setup menu. Correctly select sensor type and duration at the SENSOR setup menu if selecting SENSOR recording mode. Correctly select motion setting at the MOTION setup menu if selecting MOTION recording mode.

4. In the SENSOR recording mode, when a alarm input signal is detected (the letter S will be displayed on the channel), the relevant single screen will begin ALARM recording and the letter R will be displayed on the channel. In the MOTION recording mode, when motion detected (the letter M will be displayed on the channel), the DVR will begin ALARM recording and the letter R will be displayed on the channel. If alarm signal cannot be detected, it will keep ALARM recording for the duration set in the SENSOR or MOTION setup menu and then stop ALARM recording automatically.

5. Select the channel RECORD MODE to OFF at the RECORD setup menu to disable ALARM recording.

2.6 Schedule Recording

1. Stop manual recording.

2. Select the channel RECORD MODE to SCHEDULE at the RECORD setup menu. There are totally 5 schedule recording lists to select.

3. Correctly set the schedule recording date, time and type for a schedule recording list at the SCHEDULE setup menu.

4. The system begins or stops schedule recording automatically according to the SCHEDULE setup.

5. Select the channel RECORD MODE to OFF at the RECORD setup menu to disable SCHEDULE recording.

2.7 Playback

1. Press "SEARCH" button on the front panel to display SEARCH MENU during the live display mode. Then press "LEFT" or "RIGHT" button to select the playback modes (TIME SEARCH, EVENT SEARCH or URGENT SEARCH) and playback date/time. Press "ENTER" button to begin playback.

2. During the playback mode, press "PLAY / PAUSE" button to pause the images. Press "PLAY / PAUSE" button again to restart playback.

For Mini 4CH DVR, press "LEFT" or "RIGHT" button to select "PLAY/PAUSE" mode and "▶" button on the playback status bar is selected. Press "ENTER" button to pause the images. Press "ENTER" button again to restart playback.

3. During the playback mode, press "◀◀" button or "▶▶" button to speed-up playback backward or forward at the speed of 2x, 4x or 6x.

For Mini 4CH DVR, press "LEFT" or "RIGHT" button to select "BACKWARD/FORWARD" mode and "◀◀" button or "▶▶" button on the playback status bar are selected. Press "ENTER" button to speed-up playback backward or forward at the speed of 2x, 4x or 6x.

4. During the playback mode, press "▶" RIGHT button to enter step forward playback, press "PLAY / PAUSE" button to return to normal playback.

For Mini 4CH DVR, press "RIGHT" button to select "STEP FORWARD" mode and "▶| " button on the playback status bar are selected. Press "ENTER" button to enter step forward playback.

5. During the playback mode, press "MODE" button to select the different display mode, press NUMBER button or "▲" button or "▼" button to select a single camera displaying on the screen.

For Mini 4CH DVR, press "UP" button or "DOWN" button to select the different display mode or select a single camera displaying on the screen.

6. During the playback mode of one channel, press "MUTE" button on the front panel to enter playback audio volume setting mode. Press "LEFT" or "RIGHT" button to decrease or increase the playback audio volume. Press "CANCEL" button to exit playback audio volume setting mode.

For Mini 4CH DVR, press "SEARCH" button on the front panel to enter playback audio volume setting mode. Press "LEFT" or "RIGHT" button to decrease or increase the playback audio volume. Press "CANCEL" button to exit playback audio volume setting mode.

7. During the playback mode, press "CANCEL" button to stop playback and return to previous mode.

● "JOG&SHUTTLE"(For 16/3CH DVR)

During the playback mode, turn the SHUTTLE ring to the right or left to select speed of FAST FORWARD or REWIND playback. Turn the JOG dial in either direction continuously for playback of consecutive frames.

● Mouse

Click the mouse on the MENU icon on the bottom status bar to display POPUP MENU during the live display mode. Click on the SEARCH button to display SEARCH MENU. Then click on the "TIME SEARCH", "EVENT SEARCH" or "URGENT SEARCH" button to select the playback modes to begin playback. Or double click the date/time to begin playback. During the single channel playback mode, turn the middle button of mouse to select other cameras displaying on the screen.

To zoom in images can only be operated by mouse. During the playback mode, select the desired single camera and the single channel is displaying on the screen. Click on the "Zoom" button to enable ZOOM function. Keep pressing the left mouse button and drag it to select zoom area. After release the left mouse button it will zoom in the selected image. Right click the mouse to return back the normal image. Double click the mouse to exit

ZOOM function.

2.8 Time Searching Playback

1. **Press “SEARCH” button on the front panel to display SEARCH MENU during the live display mode.**
2. **Press “LEFT” or “RIGHT” button to select TIME SEARCH playback mode and press “ENTER” button to enter TIME SEARCH menu.**
3. **Press “UP”, ”DOWN”, “LEFT” and “RIGHT” buttons to select the beginning date/time for playback.**
4. **Press “ENTER” button to begin TIME SEACHING playback.**

- **Mouse**

1) **Click the mouse on the MENU icon on the bottom status bar to display POPUP MENU during the live display mode. Then click on the SEARCH button to display SEARCH MENU. Click on the “TIME SEARCH” button to enter TIME SEARCH menu or double click the date/time to begin TIME SEACHING playback.**
2) **At the TIME SEARCH menu, move the mouse and turn the middle button of mouse to select the beginning date/time for playback.**
3) **Then click on the top right “O” (OK) button to begin TIME SEACHING playback.**

2.9 Event Searching Playback

1. Press “SEARCH” button on the front panel to display SEARCH MENU during the live display mode.

2. Press “LEFT” or “RIGHT” button to select EVENT SEARCH playback mode and press “ENTER” button to enter EVENT SEARCH menu.

3. Press “UP”, ”DOWN”, “LEFT” and “RIGHT” buttons to select the event beginning date/time for playback.

4. Press “ENTER” button to begin EVENT SEACHING playback. The playback is only for motion, sensor and schedule recording mode.

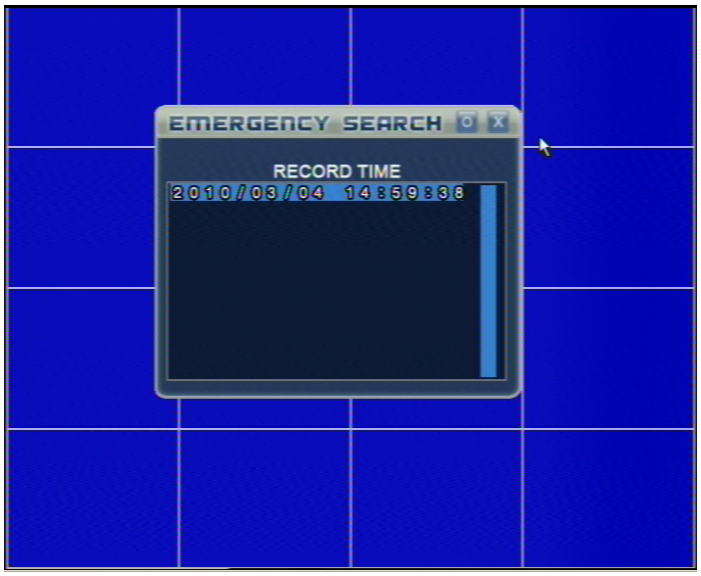
● **Mouse**

1. Click the mouse on the MENU icon on the bottom status bar to display POPUP MENU during the live display mode. Then click on the SEARCH button to display SEARCH MENU. Click on the “EVENT SEARCH” button to enter EVENT SEARCH menu.

2. At the EVENT SEARCH menu, move the cursor or turn the middle button of mouse to select the event beginning date/time for playback.

3. Then click on the top right “O” (OK) button to begin EVENT SEACHING playback or double click the event beginning date/time to begin EVENT SEACHING playback.

2.10 Urgent Searching Playback



1. **Press “SEARCH” button on the front panel to display SEARCH MENU during the live display mode.**
2. **Press “LEFT” or “RIGHT” button to select URGENT SEARCH playback mode and press “ENTER” button to enter EMERGENCY SEARCH menu.**
3. **Press “UP”, ”DOWN”, “LEFT” and “RIGHT” buttons to select the emergency recording date/time for playback.**
4. **Press “ENTER” button to begin URGENT SEACHING playback. The playback is only for manual recording mode.**

● **Mouse**

1. **Click the mouse on the MENU icon on the bottom status bar to display POPUP MENU during the live display mode. Then click on the SEARCH button to display SEARCH MENU. Click on the “URGENT SEARCH” button to enter EMERGENCY SEARCH menu.**
2. **At the EMERGENCY SEARCH menu, move the cursor or turn the middle button of mouse to select the emergency recording date/time for playback.**
3. **Then click on the top right “O” (OK) button to begin URGENT SEACHING playback or double click the emergency recording date/time to begin URGENT SEACHING playback.**

2.11 USB Backup

1. **Connect the USB backup device to DVR USB port.**
2. **Press “MENU” button on the front panel to display MAIN MENU then select “BACKUP” button and press “ENTER” button or press “BACKUP” button on the front panel or remote controller to display BACKUP setup menu during the live display mode. The DEVICE name is USB at the BACKUP setup menu if using USB disk.**
3. **Press “LEFT” or “RIGHT” button on the front panel to move the cursor to the CHANNEL, START or END line. Press “MENU” button on the front panel to select the backup channel, backup beginning date/time and end date/time or**

press “UP” or “DOWN” button to select backup beginning date/time and end date/time.

4. **Press “ENTER” button on the front panel to begin backup.**

- **Mouse**

1. **Click the mouse on the MENU icon on the bottom status bar to display POPUP MENU during the live display mode. Then click on the “SETUP” button to display MAIN MENU. Then click on the “BACKUP ” button to enter BACKUP setup menu.**
2. **At the BACKUP setup menu, move the cursor to the CHANNEL, START or END line. Click on the “SET” button to select the backup channel, backup beginning date/time and end date/time or turn the middle button of mouse to select backup beginning date/time and end date/time.**
3. **Click on the top right “O” (OK) button to begin backup.**

2.12 System Information

1. **Press “MENU” button on the front panel to display MAIN MENU during the live display mode.**
2. **In the MAIN MENU, Press “UP”, ”DOWN”, “LEFT” and “RIGHT” buttons to select “SYSTEM” button and press “ENTER” button to enter SYSTEM setup menu.**
3. **Press “UP” or “DOWN” button on the front panel to move the cursor to the SYSTEM INFO line. Press “ENTER” button on the front panel to enter SYSTEM INFO menu.**
4. **Press “LEFT” and “RIGHT” buttons to enable or disable HDD overwrite function. When setting HDD OVERWRITE to OFF, the system may stop recording if the hard disk is full during recording. When setting OVERWRITE to ON, the system may not stop recording and automatically overwrite the oldest recorded file.**

- **Mouse**

1. **Click the mouse on the MENU icon on the bottom status bar to display POPUP**

MENU during the live display mode. Then click on the "SETUP" button to display MAIN MENU. Then click on the "SYSTEM " button to enter SYSTEM setup menu.

2. **At the SYSTEM setup menu, move the cursor to the SYSTEM INFO line. Click on the "SET" button to enter SYSTEM INFO menu.**

2.13 PTZ Control

2.13.1 PTZ Operation Function

1. **Press the desired camera NUMBER button to select the single channel you wish to display on the monitor or press "LEFT", "RIGHT", "UP","DOWN" buttons to view one channel video during the live display mode. Then press "PTZ" button on the front panel to display PTZ control menu and enter the PTZ operation mode.**

   For Mini 4CH DVR, press "UP" button or "DOWN" button to select the single channel you wish to display on the monitor during the live display mode. Then press the "ENTER" button on the front panel to display POPUP MENU and select the PTZ line then press "ENTER" button or press "PTZ" button on the remote controller to display PTZ control menu and enter the PTZ operation mode.

2. **Press "LEFT", "RIGHT", "UP" or "DOWN" button to move the cursor to "LEFT" or "RIGHT" arrow, press "ENTER" button to control pan function. Press "LEFT", "RIGHT", "UP" or "DOWN" button to move the cursor to "UP" or "DOWN" arrow, press "ENTER" button to control tilt function. Press "LEFT", "RIGHT", "UP" or "DOWN" button to move the cursor to "LEFT UP" arrow, "LEFT DOWN" arrow, "RIGHT UP" arrow or "RIGHT DOWN" arrow, press "ENTER" button to operate pan/tilt in relevant direction.**

   Note: Only keep pressing "ENTER" button to control pan and tilt function. When this button released, the system will stop pan and tilt control function.

3. **Press “LEFT”, “RIGHT”, “UP” or “DOWN” button to move the cursor to “ZOOM MINUS” and “ZOOM PLUS” icon, press “ENTER” button to control zoom near and far function. Press “LEFT”, “RIGHT”, “UP” or “DOWN” button to move the cursor to “FOCUS MINUS” and “FOCUS PLUS” icon, press “ENTER” button to control focus near and far function. Press “LEFT”, “RIGHT”, “UP” or “DOWN” button to move the cursor to “IRIS MINUS” and “IRIS PLUS” icon, press “ENTER” button to control iris close and open function.**
4. **Press “AUTO” button on the front panel to enable PTZ AUTO control function. Or press “LEFT”, “RIGHT”, “UP” or “DOWN” button to move the cursor to AUTO PAN button at the menu, press “ENTER” button to enable PTZ AUTO control function. The AUTO PAN button at the PTZ control menu is selected and word “AUTO PAN” will become yellow color. Press “AUTO” button again to exit PTZ AUTO control function and word “AUTO PAN” will become white color.**
5. **Press “LEFT”, “RIGHT”, “UP” or “DOWN” button to move the cursor to SPEED frame, press “UP” or “DOWN” button to set the pan/tilt speed from 1 to 8.**
6. **Press “LEFT”, “RIGHT”, “UP” or “DOWN” button to move the cursor to PRESET button, press “ENTER” button to display PTZ PRESET menu and enter PTZ preset function setting.**
7. **Press “LEFT”, “RIGHT”, “UP” or “DOWN” button to move the cursor to SET button, press “ENTER” button to display PTZ SET menu and enter PTZ other functions setting.**
8. **If PTZ protocol supports position function, it will display word “SIT” on the round icon among pan/tilt arrows. Press “LEFT”, “RIGHT”, “UP” or “DOWN” button to move the cursor to SIT icon, press “ENTER” button to operate PTZ position function.**
9. **Press “CANCEL” button on the front panel to exit the PTZ operation mode.**
10. **Press “MENU” button on the front panel to make the PTZ menu transparent.**

● **Mouse**

1. **Left click the desired camera screen to select this single channel to display on the monitor during the live display mode. Click the mouse on the MENU icon on the bottom status bar to display POPUP MENU during the live display mode. Then click on the “PTZ” line to display PTZ control menu and enter the PTZ operation mode.**
2. **At the PTZ control menu, click or keep pressing the mouse left button on “LEFT” or “RIGHT” arrow to control pan function. Click or keep pressing the mouse left button on “UP” or “DOWN” arrow to control tilt function. Click or keep pressing the mouse left button on “LEFT UP” arrow, “LEFT DOWN” arrow, “RIGHT UP” arrow or “RIGHT DOWN” arrow to operate pan/tilt in relevant direction.**
3. **At the PTZ control menu, click or keep pressing the mouse left button on**

"ZOOM MINUS" and "ZOOM PLUS" icon to control zoom near and far function. Click or keep pressing the mouse left button on "FOCUS MINUS" and "FOCUS PLUS" icon to control focus near and far function. Click or keep pressing the mouse left button on "IRIS MINUS" and "IRIS PLUS" icon to control iris close and open function.

4. **At the PTZ control menu, click on AUTO PAN button to enable PTZ AUTO control function and word "AUTO PAN" will become yellow color. Click on AUTO PAN button again to exit PTZ AUTO control function and word "AUTO PAN" will become white color.**
5. **Move the cursor to SPEED frame, turn the middle button of mouse to set the pan/tilt speed from 1 to 8.**
6. **At the PTZ control menu, click on PRESET button to display PTZ PRESET menu and enter PTZ preset function setting.**
7. **At the PTZ control menu, click on SET button to display PTZ SET menu and enter PTZ other functions setting.**
8. **If PTZ protocol supports position function, it will display word "SIT" on the round icon among pan/tilt arrows. At the PTZ control menu, click on SIT icon to operate PTZ position function.**
9. **At the PTZ control menu, click on CANCEL button or right click to exit the PTZ operation mode.**
10. **At the PTZ control menu, Move the cursor to any place of menu except SPEED frame and turn the middle button of mouse to make the PTZ menu transparent.**

2.13.2 PTZ Preset Function

1. **In PTZ operation mode, press "LEFT", "RIGHT", "UP" or "DOWN" button on the front panel to move the cursor to the PRESET button at the menu, press "ENTER" button on the front panel to display PTZ PRESET menu and enter PTZ preset function setting mode.**

2. **PRESET**

a. **At the PTZ PRESET menu, press “LEFT”, “RIGHT”, “UP” or “DOWN” button on the front panel to move the cursor to the PRESET frame. Press “UP” or “DOWN” button on the front panel to set PRESET number to 1. Move the cursor to the SAVE PRE button and press “ENTER” button on the front panel to save current PTZ position to 1.**
b. **Press “CANCEL” button on the front panel to exit PTZ preset function and return to PTZ operation mode. Press “UP”, “DOWN”, “LEFT”, “RIGHT” and “ENTER” buttons to control PTZ to a desired position. Enter PTZ PRESET menu again and set PRESET number to 2. Move the cursor to the SAVE PRE button and press “ENTER” button on the front panel to save current PTZ position to 2. Using the same way to save other PTZ preset positions.**
c. **At the PTZ PRESET menu, select PRESET number to 1 or other PTZ position number you wish to load. Press “LEFT”, “RIGHT”, “UP” or “DOWN” button on the front panel to move the cursor to the LOAD PRE button. Press “ENTER” button to move PTZ to selected preset position.**
d. **At the PTZ PRESET menu, select PRESET number to 1 or other PTZ position number you wish to delete. Press “LEFT”, “RIGHT”, “UP” or “DOWN” button on the front panel to move the cursor to the CLR PRE button. Press “ENTER” button to delete preset position.**

3. **TOUR**
   a. **At the PTZ PRESET menu, press “LEFT”, “RIGHT”, “UP” or “DOWN” button on the front panel to move the cursor to the PATROL frame. Press “UP” or “DOWN” button on the front panel to set PATROL number to 1. Select PRESET number to 1 or other number you want to add to this tour. Move the cursor to the ADD PRE button and press “ENTER” button on the front panel to add this preset position to tour 1. Using the same way to add other preset position to tour 1. Using the same way to set other tour.**
   b. **At the PTZ PRESET menu, select PATROL number to 1, press “LEFT”, “RIGHT”, “UP” or “DOWN” button on the front panel to move the cursor to the TOUR button. Press “ENTER” button on the front panel to start tour 1. Press “ENTER” button on the front panel again to stop tour 1. Using the same way to start and stop other tours.**
   c. **At the PTZ PRESET menu, select a PATROL number and select a PRESET number you want to delete from this tour. Press “LEFT”, “RIGHT”, “UP” or “DOWN” button on the front panel to move the cursor to the DEL PRE button. Press “ENTER” button to delete selected preset position from this tour.**
   d. **At the PTZ PRESET menu, select PATROL number or other tour number you want to delete. Press “LEFT”, “RIGHT”, “UP” or “DOWN” button on the front panel to move the cursor to the CLR PAT button. Press “ENTER” button to delete selected tour.**

4. **AUX**
   a. **At the PTZ PRESET menu, press “LEFT”, “RIGHT”, “UP” or “DOWN”**

button on the front panel to move the cursor to the AUX frame. Press "UP" or "DOWN" button on the front panel to set AUX number to 1 or other number you want to operate.

b. At the PTZ PRESET menu, press "LEFT", "RIGHT", "UP" or "DOWN" button on the front panel to move the cursor to the AUX ON button. Press "ENTER" button on the front panel to turn on this aux operation. For aux operation, please refer to the user manual of PTZ.

c. At the PTZ PRESET menu, press "LEFT", "RIGHT", "UP" or "DOWN" button on the front panel to move the cursor to the AUX OFF button. Press "ENTER" button on the front panel to turn off this aux operation. For aux operation, please refer to the user manual of PTZ.

- **Mouse**

1. In PTZ operation mode, click on the PRESET button at the menu to display PTZ PRESET menu and enter PTZ preset function setting mode.

2. PRESET

a. At the PTZ PRESET menu, move the cursor to the PRESET frame. Turn the middle button of mouse to set PRESET number to 1. Click on the SAVE PRE button to save current PTZ position to 1.

b. Click on CANCEL button or right click to exit PTZ preset function and return to PTZ operation mode. Click on the direction arrows and zoom, focus, iris icons to control PTZ to a desired position. Enter PTZ PRESET menu again and set PRESET number to 2. Click on the SAVE PRE button to save current PTZ position to 2. Using the same way to save other PTZ preset positions.

c. At the PTZ PRESET menu, select PRESET number to 1 or other PTZ position number you wish to load. Click on the LOAD PRE button to move PTZ to selected preset position.

d. At the PTZ PRESET menu, select PRESET number to "1" or other PTZ position number you wish to delete. Click on the CLR PRE button to delete preset position.

3. TOUR

a. At the PTZ PRESET menu, move the cursor to the PATROL frame. Turn the middle button of mouse to set PATROL number to 1. Select PRESET number to 1 or other number you want to add to this tour. Click on the ADD PRE button to add this preset position to tour 1. Using the same way to add other preset position to tour 1. Using the same way to set other tour.

b. At the PTZ PRESET menu, select PATROL number to 1, click on the TOUR button to start tour 1. Click on the TOUR button again to stop tour 1. Using the same way to start and stop other tours.

c. At the PTZ PRESET menu, select a PATROL number and select a PRESET number you want to delete from this tour. Click on the DEL PRE button to delete selected preset position from this tour.

d. At the PTZ PRESET menu, select PATROL number or other tour

number you want to delete. Click on the CLR PAT button to delete selected tour.

4. **AUX**
   a. **At the PTZ PRESET menu, move the cursor to the AUX frame. Turn the middle button of mouse to set AUX number to 1 or other number you want to operate.**
   b. **At the PTZ PRESET menu, click on the AUX ON button to turn on this aux operation. For aux operation, please refer to the user manual of PTZ.**
   c. **At the PTZ PRESET menu, click on the AUX OFF button to turn off this aux operation. For aux operation, please refer to the user manual of PTZ.**

2.13.3 PTZ Other Set Function

1. **In PTZ operation mode, press "LEFT", "RIGHT", "UP" or "DOWN" button on the front panel to move the cursor to SET button at the menu, press "ENTER" button on the front panel to display PTZ SET menu and enter PTZ other function setting mode. If it does not support pattern and auto scan operation for the PTZ protocol, this menu can not be opened.**

2. **PATTERN**
   a. **At the PTZ SET menu, press "LEFT", "RIGHT", "UP" or "DOWN" button on the front panel to move the cursor to the PATTERN frame. Press "UP" or "DOWN" button on the front panel to set PATTERN number to 1. Move the cursor to the BEGIN button and press "ENTER" button on the front panel to start pattern setting.**
   b. **Press "CANCEL" button on the front panel to exit PTZ other function setting mode and return to PTZ operation mode. Press "UP", "DOWN", "LEFT", "RIGHT" and "ENTER" buttons to control PTZ to any position. When all operating route finished, enter PTZ SET menu again and move the cursor to the END button and press "ENTER" button on the front panel to save the operating route to pattern 1. Using the same way to save other PTZ operating route to relevant pattern number.**

c. **At the PTZ SET menu, select PATTERN number to 1 or other PATTERN number you wish to run. Press "LEFT", "RIGHT", "UP" or "DOWN" button on the front panel to move the cursor to the PATTERN button. Press "ENTER" button to start pattern 1 route operation. Press "ENTER" button again to stop pattern 1 route operation. Using the same way to run other pattern operation.**

3. **AUTO SCAN**
   a. **At the PTZ SET menu, press "CANCEL" button on the front panel to exit PTZ other function setting mode and return to PTZ operation mode. Press "UP", "DOWN", "LEFT", "RIGHT" and "ENTER" buttons to control PTZ to a position as the left position.**
   b. **Enter the PTZ SET menu again, press "LEFT", "RIGHT", "UP" or "DOWN" button on the front panel to move the cursor to the LEFT button. Press "ENTER" button on the front panel to set the PTZ position to the left position.**
   c. **At the PTZ SET menu, press "CANCEL" button on the front panel to exit PTZ other function setting mode and return to PTZ operation mode. Press "UP", "DOWN", "LEFT", "RIGHT" and "ENTER" buttons to control PTZ to a position as the right position. Enter the PTZ SET menu again, press "LEFT", "RIGHT", "UP" or "DOWN" button on the front panel to move the cursor to the RIGHT button. Press "ENTER" button on the front panel to set the PTZ position to the right position.**
   d. **At the PTZ SET menu, press "LEFT", "RIGHT", "UP" or "DOWN" button on the front panel to move the cursor to the AUTOSCAN button. Press "ENTER" button to start PTZ auto scan between the left position and the right position. Press "ENTER" button again to stop PTZ auto scan.**
4. **Others**
   a. **At the PTZ SET menu, press "LEFT", "RIGHT", "UP" or "DOWN" button on the front panel to move the cursor to the FLIP button. Press "ENTER" button on the front panel to flip the PTZ.**
   b. **At the PTZ SET menu, press "LEFT", "RIGHT", "UP" or "DOWN" button on the front panel to move the cursor to the RESET button. Press "ENTER" button on the front panel to reset the PTZ.**
   c. **At the PTZ SET menu, press "LEFT", "RIGHT", "UP" or "DOWN" button on the front panel to move the cursor to the LIGHT button. Press "ENTER" button on the front panel to turn on the light. Press "ENTER" button again on the front panel to turn off the light.**
   d. **At the PTZ SET menu, press "LEFT", "RIGHT", "UP" or "DOWN" button on the front panel to move the cursor to the WIPER button. Press "ENTER" button on the front panel to start using wiper. Press "ENTER" button again on the front panel to stop using wiper.**
   e. **At the PTZ SET menu, press "LEFT", "RIGHT", "UP" or "DOWN" button on the front panel to move the cursor to the CAMPOWER button.**

Press “ENTER” button on the front panel to turn on the camera power. Press “ENTER” button again on the front panel to turn off the camera power. If it supports menu or matrix operation for the PTZ protocol, this button is MENU button for PTZ and press “ENTER” button on the front panel to enter PTZ MENU/ MATRIX setup menu.

- **Mouse**

1. **In PTZ operation mode, click on SET button at the menu to display PTZ SET menu and enter PTZ other function setting mode.**
2. **PATTERN**
   a. **At the PTZ SET menu, move the cursor to the PATTERN frame. Turn the middle button of mouse to set PATTERN number to 1. Click on the BEGIN button to start pattern setting.**
   b. **Click on CANCEL button or right click to exit PTZ other function setting mode and return to PTZ operation mode. Click on the direction arrows and zoom, focus, iris icons to control PTZ to any position. When all operating route finished, enter PTZ SET menu again and click on the END button to save the operating route to pattern 1. Using the same way to save other PTZ operating route to relevant pattern number.**
   c. **At the PTZ SET menu, select PATTERN number to 1 or other PATTERN number you wish to run. Click on the PATTERN button to start pattern 1 route operation. Click on the PATTERN button again to stop pattern 1 route operation. Using the same way to run other pattern operation.**
3. **AUTO SCAN**
   a. **At the PTZ SET menu, click on CANCEL button or right click to exit PTZ other function setting mode and return to PTZ operation mode. Click on the direction arrows and zoom, focus, iris icons to control PTZ to a position as the left position.**
   b. **Enter the PTZ SET menu again, click on the LEFT button to set the PTZ position to the left position.**
   c. **At the PTZ SET menu, click on CANCEL button or right click to exit PTZ other function setting mode and return to PTZ operation mode. Click on the direction arrows and zoom, focus, iris icons to control PTZ to a position as the right position. Enter the PTZ SET menu again, click on the RIGHT button to set the PTZ position to the right position.**
   d. **At the PTZ SET menu, click on the AUTOSCAN button to start PTZ auto scan between the left position and the right position. Click on the AUTOSCAN button again to stop PTZ auto scan.**
4. **Others**
   a. **At the PTZ SET menu, click on the FLIP button to flip the PTZ.**
   b. **At the PTZ SET menu, click on the RESET button to reset the PTZ.**
   c. **At the PTZ SET menu, click on the LIGHT button to turn on the light. Click on the LIGHT button again to turn off the light.**
   d. **At the PTZ SET menu, click on the WIPER button to start using wiper. Click on the WIPER button again to stop using wiper.**

e. **At the PTZ SET menu, click on the CAMPOWER button to turn on the camera power. Click on the CAMPOWER button again to turn off the camera power. If it supports menu or matrix operation for the PTZ protocol, this button is MENU button for PTZ and click on it to enter PTZ MENU/ MATRIX setup menu.**

2.13.4 PTZ Menu/Matrix Function

1. **At the PTZ SET menu, press "LEFT", "RIGHT", "UP" or "DOWN" button on the front panel to move the cursor to the MENU button, press "ENTER" button on the front panel to display PTZ MENU/MATRIX setup menu and enter PTZ menu setting mode. If it does not support menu and matrix operation for the PTZ protocol, this menu can not be opened.**

2. **At the MENU/MATRIX setup menu, press "LEFT", "RIGHT", "UP" or "DOWN" button on the front panel to move the cursor to the MONITOR frame. Press "UP" or "DOWN" button on the front panel to set MONITOR address to 1 or other number. It is only used for matrix operation if it supports PTZ matrix protocol.**
3. **MENU**
   a. **At the MENU/MATRIX setup menu, press "LEFT", "RIGHT", "UP" or "DOWN" button on the front panel to move the cursor to the MENU button. Press "ENTER" button on the front panel to enable PTZ menu setting. Press "ENTER" button again on the front panel to disable PTZ menu setting.**
   b. **At the MENU/MATRIX setup menu, if PTZ menu function is enabled, press "LEFT", "RIGHT", "UP" or "DOWN" button on the front panel to move the cursor to the MENU UP, M DOWN, M LEFT or M RIGHT button. Press "ENTER" button on the front panel to move the cursor to up, down, left or right direction at the PTZ menu.**
   c. **At the MENU/MATRIX setup menu, if PTZ menu function is enabled, press "LEFT", "RIGHT", "UP" or "DOWN" button on the front panel to**

move the cursor to the M ENTER button. Press "ENTER" button on the front panel to enter PTZ sub menu. Press "ENTER" button again to exit PTZ sub menu.

4. **Others**
   a. **At the MENU/MATRIX setup menu, press "LEFT", "RIGHT", "UP" or "DOWN" button on the front panel to move the cursor to the ALARM button. Press "ENTER" button on the front panel to start alarm search.**
   b. **At the MENU/MATRIX setup menu, press "LEFT", "RIGHT", "UP" or "DOWN" button on the front panel to move the cursor to the RESET button. Press "ENTER" button on the front panel to reset the PTZ.**
   c. **At the MENU/MATRIX setup menu, press "LEFT", "RIGHT", "UP" or "DOWN" button on the front panel to move the cursor to the LIGHT button. Press "ENTER" button on the front panel to turn on the light. Press "ENTER" button again on the front panel to turn off the light.**
   d. **At the MENU/MATRIX setup menu, press "LEFT", "RIGHT", "UP" or "DOWN" button on the front panel to move the cursor to the MATRIX button. Press "ENTER" button on the front panel to switch matrix.**
   e. **At the MENU/MATRIX setup menu, press "LEFT", "RIGHT", "UP" or "DOWN" button on the front panel to move the cursor to the CAMPOWER button. Press "ENTER" button on the front panel to turn on the camera power. Press "ENTER" button again to turn off the camera power.**

● **Mouse**

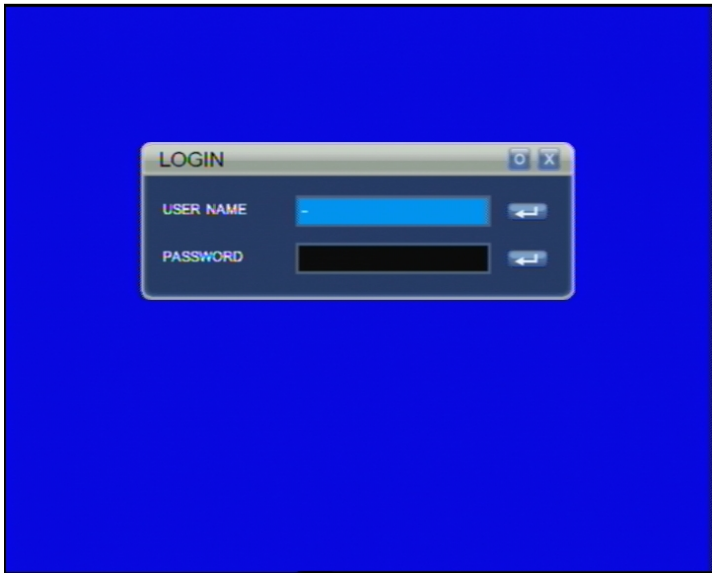
1. **At the PTZ SET menu, click on the MENU button to display PTZ MENU/MATRIX setup menu and enter PTZ menu setting mode.**
2. **At the MENU/MATRIX setup menu, move the cursor to the MONITOR frame. Turn the middle button of mouse to set MONITOR address to 1 or other number. It is only used for matrix operation if it supports PTZ matrix protocol.**
3. **MENU**
   a. **At the MENU/MATRIX setup menu, click on the MENU button to enable PTZ menu setting. Click on the MENU button again to disable PTZ menu setting.**
   b. **At the MENU/MATRIX setup menu, if PTZ menu function is enabled, click on the MENU UP, M DOWN, M LEFT or M RIGHT button to move the cursor to up, down, left or right direction at the PTZ menu.**
   c. **At the MENU/MATRIX setup menu, if PTZ menu function is enabled, click on the M ENTER button to enter PTZ sub menu. Click on the M ENTER button again to exit PTZ sub menu.**
4. **Others**
   a. **At the MENU/MATRIX setup menu, click on the ALARM button to start alarm search.**
   b. **At the MENU/MATRIX setup menu, click on the RESET button to reset the PTZ.**
   c. **At the MENU/MATRIX setup menu, click on the LIGHT button to turn**

on the light. Click on the LIGHT button again to turn off the light.

d. At the MENU/MATRIX setup menu, click on the MATRIX button to switch matrix.

e. At the MENU/MATRIX setup menu, click on the CAMPOWER button to turn on the camera power. Click on the CAMPOWER button again to turn off the camera power.

2.14 Login



1. Press “UP” or “DOWN” button on the front panel to move the cursor to USER NAME line. Press “MENU” button on the front panel to display a keyboard box, press “UP”, “DOWN”, “LEFT” or “RIGHT” button on the front panel to move cursor to a letter, number or symbol, then press “ENTER” button on the front panel to input it. Select “←” on the keyboard box to clear the previous input. After input the correct user name, move the cursor to ENTER button on the keyboard box, press “ENTER” button on the front panel to return back to LOGIN MENU.
2. Press “UP” or “DOWN” button on the front panel to move the cursor to PASSWORD line. Press NUMBER buttons to input correct password or press “MENU” button on the front panel to display a keyboard box, press “UP”, “DOWN”, “LEFT” or “RIGHT” button on the front panel to move cursor to a number, then press “ENTER” button on the front panel to input this number. Select “←” on the keyboard box to clear the previous number. After input the correct password and move the cursor to ENTER button on the keyboard box, press “ENTER” button on the front panel to return back to LOGIN MENU.
3. After input correct user name and password at the LOGIN MENU, press “ENTER” button on the front panel to login.

● Mouse

1. Move the cursor to USER NAME line. Click on the “SET” button to display a keyboard box. Click on a letter, number or symbol to input it. Click on “←”

on the keyboard box to clear the previous input. After input the correct user name, click on ENTER button on the keyboard box to return back to LOGIN MENU.

2. **Move the cursor to PASSWORD line. Click on the "SET" button to display a keyboard box. Click on a number to input it. Select "←" on the keyboard box to clear the previous number. After input the correct password, click on ENTER button on the keyboard box to return back to LOGIN MENU.**
3. **After input correct user name and password at the LOGIN MENU, click on "O" (OK) button to login.**

Ⅲ SYSTEM MENU SETUP

3.1 Main Menu Setup

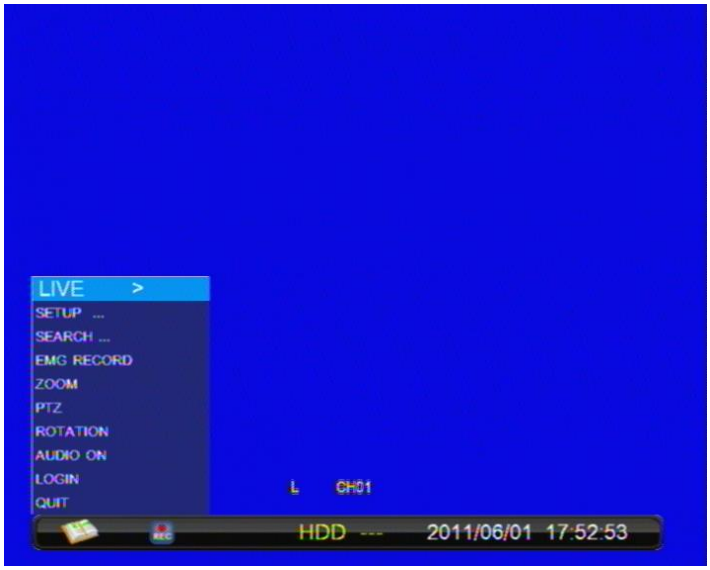
1. **Press “MENU” button on the front panel to display MAIN MENU during the live display mode.**
2. **In the MAIN MENU, Press “UP”, ”DOWN”, “LEFT” and “RIGHT” buttons to select submenu button and press “ENTER” button to enter relevant submenu.**
3. **In the MAIN MENU, Press “CANCEL” button to exit the MAIN MENU.**

The MAIN MENU displayed as below:

● **Mouse**

1. **Click the mouse on the MENU icon on the bottom status bar to display POPUP MENU during the live display mode.**

The POPUP MENU displayed as below:



LIVE: Select the different screen display mode: QUAD (2×2), PIP, 9

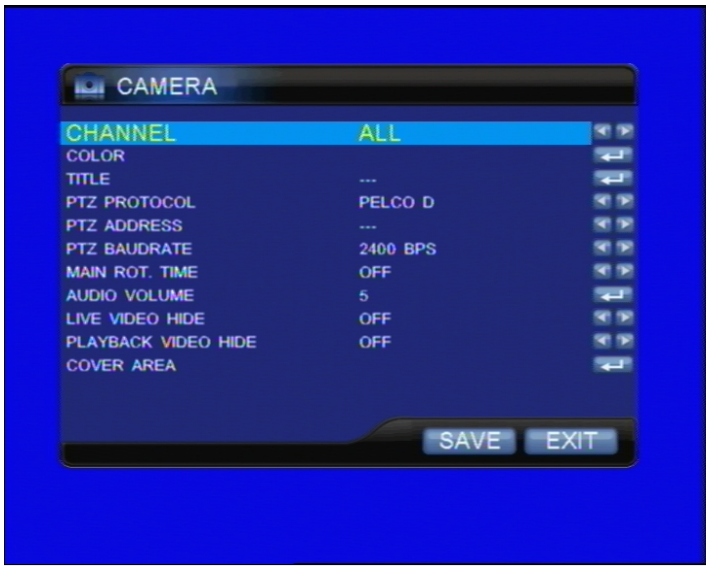
SPLIT (3×3)(For 8/16CH DVR), 25 SPLIT (5×5) (For 24/32CH DVR) and 36 SPLIT (6×6)(For 32CH DVR)
SETUP: Enter the system setup mode and display MAIN MENU
SEARCH: Enter the playback mode and display the search menu
EMG RECORD: Begin and stop manual recording
ZOOM: Enter image zoom-in function, only operated by mouse
PTZ: Enter PTZ operation mode and display PTZ menu
ROTATION: Start or stop auto sequence function
AUDIO ON/OFF: Turn audio on/off during the live display mode
LOGIN: Select a valid user name and password to login.
QUIT: Power off the DVR

2. **At the POPUP MENU, Click on the "SETUP" button to display MAIN MENU. Click on the submenu button to enter relevant submenu.**
3. **In the MAIN MENU, right click the place out of the MAIN MENU on the screen to exit the MAIN MENU.**

3.2 CAMERA Menu Setup

Press "MENU" button on the front panel to display MAIN MENU during the live display mode. Press "UP", "DOWN", "LEFT" and "RIGHT" buttons to select CAMERA button in the MAIN MENU and press "ENTER" button to enter CAMERA setup menu. After setting, press "MENU" button to save the setting. Then exit the submenu and main menu. Press "CANCEL" button to exit submenu without saving.

The CAMERA setup menu displayed as below:



1. **CHANNEL**

Press “UP” or “DOWN” button on the front panel to move the cursor to the CHANNEL line at the CAMERA setup menu. Press “LEFT”, “RIGHT” button to select the channel to set. Select “ALL” to set all channels. When selecting “ALL”, if one item display “---” it means that this feature item of each channel is different. When saving the setting, if the item selected “---” the setting of this item is not changed.

2. COLOR

(1) Press “UP” or “DOWN” button on the front panel to move the cursor to the COLOR line at the CAMERA setup menu. Press “ENTER” button to display the COLOR submenu, press “LEFT” or “RIGHT” button to set the parameters.

(2) At the COLOR submenu, press “UP” or “DOWN” button on the front panel to move the cursor to CONTRAST, BRIGHTNESS, HUE, SATURATION or SHARPNESS line and press “LEFT” or “RIGHT” button to change image contrast, brightness, hue, saturation and turn on/off the sharpness.

The COLOR submenu displayed as below:

3. TITLE

(1) Press “UP” or “DOWN” button on the front panel to move the cursor to the TITLE line at the CAMERA setup menu. Press “ENTER” button to display a keyboard box.

(2) Press “UP”, “DOWN”, “LEFT” or “RIGHT” button on the front panel to move cursor to select a number or letter on the keyboard box, then press “ENTER” button on the front panel to input this number or letter. Select “←” on the keyboard box to clear the previous display.

(3) **After input the desired camera title, move the cursor to "ENTER" on the keyboard box, press "ENTER" button on the front panel to set the camera title.**

● **Mouse**

(1) **Click the mouse on the MENU icon on the bottom status bar to display POPUP MENU during the live display mode. Then click on the "SETUP" button to display MAIN MENU. Click on the "CAMERA" button to enter CAMERA setup menu.**

(2) **At the CAMERA setup menu, move the cursor to the TITLE line. Click on the "SET" button to display a keyboard box.**

(3) **Click on a number or letter on the keyboard box to input it. Click on "←" on the keyboard box to clear the previous display. After input the desired camera title, click on "ENTER" on the keyboard box to set the camera title.**

(4) **Click on the "SAVE" button at the CAMERA setup menu to save the setting. Then exit the submenu and main menu. Click on "CANCEL" button to exit submenu without saving.**

4. **PTZ PROTOCOL**

(1) **Press "UP" or "DOWN" button on the front panel to move the cursor to the PTZ PROTOCOL line at the CAMERA setup menu. Press "LEFT" or "RIGHT" button to select the PTZ protocol.**

(2) **When setting it to OFF, the system PTZ function is disabled. The default PTZ protocol is PELCO-D.**

5. **PTZ ADDRESS**

(1) **Press "UP" or "DOWN" button on the front panel to move the cursor to the PTZ ADDRESS line at the CAMERA setup menu. Press "LEFT" or "RIGHT" button to select the PTZ address from 0 to 255.**

(2) **The default PTZ address is as below:**

Channel	Address
Channe l – Channel 32	1 - 32

6. PTZ BAUDRATE

(1) Press “UP” or “DOWN” button on the front panel to move the cursor to the PTZ BAUDRATE line at the CAMERA setup menu. Press “LEFT” or “RIGHT” button to select the PTZ baud rate.

(2) The default PTZ baud rate is 2400bps.

7. MAIN ROT. TIME

(1) Press “UP” or “DOWN” button on the front panel to move the cursor to the MAIN ROT. TIME line at the CAMERA setup menu. Press “LEFT” or “RIGHT” button to set displaying duration of each channel screen in the auto sequence mode.

(2) When setting it to OFF, the auto sequence function of this channel is disabled. The default auto sequence duration is 2 seconds.

8. AUDIO VOLUME

(1) Press “ENTER” button on the front panel to enter audio volume setting mode. Press “LEFT” or “RIGHT” button to decrease or increase the audio volume for the live displaying channel .

(2) After setting, press “ENTER” or “CANCEL” button to go back to the CAMERA setup menu.

9. LIVE VIDEO HIDE

(1) Press “UP” or “DOWN” button on the front panel to move the cursor to the LIVE VIDEO HIDE line at the CAMERA setup menu. Press “LEFT” or “RIGHT” button to turn on or off the hide function for live video.

(2) When setting it to ON, no video displayed in this channel and it is black screen for the live view of this channel.

10. PLAYBACK VIDEO HIDE

(1) Press “UP” or “DOWN” button on the front panel to move the cursor to the PLAYBACK VIDEO HIDE line at the CAMERA setup menu. Press “LEFT” or “RIGHT” button to turn on or off the hide function for playback video.

(2) When setting it to ON, no video displayed in this channel and it is black screen for the playback of this channel.

11. COVER AREA

(1) Press “ENTER” button on the front panel to enter cover area setting menu. There are totally 3 areas marked with different colors to set. Press “UP” or “DOWN” button to SELECT AREA 1 line and press “ENTER” button to start setting.

(2) **Press “UP”, “DOWN”, “LEFT” or “RIGHT” button on the front panel to move the cursor to the start point of area, press “ENTER” button to confirm. Then press “UP”, “DOWN”, “LEFT” or “RIGHT” button to move the cursor to get the area marked with relevant color. Press “ENTER” button again to finish area setting. Press “Menu” button on the front panel to enter cover area setting menu. Press “UP” or “DOWN” button to select PREVIEW to view the selected area. Using the same way to set the cover area 2 and cover area 3. The area that already set before can not be set again. If needs to set the same area again, must clear the area first.**

(3) **Press “UP” or “DOWN” button to select CLEAR AREA 1 at the cover area setting menu. Press “ENTER” button to clear cover area 1 and the cleared area will become gray color. Using the same way to clear cover area 2 and cover area 3.**

(4) **Press “UP” or “DOWN” button to select EXIT in the cover area setting menu. Press “ENTER” button to return back to the CAMERA setup menu. The covered area can not display video for the live, playback and network viewing.**

3.3 RECORD Menu Setup

Press “MENU” button on the front panel to display MAIN MENU during the live display mode. Press “UP”, ”DOWN”, “LEFT” and “RIGHT” buttons to select RECORD button in the MAIN MENU and press “ENTER” button to enter RECORD setup menu. After setting, press “MENU” button to save the setting. Then exit the submenu and main menu. Press “CANCEL” button to exit submenu without saving.

The RECORD setup menu displayed as below:

1. **CHANNEL**

   Press "UP" or "DOWN" button on the front panel to move the cursor to the CHANNEL line at the RECORD setup menu. Press "LEFT", "RIGHT" button to select the channel to set. Select "ALL" to set all channels. When selecting "ALL", if one item display "---" it means that this feature item of each channel is different. When saving the setting, if the item selected "---" the setting of this item is not changed.

2. **RESOLUTION**

   (1) Press "UP" or "DOWN" button on the front panel to move the cursor to the RESOLUTION line at the RECORD setup menu. Press "LEFT" or "RIGHT" button to set the recording resolution.

   (2) When setting it to CIF, the total frame rate is 400fps for PAL and 480 fps for NTSC of 16CH DVR, 600fps for PAL and 720 fps for NTSC of 24CH DVR, 800fps for PAL and 960 fps for NTSC of 32CH DVR, 200fps for PAL and 240 fps for NTSC of 8CH DVR, 100fps for PAL and 120 fps for NTSC of 4CH DVR. When setting it to 1/2 D1, the total frame rate is 200fps for PAL and 240 fps for NTSC of 16CH DVR, and 100fps for PAL and 120 fps for NTSC of 8CH DVR, and 100fps for PAL and 120 fps for NTSC of 4CH DVR. When setting it to D1, the total frame rate is 100fps for PAL and 120 fps for NTSC of 16CH DVR, and 50fps for PAL and 60 fps for NTSC of 8CH DVR, and 50fps for PAL and 60 fps for NTSC of 4CH DVR.

   (3) For 24/32 CH DVR, only CIF resolution and this item can not be selected. the total frame rate is 600/800fps for PAL and 720/960 fps for NTSC

3. **PRE RECORD**

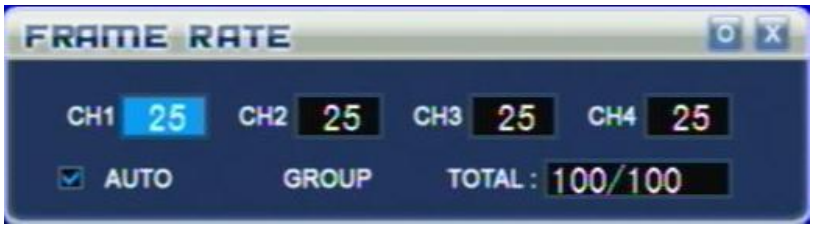
   (1) Press "UP" or "DOWN" button on the front panel to move the cursor to the PRE RECORD line at the RECORD setup menu. Press "LEFT" or "RIGHT" button to turn on or off the pre recording function.

   (2) The system pre recording time is 1 second.

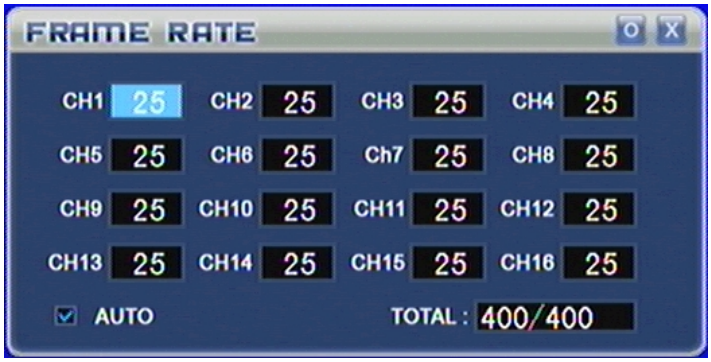
4. **FPS**

   (1) Press "UP" or "DOWN" button on the front panel to move the cursor to the FPS line at the RECORD setup menu. Press "ENTER" button to display the FRAME RATE setup menu.

The FRAME RATE setup menu displayed as below:



4CH



16CH

(2) Press "LEFT" or "RIGHT" button on the front panel to move cursor to the AUTO line at the FRAME RATE setup menu. Then press "MENU" button to turn on or off auto FPS setting.

(3) When setting AUTO to off at the FRAME RATE setup menu, press "LEFT" or "RIGHT" button on the front panel to select a channel at the FRAME RATE setup menu and press "UP" or "DOWN" button to set the frame rate of the channel. Press "ENTER" button to exit the FRAME RATE setup menu.

(4) For 24/32 CH DVR, only CIF resolution and this item can not be set.

5. QUALITY

(1) Press "UP" or "DOWN" button on the front panel to move the cursor to the QUALITY line at the RECORD setup menu. Press "LEFT" or "RIGHT" button to select the quality of recording image.

(2) The image quality can be selected to HIGHEST, HIGH, STANDARD and LOW. The higher the image quality set, the bigger the HDD size used.

6. BITRATE

(1) Press "UP" or "DOWN" button on the front panel to move the cursor to the BITRATE line at the RECORD setup menu. Press "LEFT" or "RIGHT" button to select the bit rate of recording h264 stream.

(2) The stream bit rate can be selected to HIGHEST, HIGH, STANDARD and LOW. The higher the bit rate set, the higher recording image quality get, and the bigger the HDD size used.

7. RECORD MODE

(1) Press "UP" or "DOWN" button on the front panel to move the cursor to the RECORD MODE line at the RECORD setup menu. Press "LEFT" or "RIGHT" button to select recording mode.

(2) The recording mode can be selected to ALWAYS, MOTION, SENSOR, SCHEDULE, OFF. When setting it to OFF, the manual recording mode can be used .

8. AUDIO

(1) Press “UP” or “DOWN” button on the front panel to move the cursor to the AUDIO line at the RECORD setup menu. Press “LEFT” or “RIGHT” button to set audio on or off.

(2) When setting AUDIO to ON, the system will record input audio of this channel. When setting AUDIO to OFF, the system will not record input audio of this channel.

9. SCHEDULE

(1) Press “UP” or “DOWN” button on the front panel to move the cursor to the SCHEDULE line at the RECORD setup menu. Press “LEFT” or “RIGHT” button to select schedule list number. If selecting SCHEDULE record mode, the recording is according to this schedule list that setting at the SCHEDULE setup menu.

(2) There are totally 5 schedule lists.

10. SYSTEM MAINTENANCE

(1) Press “UP” or “DOWN” button on the front panel to move the cursor to the SYSTEM MAINTENANCE line at the RECORD setup menu. Press “ENTER” button to display the SYSTEM MAINTENANCE setup menu.

(2) When setting RESTART to ON, it needs to set the date and time. The system will restart automatically when the same date and time come as the setting.

3.4 MOTION Menu Setup

Press “MENU” button on the front panel to display MAIN MENU during the live display mode. Press “UP”, ”DOWN”, “LEFT” and “RIGHT” buttons to select MOTION button in the MAIN MENU and press “ENTER” button to enter MOTION setup menu. After setting, press “MENU” button to save the setting. Then exit the submenu and main menu. Press “CANCEL” button to exit submenu without saving.

The MOTION setup menu displayed as below:

1. **CAMERA CHANNEL**

   Press "UP" or "DOWN" button on the front panel to move the cursor to the CAMERA CHANNEL line at the MOTION setup menu. Press "LEFT", "RIGHT" button to select the channel to set. Select "ALL" to set all channels. When selecting "ALL", if one item display "---" it means that this feature item of each channel is different. When saving the setting, if the item selected "---" the setting of this item is not changed.

2. **MOTION ENABLE**

   Press "UP" or "DOWN" button on the front panel to move the cursor to the MOTION ENABLE line at the MOTION setup menu. Press "LEFT" or "RIGHT" button to turn on or off the motion detection function.

3. **SENSITIVITY**

   Press "UP" or "DOWN" button on the front panel to move the cursor to the SENSITIVITY line at the MOTION setup menu. Press "LEFT" or "RIGHT" button to select the motion sensitivity from level 0 (lowest) to level 7 (highest).

4. **MOTION AREA**

   (1) Press "UP" or "DOWN" button on the front panel to move the cursor to the MOTION AREA line at the MOTION setup menu. Press "ENTER" button to display the MOTION AREA setup screen.

   After setting motion area, if record resolution (CIF, 1/2D1, D1) has changed it needs to set motion area again for new record resolution.

The MOTION AREA setup screen displayed as below:

(2) At the MOTION AREA setup screen, press "MENU" button on the front panel to display a setup menu. Press "UP" or "DOWN" button to move the cursor to the SELECT line and press "ENTER" button to exit the menu and begin setting motion area.

(3) Press "UP", "DOWN", "LEFT" or "RIGHT" button to move the cursor to a starting position of motion area. Press "ENTER" button on the front panel then press "UP", "DOWN", "LEFT" or "RIGHT" button to select desired motion area. The selected motion area will become white color. Press "ENTER" button again to finish motion area selecting and selected motion area will become transparent.

(4) Using the same way can select the other desired motion area.

(5) At the MOTION AREA setup screen, press "MENU" button on the front panel to display the setup menu. Press "UP" or "DOWN" button to move the cursor to the CLEAR line and press "ENTER" button to exit the menu and begin clearing motion area.

(6) Press "UP", "DOWN", "LEFT" or "RIGHT" button to move the cursor to a starting position of selected motion area. Press "ENTER" button on the front panel then press "UP", "DOWN", "LEFT" or "RIGHT" button to clear selected motion area. The selected area will become white color. Press "ENTER" button again to finish motion area clearing and the selected area will become red color.

(7) At the MOTION AREA setup screen, press "MENU" button on the front panel to display the setup menu. Press "UP" or "DOWN" button to move the cursor to the EXIT line and press "ENTER" button to exit the MOTION AREA setup screen and return to the MOTION setup menu.

● **Mouse**

(1) Move the cursor to the MOTION AREA line at the MOTION setup menu. Click on the "SET" button to display the MOTION AREA setup screen.

(2) At the MOTION AREA setup screen, click the right mouse button to display a setup menu. Move the cursor to the SELECT line and click on it to exit the menu and begin setting motion area.

(3) Move the cursor to a starting position of motion area. Keep pressing the left mouse button and drag it to select desired motion area. The selected motion area will become white color. Release the left mouse button to finish motion area selecting and selected motion area will become transparent.

(4) Using the same way can select the other desired motion area.

(5) At the MOTION AREA setup screen, click the right mouse button to display the setup menu. Move the cursor to the CLEAR line and click on it to exit the menu and begin clearing motion area.

(6) Move the cursor to a starting position of selected motion area. Keep pressing the left mouse button and drag it to clear selected motion area. The selected area will become white color. Release the left mouse button to finish motion area clearing and the selected area will become red color.

(7) At the MOTION AREA setup screen, click the right mouse button to display the setup menu. Move the cursor to the EXIT line and click on it to exit the MOTION AREA setup screen and return to the MOTION setup menu.

5. POST RECORD TIME

(1) Press "UP" or "DOWN" button on the front panel to move the cursor to the POST RECORD TIME line at the MOTION setup menu. Press "LEFT" or "RIGHT" button to select post-alarm recording time.

(2) The post-alarm recording time can be set from 10 second to 60 second. When setting it to OFF, the post-alarm recording time is 0 second.

6. BUZZER TIME

(1) Press "UP" or "DOWN" button on the front panel to move the cursor to the BUZZER TIME line at the MOTION setup menu. Press "LEFT" or "RIGHT" button to select beep sound time.

(2) The beep sound time can be set from 1 second to 60 second. When setting it to OFF, the beep does not sound.

7. ALARM TIME

(1) Press "UP" or "DOWN" button on the front panel to move the cursor to the ALARM TIME line at the MOTION setup menu. Press "LEFT" or "RIGHT" button to select post output alarm time.

(2) The post alarm time can be set from 1 second to 60 second. When setting it to OFF, the alarm does not output.

3.5 SENSOR Menu Setup

Press "MENU" button on the front panel to display MAIN MENU during the live

display mode. Press “UP”, ”DOWN”, “LEFT” and “RIGHT” buttons to select SENSOR button in the MAIN MENU and press “ENTER” button to enter SENSOR setup menu. After setting, press “MENU” button to save the setting. Then exit the submenu and main menu. Press “CANCEL” button to exit submenu without saving.

The SENSOR setup menu displayed as below:

1. **SENSOR CHANNEL**

   Press “UP” or “DOWN” button on the front panel to move the cursor to the SENSOR CHANNEL line at the SENSOR setup menu. Press “LEFT”, “RIGHT” button to select the channel to set. Select “ALL” to set all channels. When selecting “ALL”, if one item display “---” it means that this feature item of each channel is different. When saving the setting, if the item selected “---” the setting of this item is not changed.

2. **SENSOR TYPE**

   Press “UP” or “DOWN” button on the front panel to move the cursor to the SENSOR TYPE line at the SENSOR setup menu. Press “LEFT”, “RIGHT” button to select the sensor type: NORMAL CLOSE or NORMAL OPEN.

3. **POST RECORD TIME**

   (1) Press “UP” or “DOWN” button on the front panel to move the cursor to the POST RECORD TIME line at the SENSOR setup menu. Press “LEFT” or “RIGHT” button to select post-alarm recording time.

   (2) The post-alarm recording time can be set from 10 second to 60. When setting it to OFF, the post-alarm recording time is 0 second.

4. **BUZZER TIME**

(1) Press “UP” or “DOWN” button on the front panel to move the cursor to the BUZZER TIME line at the SENSOR setup menu. Press “LEFT” or “RIGHT” button to select beep sound time.

(2) The beep sound time can be set from 1 second to 60 second. When setting it to OFF, the beep does not sound.

5. ALARM TIME

(1) Press “UP” or “DOWN” button on the front panel to move the cursor to the ALARM TIME line at the SENSOR setup menu. Press “LEFT” or “RIGHT” button to select post output alarm time.

(2) The post alarm time can be set from 1 second to 60 second. When setting it to OFF, the alarm does not output.

6. HDD LOSS

(1) Press “UP” or “DOWN” button on the front panel to move the cursor to the HDD LOSS line at the SENSOR setup menu. Press “LEFT” or “RIGHT” button to select HDD loss alarm time.

(2) The beep sound time of HDD loss can be set from 1 second to 30 second. When HDD is out of action or DVR cannot detect the HDD, the beep of alarm will sound for the setting duration. When setting it to OFF, the beep does not sound.

7. VIDEO LOSS

(1) Press “UP” or “DOWN” button on the front panel to move the cursor to the VIDEO LOSS line at the SENSOR setup menu. Press “LEFT” or “RIGHT” button to select video loss alarm time.

(2) The beep sound time of video loss can be set from 1 second to 30 second. When video of a channel loss, the beep of alarm will sound for the setting duration and the letter L will be displayed on the channel. When setting it to OFF, the beep does not sound.

8. HDD FULL

(1) Press “UP” or “DOWN” button on the front panel to move the cursor to the HDD FULL line at the SENSOR setup menu. Press “LEFT” or “RIGHT” button to select HDD full alarm time.

(2) The beep sound time of HDD full can be set from 1 second to 30 second. When the HDD is full of recording, the beep of alarm will sound for the setting duration. When setting it to OFF, the beep does not sound.

3.6 SCHEDULE Menu Setup

Press “MENU” button on the front panel to display MAIN MENU during the live display mode. Press “UP”, ”DOWN”, “LEFT” and “RIGHT” buttons to select SCHEDULE button in the MAIN MENU and press “ENTER” button to enter SCHEDULE setup menu. After setting, press “ENTER” button to save the setting.

Then exit the submenu. Press "CANCEL" button to exit submenu without saving. The last line is the comment for recoding mode when selecting ALWAYS, MOTION, SENSOR or CANCEL recording mode.

The SCHEDULE setup menu displayed as below:

1. **Press NUMBER 1 or "MODE" button on the front panel to select the ALWAYS button at the SCHEDULE setup menu. Or press "UP", "DOWN","LEFT" or "RIGHT" button on the front panel to select the ALWAYS button at the SCHEDULE setup menu. The schedule recording mode is set to ALWAYS.**
   For Mini 4CH DVR, press "SEARCH" button on the front panel to select the ALWAYS button at the SCHEDULE setup menu. The schedule recording mode is set to ALWAYS.
2. **Press NUMBER 2 or "AUTO" button on the front panel to select the MOTION button at the SCHEDULE setup menu. Or press "UP", "DOWN","LEFT" or "RIGHT" button on the front panel to select the MOTION button at the SCHEDULE setup menu. The schedule recording mode is set to MOTION.**
   For Mini 4CH DVR, press "SEARCH" button on the front panel to select the MOTION button at the SCHEDULE setup menu. The schedule recording mode is set to MOTION.
3. **Press NUMBER 3 or "MUTE" button on the front panel to select the SENSOR button at the SCHEDULE setup menu. Or press "UP", "DOWN","LEFT" or "RIGHT" button on the front panel to select the SENSOR button at the SCHEDULE setup menu. The schedule recording mode is set to SENSOR.**
   For Mini 4CH DVR, press "SEARCH" button on the front panel to select the SENSOR button at the SCHEDULE setup menu. The schedule recording

mode is set to SENSOR.

4. **Press NUMBER 4 or "BACKUP" button on the front panel to select the CANCEL button at the SCHEDULE setup menu. Or press "UP", "DOWN","LEFT" or "RIGHT" button on the front panel to select the CANCEL button at the SCHEDULE setup menu. The schedule recording mode is set to OFF .**

   For Mini 4CH DVR, press "SEARCH" button on the front panel to select the CANCEL button at the SCHEDULE setup menu. The schedule recording mode is set to OFF.
5. **Press "UP", "DOWN", "LEFT" or "RIGHT" button to move the cursor to the desired day(from Monday to Sunday) and time(from 0 to 24). Press "MENU" button to set the day and time to the selected schedule recording mode.**
6. **At the SCHEDULE setup menu, press "UP" or "DOWN" button on the front panel to move the cursor to the SCHEDULE LIST, then press "LEFT" or "RIGHT" button to select different schedule recording list. There are totally 5 schedule recording lists to select.**
7. **Press "ENTER" button to save the setting and exit the SCHEDULE setup menu.**

● **Mouse**

1. **Click on the MOTION button to select the MOTION schedule recording mode at the SCHEDULE setup menu. Or click on the SENSOR button to select the SENSOR schedule recording mode. Or click on the ALWAYS button to select the ALWAYS schedule recording mode. Or click on the CANCEL button to select the OFF schedule recording mode.**
2. **Move the cursor to the desired day(from Monday to Sunday) and time(from 0 to 24). Click the left mouse button to set the day and time to the selected schedule recording mode.**
3. **Move the cursor to the SCHEDULE list button and turn the middle button of mouse to select different schedule recording list. There are totally 5 schedule recording lists to select.**
4. **Click on the top right "O" (OK) button to save the setting and exit the SCHEDULE setup menu.**

3.7 NETWORK Menu Setup

Press "MENU" button on the front panel to display MAIN MENU during the live display mode. Press "UP", "DOWN", "LEFT" and "RIGHT" buttons to select NETWORK button in the MAIN MENU and press "ENTER" button to enter NETWORK setup menu. After setting, press "MENU" button to save the setting. Then exit the submenu and main menu. Press "CANCEL" button to exit submenu without saving.

The NETWORK setup menu displayed as below:

1. **IP MODE**

   Press "UP" or "DOWN" button on the front panel to move the cursor to the IP MODE line at the NETWORK setup menu. Press "LEFT", "RIGHT" button to select the network IP mode. The IP mode can be set to STATIC, DHCP or PPPoE. Select "OFF" to disable network connection.

2. **PORT**

   Press "UP" or "DOWN" button on the front panel to move the cursor to the PORT line at the NETWORK setup menu. Press "LEFT", "RIGHT" button to select the network server port.

3. **IP ADDRESS**

   Press "UP" or "DOWN" button on the front panel to move the cursor to the IP ADDRESS line at the NETWORK setup menu. Press "ENTER" button to display a keyboard box.

The keyboard box displayed as below:

(1) Press "UP", "DOWN", "LEFT" or "RIGHT" button on the front panel to move cursor to select a number, then press "ENTER" button on the front panel to input this number. Select "←" on the keyboard box to clear the previous number. After input the correct IP address and move the cursor to "ENTER" on the keyboard box, press "ENTER" button on the front panel to exit the keyboard box and return to the NETWORK setup menu.

(2) Press "CANCEL" button on the front panel to exit the keyboard box and return to the NETWORK setup menu without saving.

- **Mouse**

(1) Click on a number button on the keyboard box to input a number. Click on "←" button on the keyboard box to clear the previous number. After input the correct IP address and click on "ENTER" button on the keyboard box to exit the keyboard box and return to the NETWORK setup menu.

(2) Right click the place out of the keyboard box on the screen to exit the keyboard box and return to the NETWORK setup menu without saving.

4. MAC ADDRESS

Press "UP" or "DOWN" button on the front panel to move the cursor to the MAC ADDRESS line at the NETWORK setup menu. Press "ENTER" button to display a keyboard box. Use the same way for setting IP address to set MAC ADDRESS.

5. NETMASK

Press "UP" or "DOWN" button on the front panel to move the cursor to the NETMASK line at the NETWORK setup menu. Press "ENTER" button to display a keyboard box. Use the same way for setting IP address to set NETMASK.

6. GATEWAY

Press “UP” or “DOWN” button on the front panel to move the cursor to the GATEWAY line at the NETWORK setup menu. Press “ENTER” button to display a keyboard box. Use the same way for setting IP address to set GATEWAY.

7. NAME SERVER

Press “UP” or “DOWN” button on the front panel to move the cursor to the NAME SERVER line at the NETWORK setup menu. Press “ENTER” button to display a keyboard box. Use the same way for setting IP address to set NAME SERVER.

8. DDNS

Press “UP” or “DOWN” button on the front panel to move the cursor to the DDNS line at the NETWORK setup menu. Press “ENTER” button to display the DDNS setup menu.

The DDNS setup menu displayed as below:

(1) Press “UP” or “DOWN” button on the front panel to move the cursor to the SERVER line at the DDNS setup menu. Press “LEFT”, “RIGHT” button to select DYNDNS, 3322, perfect or myq-see. When selecting OFF, the DDNS server is disabled.

(2) When not setting DDNS server to OFF, press “UP” or “DOWN” button on the front panel to move the cursor to the HOSTNAME, USERNAME or PASSWORD line at the DDNS setup menu. Press “MENU” button to display a keyboard box. Using the same way for setting IP address to set them.

(3) When setting DDNS to dvr ddns, it can apply for a free DDNS. If apply for free DDNS first time, press “UP” or “DOWN” button on the front panel or use the mouse to move the cursor to the DDNS and press “LEFT” or “RIGHT” button to set it to ON, then press ENTER button or click the SET

button beside DDNS. It will apply for free DDNS automatically. After some time the DVR will get a user name and it can not be changed. You can open the IE browser and enter host name website: http://dy.vip620.com or enter http://dy.vip620.com/(your username) to access the DVR directly. When apply for free DDNS, make sure the DVR can be connected to internet.

(4) press "UP" or "DOWN" button on the front panel or use the mouse to move the cursor to the UPNP, then press ENTER button or click the mouse to select UPNP. After quit the submenu and main menu, it will enable the UPNP for your Router. When setting UPNP, make sure the UPNP function of Router is turned on.

9. EMAIL

Press "UP" or "DOWN" button on the front panel to move the cursor to the EMAIL line at the NETWORK setup menu. Press "ENTER" button to display the EMAIL setup menu.

The EMAIL setup menu displayed as below:

(1) Press “UP” or “DOWN” button on the front panel to move the cursor to the EMAIL line at the EMAIL setup menu. Press “LEFT”, “RIGHT” button to select ON or OFF. When selecting OFF, the EMAIL function is disabled.

(2) When setting EMAIL to ON, press “UP” or “DOWN” button on the front panel to move the cursor to the SSL line and press “LEFT”, “RIGHT” button to select ON or OFF to turn on or off SSL, press “UP” or “DOWN” button on the front panel to move the cursor to the SMTP PORT, SMTP, SENDER EMAIL, SEND PW and RECV EMAIL line at the EMAIL setup menu. Press “MENU” button to display a keyboard box. Using the same way for setting IP address to set them.

10. BITRATE

(1) Press “UP” or “DOWN” button on the front panel to move the cursor to the BITRATE line at the NETWORK setup menu. Press “LEFT”, “RIGHT” button to select the bit rate of network h264 stream.

(2) The stream bit rate can be selected to HIGHEST, HIGH, STANDARD and LOW. The higher the bit rate set, the higher network image quality get, and the slower speed the network connecting has.

11. MOBILE PORT

Press “UP” or “DOWN” button on the front panel to move the cursor to the MOBILE PORT line at the NETWORK setup menu. Press “LEFT”, “RIGHT” button to select the mobile port.

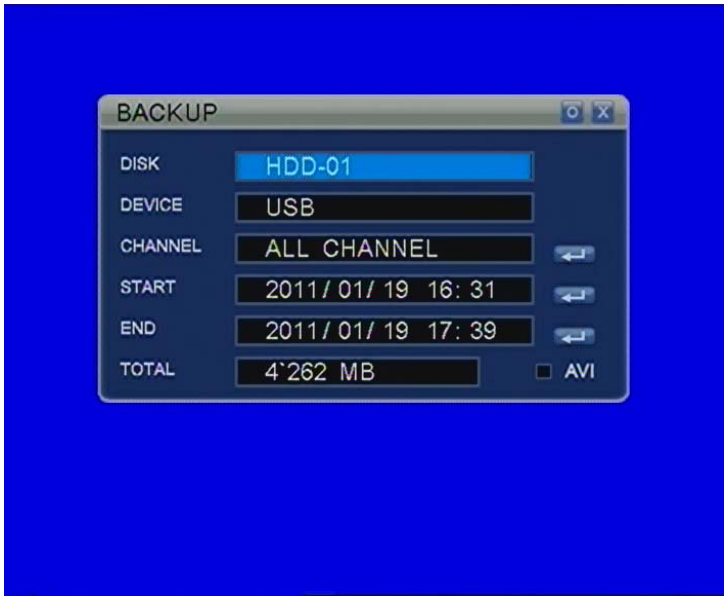
12. IE PORT

Press “UP” or “DOWN” button on the front panel to move the cursor to the IE PORT line at the NETWORK setup menu. Press “LEFT”, “RIGHT” button to select the IE web port.

3.8 BACKUP Menu Setup

Connect USB device to the USB port of DVR. Press "MENU" button on the front panel to display MAIN MENU during the live display mode. Press "UP", "DOWN", "LEFT" and "RIGHT" buttons to select BACKUP button in the MAIN MENU and press "ENTER" button to enter BACKUP setup menu. Press "CANCEL" button to exit submenu without saving.

The BACKUP setup menu displayed as below:



1. **DISK**

   If the USB or SATA DVDRW device is connected to this DVR, press "LEFT" or "RIGHT" button on the front panel to move the cursor to the DISK line and press "UP" or "DOWN" button to select HDD. When using only one HDD, it can not be selected.

2. **DEVICE**

   It will display USB if the USB device is connected to this DVR. It will display CDROM if the SATA DVDRW ROM device connected to the DVR.

3. **CHANNEL**

   If the USB or SATA DVDRW device is connected to this DVR, press "LEFT" or "RIGHT" button on the front panel to move the cursor to the CHANNEL line and press "MENU" button to display the CHANNEL ENABLE menu. Press "LEFT" or "RIGHT" button to select the backup channel at the CHANNEL ENABLE menu and press "UP", "DOWN" button to select ON or OFF to enable or disable the backup channel. Press "ENTER" button to return

to the BACKUP setup menu.

4. **START**

   If the USB or SATA DVDRW device is connected to this DVR, press "LEFT" or "RIGHT" button on the front panel to move the cursor to the date or time of START line and press "UP" or "DOWN" button to select backup beginning date/time. Or press "MENU" button to display the CALENDAR menu. Press "LEFT" or "RIGHT" button to select the date at the CALENDAR menu and press "ENTER" button to return to the BACKUP setup menu.

5. **END**

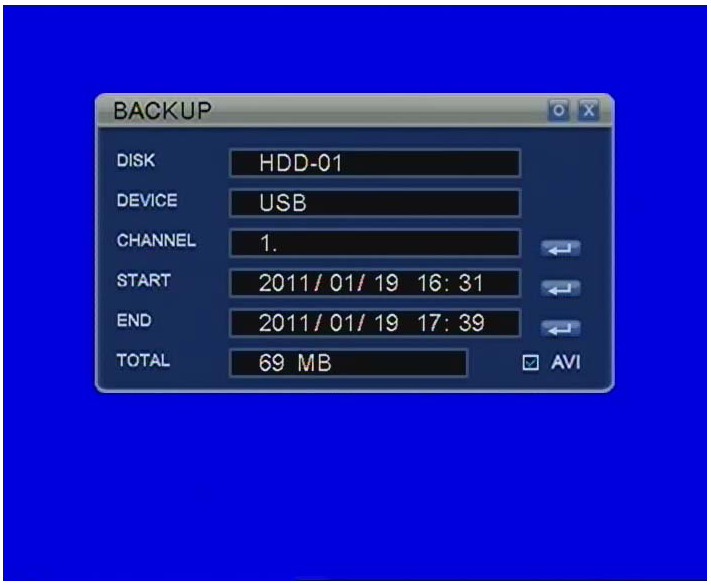
   If the USB or SATA DVDRW device is connected to this DVR, press "LEFT" or "RIGHT" button on the front panel to move the cursor to the date or time of END line and press "UP" or "DOWN" button to select backup end date/time. Or press "MENU" button to display the CALENDAR menu. Press "LEFT" or "RIGHT" button to select the date at the CALENDAR menu and press "ENTER" button to return to the BACKUP setup menu.

6. **TOTAL**

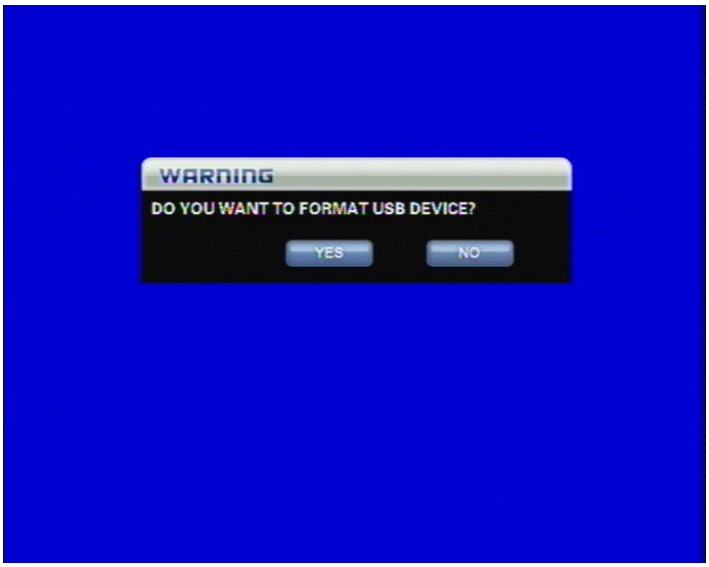
   If the USB or SATA DVDRW device is connected to this DVR and START date/time END date/time set correctly, it will display the selected backup file size.

7. **AVI**

   If the USB or SATA DVDRW device is connected to this DVR, press "LEFT" or "RIGHT" button on the front panel to move the cursor to AVI icon and press "MENU" button to select AVI. Press "MENU" button again not to select AVI. When select AVI, the type of the backup file in USB device is AVI format and backup channel is only one channel.



8. **Press “ENTER” button on the front panel to display warning box. Press “ENTER” button on the front panel again to begin format USB device and then start backup. Press “CANCEL” button on the front panel to start backup without USB device format.**



When the backup is completed, it will return back the BACKUP setup menu.

● **Mouse**

(1) At the BACKUP setup menu, if the USB or SATA DVDRW device is connected to the DVR move the cursor to the CHANNEL, START or END line. Click on the “SET” button to select the backup channel, backup beginning date/time and end date/time or turn the middle button of mouse to select backup beginning date/time and end date/time.

(2) Click on the top right “O” (OK) button to begin backup.

If no any backup device connected to the DVR when beginning the backup, it will display the information that no backup device found.

3.8 SYSTEM Menu Setup

Press “MENU” button on the front panel to display MAIN MENU during the live display mode. Press “UP”, ”DOWN”, “LEFT” and “RIGHT” buttons to select SYSTEM button in the MAIN MENU and press “ENTER” button to enter SYSTEM setup menu. After setting, press “MENU” button to save the setting. Then exit the submenu and main menu. Press “CANCEL” button to exit submenu without saving.

The SYSTEM setup menu displayed as below:

1. **TIME SETUP**

   Press "UP" or "DOWN" button on the front panel to move the cursor to the TIME SETUP line and press "ENTER" button to display the TIME SET menu. Press "UP", "DOWN", "LEFT" or "RIGHT" button to set the current date/time and select display format of date/time at the TIME SET menu. There are 3 display formats for date/time: ASIA, EURO and US. Press "ENTER" button to return to the SYSTEM setup menu.

   Press "UP" or "DOWN" button to ZONE and press "LEFT" or "RIGHT" button to select the local area zone. Press "UP" or "DOWN" button to SERVER and press "MENU" button to set a IP address of time server or keep the default server IP address. Press "UP" or "DOWN" button to NTP ON and press "LEFT" or "RIGHT" button to set it to ON. Press "ENTER" button to get correct date and time for DVR. When using NTP to set date and time, make sure the DVR can be connected to internet.

The TIME SET menu displayed as below:

● **Mouse**

(1) Move the cursor to the TIME SET line at the SYSTEM setup menu. Click on the "SET" button to display the TIME SET menu.

(2) Move the cursor to the date/time of TIME line or FORMAT line. Turn the middle mouse button to set the current date/time and select display format of date/time at the TIME SET menu.

(3) Click on the top right "O" (OK) button at the TIME SET menu to return to the SYSTEM setup menu.

(4) Move the cursor to ZONE. Turn the middle mouse button to select your local area zone. Move the cursor to SERVER and click on the "SET" button to set a time server IP address or keep the default server IP address. Move the cursor to NTP ON and click on the "SET" button to set correct date and time for DVR. When using NTP to set date and time, make sure the DVR can be connected to internet.

2. ACCOUNT MANAGER

If login user is admin, press "UP" or "DOWN" button on the front panel to move the cursor to the ACCOUNT MANAGER line and press "ENTER" button to display the ACCOUNT MANAGER menu. For other users except admin user, press "ENTER" button to display the MODIFY USER menu.

The ACCOUNT MANAGER menu displayed as below:

(1) There are 3 factory setting users. The user name "admin" is an administrator user and the factory setting password is admin. The user name "user" is a default user, the factory setting password is user and its authority is that only view live video. The user name "1" is a normal user and factory setting is no password with all authority. The administrator user and default user can not be deleted. The normal user can be deleted or added by administrator user. Only administrator user can add or delete normal user and change the authority of other users.

(2) If login user is admin, press "UP" or "DOWN" button on the front panel to move the cursor to any user line at the ACCOUNT MANAGER menu. Press "ENTER" button to display MODIFY USER menu. Press "UP" or "DOWN" button to move the cursor to the USER PASSWORD and press "ENTER" button to open keyboard box to modify the password. Press "UP" or "DOWN" button on the front panel to move the cursor to the other selectable item of authority list at the MODIFY USER menu. Press "ENTER" button to select or unselect the relevant authority item for the user. Press "MENU" button on the front panel to save the setting and return back to previous menu.

(3) If login user is admin, press "UP" or "DOWN" button on the front panel to move the cursor to ADD USER line at the ACCOUNT MANAGER menu. Press "ENTER" button to display ADD USER menu. Press "UP" or "DOWN" button to move the cursor to the USERNAME and the USER PASSWORD line and press "ENTER" button to open keyboard box to set a user name and the password for this new user. Press "UP" or "DOWN" button on the front panel to move the cursor to the other selectable items of authority list at the ADD USER menu. Press "ENTER" button to select or unselect the relevant authority item for the new user. When the item is selected and ticked, the user is allowed to operate this function. Press "MENU" button on the front panel to save the setting and return back to previous menu.

(4) If login user is admin, press "UP" or "DOWN" button on the front panel to move the cursor to a normal user line at the ACCOUNT MANAGER menu. Press "MENU" button to delete the normal user and display a WARNNING box. Press "ENTER" button to delete the user.

(5) If login user is not admin, using the same way to change itself password and

authority at the MODIFY USER menu.

- **Mouse**

(1) **If login user is admin, move the cursor to any user line at the ACCOUNT MANAGER menu. Click on the "SET" button to display MODIFY USER menu. Move the cursor to the USER PASSWORD and click on the "SET" button to open keyboard box to modify the password. Move the cursor to the other selectable item of authority list at the MODIFY USER menu. Click on the relevant item to select or unselect the authority for the user. Click on the "SAVE" button to save the setting and return back to previous menu.**

(2) **If login user is admin, move the cursor to ADD USER line at the ACCOUNT MANAGER menu. Click on the "SET" button to display ADD USER menu. Move the cursor to the USERNAME and the USER PASSWORD line and click on the "SET" button to open keyboard box to set a user name and the password for this new user. Move the cursor to the other selectable items of authority list at the ADD USER menu. Click on the relevant item to select or unselect the authority for the new user. When the item is selected and ticked, the user is allowed to operate this function. Click on the "SAVE" button to save the setting and return back to previous menu.**

(3) **If login user is admin, move the cursor to a normal user line at the ACCOUNT MANAGER menu. Click on the "CANCEL" button on the right side of the user line to delete the normal user and display a WARNNING box. Click on the "YES" button to delete the user.**

(4) **If login user is not admin, using the same way to change itself password and authority at the MODIFY USER menu.**

3. SYSTEM INFO

Press "UP" or "DOWN" button on the front panel to move the cursor to the SYSTEM INFO line and press "ENTER" button to display the SYSTEM INFO menu.

The SYSTEM INFO menu displayed as below:

(1) It will display the system information include system firmware version, HDD information.

(2) OVERWRITE

Press "LEFT", "RIGHT" button at the SYSTEM INFO menu to select overwrite function ON or OFF.

(3) Press "ENTER" button on the front panel to exit the SYSTEM INFO menu and return to the SYSTEM setup menu.

4. VIDEO FORMAT

Press "UP" or "DOWN" button on the front panel to move the cursor to the VIDEO FORMAT line and press "LEFT", "RIGHT" button to set system to PAL or NTSC.

5. LOG VIEW

Press "UP" or "DOWN" button on the front panel to move the cursor to the LOG VIEW line and press "ENTER" button to display the SYSTEM LOG menu. Press "UP" or "DOWN" button at the SYSTEM LOG menu to display the information of event log. Press "CANCEL" button on the front panel to exit the SYSTEM LOG menu and return to the SYSTEM setup menu.

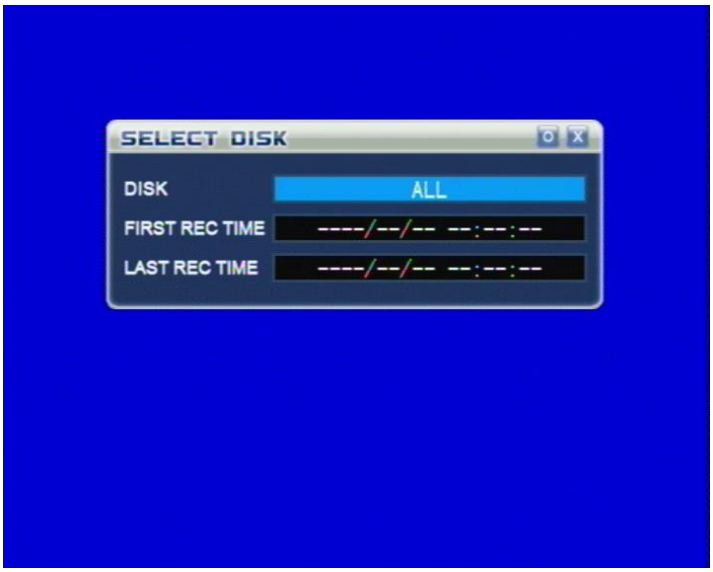
6. LOG SET

Press "UP" or "DOWN" button on the front panel to move the cursor to the LOG SET line and press "ENTER" button to display the LOG SET menu. Press "UP" or "DOWN" button at the LOG SET menu to move the cursor to MOTION, SENSOR, MANUAL or BOOTING line and press "LEFT" or "RIGHT" button to turn on or off the log function of each item. Press "ENTER" or "CANCEL" button on the front panel to exit the SYSTEM LOG menu and return to the SYSTEM setup menu. If setting the item to ON it will display the relevant information in LOG VIEW.

7. DISK FORMAT

1. **Press "UP" or "DOWN" button on the front panel to move the cursor to the DISK FORMAT line at the SYSTEM setup menu. Press "ENTER" button to display the SELECT DISK setup menu.**

The SELECT DISK setup menu displayed as below:



2. **At the SELECT DISK setup menu, Press "LEFT" or "RIGHT" button on the front panel to select the HDD for formatting. When select ALL will format all HDD.**
3. **Press "ENTER" button on the front panel to begin HDD formatting.**

8. FIRMWARE UPGRADE

Connect the USB or SATA DVDRW device with the latest firmware. Press "UP" or "DOWN" button on the front panel to move the cursor to the FIRMWARE UPGRADE line and press "ENTER" button to display the WARNING box.

The WARNING box as below:

(1) Press "ENTER" button on the front panel to begin firmware updating.

(2) It will take some time to update firmware. After firmware updating completely, the DVR will be switched off and restarted again automatically.

9. FACTORY RESET

Press "UP" or "DOWN" button on the front panel to move the cursor to the FACTORY RESET line and press "ENTER" button to display the WARNING box.

The WARNING box as below:

Press "ENTER" button on the front panel to load the factory default setting.

10. LANGUAGE

Press "UP" or "DOWN" button on the front panel to move the cursor to the LANGUAGE line and press "LEFT", "RIGHT" button to select system language. The DVR language can be selected as: ENGLISH, CHINESE, RUSSION, FRENCH, ITALIAN, GERMAN, SPANISH, PORTUGUESE, TURKISH, THAI, HEBREW, GREEK, VIETNAMESE.

11. SPOT MONITOR(For 16/24/32CH DVR)

(1) Press "UP" or "DOWN" button on the front panel to move the cursor to the SPOT MONITOR line at the SYSTEM setup menu. Press "ENTER" button to display the SPOT MONITOR setup menu.

The SPOT MONITOR setup menu displayed as below:

(2) Press “UP” or “DOWN” button on the front panel to move cursor to the CHANNEL MODE line at the SPOT MONITOR setup menu. Then press “LEFT” or “RIGHT” button to select the display mode for spot monitor: HEXA, FULL, QUAD, NINE. Press “UP” or “DOWN” button on the front panel to move cursor to the ROTATION TIME line. When set CHANNEL MODE to the display mode except HEXA, the ROTATION TIME can be set from 1 second to 10 seconds. When set it to OFF, it is unchangeable display and no channel rotation for spot monitor.

(3) Press “ENTER” button on the front panel to return back to SYSTEM setup menu.

12. VGA

Press “UP” or “DOWN” button on the front panel to move the cursor to the VGA line and press “LEFT”, “RIGHT” button to select VGA display mode: 800x600, 1024x768 or 1280x1024.

Ⅳ FACTORY DEFAULT

The factory default setting for the DVR displayed as below:

SYSTEM SETUP		**Items**	**Factory Default**	**Optional Setting**
	General Setup	**Login**	**User Name:1, No password**	**Setting in menu**
		Auto Sequence	**OFF**	**1~10 second/OFF**
		Motion Buzzer	**5 seconds**	**1-60 second/OFF**
		System Log	**ON**	**ON/OFF**
		Sensor Buzzer	**OFF**	**1-60 second/OFF**
		Video Color	**50**	**0~99 adjustable**
		Audio	**OFF**	**ON /OFF**
		System protect	**ON**	**ON/OFF**
		Live video hide	**OFF**	**ON/OFF**
		Playback video hide	**OFF**	**ON/OFF**
	Record Parameter	**Overwrite**	**ON**	**ON/OFF**
		Record Quality	**Highest**	**Low, standard, high, highest**
		Resolution	**CIF**	**CIF, 1/2D1, D1**
		Record Bit rate	**Highest**	**Low, standard, high, highest**
		Audio	**OFF**	**ON/OFF**
		Alarm Post Time	**10 second**	**10~60 second/OFF**
		Pre-record	**OFF**	**ON/OFF**
		Schedule Record Mode	**Always**	**Always, Motion, Sensor, OFF**
		Record Mode	**Always Record**	**Always, Motion, Sensor, Schedule, Off**
	P T Z	**PTZ Protocol**	**PELCO-D**	**Optional**
		PTZ Address	**1 2 3 4 5 6 .....**	**Optional**
		Pre-set Position	**Support**	**Optional**
	Network Setup	**Netmask**	**255.255.255.0**	**Optional**
		Gateway	**192.168.1.1**	**Optional**
		IP Addrss	**192.168.1.192**	**Optional**
		Port	**2200**	**Optional**
		Mobile Port	**15961**	**Optional**
		IE Port	**80**	**Optional**
	Alarm Setup	**Motion Detection**	**OFF**	**ON/OFF**
		Motion Area	**No setting**	**Selectable**
		Sensitivity	**LEVEL 4**	**LEVEL 1~ LEVEL 8**

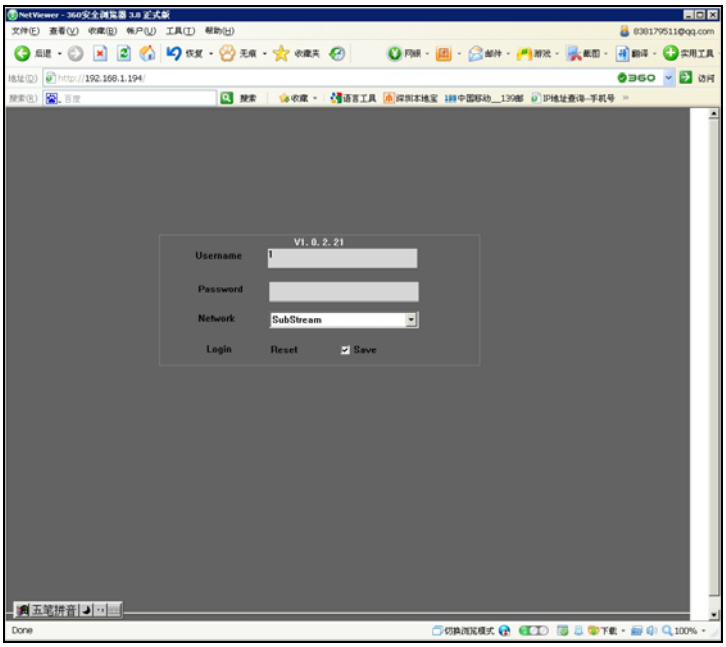
		Motion Alarm Time	**5 second**	**1~60 second/OFF**
		Sensor Alarm Time	**OFF**	**1~60 second/OFF**

Ⅴ Network Viewer

5.1 IE Browser

Enter IE browser of your computer, input the IP address of the DVR or DDNS name of DVR include IE port number (no need to input the default IE port 80). If it is first time to use computer to connect with DVR, it will ask to download software plug-in and it will take several seconds to download. If it succeeds you will enter the USER LOGIN website. The connecting method is the same with the Network Viewer as below.

If using free DDNS supplied by DVR, open the IE browser and enter website: http://dy.vip620.com or enter http://dy.vip620.com/(your username) to access the DVR directly. When using the free DDNS, no need to input the port number.

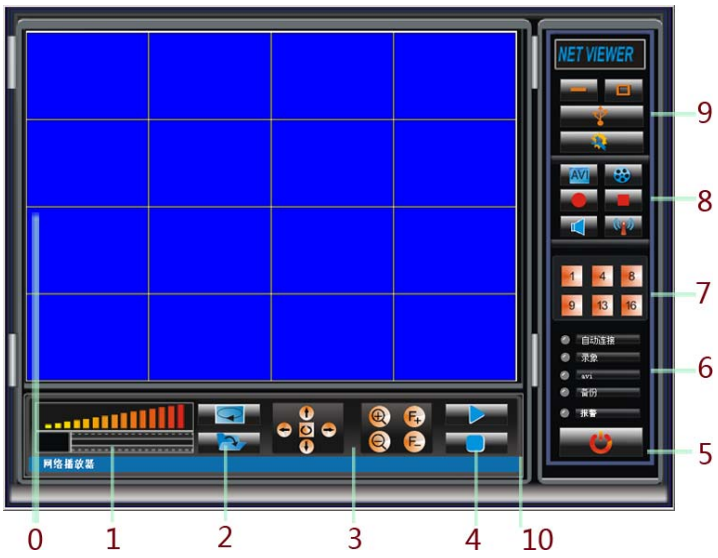


5.2 NetViewer

5.2.1 Operation

1. Copy and save the network viewer software (NetViewer) from CD to your PC.

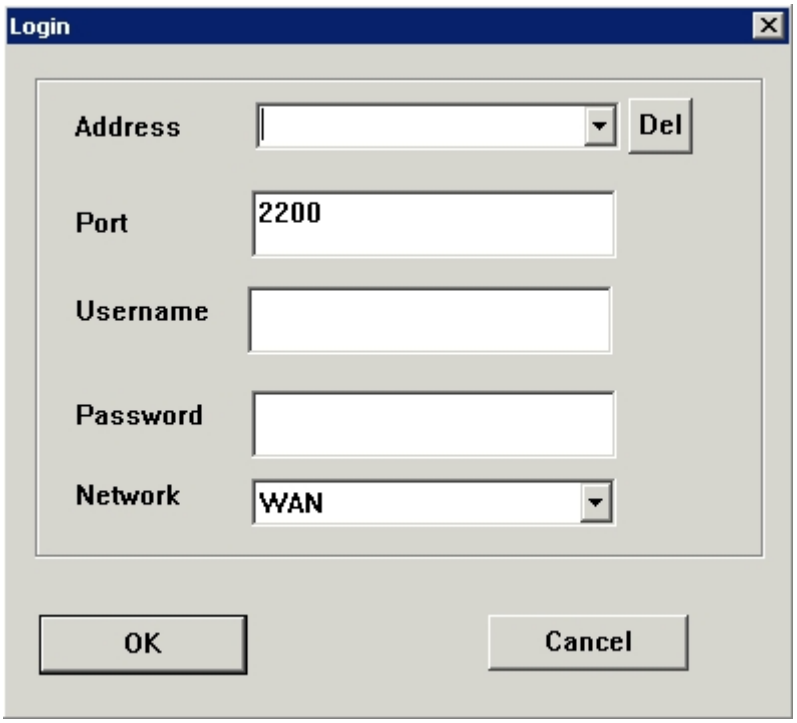
2. Double click NetViewer software, it will display as below:



No.	TYPE	DESCRIPTION
0	Video display area	Double click the area to display the single channel image. Double click again to display last display mode.
1	Audio volume	Display and change PC audio volume.
2		Select the playback mode.
		Select the local file play mode.
3		PTZ control for pan and tilt. Middle button is AUTO control for PTZ.
		PTZ zoom control.
		PTZ focus control.
4		Start to display.
		Stop displaying.
5		Close and quit the net viewer
6		On when enable auto connection On when DVR is recording On when NetViewer enable the AVI record On when recording and saving in the PC local directory. On when the DVR motion alarm or sensor alarm occur.
7		Display mode: Full, Quad, 8 split, 9 split, 13 split and 16/25/32 split.
8		Recording and saving the display image as AVI file in the PC local directory.
		Enable or disable the recording in the PC local directory.
		Start the manual record of DVR.
		Stop the manual record of DVR.
		Enable or disable the audio.

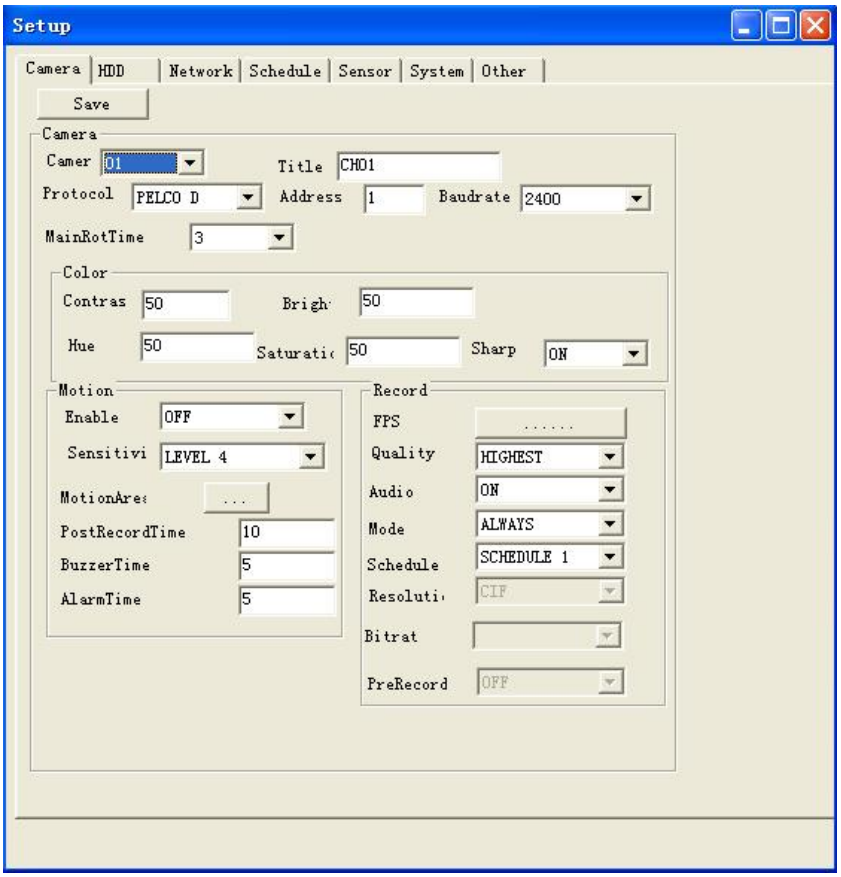
		Enable or disable the automatic connection.
9		Minimum of the net viewer window.
		Maximum of the net viewer window.
		Setup the connection and start to connect to DVR.
		Setup of DVR parameter
10		Status bar（Connection status and time display）

3. Click the **button as below:**



Input IP address of DVR (it can be saved automatically) or free DDNS user name, port number (default is 2200), no need to input port number when using free DDNS user name, password (default is no password) and select LAN or internet of your network in the Login window. Click the OK button to finish setting and start to connect to the DVR. Click the Del button to delete the saved IP address.

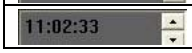
4. If the DVR is connected, Click the **button to enter parameter setup window as below:**



Select the tag and set the parameter of DVR. Click the Save button to change and save the new parameter to the DVR. If the internet speed is very low it may be fail to set the new parameter and it will popup the message box to display the warning of time out.

5. The default mode of NetViwer is live mode. It will display the live image of DVR. The control buttons are as below:

After connection with DVR, click on the **button to change NetViwer to playback mode. It can select the playing date and time and play back the DVR recording file. The control buttons are as below:**

TYPE	DESCRIPTION
	Select the live mode.
	Select the local file play mode.
	Start the playback of DVR recording file.
	Stop the playback of DVR recording file.
	Fast Forward Playback.
	Rewind Playback.
	Select playback channel
	Start date of playback.
	Start time of playback.

Click on the **button to change NetViwer to local mode. It can open the pc local folder and select the recording backup file (By USB device etc.) and play it. The control buttons are as below:**

TYPE	DESCRIPTION
	Select the live mode.
	Select the playback mode.
	Start to play recording backup file.
	Stop playing recording backup file.
	Previous file.
	Last frame of file playing.
	Next frame of file playing.
	Next file.
	Playing status bar.
	Open button for playing file.

Click on the **button to change NetViwer to live mode.**

Ⅵ SPECIFICATION

Compression Format	H.264
Video System	NTSC/PAL
Video Input	Composite 1.0Vp-p/75Ω， BNC×4/8/16/24/32
Monitor Output	1.0Vp-p Composite 75Ω， BNC×1 monitor, BNC×1 spot monitor(16/24CH), BNC×2 spot monitor(32CH)
VGA Output	Analogue RGB 60 Hz，800x600, 1024x768, 1280x1024
Resolution	NTSC(720x480) PAL(720×576)
Audio Input	-8db22kΩ,RCA connector×4/8/16
Audio Output	-8db3kΩ,RCA connector×1
Alarm Input	4/8/16
Alarm Output	1(4/8/16CH DVR), 2(24/32CH DVR)
Frame and Resolution	4CH: CIF ： NTSC 120fps /352x240 PAL 100fps /352x288 1/2D1： NTSC 120fps /720x240 PAL 100fps /720x288 D1 ： NTSC 60fps /720x480 PAL 50fps /720x576 8CH: CIF ： NTSC 240fps /352x240 PAL 200fps/352x288 1/2D1： NTSC 120fps /720x240 PAL 100fps /720x288 D1 ： NTSC 60fps /720x480 PAL 50fps /720x576 16CH: CIF ： NTSC 480fps /352x240 PAL 400fps /352x288 1/2D1： NTSC 240fps /720x240 PAL 200fps /720x288 D1 ： NTSC 120fps /720x480 PAL 100fps /720x576 24CH: CIF ： NTSC 720fps /352x240 PAL 600fps /352x288 32CH: CIF ： NTSC 960fps /352x240 PAL 800fps /352x288
HDD Port	SATA hard disk × 1(4CH), × 2(8CH) , × 4(16/24/32CH)
Network Port	10M/100M(4/8/16/24/32CH), 10M/100M/1000M(16CH) Ethernet port
Mobile monitoring	Windows mobile, Symbian, iPhone, Android, Blackberry
Email for alarm	Support SMTP server, support SSL
Confidential Function	Password Protection
Power Supply	DC:12V/2A(4CH), 3A(8CH), 5A(16/24/32CH)
Power Consumption (No HDD)	<10W(4/8CH),15W(16/24CH), 20W(32CH)
Environment	Operating Temperature : 0℃ ～ +55℃； Humidity: 10~90%
Dimension	330×250×60mm(4/8CH), 430×350×90mm(16/24/32CH), 280×230×36mm(Mini 4CH)