

USER MANUAL



www.ZMODO.com

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Safety Instructions

Use proper power source.

Do not use this product with a power source that applies more than specified voltage (100-240V AC).

2. Never insert anything metallic into the DVR case.

Putting something into the DVR case can be a source of dangerous electric shock.

3. Do not operate in wet & dusty area or use near water.

Avoid places like a damp basement or dusty hallway.

4. Do not expose this product to rain or use near water.

If this product accidentally gets wet, unplug it and contact an authorized dealer immediately.

5. Keep product surfaces clean and dry.

To clean the outside case of the DVR, use a cloth lightly dampened with water (no solvents).

6. Provide proper ventilation.

This DVR has a built in fan that properly ventilates the system.

7. Do not attempt to remove the top cover.

If there are any unusual sounds or smells coming from the DVR, unplug it immediately and contact an authorized dealer or service center.

8. Do not attempt to remove the top cover.

Warning: You may be subjected to severe electrical shock if you remove the cover of the DVR.

9. Handle DVR box carefully.

If you accidentally drop your DVR on any hard surface, it may cause a malfunction. If the DVR doesn't work properly due to physical damage, contact an authorized dealer for repair or exchange.

10. Use standard lithium cell battery. (NOTE: Manufacturer has preinstalled battery.)

The standard lithium cell 3v battery located on the mother board should be replaced if the time clock does not hold its time after the power is turned off. Warning: unplug the DVR before replacing battery or you may be subjected to severe electrical shock. Properly dispose of old batteries.

11. Make sure there is good air circulation around the unit.

This DVR system uses a hard drive for video storage, which generates heat during operation. Do not block air holes (bottom, upper, sides and back) of the DVR that cool down the system while running. Install or place this product in an area where there is good air circulation.

Chapter 1: DVR Features

Function	Brief and Description
Real time monitoring	Double video output; with monitor, VGA virtual output port; Support net-viewer and MP live surveillance, ZOOM IN/OUT, dwell time display and PIP display.
Recording	H.264 video compression format; recording quality optional, multiple recording modes (Always, Scheduled, Manual, Alarm, Motion detection and remote recording.
Save Recordings	Support SATA large capacity HDD and save real-time recording image to HDD.
Playback Recordings	Supports DVR single CH and multiple CH playback of recorded files
Backup Recordings	Supports DVR backup via USB flash drive, removable drive, Recorder and network.
Alarm Setting	Supports HDD & video input alarm management and external alarm signal inputs
Network operation	Supports remote surveillance by multiple users simultaneously.
Mouse Operation	Supports Mouse operation for faster menu navigation.
PTZ Control	Supports PTZ camera operations through RS-485.

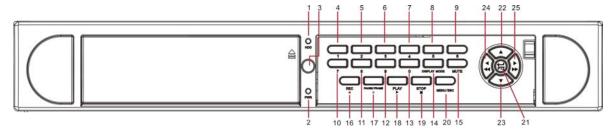
List 1-1

Other Features:

- ∀ H. 264 video compression format; supports D1 resolution;
- & ADPCM audio compression format
- & Windows Graphical interface; built-in real-time Linux2.6 operation system.
- ⋈ Friendly Menu reminder.
- № Multiple operation (Preview, recording, playback, backup, network surveillance and mobile phone monitoring at the same time)
 - & Supports Double Encode bit network transmission
 - & Supports remote live viewing via 3G mobile networks
 - & Supports zoom in / out and dwell time display
 - the video package time is adjustable
 - ⋈ Multiple alarm record mode
 - & Rear USB2.0 ports for back-up, upgrade and mouse operation.
 - With IR remote control operation
 - Multiple language OSD
 - & Supports auto maintenance

Chapter 2: Layout

2.1 Front Panel



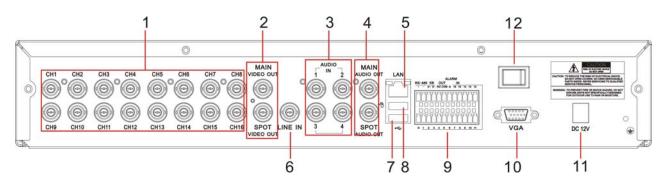
2.1.1 DVR Front Panel (Only for reference)

Item	Туре	Key title /Indicator	Marks	Fu	ınction	
1	Indicator	HDD indicator	HDD	When the "Red" indicator is being read or written to.	r flashes it means the hard drive	
2		Power indicator	PWR	If the "Green" indicator is on the system is getting power		
3	IR Receiver			Receives signal from Rem	ote Control	
4			1	CH-1; Numeric key 1	CH11-CH16 select	
5			2	CH-2; Numeric key 2	method: press key plus other	
6			3	CH-3; Numeric key 3	numeric key. Such as CH16	
7	Channel	G. 1 Gl 1	4	CH-4; Numeric key 4	display, firstly press 1, then	
8	Select &	Single Channel	5	CH-5; Numeric key 5	press 6.	
9	numeric	display and numeric key	6	CH-6; Numeric key 6		
10	input	кеу	7	CH-7; Numeric key 7		
11			8	CH-8; Numeric key 8		
12			9	CH-9; Numeric key 9		
13			0	CH-10; Numeric key 0		
14	Preview	Multiple CH display	DISPLAY MODE	Quad display, 9-CH and 1	6-CH display	
15	Audio control	Mute key	MUTE	"On" or "Off" audio input	/output	
16	Rec.	Manual recording	•	Start Manual recording		
17		Pause	PAUSE/FRAME	II Pause / play frame by f	rame	
18	Play Control	Play	PLAY	Convert to play status		
19		Stop	STOP ■	Stop playing recording		
20	Complex	Menu	MENU/ESC	Enter into main menu / Ex	iit	
21	Key	PTZ	PTZ	Enter PTZ control, select [[Enter] / [Edit] operation	
22		UP	•	Move up		
23	Direction	DOWN	~	Move down		
24	Key	LEFT	4 /44	Move left / RWD		
25		RIGHT	> / >>	Move right / FWD		

List 2-1

2.2 Rear Panel

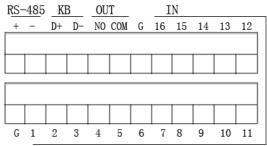
2.2.1 16-CH DVR Rear Panel



Item	Physical port	Connection method
1	Video input	Connect CH1-16 (BNC interface)
2	Video output	(UP) Main video output; (Down) Spot output (BNC interface)
3	Audio input	Connect CH1-4 audio signal input (BNC interface)
4	Audio output	Connect audio signal output (BNC interface)
5	Ethernet: Port	Connect intranet, internet (RJ45 interface)
6	LINE IN port	Phonetic talkback
7	USB Port	Connect USB device (Flash Drive, Hard Drive)
8	USB Port	Connect USB mouse
9	RS-485/Sensor/Alarm	RS485/Sensor/Alarm interface (see pin outs below)
10	VGA Port	Connect to VGA monitor, such as PC monitor
11	Power Port	Connect power supply - DC12V 8.33A
12	Power Switch	Turn Power on and off

List 2-2

RS485/Sensor/Alarm port functions:



Alarm input: Connect [-] port of your sensor to G (GND) pin, and [+] port to channel input you want to set.

Alarm output: indicate the two ports marked "out".

PTZ Port: Connect your camera to RS-485A and RS485B accordingly.

2.3 Remote Control



Key Title	Key Function			
REC	Manual recording			
SEARCH	Enter into recording search menu			
2×2	Quad display			
3×3	9-CH display			
4×4	16-CH display			
AUTO	Dwell time display			
0~9	Channel select; numeric key			
DISPLAY	Multiple CH display (Quad, 9-CH, 16-CH			
MODE	and single channel display)			
A	UP			
▼	DOWN			
◄/ ▶	Left/right key			
ENTER	Select / Edit key; Enter key			
Menu/ESC	Enter into main menu / Exit			
PIP	PIP display mode			
MUTE	Mute key			
FWD	Forward (x2, x4, x8)			
REW	Rewind (x2, x4, x8)			
PLAY	Enter into recording search, play			
12/11	recording event			
STOP	Manual stopping play			
PAUSE/	Pause / play frame by frame			
FRAME				
SLOW	(1/2, 1/4, 1/8) Slow play			
Z +	Zoom out video area			
Z-	Zoom in video area			
F+	Extend focus			
F-	Extend focus			
I+	Add PTZ brightness			
I-	Decrease PTZ brightness			
PTZ	Allow you set presetting bit and			
	control PTZ.			
LOCK	Lock system			

List 2-3

Mouse Operation

You can use a mouse instead of front panel buttons or remote control.

ТҮРЕ	Function		
	In menu lock mode, Enter into pop-up menu and clicking any sub menu to pop		
	up Log-in window; on menu unlock mode, enter into pop-up menu, and then		
	clicking left key to enter into any sub menu directly.		
	After entering main menu, clicking left key could enter into any sub menu;		
	On[Detailed file] menu mode, clicking left key could playback one recording		
	file.		
Click left key	Change the status of check box and motion detection area.		
of Mouse	Clicking combo box to access pull-down menu; Click left key to stop dwell		
	time display when dwell time display is "ON"		
	By clicking left key you can adjust Color control bar and volume control bar.		
	Clicking combo box to access pull-down menu		
	By clicking left key you can select values in edit boxes or pull-down menu and		
	supports Chinese word input, special symbol, numeric and character input, use		
	instead of [Enter- or [Backspace]		
Click right key	In live display mode, clicking right key will display pop-up menu (shown as		
of Mouse	Picture 5-1).		
of wouse	In Main menu or sub menu mode, clicking right key will exit current menu.		
Double-click	In live display or playback mode, double-clicking left key will maximize the		
Left key of			
Mouse	screen.		
Moving Mouse	Select menu item		
Sliding Mouse	On motion mode, sliding mouse will select motion area; On [Color set] menu		
	mode, sliding mouse will adjust color control bar and volume control bar.		

List 2-4

Chapter 3: DVR Installation

3. 1 Hard Drive Installation

Caution: Please do not Install or take out hard drive when DVR is running!

The model has a HDD drawer. Please use provided key to take out the HDD drawer and put HDD into the drawer correctly.

- (1) Remove screws and open DVR upper cover carefully;
- (2) Insert Power Cord and data cable into Pin of hard drive securely;
- (3) Put the upper cover back carefully, re-attach screws.

3. 2 Camera and Monitor Connection

Connect camera cable to video input of DVR, and from video output of DVR to Monitor via BNC connector (Refer to section2.2-Rear Panel); or

If the camera is a PTZ speed dome, you could connect RS485 A & B to the according port of DVR respectively (refer to system figuration on Chapter 8).

3. 3 Power Supply connection

Please only use the power adapter supplied with the DVR.

Chapter 4: DVR Boot up

4.1 System Initialization



Picture 4-1

After connecting the power adapter and turning

On the power button, the system will boot-up and start initializing

4.2 Main Interface

2000	CH2 06/ 04/ 24	009 12 03 14	
VIDEO LOSS	VIDEO LOSS	VIDEO LOSS	VIDEO LOSS
CH5	CH6	CHZ	СНВ
VIDEO LOSS	VIDEO LOSS	VIDEO LOSS	VIDEO LOSS
CH9	CH10	CH11	CH12
VIDEO LOSS	VIDEO LOSS	VIDEO LOSS	VIDEO LOSS
CH13	CH14	CH15	CH16
VIDEO LOSS	VIDEO LOSS	VIDEO LOSS	VIDEO LOSS

Picture 4-2

After finishing system initialization the system will enter into main interface. Picture 4-2 is the main interface displayed by system, which is showing no video input status. Once there are video inputs, the interface will display live images from the cameras. In main interface mode, if you use the mouse to double-click the live image of any channel, the image will be maximized to full screen, by double-clicking again, the display will be come back to 16-CH displaying all cameras; clicking the right button of the mouse, will enter into Pop-up Menu; by clicking the left button of the mouse, you select menu items; when clicking any area outside the menu, you will exit the Pop-up

Note: When no connection to HDD, the first channel on the main interface will display character "H" and accompany buzzer alarm. If you want to close the buzzer alarm, please enter into [Device manage→Alarm setting] to set HDD loss, HDD space not enough and alarm output to "off".

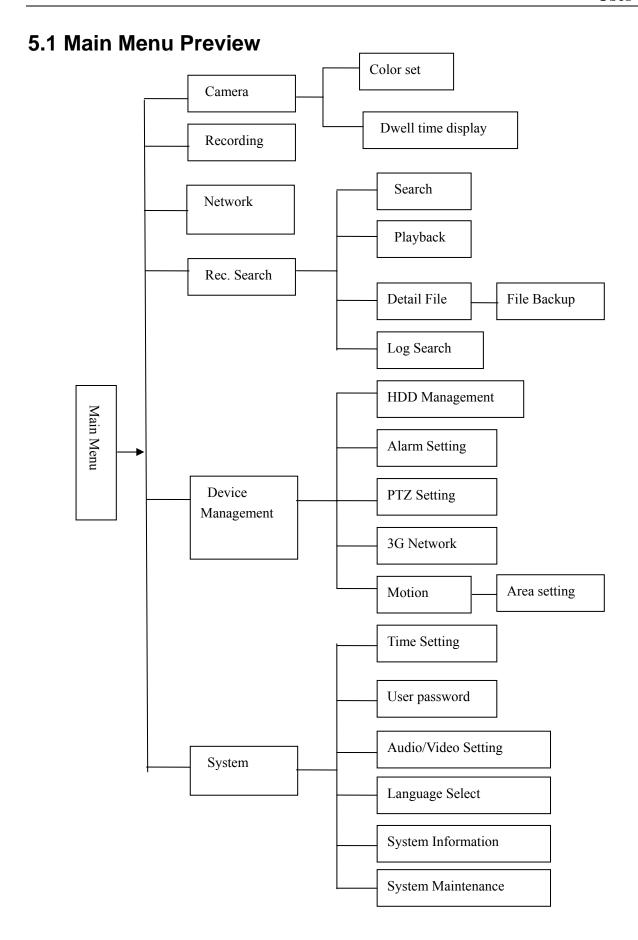
Chapter 5: DVR Menu

Pop-up Menu



Picture 5-1

After finishing system initialization, click right key of mouse on main interface mode to enter into Pop-up Menu. Now you could proceed parameter setting and operate for Main Menu, Multiple CH display, PTZ, PIP Mode, Video Search, Mute, Manual record, dwell time display and Start Cruise etc.



5.2 Main Menu



Picture 5-2

After clicking right button of mouse, pop-up menu will be displayed on the screen. You can click [main menu] button on pop-up menu to enter into Main menu interface (Shown as Picture 5-2). In Main Menu mode, you can control device management settings, such as Camera, Recording, Network, Recording search, HDD, Alarm, PTZ Control, Mobile Phone & motion detection etc, you can also set system function settings, such as Time setting, User password, Audio/Video setting, Language select, and access system information, system maintenance etc.

5.2.1 Camera setup



Picture 5-3

Go to [Main Menu → Camera] to set up the name display and position display of each channel (Shown as Picture 5-3), You can also adjust image brightness, saturation, contrast and hue settings of each channel after entering into [Color] Menu and set up whether each channel can be previewed or not under Live display and/or Recording mode.

Please note that the name of each channel supports up to eight characters or four Chinese characters.



Picture 5-4

Below is the Color Menu where you can adjust image brightness, saturation, contrast and hue parameters of each channel.(shown as picture 5-4).

Explanation:

- 1. The modifications will be available after clicking [APPLY] button on the bottom of the sub-menu windows and being prompted to save and then clicking [ok] button.
- 2. If you want to cancel the modification, click [Exit] button to exit the menu.
- 3. When clicking [DEFAULT] button, all system default values will be reset to default value.
- 4. System default value indicates the value pre-set at the factory.

5.2.2 Record setup

Click [Main Menu] → [Record] to enter into [Record Setup] menu (Shown as Picture 5-5).



Picture 5-5

Functions:

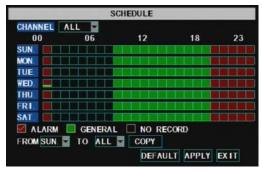
- 1. The [Rec Mode] button allows you to setup recording 24 hours, on motion, or on a set schedule.
- 2 [PACK time] indicates maximum continuous time of recorded files (15, 30, 45, 60 min).

The [Record Setup] menu allows you set up recording status (on/off) of each channel, it also allows you setup recording image resolution and quality, and turns audio on/off. This menu also allows you select recording mode (recording after power on and scheduled recording) and recording file length.

Once a channel is set to "on" the channel can record, if it is set to "off" the video from the channel will not be recorded. **Resolution** options are D1, HD1 and CIF; and **Quality** options are Best, Good and Normal.

When Audio is set to "On", system will also record audio from the channels and will have audio output on playback mode; if it is set to "off" you can not record audio and will have no audio output available on playback mode.

To record 24 hours a day set the [Rec Mode] to Always. To record on motion or a set schedule, select Time Schedule Record and click the "Schedule" option, the Schedule interface will open as shown in (picture 5-6):



Picture 5-6

Recording options include All, CH-1, CH-2, CH-3, CH-4, CH-5...CH-16 in turn. Please click the channel you need, the channel you select will be highlighted in "Blue" unselected channels will be "Grey".

To setup weekly schedules, click on the box of the recording status you want (Alarm, General, or No Record) and then click on each box in the schedule time line that you want this method to apply to. You can use the [From – To] pull-down menus and Copy button to copy settings from one day to another day or all days.

After you complete the schedule you activate it by clicking the [Apply] button.

You can also click on the Default button to use the system defaults. The system default settings are:

Hr01:00 am-07:59 am: No recording Hr08:00 am-18:59 pm: Normal recording Hr 19:00 pm- 00:59 pm: Alarm recording

Explanation: Under the recording Set menu and recording search menu, original color stands for no recording, "Red" stands for alarm recording, "Green" stands for normal recording and "Blue" stands for the channel and date you have selected.

5.2.3 Network Setup

Enter into [Main Menu-Network Set] to setup the network configuration (Shown as picture 5-7): After selecting network mode - such as DHCP, PPPOE, or static allocation and setting up web ports, you can view DVR remotely over a network or the internet.



Picture 5-7

When selecting DHCP the router will allocate DVR IP address automatically after you exit the menu. You might want to write down the addresses assigned and then switch to static and re-inter the addresses so the router does not change them later.

When selecting manual allocation, you need to set IP address, sub mask, gate and web port (shown as Pic. 5-8):



Picture 5-8

When selecting PPPoE, you need to input user and password provided by your internet service provider and set up web port (for details refer to the below picture 5-9). When network type is set to "PPPoE" mode and web port is right, you could visit DVR via public network without mapping.



Picture 5-9

At the bottom of the NETWORK SETUP window there is an option to setup the DVR to be accessed through a DDNS service. When you click on the DDNS button it brings up the window displayed as Picture 5-11. You can access the DVR through a static or dynamic IP address; however a dynamic address can change from time to time. How often depends on your service provider When it changes you need to go to a website such as www.myipaddress.com from a computer attached to the same router as the DVR to find out

what the new IP address is. There are two solutions to this problem. One would be to get a static IP address from your service provider so that you do not have to be concerned with the address changing. Another solution would to use a dynamic domain name service to get a domain name that can be linked to your dynamic address. You can register on DVR2009.3322.org website and get a domain name, user name, and password. You can then enter your dynamic domain name into an Internet Explorer browser instead of an IP address and be directed to whatever the current dynamic IP address is, so that you can always access the DVR by entering the same address. This DVR also supports the DDNS service provided by dyndns. You can get more information on how to use these services from www.dyndns.com website.



Picture 5-10

To access the DVR from a remote computer over the internet you would then need to forward port 80 and port 9000 on the router the DVR is attached to, to the IP address of the DVR.

When you access the DVR from a remote computer you also need to use a different address in the Internet Explorer browser window. Instead of entering the IP address of the DVR you need to enter the public IP address of the router the DVR is attached to.

http:// Public net IP: Web port number (such as 8080)

http://Intranet IP: Web port number (such as 8080) (only use for Intranet)

http://superdvr.3322.org: Web port number (such as 8080)

ID	Service Port	IP Address	Protocol	Enable
1	9000	192.168.1. 101	ALL 🔻	~
2	8080	192.168.1. 101	ALL 💌	~
3	554	192.168.1. 101	ALL 💌	~
4		192.168.1.	ALL •	
5		192.168.1.	ALL 🔻	
6		192.168.1.	ALL 💌	
7	1	192.168.1.	ALL 🔻	
8		192.168.1.	ALL 💌	
Comm	on Service Port:	DNS(53)	Copy to ID 1	

Picture 5-11

5.2.4 Recording Search

Click [Main menu→ search] to enter into [Video Search] menu (shown as the below picture 5-12)



Picture 5-12

Channel: allows you select the channel you want to search

Searched playback:

If you input specific date and click [Search], you will find all the recordings for that day. When you select [Date] item, you will playback the recordings in 4 channel mode; or, click [File list] button to display File list interface, where you can playback or backup the file you selected. See File List heading below.

You can play video Forward at 2x, 4x, and 8x speeds, Slow play at 1/2x, 1/4x, and 1/8x, normal play, pause and play frame by frame using the playback control bar, and adjust volume by clicking or sliding tune control bar. When playback has finished, system will return to previous menu.

File list

On the [Video search] menu mode, click [File list] to pop up the sub-menu(shown below as Picture 5-13). This option will allow you to view all of the available files by channel and type (all, normal, or alarm).

You can select a file and push the SEL button to playback the file, or use the FWD button and down button to select the option and backup the recording file you selected. You can also put a checkmark in the box at the end of multiple files if you want to backup more then one file.



Picture 5-13

First: Indicates the first page of recording history you have searched. When you view other pages, clicking [First] button brings you back to Page one.

PRE (Previous page): When viewing event list, clicking [Previous page] button will take you back to page before the one you are currently viewing (except the first page).

NEXT (Next page): When viewing event list, clicking [Next page] button will take you to the page after the one you are currently viewing (except the last page).

LAST (Last page): Indicates the last page of recording history you have searched. When you view other pages, clicking [Last page] button will take you to the Last page.

ALL (Select All): Allows you to select all the events on the current page.

INVERSE (Select Invert): Allows you to select other events on the current page except those you have

currently selected.

Recording File Backup

If you want to backup one recording from the file list, you just select the recording and backup device, and then click [Ok] button.



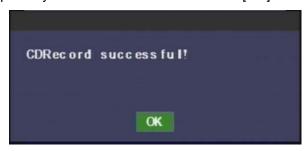
Picture 5-14

If you select built-in DVD recorder, backup will be started after clicking [OK] button (shown as below Picture 5-15)



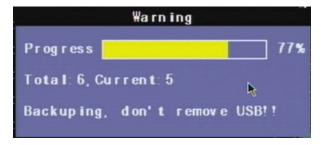
Picture 5-15

When the backup is completed you will be notified. Please click [OK] button to save your backup.



Picture 5-16

The below picture 5-17 have shown system is backing-up via U flash disk.



Picture 5-17

When the USB backup is completed you will be notified. Please click [OK] button to save your backup.



Picture 5-18

Explanation: Backup file will be in H264 format, you can convert it to AVI format using the Multimedia Player program that comes with the DVR or through the net-viewer program, so you can use any player which supports AVI format.

5.2.5 Device Management



Options in device management include Hard drive, External Alarm, PTZ control, Mobile Phone Monitoring, and Motion Detection.

Picture 5-19

5.2.5.1 HDD Management



Click [Main Menu→Device → HDD] to enter [HDD Management] menu (shown as Picture 5-20)

Picture 5-20



When you install a HDD, the system will automatically detect if HDD is formatted or not; If HDD needs to be formatted, HDD status will be shown as "Not format", otherwise, the HDD status will be shown as "Normal" (refer to Picture 5-21)

Picture 5-21

- ➤ NO: HDD number pre-setted by system
- **Status:** Available Hard drive. You could use HDD only when formatting the HDD and inspect its status normal.

TOTAL SPACE: Indicates total space available on Hard Drive.

FREE SPACE: Indicates unused space available on the Hard Drive.

USEABLE REC TIME: Based on current image detail/quality and frame rate, system will show you how Recording time you have left on the Hard Drive.

HDD FORMAT: You use this option to format the hard drive, you can not record files to the hard drive until it has been formatted. Click [Format HDD] button to start formatting. When selecting [Format HDD] option the system will prompt you – "Format HDD will loss all the data, do you confirm?"; click "OK", system will prompt you – "Is formatting..." and "successful format"; and then system will restart automatically.

OVERWRITE: If you select "on" the system will automatically overwrite the oldest recordings once the hard drive is full; if you select "off", recording will stop once the hard drive is full.

USB FORMAT: Use this option to format USB devices.

5. 2. 5. 2 Alarm Set

Click [Main Menu→Device → Alarm] to enter into [Alarm setup] menu to setup Alarm warnings (shown as Picture 5-22).



Picture 5-22

Enter into its sub menu, you could set alarm parameter accordingly.

- **Channel select: the options allow you select one channel you want.**
- ▶ I/O STATUS: Options include NO (Normal-open), NC (Normal-close) and OFF. Set to "Normal-open" if you use external sensor alarms that are normally open, Set to "Normal-close" if you use external sensor alarms that are normally closed, set to "off" if you are not going to use external sensor alarms. You can use the DVRs internal motion detection to record when motion is detected; you do not external sensors to record on motion detection.

HDD LOSS: Options are "On" and "Off". If you select On there will be a buzzer sound and "H" sign on screen when HDD is not detected or not formatted; on the contrary, if you close the function, there is only "H" sign to indicate HDD not found, but no alarm sound when HDD not found or not formatted.

HDD SPACE: Options are "On" and "Off". When the alarm function is on, there are alarm sounds when the HDD is running out of space; when the function is off, there are no alarm sounds.

VIDEO LOSS: Options are "On" and "Off". When the function is on, system will issue alarm sound and display video loss on the preview interface; when the function is off, system will have no alarm sound, but the preview interface will display video loss.

ALARM MANAGE: Alarm Output (0s,10s,20s,40s,60s), Buzzer time (0s,10s,20,40s,60s), alarm duration time (0s, 30s, 1minute, 2minute, 5minute) and Pre-alarm duration time (off, 10s)

Alarm Type	Function		
Video Loss	Sends alarm when DVR can't receive video signal (such as camera damage, cable broken or damaged or power supply malfunction).		
Motion Detection When an object moves into motion detection area, alarm will be triggered. You can add sensitivity level to suit the needs of your actual application environment.			
I/O Status	Status System can convert alarm signal triggered by external sensor into signal identified by system.		
HDD loss When Hard Drive is not detected (HDD damage, power supply malfunction), or HDD auto-over is off, and free space is not enough, an alarm will be triggered.			

List 5-1

Email Alarm Notification

(Send notice to email account when motion alarm is triggered)

Click the [Email setup] menu to enter into its sub menu (shown as Picture 5-23)



Picture 5-23

On the [Email setup] mode, refer to its parameter setup shown as picture 5-24 when setting email alarm to "on".

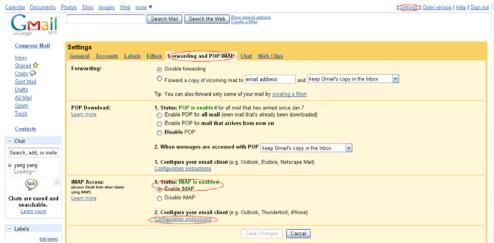


Picture 5-24

> SSL: is a security link transport protocol. You can encrypt your communication info (including your email) using SSL to prevent hackers from monitoring your email or communication info and even your password.

Please set SSL to "On" via Gmail.com server, and set to "Off" via other mail server.

➤ If your setting is still not right, please contact the web site where you have applied for your email box to get SMTP server and SSL of mail box.



Picture 5-25

SMTP server: indicates server address you use.

Sender email: indicates sender's email address. The email address should be consistent with the server you use. That is to say, when you use email address – aaa@gmail.com, the according server should be smtp.gmail.com.

Receiver address: indicates receiver's email address. The email address is used to receive image transmitted from motion detection alarm of DVR. Please clear the images you have received as soon as possible to avoid overloading your email account. For detailed SMTP protocols settings refer to the below picture 5-26.

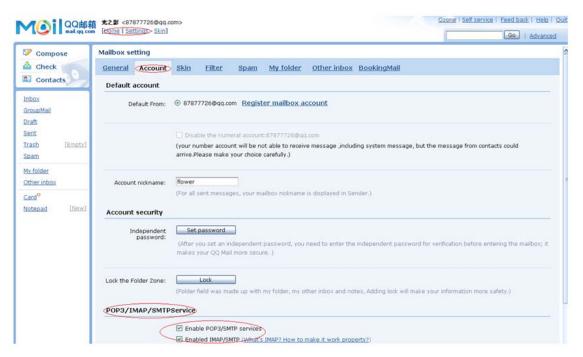


图 5-26

5. 2. 5. 3 PTZ Setup



Picture 5-27

Enter into [Main menu→Device→ PTZ Setup] to select the channel you want to control and set PTZ protocol (Pelco-D or Pelco-P), Baud Rate (1200, 2400, 4800, 9600), Stop bit (1, 2), Parity Check (None, Odd, Even Mark Space), Address Code and Cruise status respectively. Please note the above mentioned channel settings must match the settings of the PTZ camera.

5, 2, 5, 4 Mobile

Click [Main menu→Device→Mobile] to enter into [Mobile] menu.

User Name: indicate user name of DVR.

User password: indicate user password of DVR

Server port: Mobile monitoring port. Setting range is between 1024 and 65535. Please note that

Explanation: Please connect DVR to Internet before setting DVR port number and the server port no is not equal to network menus.



Picture 5-28

Mobile Phone Access

The DVR is currently compatible with mobile phones running Windows Mobile and Symbian operating systems on 3G networks.

Before you can access the DVR from a mobile phone you need to setup the Network Configuration on the DVR. Go to section 5.2.3 Network Setup on page 14 of the product manual for instructions on how to do this. You also need to go to the Main Menu then Devices then Mobile and enter your user name and password, and set the Server Port to 18600. This port also needs to be forwarded to the IP address of the DVR along with the ports from 5.2.3 Network Setup.

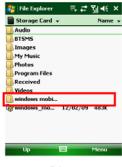
Explanation: You can only see one channel at a time when viewing from a mobile phone. The speed of the display depends on the speed of the internet connection.

When accessing from a mobile phone with Windows Mobile operating system, use the following

1. Webcam installation

procedure:

First you need to install the webcam program that is included on the CD that comes with the DVR by copying the "QQeye.CAB" file to the mobile phone. You can do this by attaching the mobile phone to a computer and copying the file from the CD to the memory card on the phone, or by copying the file from the computer to the phone's memory card through a memory card reader or through a Bluetooth connection.







Pic 1

Pic 2

Pic 3

2. Click the windows mobile folder (red box in Pic 1) and choose the file

QQeye" Select the file which will open the window in Pic 3. The file is generally faulted to save as Device, direct to phone, (shown in Pic 3) but you can save it to Device or Storage Card.

3. Choose storage location and click [Install] button (red box in Pic 3) to start the installation (please refer to display in Pic 4 below)







Pic 4

Pic 5

Pic 6

- 4. After installation finishes, click the icon named QQeye (red box in Pic 5) to run the program. This will display the program screen in Pic 6.
- 5. Settings: Click [Setting] button (red box in Pic 6) to enter the Setting menu shown as Pic 7







Pic 7

Pic 8

Pic 9

User name: same as user name setup in DVR under Menu, Devices, and Mobile

Password: same as password setup in DVR under Menu, Devices, Mobile

Server address: Public IP address of router DVR is connected to.

Web port: Same as the Server Port you setup in the DVR, it needs to be forwarded to the IP address of the DVR, setting range is between 1024 and 65535, the default setting is 18600. Note: this port is in addition to the ports used for standard remote access.

Channel: Select the channel from the DVR you want to monitor and click [OK] button (red box in Pic 7) to display the screen in Pic 8 and start video connection.

6. Main interface operation (Pic 8)

Click [Disconnect] button to stop displaying live image of the channel.

Click [Setting] button to modify the settings.

7. Video connection Display

Normal Mode:

You will find network connection status info under the video image:

Display on the left corner: Network transmission speed, Frame rate and Resolution.

Display on right corner: percentage of buffer display, Connection success, Connection fail, Play and Stop.

Function of Buttons under the video image from left to right: PTZ control (Left, Right, Up and Down), area select (Zoom out and Zoom in), Focus (Add "+" and deduct "-") and Iris (Add "+" and deduct "-") and Snap to capture screen image.

8. Display mode: You can convert normal display into full-screen display by clicking the screen on the mobile phone (displayed as Pic 9)

When accessing from a mobile phone with Symbian operating system, use the following procedure:

- 1. First you need to copy the file with suffix "QQeye.CAB" that is included on the CD disk to the mobile phone. Copying file is save to storage card by default, and the file can also be transmitted from the CD through a computer by Bluetooth technology to save to Inbox (Pic 1). Select the QQEye program (red box in Pic 1) which will display Pic 2.
- 2. Select the QQEye icon in this window (red box in Pic 2) to install it, this will display Pic 3).



After the phone finishes preparation it will display Pic 4 asking for permission to install the program. Select the Yes button (red box in Pic 4). This will display the window in Pic 5.



- 3. Click the Continue button (red box in Pic 5) on the information box displaying the program and current version. This will display the window in Pic 6.
- 4. Next choose where you want to install the program, to phone memory or to the memory card, and click on the Select option (red box in Pic 6). This will display the window in Pic 7, click on Continue (red box in Pic 7) which will display the screen in Pic 8 and tell you it is installing the program (red box in Pic 8).



5. Once the installation is complete the window in Pic 9 will be displayed to tell you that installation is completed. Then you can go to the Applications folder and select the QQEye program (white box in Pic 10)

and click on the Open option (red box in Pic 10) to display the settings menu. After you complete the settings and click on the Done button (red box in Pic 11) the Video window in Pic 12 will be displayed.

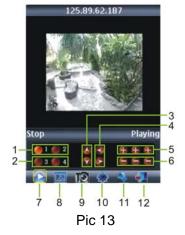






Pic 10 Pic 11 Pic 12

6. Select the icon to run the program, and then enter into below interface.



Please refer to the table for operation:

Item	Button	Item	Button	Item	Button
1	CH-1; CH-2	5	Z+ F+ I+	9	Capture
2	CH-3; CH-4	6	Z- F- I-	10	SET
3	PTZ: UP; PTZ: DOWN	7	PLAY/STOP	11	Next group CH
4	PTZ: Left PTZ: Right	8	Full screen / Normal	12	Exit

Note: Captured file will be faulted to save to below path:

- "C: \Data\Images\"
- 7. If you want to modify setting parameter, click [Setting] to enter into its sub menu (shown as Pic 14).



Pic 14

Default Access Point:

Input the access point. System default for the access point is GPRS connection.

Server Address:

Input the public IP address of the router the DVR is attached to (refer to section 5.2.3 Network Setup on page 14 of the product manual).

Server Port:

Web port: Same as the web port setting on the DVR, you need to forward this port from the Router to the DVR. Setting range is between 1024 and 65535, the default setting is 18600. Note: this port is in addition to the ports used for standard remote access.

User Name:

Same as user name setup in DVR under Menu, Devices, and Mobile

Password:

Same as password setup on DVR (Please press Function key to save the password, left soft key won't be able to save the password)

Channel:

Select the channel you want to monitor and click [OK] button to start video connection

Network connection status: percentage of buffer display, connection success, connection fail, play and stop.

Channel select, PTZ control, Zoom in/out, Focus and Iris

Play/Stop, Full screen/ Normal Display, Capture, Parameter setting and Exit []



Pic 15

5.2.5.5 Motion Detection



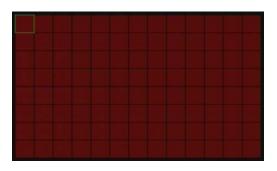
Picture 5-29

Click [Main→Device→Motion] to enter into the [Motion Detection] menu to setup motion detection recording.

The [Motion detection] Menu has three sections, including Channel Status, Sensitivity and Motion area.

Channel STATUS: This option allow you enable motion detection on any channel.

SENSITIVITY: This option allows you to set sensitivity level of motion detection from 1 to 4 with 4 being the most sensitive.



Picture 5-30

MD AREA: This option allows you select the area you want to be sensitive to motion. The channel is separated into a 13X8 area. When any object moves into the motion detection area, and the area where the object is located is displayed in red recording will be triggered. In the semi-transparent area the motion detection is off.

5.2.6 System Function



Picture 5-31

5. 2. 6. 1 Time Set



Picture 5-32

5.2.6.2 Password



Picture 5-33

The [System] Menu includes the below sub-menus: Time Set, User Password, Audio/Video Setting, Language select, System Info and System Maintenance.

After entering into the [System], you can configure the system to meet your needs.

Click the [Main menu→System→Date/Time] in turn to Enter into the time setup menu shown as Picture 5-32 to not only modify system date, time, date/time format and time zone, but also setup DST (day saving time) status and mode.

This option allows you set the device ID for the DVR and set the system password if you want to use one. The new passwords will be available after clicking [APPLY] button.



When you set Password Enabled to "ON" (shown as Picture 5-34), you can setup a user password and administrator password respectively. The password supports up to 6 characters.

Picture 5-34

5. 2. 6. 3 Video Setup

Click [Main Menu→System→VIDEO] to setup Video, here you can set Camera system (PAL,

NTSC)



Picture 5-35

- > Camera system: allow you set Camera system.
- ➤ **Video output port:** include Live out port which indicates real-time display mode and Spot out port which indicates single channel/dwell time display.
- **Dwell time:** Settable period include 0s to 300s.
- > Channel sequence set: the option allows you setup display position of any channel (Virtual).
- **VGA resolution:** Your options are 1280×1024 , 1024×768 , 800×600 .
- **Volume control:** the option allows you set volume's default value.

5. 2. 6. 4 Language



Picture 5-36

Enter into [System Language] menu to select the language you want to use on the DVR (shown as Picture 5-36) and click [APPLY] button. The selection will be available after system Auto restarts.

5. 2. 6. 5 Info.



Picture 5-37

Click [Main Menu→ System→Info] to enter into [System Information] menu to view system info, including Device type, Software (firmware) version and MAC address etc.

Note: The fist two numbers of MAC address must be 00-11.

5. 2. 6. 6 System Maintenance



Picture 5-38

This option allows you reset the DVR to factory default settings, update system software (firmware), and set system auto-maintenance. Click [Main menu→System→Maintain] to enter into the [System Maintain] menu (shown as Picture 5-38).

When opening auto-maintain function, you can setup

Note: 1. Please cut power and plug-in U flash disk during the upgrade.

- 2. Please manual recover ex-factory default value after restart.
- 3. When setting auto Maintenance time, DVR should return back to pre-view screen and have no any operation, otherwise, auto-maintenance will be not effective.

system to restart regularly.

5.3 Menu Lock



图 5-39

As a system safety feature you can click [Menu Lock] menu to lock menu when leaving the DVR. If you want to login to the DVR, you would input device code and password (refer to the Menu Locking interface- Picture 5-39).

Explanation: User only has the authority to search recordings, but Administrator has full authority over Main Menu operations.

5.4 Multiple channels Display

Video channel have multiple display mode. Except of single channel display, PIP display, Dwell time display mode has multiple channels display.

On the Multiple Channels Display mode, the below options let you selected, including:

First Quad display (CH1~CH4), Second Quad display (CH5~CH8), Third Quad display (CH9~CH12), Forth Quad display(CH13~CH16), First Nine CHs display (CH1~CH9), Second Nine CHs display (CH10~CH16) and Sixteen CHs Display(CH1~16)

5.5 PTZ Control



Picture 5-40

We introduced setting PTZ parameters previously in chapter 5.2.6.3. Here we will discuss how to operate PTZ controls.

Click pop-up menu to show PTZ option and enter into PTZ control interface (shown as Picture 5-40). You can now click Z+&Z- keys to zoom in or out, click F+&F- keys to control camera focus and click I+&I-to adjust iris.

Cruise Set

Open auto cruise function on PTZ setting menu if you want to setup cruise function (system default: off), and set up cruise channel, cur point and total quantity and stop time etc.



Picture 5-41

Channel select: select the channel with the PTZ camera

Total: set up presetting bit quantity

Cur Point: System has default starting (current) cruise point as 01. You can use this option to set additional

cruise points.

Stop time: sets the pause time at each stop.

GOTO: select this option to go to specific preset points.

Set: save the preset point. After setting channel and setting the position by adjusting PTZ direction key you click [Set] button to setup the pre-set point. Please note you will click the [Save] button to finish the setting successfully. If you want to combine Zoom, Iris, Focus and direction keys into the pre-set setting, please return to previous menu (shown as Picture 5-41) to add additional settings, and then enter into Cruise Set again and click [Set] and [Save] to make sure your setting is setup successfully.

Clean: remove settings.

Note: this DVR model supports up to 100 pre-set points. But actual quantities may be restricted by the PTZ camera you are using.

5.6 PIP mode

PIP display is one kind of Live display, including 1x1 display mode and 1x2 display mode.

1x1 display mode: There are one full screen video image on the screen, one another small screen image shown on the above

1x2 display mode: There are one full screen video image on the bottom of screen, another two small screen images shown on the above.

5.7 Recording search

Click pop-up menu to enter into [Recording Search] menu quickly, now you could proceed recording search and playback. Details please refer to section 5.2.4.

5.8 Mute

The option allows you control volume of DVR

5.9 Record

Click [Rec.] button to start manual recording.

5.10 Stop recording

If you want to stop manual recording click [Stop Record.] menu or [Stop] button

5.11 Open dwell time display

After setting up one channel's dwell time on Audio/Video setup mode, you could open dwell time display via pop-up menu.

5.12 Start Cruise

After setting pre-setting point of PTZ camera, you could click pop-up menu to start cruise.

Chapter 6: Net-Viewer Progra

6.1 Plug-ins download and installation

Open IE browser and input IP address and web port of DVR, such as http://172.18.6.202:8080/ and confirm to download and install webcam. If your computer is connected to internet, computer will auto download and install the webcam.

Reminder: If the webcam is not downloaded successfully, please check if your browser's safety level or firewall setting is too advanced. Also refer to section 5.2.3 Network Setup to make sure network configuration is correct, ports are forwarded correctly, and ActiveX is enabled



Picture 6-1

6.2 Log-in to Net-Viewer

After webcam installs plug-ins, please select log-in language (Chinese or English) and enter password and click [Log-in] button, and now you can view DVR remotely through Net-Viewer.

Please note default password is empty. System allows Administrator to set new password as per instructions in section 5.2.6.2 - [Password set] menu.

Note: If you want to delete old IE webcam at DVR system update, run the command characters: "regsvr32/u dvrocx.ocx"



Picture 6-2

After successful Log-in to Net-viewer, system will enter into live display interface and connect to audio/video feed automatically (shown as Picture 6-3).



Picture 6-3

6.3 Main Interface of Net-viewer

Log in Net-viewer and show the interface as follows

- 6.3.1 Menu column (Section 1 on Picture 6-3)
- 6.3.2 PTZ Control (Numbers 2, 3, 4 on Picture 6-3)
- 6.3.3 Live Play Control (Numbers 6 through 10 on Picture 6-3)

6.3.1 Menu column (Section 1 on Picture 6-3)

①. Menu column include [Live] menu, [Replay] menu and [Setup] menu and [Logout] menu.

6.3.1.1 Live

After Logging-in to system, system will enter into Live display (shown as Picture 6-3).

6. 3. 1. 2 **Replay**

This option allows you to playback recordings remotely.

First select the day, channel and type and proceed searching and refreshing; second select any event from search result list to playback.

Please note you can control playing speed by sliding the playing-control bar on the bottom of the interface (shown as Picture 6-4).



Picture 6-4

Play button: [Play]/[Pause]

Stop button: stop playing recording.

F.F. button: fast forward playback recording **Slow button:** slow playback recording. **Next Frame:** play frame by frame.

264 TO AVI button: convert file from H.264 format to AVI format



The native format of the backup files is H.264, you can convert H.264 format into more familiar AVI format by clicking the key of 264 to AVI.

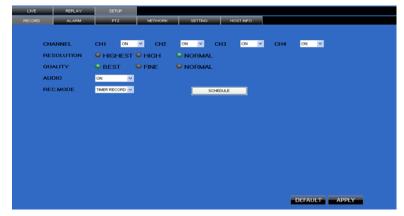
6. 3. 1. 3 **Setup**

Click [Setup] menu to enter into its sub menu, including [Recording Mode] menu, [Alarm Mode] menu, [PTZ Control] Menu, [Network Setting] menu, [System Setting] menu and [Host Info] menu.

Explanation: Only when DVR is on the status of live display, you could modify and save its parameters remotely at this moment, the settings are available. The modification method to DVR via Net-viewer is the same as local adjustment of DVR.

♦ Record

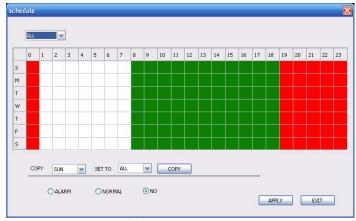
Enter into sub menu – [Recording Mode] menu, you can select on/off for every channel, and adjust recording parameters (resolution, quality, audio, REC mode and Schedule) remotely via Net-viewer.



Picture 6-5

Click the [Schedule] menu to enter into its sub menu (shown as Picture 6-6).

Remote setup methods are the same as local DVR setup. Please refer to Section 5.2.2 Record Setup



Picture 6-6

♦ Alarm

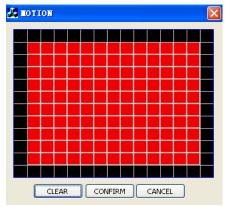
Click [Alarm] menu to enter into its sub menu (shown as Picture 6-7).

You can set I/O alarm for every channel, motion detection alarm, motion recording, motion trace, motion sensitivity, video loss alarm, HDD not enough space alarm, HDD not found alarm and alarm output time etc. For details on setup method please refer to section 5.2.5.2.



Picture 6-7

System allows you setup motion detection settings for each channel of DVR remotely (shown as Picture 6-8).



Picture 6-8

♦ PTZ Control

Click [PTZ control] button to setup PTZ cameras. Remote setup methods are the same as local DVR setup.

Please refer to Section 5.2.5.3 (shown as Picture 6-9).



Picture 6-9

♦ Network

lick [Network] to enter into [Network] menu. Remote setup methods are the same as local DVR setup. Please refer to Section 5.2.3. – Network Set.



Picture 6-10

♦ System Setting

Click [setting] menu to enter into the menu interface (shown as Picture 6-11);

Click [...] button to preview net-viewer recording saving path and screen capture saving path.

The menu also allows you to set a lower bandwidth for Internet video transmission, set user password, turn daylight saving time on/off, etc.



Picture 6-11

♦ Host Info

Click [Host Info.] to enter into the sub menu (shown as Picture 6-12). Here you can check Usage rate of HDD, available recording time, software version and MAC address.



Picture 6-12

6.3.2 PTZ Control

Note: below-mentioned series no will be consistent with the remark no shown as Picture 6-2.

- 2.PTZ direction control: Control PTZ moving direction
- ③.Zoom, Focus and Iris Control: control direction, zoom, focus and iris of PTZ.
- 4. Presetting bit Control

CUR: display current presetting bit or input a presetting bit you want to fix at according edit box •

Load: Load one presetting bit setting you have saved last time.

Save: Save presetting bit.

Set: set presetting bit parameter (Details setting method please refer to section 5.5- cruise set.

GOTO: on the preview mode, please input one presetting bit no and click [GOTO] button, you could fix the presetting bit quickly.

Clean: clean presetting bit setting

Cruise: control cruise status (including on and off).

6.3.3 Live Play Control

- 7. Recording [Properate DVR recording remotely

Chapter 7: Specifications

TYPE	DEVICE PARAMETER	16-CH DVR	
	Video System	NTSC / PAL(Optional)	
	Compression Format	H.264	
	Audio Compression Format	8kHz*16bit ADPCM	
Video / Audio	Display Resolution	D1:704×576(PAL) 704×480 (NTSC)	
Tiddio	Playback Resolution	PAL CIF: 352*288 NSTC CIF: 352*240	
	Recording Frame Rate (Shared)	PAL 400fps@CIF NSTC 480fps@CIF	
	Display Mode	Support Dwell time display, PIP and Zoom in/out in special area	
	Recording Mode	Always / schedule / manual /motion detection / sensor triggered /Net-viewer recording	
Pagarding	Record Pack Time	15/30/45/60 min. adjustable	
Recording	Playback Mode	PLAY /SLOW /FWD/Frame by Frame	
	Backup	Support U flash disk, Removable HDD, Recorder and network backup	
Alarm	Alarm type	Motion/ sensor triggered/Video loss/HDD Space/HDD Loss	
Network	Network function	Support mobile phone surveillance, Live monitoring and DVR parameter setting remotely	
	Network protocol	Supports TCP/IP, DHCP, UDP, DDNS, PPPOE network Protocol	
	Video input / output	16-CH Input / 2-CH Output; 1-CH VGA output	
	Audio input / output	4-CH Input / 2-CH Output	
	Alarm input / output	16-CH Input / 1-CH Output	
System Port	HDD port	Support up to 2 sets of SATA HDD	
1 010	Ethernet	One RJ-45 10M/100M self-adaptable Ethernet interface	
	USB Port	Support Mouse, Removable and U flash disk backup and upgrade	
	PTZ Control	Built-in RS-485 port, supports PELCO-P & PELCO-D	
	Power Adapter	DC 12V 8.33A	
	Working Temperature	10°C~+40°C	
General Parameter	Working humidity	10%~90%	
T di di litto to l	Power consumption	10-15 W	
	Dimension (W x D x H)	430×380×70mm	

Chapter 8: Appendix

8.1 Operation Function Table

Туре	Title	Description	Page		
Principle	Time setting	Setting system date, time and format and day-light saving time setting			
	Language Select	Setting system language			
	CH Setting	Setting CH title and position; adjusting image color parameter value; setting CH display to ON / Off and time display/recording time overlaying to On/Off.			
	Rec. Setting	Setting image quality, resolution, volume, recording mode an pack time	15		
	Rec. Search	Time based search, channel based search and rec. mode based search.			
Setting	Rec. Playback	Specified time playback, scheduled playback, file list playback			
	Playback mode	Play, play frame by frame, multi-speed forward and multi-speed rewind			
	File backup	File backup U flash disk and removable HDD backup, DVD recorder backup and network download backup			
	HDD Manage	Check HDD status, usage space, setting HDD auto-overwrite			
	VID/AUD	Adjust VGA resolution, select system and volume control	30		
	Setting				
	User password	Setting or modifying user password	29		
	Alarm setting Setting HDD lost, HDD space, video loss, I/O status, alarm management and Email alarm		21		
	Motion	Setting on/off status of MD; select sensitivity and setting motion detection	28		
	detection	area.			
Advanced Setting	PTZ control	Selecting CH and setting PTZ protocol, baud rate and PTZ address for the CH			
	MP Monitor	Setting user name, password and server port.			
	System Maintenance	Setting system auto maintenance, maintenance time regularly, system upgrade, ex-factory default value recovery and manual restart system			
	Display Control	PIP, ZOOM IN/OUT, Multiple Images display, Dwell time display and Cruise display			
Network Setting	Network and Port setting	Selecting network mode and setting net-viewer port, web port, DNS and DDNS parameters.	16		
Network	Live display	Real time video input remotely	34		
Function	Remote recording	Setting recording mode and status of DVR remotely	34		
	Remote playback	Check local recording history via network	34		
	PTZ control	Remotely control PTZ camera, position, focus, zoom and iris etc.	38		
	parameter set of	Setting local CH display, recording, alarm, PTZ control	34		

	DVR remotely	parameter value via network					
	Network	Backup recording file via network					
	download						
Auxiliary	System info	Check device model, software version and MAC address					
function	()	In addition to illustrating picture, Parenthesis generally indicate					
		optional parameter value of previous menu.					
Menu button	Confirm	The button allows you save the modification of parameter value.					
	Recover default	The button allows you recover default value	The option will				
		of current menu or system	be effective				
			once				
			confirmation				
	Exit	Exit current menu					
	①Time setting	Adjust system time					
	②HDD Format HDD		The option will				
	Manage		be effective	20			
	wianage		after restart.				
Basic		Set network type and web port (except of					
setting	③Net setting	PPPoE, other type need forward web port to	The option will	16			
setting		router of DVR.	be effective				
	4 System Info	Modify MAC address after restart.					
	③ MP	Set relative parameter	artor restart.	23			
	Monitoring						
	Other	PTZ setting, Recording set and Language select etc					

List 8-1

8.2 Recording Alarm setting

Please refer the below matrix: "_" stand for "only alarm but no recording"; "AMR" stand for "alarm recording"; "NLR" stand for "normal recording"; and "NOR" stand for "no recording". Once alarm is triggered, alarm icon will occur, and when many alarms are triggered, alarm remarks will occur on the screen.

<u>, </u>									
Recording alarm setting		Alarm icon	Recording Mode						
			Recording after power on	Timing recording					
				AMR	NLR	NOR	Manual Recording		
	MD alarm	M	AMR	AMR	NLR		NLR		
Alarm	I/O triggered alarm	I	AMR	AMR	NLR	1	NLR		
mode	HDD loss, HDD space full	H		Ţ	1				
	Video Loss	Video Loss		Ţ	T	Ţ			

表 8-2

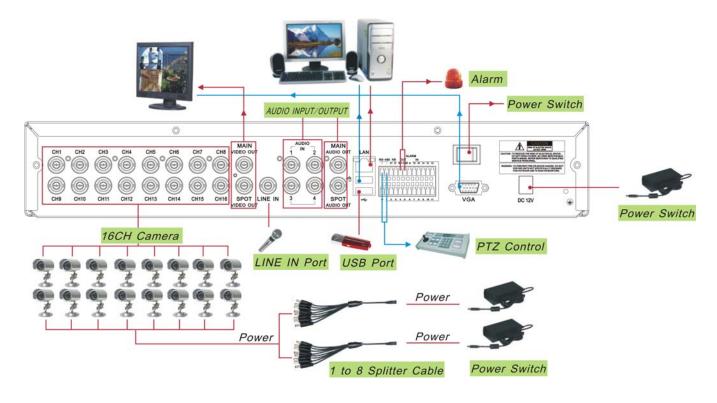
When DVR is in recording mode, $[\mathbb{R}]$ icon or $[\mathbb{M}]$ icon will appear on the screen. But when there are $[\mathbb{L}]$ icon and $[\mathbb{M}]$ icons on the screen it indicates a motion alarm was triggered. When $[\mathbb{H}]$ icon appears on the screen, that mean a hard drive alarm has occurred..

8.3 Troubleshooting

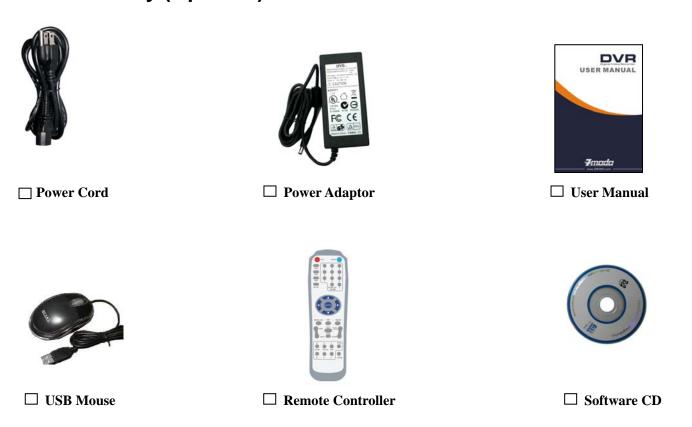
- 1. Q: What can I do if the system does not detect the HDD?
- A: Check the data and power cables and make sure they are securely connected.

- 2. Q: We have changed the password but do not remember the new password, how can we access the system?
- A: If you forget system password, enter 0800808 into the password field to reset the password
- 3. Q: We are not getting any video signal on the DVR, what is wrong?
- A: Check to make sure the cables are securely connected to the BNC ports on the DVR. You can also try another cable to make sure there is not a problem with the cable. Make sure you have selected the correct video format for your country (NTSC or PAL), is the USA we use NTSC.
 - 4. Q: Can the DVR have problems if it gets too hot, how can I prevent this?
- A: The DVR has a fan to help it dissipate heat while it is working. Please place the DVR in a place where there is good air circulation and away from high temperatures to increase stability and life of the DVR.
- 5. Q: My remote control does not work when the DVR is in Live mode but the front panel buttons are working, what is wrong?
- A: Make sure nothing is blocking the LED on the remote, or the receiver on the DVR, if both are ok, check the batteries.
 - 6. Q: Can I use the hard drive from my PC in the DVR?
- A: You can if the hard drive is the same type and the size is supported by the DVR. If you install it in the DVR it will be formatted for use in the DVR and the PC will not be able to read it.
 - 7. Q: Do I have to stop recording to playback files on the DVR?
 - A: No you do not have to stop recording, the DVR will support both functions at the same time.
 - 8. Q: Can I erase files from the hard drive of the DVR?
 - A: You can not erase individual file, you would need to format the hard drive which will erase all of the files
 - 9. Q: Why can't I log-in to the Net-viewer program?
- A: Please verify that the Net mode is correct, the cable to the RJ-45 port is well connected to the DVR and the router, and that you are using the correct password.
 - 10. Q: We have attached a PTZ camera but can not control it, what is wrong?
- A: Verify that the Protocol, baud rate, address, and other settings on the PTZ camera match the settings you have put into the DVR. Make sure the data cables are attached firmly to the RS485 port on the DVR.
 - 11. Q: Why does the Buzzer keep sounding?
- A: Please check to see if motion detection is on and the system has detected motion, make sure the hard drive is being detected and has sufficient space available and that none of your cameras have lost video. You can turn off the buzzer in the Alarm setup option.

8.4 System Connections



8.5 Accessory (Optional)





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