

User's Manual

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,5A power adaptor. Please select the correct voltage and power if using other adaptor.
- 0 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
- · Chinese/English languages supported
- · Audio and video recording and playback at the same time with D1, half D1 and CIF resolution
- Support NTSC/PAL video system
- 8/16CH video inputs, 1CH monitor output, 1CH spot monitor output
- 1CH VGA output(optional)
- 4CH audio inputs, 1CH audio output
- · High quality image, brightness, contrast, sharpness and color adjustable for each channel
- · Support auto sequence display
- Display modes: PIP, FULL, QUAD, 8 SPLIT, 9/16 SPLIT
- Recording modes: always recording, manual recoding, schedule recording, sensor recording and motion recording
- · Image quality: highest, high, standard, low
- · Detailed event log support
- · Searching modes: time / date searching, event searching, urgent searching
- Support fast forward and rewind: x 2, x 4, x 6, support jog-shuttle operation
- · Backup modes: network backup, USB backup.
- · Support RS-485 PTZ control(speed dome camera), and preset positions operation
- · Support USB mouse and infrared remote controller operation
- Support 4 SATA port HDD
- 8/16 CH alarm inputs, 1 CH alarm output
- · Multiplex operation: live / recording / playback / network can be operated at the same time
- · Telemetry network control: live view, playback, recording and so on
- Frame rate in the live display mode:

8CH: 240fps(NTSC), 200fps(PAL) 16CH: 480fps(NTSC), 400fps(PAL)

· Frame rate in the playback mode:

8CH: 240fps(NTSC),200fps(PAL)
16CH: 240fps(NTSC), 200fps(PAL)

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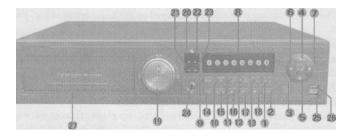
I INSTALLATION

1.1Packing Detail

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1.2 Front Panel Controls

Front Panel of 8CH DVR:



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, press this button to make the PTZ 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. "«-!"/ "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 SET PRESET operation.

4. " • " / "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, it is "PAN" control button.

5. " • " / "DOWN" button

After pressing "MODE" button, press "Y "/"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, it is "PAN" control button.

6. " < " / "LEFT" button

In the playback mode, press this button to enter step backward playback, press "pause/play" button to return to normal playback. Press this button to move the cursor in left direction in the setup menu. In PTZ operation mode, it is "TILT" control button.

7. " • " / "RIGHT" button

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, it is "TILT" control button.

8. Number button

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

9. "MODE" button

Repeat pressing this button to select the different display mode (QUAD, PIP, FULL CHANNEL and 8 SPLIT). In PTZ operation mode, press "MODE" button to enable PTZ FOCUS function, then operated by "LEFT" button and "RIGHT" button. Press "MODE" button again to exit PTZ FOCUS function.

10. "MUTE" button

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

In PTZ operation mode, press "MUTE" button to enable PTZ IRIS function, then operated by "LEFT" button and "RIGHT" button. Press "MUTE" button again to exit PTZ IRIS function.

11. "AUTO" button

During 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/tilt function, press this button again to exit PTZ auto pan/tilt function.

12. "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 DISK IS NOT FOUND.

In PTZ operation mode, press "BACKUP" button to enable PTZ ZOOM function, then operated by "LEFT" button and "RIGHT" button.

Press "BACKUP" button again to exit PTZ ZOOM function.

13. "PTZ" button

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

14. "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.

15. "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.

16. " 4< " / "REWIND" button

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

17. " • | | J / "PLAY/PAUSE" button

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

18. " •• I / " FAST FORWARD" button

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

- 19. "JOG&SHUTTLE" 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.
- 20. Power indicator

Indicate running state of system. Lights when system is running.

21. Recording status indicator

Lights when system is recording.

22. Network status indicator

Lights when the system network connection is enabled.

23. Playback status indicator

Lights during the playback mode.

24. Remote sensor

Input sensor for the remote controller.

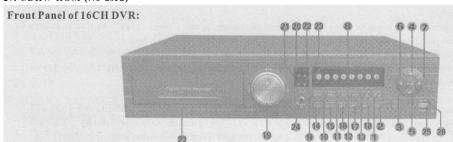
25.USB Mouse port

Connection of the USB mouse.

26.USB port

Connection of the USB interface devices for updating firmware and backup recorded files. Not connect USB mouse.

27. CDRW ROM (No used)



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, press this button to make the PTZ 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. "*-J" / "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 SET PRESET operation.

4. " A " / "up" button

After pressing "MODE" button, press "A"/" 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, it is "PAN" control button.

5. " • " / "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, it is "PAN" control button.

6. "< " / "LEFT" button

In the playback mode, press this button to enter step backward playback, press "pause/play" button to return to normal playback. Press this button to move the cursor in left direction in the setup menu. In PTZ operation mode, it is "TILT" control button.

7. " • " / "RIGHT" button

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, it is "TILT" control button.

8. Number button (1-16CH)

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

9 "MODE" button

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

In PTZ operation mode, press "MODE" button to enable PTZ FOCUS function, then operated by "LEFT" button and "RIGHT" button. Press "MODE" button again to exit PTZ FOCUS function.

10. "MUTE" button

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

In PTZ operation mode, press "MUTE" button to enable PTZ IRIS function, then operated by

"LEFT" button and "RIGHT" button. Press "MUTE" button again to exit PTZ IRIS function.

11. "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/tilt function, press this button again to exit PTZ auto pan/tilt function.

12. "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 DISK IS NOT FOUND. In PTZ operation mode, press "BACKUP" button to enable PTZ ZOOM function, then operated by "LEFT" button and "RIGHT" button. Press "BACKUP" button again to exit PTZ ZOOM function.

13. "PTZ" button

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

14. "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.

15. "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.

16. " <-4 " / "REWIND" button

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

17. " M | " / "PLAY/PAUSE" button

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

18. " •• " / "FAST FORWARD" button

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

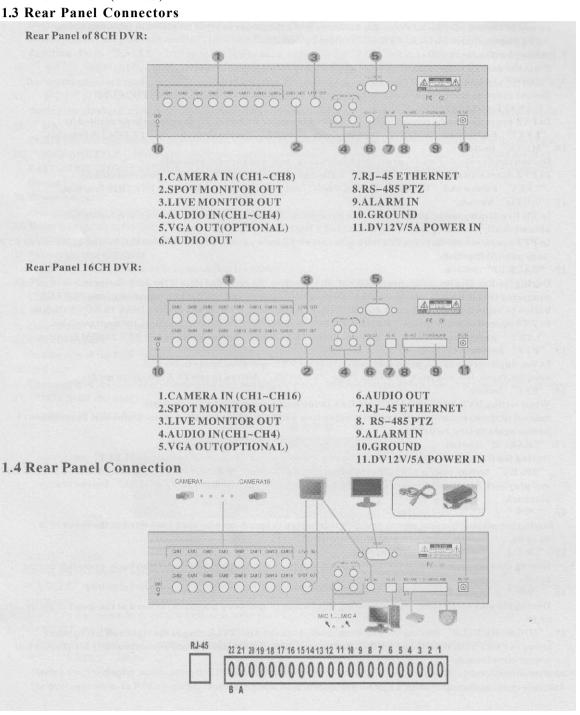
- 19. "JOG&SHUTTLE" During the playback mode, turn the SHUTTLE ring to the right and left to select speed of FAST FORWARD and REWIND. Turn the JOG dial in either direction continuously for playback of consecutive frames.
- 20. Power indicator

Indicate running state of system. Lights when system is running.

- 21. Recording status indicator
 - Lights when system is recording.
- 22. Network status indicator
 - Lights when the system network connection is enabled.
- 23. Playback status indicator
 - Lights during the playback mode.
- 24. Remote sensor
 - Input sensor for the remote controller.
- 25.USB Mouse port
 - Connection of the USB mouse.
- 26.USB port

Connection of the USB interface devices for updating firmware and backup recorded files. Not connect USB mouse.

27. CDRW ROM (No used)



No. 1~ No. 16: Alarm signal input

No. 17: Alarm output: GND (Ground)

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

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

No. 20: Alarm output: COM (Common)

No. 21: RS-48S + (A)

No. 22: RS-485 - (B)

1.5 Remote Controller



- I.NUMER BUTTON: Press the desired camera number button you wish to display on the monitor.
 - Repeat pressing this button to speed-up playback backward at the speed of X2, X4 or X6 during the playback.
- 3.^ | [: Press this button to display a still picture during the playback, press this button again to restart play. 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.
- $\emph{6.U}$: 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, press this button to make PTZ menu transparent.
- 8.CANCEL: 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.
- 10.PTZ: Enter PTZ operation mode and display PTZ menu.
- II.MUTE: Turn audio on/off during the live display mode or playback mode. In PTZ operation mode, press this button to enter PTZ IRIS function.
- 12.BACKUP: Enter the backup mode and display the backup menu during the live display mode. In PTZ operation mode, press this button to enter PTZ ZOOM function.
- 13.AUTO: Begin auto sequence function during the live display mode. In PTZ operation mode, press this button to enter PTZ auto pan/tilt control function, press this button again to exit PTZ auto pan/tilt control function.
- 14.MODE: Select the different screen display (FULL CHANNEL, PIP, QUAD, 8 SPLIT, 9/16 SPLIT) during the live display mode or playback mode. In PTZ operation mode, press this button to enter PTZ FOCUS function.
- 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, it is "PAN" control button.
- 16. ^: Press this button to move the cursor in left direction in the setup menu. In the playback mode, press this button to enter step backward playback. In PTZ operation mode, it is "TILT" control button.
 - —I: 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 SET PRESET operation.
- 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, it is "TILT" control button.
- 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, it is "PAN" control button.

1.6 Installation Process

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

D OPERATION

2.1 Power On

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

2.2 Power Off

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

2.3 Display Mode

- 1. Press the "MODE" button to select the different screen display (FULL CHANNEL, PIP, QUAD, 8 SPLIT, 9/16 SPLIT) during the live display mode. Press NUMBER 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.
- 2. Press the "AUTO" button on the front panel to start auto sequence display. Each screen displaying will be automatically switching according to the MAIN ROT TIME duration setting in the setup menu.
- 3. To zoom in images can only operated by mouse.
- 9 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 QUICK 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.

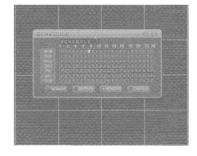
2.4 Manual Recording

- 1. Select ALL channels RECORD MODE to OFF at the RECORD setup menu.
- 2. Press "REC" button on the front panel or remote controller to begin manual recording. The red recording icon will be displayed on the bottom status bar.
- 3. If the hard disk is full during recording, the system may stop recording when setting OVERWRITE to OFF at the SYSTEM INFO setup menu. The system may not stop recording and automatically overwrite the oldest recorded file when setting OVERWRITE to ON ait the SYSTEM INFO menu.
- 4. Press "REC" button again on the front panel or remote controller 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 ALL channels 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. Irecording mode, when a alarm input signal is detected, the relevant single screen will begin ALARM recording. In the MOTION recording mode, when motion detected, the DVR will begin ALARM recording. 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 ALL channels RECORD MODE to OFF at the RECORD setup menu to disable ALARM recording.

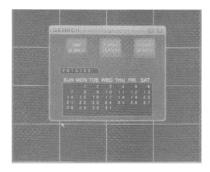
2.6 Schedule Recording



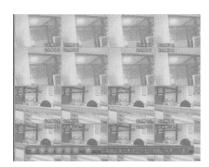
- 1. Stop manual recording.
- 2. Select ALL channels RECORD MODE to SCHEDULE at the RECORD setup menu. There are totally 5 schedule recording lists to select.
- 3. Correctly set the schedule recording date, time and type for a schedule recording list at the SCHEDULE setup menu.
- 4. The system begins or stops schedule recording automatically according to the SCHEDULE setup.
- 5. Select ALL channels 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.



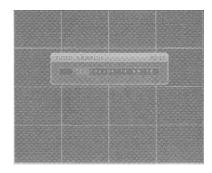
- 4. During the playback mode, Press LEFT button or "•" RIGHT button to enter step backward playback or step forward playback, press "PLAY/PAUSE" button to return to normal playback.
- 5. During the playback mode, press "MODE" button to select the different display mode, press NUMBER button or "A" button or "Y" button to select a single camera displaying on the screen.
- 6. During the playback mode, press "CANCEL" button to stop playback and return to previous mode.
- "JOG&SHUTTLE" (8/16CH 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

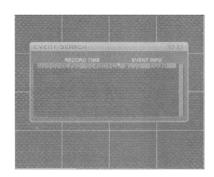
Click the mouse on the MENU icon on the bottom status bar to display POPUP MENU during the live display mode. Click on the SEARCH button to display SEARCH MENU. Then click on the "TIME SEARCH", "EVENT SEARCH" or "URGENT SEARCH" button to select the playback modes to begin playback. Or double click the 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.

2.8 Time Searching Playback



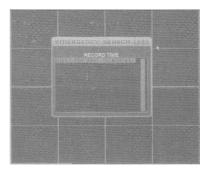
- 1.Press "SEARCH" button on the front panel to display SEARCH MENU during the live display mode.
- 2.Press "LEFT" or "RIGHT" button to select TIME SEARCH playback mode and press "ENTER" button to enter TIME SEARCH menu.
- 3.Press "UP" ," DOWN" , "LEFT" and "RIGHT" buttons to select the beginning date/time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

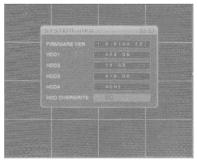


- 1. Press "SEARCH" button on the front panel to display SEARCH MENU during the live display mode.
- 2. Press "LEFT" or "RIGHT" button to select URGENT SEARCH playback mode and press "ENTER" button to enter EMERGENCY SEARCH menu.
- 3. Press "UP", "DOWN", "LEFT" and "RIGHT" buttons to select the emergency recording date/time for playback.
- 4. Press "ENTER" button to begin URGENT SEACHING playback.
- 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 "OK" button to begin URGENT SEACHING playback or double click the emergency recording date/time to begin URGENT SEACHING playback.

2.11USB Backup

- 1. Connect the USB backup device to DVR USB port.
- 2.Press "BACKUP" button on the front panel to
 - display BACKUP setup menu during the live display mode. The DEVICE name is USB at the BACKUP setup menu.
- 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" butfon 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 "OK" button to begin backup.

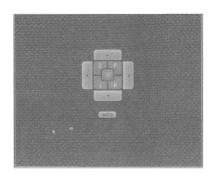
2.12 System Information



- 1. Press "MENU" button on the front panel to display MAIN MENU during the live display mode.
- 2.1n 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 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



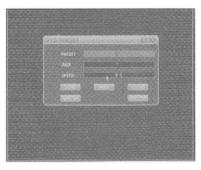
2.13.1 PTZ Operation Function

- 1. Press the desired camera NUMBER button you wish to display on the monitor during the live display mode.

 Then press "PTZ" button on the front panel to display PTZ control menu and enter the PTZ operation mode.
- 2.Press "UP" or "DOWN" button to control pan function. Press "LEFT" or "RIGHT" button to control tilt function. Note: Only keep pressing "UP", "DOWN", "LEFT" or "RIGHT" button to control pan and tilt function. When these buttons released, the system may stop pan and tilt control function.
- 3.Press "MUTE" button on the front panel to enable PTZ IRIS function. The "I" button at the PTZ control menu is selected. Then keep pressing or repeat pressing "LEFT" or "RIGHT" button on the front panel to control iris function. Release "LEFT" or "RIGHT" button to stop iris control function. Press "MUTE" button again to exit PTZ IRIS function.
- 4.Press "AUTO" button on the front panel to enable PTZ AUTO control function. The "AUTO" button at the PTZ control menu is selected. Press "AUTO" button again to exit PTZ AUTO control function.
- 5.Press "BACKUP" button on the front panel to enable PTZ ZOOM function. The "Z" button at the PTZ control menu is selected. Then keep pressing or repeat pressing "LEFT" or "RIGHT" button on the front panel to control zoom function. Release "LEFT" or "RIGHT" button to stop zoom control function. Press "BACKUP" button again to exit PTZ ZOOM function.
- 6.Press "MODE" button on the front panel to enable PTZ FOCUS function. The "F" button at the PTZ control menu is selected. Then keep pressing or repeat pressing "LEFT" or "RIGHT" button on the front panel to control focus function. Release "LEFT" or "RIGHT" button to stop focus control function. Press "MODE" button again to exit PTZ FOCUS function.
- 7.Press "ENTER" button on the front panel to display PTZ SET PRESET menu and enter PTZ preset function.
 8.Press "CANCEL" button on the front panel to exit the PTZ operation mode.

2.13.2 PTZ Preset Function

1. In PTZ operation mode, press "ENTER" button on the front panel to display PTZ SET PRESET menu and enter PTZ preset function.



- 2.At the PTZ SET PRESET menu, Press "UP" or "DOWN" button on the front panel to move the cursor to the PRESET line. Press "LEFT" or "RIGHT" button on the front panel to set PRESET number to "1".

 Move the cursor to the SAVE button and press "ENTER" button on the front panel to save current PTZ position to "1".
- 3.Press "CANCEL" button on the front panel to exit PTZ preset function and return to PTZ operation mode. Press "UP", "DOWN", "LEFT", "RIGHT", "MUTE", "BACKUP", "MODE" buttons to control PTZ to a desired position, press "ENTER" button on the front panel to display PTZ SET PRESET

menu and enter PTZ preset function again. Press "LEFT" or "RIGHT" button on the front panel to set PRESET number to "2". Move the cursor to the SAVE 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. The DVR support totally 255 PTZ preset positions.

- 4.At the PTZ SET PRESET menu, press "UP" or "DOWN" button on the front panel to move the cursor to the PRESET line. Press "LEFT" or "RIGHT" button on the front panel to set PRESET number to "1" or other PTZ position number you wish to load. Move the cursor to the LOAD button and press "ENTER" button to move PTZ to relevant saved position.
- 5.At the PTZ SET PRESET menu, press "UP" or "DOWN" button on the front panel to move the cursor to the PRESET line. Press "LEFT" or "RIGHT" button on the front panel to set PRESET number to "I" or other PTZ position number you wish to clear. Move the cursor to the CLEAR button and press "ENTER" button to clear relevant saved position.
- 6.At the PTZ SET PRESET menu, press "UP" or "DOWN" button on the front panel to move the cursor to the SPEED line. Press "LEFT" or "RIGHT" button on the front panel to select PTZ pan and tilt speed from 1 to 255. Then press "CANCEL" button on the front panel to return to PTZ operation mode.
- 7. Using the same way for PTZ PRESET to set and control AUX function of PTZ. Please refer to the user manual of PTZ.
- Monse
- 1. Left click the desired camera screen to display this single screen 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" button 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 "UP" or "DOWN" button to control pan function and click or keep pressing the mouse left button on "LEFT" or "RIGHT" button to control tilt function
- 3.At the PTZ control menu, click on "I" button to enable PTZ IRIS control function. The "I" button at the PTZ control menu is selected. Then click or keep pressing the mouse left button on "LEFT" or "RIGHT" button to control iris function. Click on "I" button again to exit PTZ IRIS control function.
- 4.At the PTZ control menu, click on "AUTO" button to enable PTZ AUTO control function. The "AUTO" button at the PTZ control menu is selected. Click on "AUTO" button again to exit PTZ AUTO control function.
- 5.At the PTZ control menu, click on "Z" button to enable PTZ ZOOM control function. The "Z" button at the PTZ control menu is selected. Then click or keep pressing the mouse left button on "LEFT" or "RIGHT" button to control zoom function. Click on "Z" button again to exit PTZ ZOOM control function.
- 6.At the PTZ control menu, click on "F" button to enable PTZ FOCUS control function. The "F" button at the PTZ control menu is selected. Then click or keep pressing the mouse left button on "LEFT" or "RIGHT" button to control focus function. Click on "F" button again to exit PTZ FOCUS control function.
- 7. Right click on the place out of the PTZ control menu to exit the PTZ operation mode.
- 8.At the PTZ control menu, click on "P" button to display PTZ SET PRESET menu and enter PTZ preset
- 9.At the PTZ SET PRESET menu, move the cursor to the PRESET, AUX or SPEED line and turn the middle button of mouse to set a desired number. Click on the LOAD, SAVE, CLEAR, AUX ON or AUX OFF button to control it's relevant function. Click on the "ENTER" or "CANCEL" button to return to PTZ operation mode.

2.14 Password

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

- 1. Press "MENU" button on the front panel, it will display LOGIN dialog box to ask you to input correct password if password is required.
- 2.Press NUMBER buttons to input correct password. Or press "MENU" button on the front panel to display a key board box, 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 password and move the cursor to "ENTER" on the key board box, press "ENTER" button on the front panel to enter the MAIN MENU.
- A 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 LOGIN dialog box to ask you to input correct password if password is required.
- 2. Click on the "SET" buttons on the LOGIN dialog box to display a keyboard box, click on a number button to input a number. Click on "*—" button on the keyboard box to clear the previous number. After input the correct password and click on "ENTER" button on the keyboard box to enter the MAIN MENU.

3.1 Main Menu Setup

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

2.1n the MAIN MENU. Press "UP", "DOWN", "LEFT" and "RIGHT" buttons to select submenu button and press "ENTER" button to enter relevant submenu.

3.1n 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(PIP, QUAD, 8 SPLIT, 9/16 SPLIT)

SETUP: Enter the system setup mode and display MAIN MENU SEARCH: Enter the playback mode and display the search menu

MOTION: Enable or disable motion trace function

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 QUIT: Before turn off the DVR, it is better to quit system first

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:



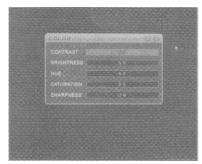
1

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.

- 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 "<-§j 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)Press "OK" 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	1	
Channe 2	2	
Channe 3.	3	
Channe 4	4	
Channe 5	5	
Channe 6	6	
Channe 7	7	
Channe 8	8	

Channel	Address
Channe 9	9
Channe 10	10
Channe 11	11
Channe 12	12
Channe 13	13
Channe 14	14
Channe 15	15
Channe 16	16

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 2400 bps.

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.

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.

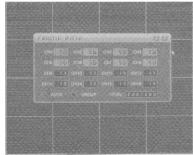
- (1) Press "UP" or "DOWN" button on the front panel to move the cursor to the RESOLUTION line at the RECORD setup menu. Press "LEFT" or "RIGHT" button to set the recording resolution.
- (2) When setting it to CIF, the total frame rate is 200 fps for PAL and 240 fps for NTSC. When setting it to 1/2 Dl, the total frame rate is 100 fps for PAL and 120 fps for NTSC. When setting it to Dl, the total frame rate is 50 fps for PAL and 60 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 2 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:



- (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.

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.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.

7.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 select audio input channel.
- (2) When setting AUDIO to OFF, the system will not record input audio.

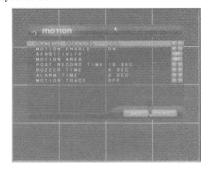
8.SCHEDULE

- (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.
- (2) There are totally 5 schedule lists.

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.

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

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

The SENSITIVITY setup menu displayed as below:



(2)Press "UP" or "DOWN" button on the front panel to move cursor to the SENSITIVITY, SPATIAL, BLACK LEVEL or WHITE LEVEL line at the SENSITIVITY setup menu. Then press "LEFT" or "RIGHT" button to select the sensitivity from LEVER l(lowest) to LEVER 8(highest). Press "ENTER" button to save and return to the MOTION setup menu

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.

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. Press "ENTER" button again to finish motion area selecting.
- (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. Press "ENTER" button again to finish motion area clearing.
- (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. Click the left mouse button to finish motion area selecting.
- (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. Click the left mouse button to finish motion area clearing.
- (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 5 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.

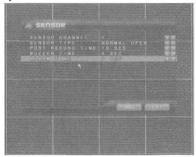
7.ALARM TIME

- (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. 8.MOTION TRACE

- (1) Press "UP" or "DOWN" button on the front panel to move the cursor to the MOTION TRACE line at the MOTION setup menu. Press "LEFT" or "RIGHT" button to turn on or off the yellow grid displaying around the moving object during motion detection.
- (2) When using motion trace function, the motion function must be enabled and motion area must be set at the MOTION setup menu, at the same time the motion trace must be turned on at the POPUP MENU.

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:



LSENSOR 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.

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 5 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 lhie 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.

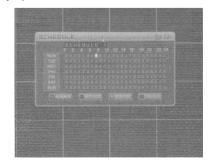
5. ALARM TIME

- (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.

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 "MENU" button to save the setting. Then exit the submenu and main menu. Press "CANCEL" button to exit submenu without saving.

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. The schedule recording mode is set to ALWAYS.
- 2.Press NUMBER 2 or "MUTE" 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 "AUTO" 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. 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, move the cursor to the MONDAY, press "UP" button 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 "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. Select "OFF" to disable network connection.

2.PORT

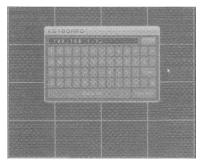
Press "UP" or "DOWN" button on the front panel to move the cursor to the PORT line at the NETWORK setup menu.

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. Using 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. Using the same way for setting IP address to set NETMASK.

6.GATEWAY

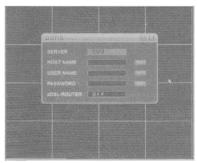
Press "UP" or "DOWN" button on the front panel to move the cursor to the GATEWAY line at the NETWORK setup menu. Press "ENTER" button to display a keyboard box. Using the same way for setting IP address to set GATEWAY.

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. Using the same way for setting IP address to set NAME SERVER.

8.DDNS

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.

9.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.

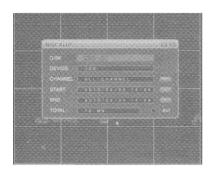
10.WEB PORT

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

3.8 BACKUP 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 BACKUP button in the MAIN MENU and press "ENTER" button to enter BACKUP 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 BACKUP setup menu displayed as below:



1.DISK

If the USB 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, can not select HDD.

2.DEVICE

It will display USB if the USB device is connected to this DVR. It will display NONE if no USB device connected to the DVR.

3.CHANNEL

If the USB 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 "UP", "DOWN", "LEFT" or "RIGHT" button to select the backup channel at the CHANNEL ENABLE menu and press "ENTER" button to return to the BACKUP setup menu.

4.START

If the USB 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

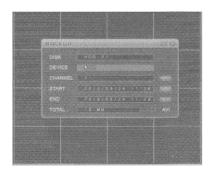
If the USB device is connected to this DVR, press "LEFT" or "RIGHT" button on the front panel to move the cursor to the date or time of END line and press "UP" or "DOWN" button to select backup end date/time. Or press "MENU" button to display the CALENDAR menu. Press "LEFT" or "RIGHT" button to select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

6.TOTAL

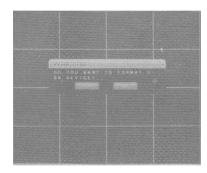
If the USB device is connected to this DVR and START date/time END date/time set correctly, it will display the selected backup file size.

7.AVI

If the USB 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 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 "OK" button to begin backup.

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

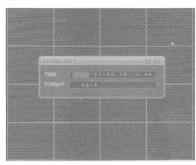
3.9 SYSTEM Menu Setup

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 format for date/time: ASIA, EURO and US. Press "ENTER" button to return to the SYSTEM setup menu. The TIME SET menu displayed as below:



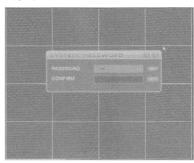
Mouse

- (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 "OK" button at the TIME SET menu to return to the SYSTEM setup menu.

2.SYSTEM PASSWORD

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

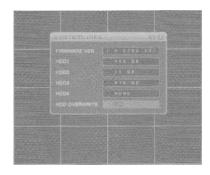
The SYSTEM PASSWORD menu displayed as below:



- (1)Press "UP" or "DOWN" button on the front panel to move the cursor to the PASSWORD line at the SYSTEM PASSWORD 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 on the keyboard box, 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 password and move the cursor to "ENTER" on the keyboard box, press "ENTER" button on the front panel to return to the TIME SET menu.
- (3) Press "UP" or "DOWN" button on the front panel to move the cursor to the CONFIRM line at the SYSTEM PASSWORD menu. Press "ENTER" button to display a keyboard box. Using the same way to input the same password for confirmation.
- (4)At the SYSTEM PASSWORD menu, press "ENTER" button on the front panel to save the password and return to the SYSTEM setup menu.
- Mouse
- (1) Move the cursor to the PASSWORD line at the SYSTEM PASSWORD menu. Click on the "SET" button to display a keyboard box.
- (2) 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 password and click on "ENTER" button on the keyboard box to exit the keyboard box and return to the SYSTEM PASSWORD menu.
- (3) Move the cursor to the CONFIRM line at the SYSTEM PASSWORD menu. Click on the "SET" button to display a keyboard box. Using the same way to input the same password for confirmation.
- (4)At the SYSTEM PASSWORD menu, click on the "OK" button on the front panel to save the password and return to the SYSTEM setup 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 "ENTER" or "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.

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 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:

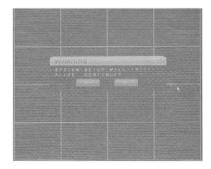


- (1) Press "ENTER" button on the front panel to begin firmware updating.
- (2) It will take some time to update firmware. After firmware updating completely, the DVR must be switched off and restarted again.

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:



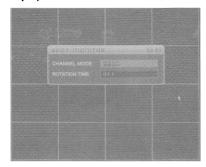
Press "ENTER" button on the front panel to load the factory default setting. 10.LANGUAGE

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 to ENGLISH or CHINESE.

11.SPOT MONITOR

(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, QUAD1, QUAD2, QUAD3, QUAD4, NINE1, NINE2. 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, there is fixed display and no rotation for spot monitor. Press "UP" or "DOWN" button on the front panel to move cursor to the EVENT POPUP line set it to ON or OFF. When set EVENT POPUP to ON, the channel of spot monitor will popup when alarm detected in this channel.
- (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

General Setup	Items	Factory Default	Optional Setting	
		Password	NO	Setting by keyboard box
		Auto Sequence Time	4 second	1~10 second
		Buzzer	ON	1-60 seconds/OFF
		System Log	ON	ON/OFF
		Video System	NTSC	NTSC/PAL
		Video Color	50	1~100 adjustable
		Audio	1234	1234/OFF
		Overwrite	ON	ON/OFF
	Record Parameter	Record Speed	240f/s(NTSC) 200f/s(PAL)	NO
		Record Resolution	CIF	CIF, 1/2D1, D1
		Playback Speed	Same with record speed	NO
CNOTERN		Audio	OFF	CH1/CH2/CH3/CH4/OFF
SYSTEM		Alarm Post Time	5 second	5~60 second
SETUP		Pre-record	ON	ON/OFF
		Schedule Record Mode	Always	Always, Motion, Sensor OFF
		Record Mode	Manual Record	Always, Motion, Sensor Schedule, Manual
	PTZ	PTZ Protocol	PELCO-D	PELCO-D PELCO-P
		PTZ Address	123456	0~255 Optional
		Pre-set Position	Support	255pcs position
	Network Setup	Netmask	255.255.255.0	Optional
		Gateway	192.168.1.1	Optional
		IP Addrss	192.168.1.152	Optional
		Port	2200	Optional
		Mobile Port	15961	Optional
		Web Port	80	Optional
	Alarm Setup	Motion Detection	ON	ON/OFF
		Motion Area	NO	Selectable
		Sensitivity	LEVEL 4	LEVEL 1~ LEVEL 8
		Buzzer Time	5 second	5-60 second

V Network Viewer

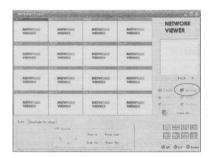
5.1 IE Brower

Enter IE browser of your computer, input the IP address of the DVR or DDNS name of DVR. If it is first time to use computer to connect with DVR, it will ask to download software and it will take several seconds to download. If it succeed you will enter the USER LOGIN website. The connecting method is the same with the Network Viewer as below.

- 5.2 NetViewer
 - 5.2.1 Operation
 - 1. Copy and install the network viewer software from CD to your PC as below:



2. Double click ^ " , it will display as below:

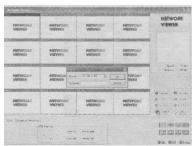


3. Click the "SETTING" button marked with red color as below:



Input IP Add in the IP Adds , and ox click the to exit the menu.

4. Click the ^ ~ icon as below:



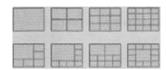
Input the DVR IP address in the#>*» I - , Input password in the i"

 $Click \qquad \underline{t"-'^1} \quad ; \ \ to \ exit, \ click \quad \ - \underline{\hspace{1cm}} \quad \ \ to \ enter \ network \ viewer \ software.$

Note: No need password for DVR default setting, only input IP address and click $|\underline{\hspace{0.4cm}} js"\sim|$.

After open of the remote viewer, click display mode icons on the bottom right to change the display mode as below:





5. Double click the one channel screen to display the full channel screen, double click again to go back to tast display. Right click a camera screen and it will display as below:

Save "Csilleo 01" Sat* I.i.gt All. Print "Camb 01" laase Reset "CanYo 01* Channel Reset Channel All

(1) Save CamNo 01 Image -

Save the camera 1 image as "JPG" format. Right click one camera screen such as "CamNo 04" to save the camera 4 image.

(2) Save Image All -

Save all images as "JPG" format.

(3) Print "CamNo 01" Channel

Print the camera 1 image. Right click one camera image such as "CamNo 03" to print the camera 3.

(4) Reset "CamNo 01" Channel

Reset the camera 1 image.

(5) Reset Channel All

Reset all camera images.

- 6. Click 33 to stop the remote viewer, click ^ , input the password and click "OK" to enter the network viewer software again.
- 7. Recording to AVI format

Click • i and Qun 1 will change to blue color and start recording. Click i, again to stop recording. The AVI file can be played by WINDOWS player.

Note: When recording to AVI file, the live camera images will not be smooth.

8. Recording to DVR format

Click and | will change to green color and start recording.

Click * again to stop recording. The file can only be played by DVR.

Note: Setting the save path in the L " " 1 • «• « before recording. The remote recording and local recording can be operated simultaneously.

5.2.2 Menu

1. Live display

Click the Live button to control the PTZ operation of DVR. When controlling PTZ operation, first select one camera image to display then can control "PTZ". Press UP, DOWN, LEFT and RIGHT icons to control the PTZ pan and tilt function.

ZOOM: Press 2«* » to zoom in, and press Zoo. in to zoom out, release the button to stop the zoom.

FOCUS: Press > ««» « to adjust focus far from object, press f«- to adjust focus near from object, release the button to stop adjusting focus.

2. Playback

 $Click\ the\ PlayBack\ button\ to\ play\ HDD\ data\ of\ DVR\ on\ your\ PC$



- (1) Move the cursor to the date box to select the date of the recorded data.
- (2) Move the cursor to the time box to select the time of the recorded data.
- (3) Click O to play recorded file. Click © to play forward one frame by one frame. Click to play rewind frame by one frame. Click ^ to stop playing.
- 3. File playing

Click the FilePlay button. Open and play backup files from viewer or from DVR copies.



- (1) Click
- to open backup file, then click the "PLAY" button to play it. to begin DVR recording, click ^ to stop DVR recording. (2) Click ^
- (3) During recording, will change to red color. If click f^s« , the recorded files will be saved in the HDD of DVRnot in HDD of PC.

Note: Setting the recording mode to URGENT recording before the operation.

VI SPECIFICATION

Compression Method	H.264		
Video System	NTSC/PAL		
Video Input	Composite 1.0Vp-p/75 Ω , BNC×8,BNC×16		
Monitor Output	1.0Vp-p Composite 75 Ω, BNC×1 monitor, BNC×1 spot		
VGA Output	Analogue RGB 60 Hz, 800x600, 1024x768, 1280x1024		
Resolution	NTSC(720x480) PAL(720×576)		
Audio Input	-8db22kΩ,RCA connector×4		
Audio Output	-8db3k Ω ,RCA connector × 1		
Alarm Input	8/16CH		
Alarm Output	1		
Frame and Resolution	CIF: NTSC 240fps /352x240 PAL 200fps /352x288 1/2D1: NTSC 120fps /720x240 PAL 100fps /720x288 D1: NTSC 60fps /720x480 PAL 50fps /720x576		
HDD Occupation Space	All 16channels record at high quality mode:4GB/H		
HDD Port	SATA hard disk		
Network Port	10M/100M Ethernet port		
Mobile monitoring	Windows mobile, Symbian, iPhone		
Confidential Function	Password Protection		
Power Supply	DC:12V/5A		
Power Consumption(No HDD)	20W		
Environment	Operating Temperature:+5°C \sim +50°C; Storage Temperature:-20°C \sim +70°C; Humidity: 30~95%		
Dimension	430×352×88mm(8/16CH DVR)		
Weight	2KG(8/16CH DVR) (No HDD)		