USER MANUAL



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Safety Instruction

1. 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.

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.

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Chapter 1: DVR Features

Real time monitoring	Supports real time surveillance via Monitor
Saves Recordings	DVR saves real-time recording image to HDD
Backup Recordings	Supports DVR backup via USB flash drive and hard drive.
Playback Recordings	Supports DVR single CH and multiple CH playback of recorded files
Network operation	Supports remote surveillance by multiple users simultaneously
Alarm Setting	Supports HDD & video input alarm management and external alarm signal inputs
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, HD1, CIF resolution

ADPCM audio compression format

Windows Graphical interface

Supports remote live viewing via 3G mobile networks

Supports sending email alerts when motion is detected by system

Triplex (recording, playback and net transmitting at the same time)

Supports USB mouse, IR remote control operation

Rear USB2.0 ports for backup, upgrade and mouse operation.

Supports Double Encode bit network transmission

The video package time is adjustable

Multiple alarm record mode

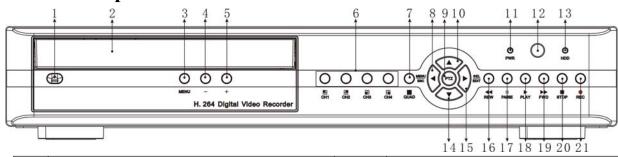
Multi-language OSD

Supports auto maintenance

Chapter 2:Layoutt

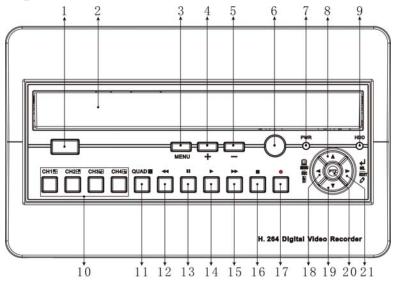
2.1 Front Panel

2.1.1 DL front panel



1	In/out key of Auto-drawn screen	12	IR Receiver
2	Auto-drawn screen in/out Port	13	HDD LED
3	Menu key of Auto-drawn screen	14	Down
4	Menu – key of Auto-drawn screen	15	Select/Edit/Right
5	Menu + key of Auto-drawn screen	16	Rewind play/Focus
6	1-4: Numeric keys1-4/Channel Select	17	Rewind play/Focus
7	View all channels	18	Pause/Auto sequence display
8	Menu/ESC/Left	19	Play
9	Enter or exit PTZ mode	20	Forward Play
10	Up	21	Stop record
11	Power LED	22	Record

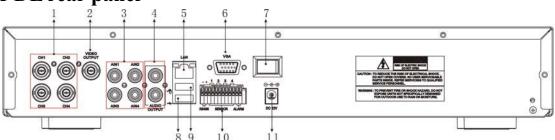
2.1.2 DH front panel



1	In/out key of Auto-drawn screen	12	Rewind play/Focus
2	Auto-drawn screen in/out Port	13	Pause/Auto sequence display
3	Menu key of Auto-drawn screen	14	Play
4	Menu + key of Auto-drawn screen	15	Forward Play
5	Menu – key of Auto-drawn screen	16	Stop record
6	IR Receiver	17	Record
7	Power LED	18	Menu/ESC/Left
8	Up	19	Down
9	HDD LED	20	Enter or exit PTZ mode
10	1-4: Numeric keys1-4/Channel Select	21	Select/Edit/Right
11	View all channels	22	

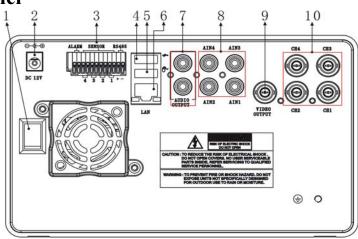
2.2 Rear Panel

2.2.1 DL rear panel



1	Video input1- video input4	7	POWER Switch
2	Video Output	8	USB Port
3	Audio Inputs	9	Mouse Potr
4	Audio Outputs	10	RS-485/SENSOR/ALARM
5	LAN Input	11	DC Power input jack
6	VGA Output (Optional)		

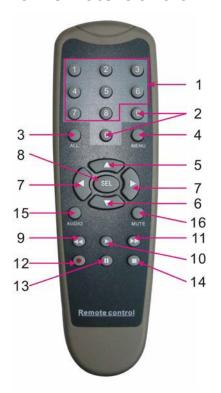
2.2.2 DH rear panel



1	POWER Switch	6	LAN port
2	DC Power input jack	7	Audio output
3	RS-485/Sensor/Alarm	8	Audio input
4	USB port	9	Video output
5	Mouse port	10	Video input1- video input4

4

2.3 Remote Control



1	1-8	Channel Select 1-8 ; Numeric key
2	9、0	Numeric Key
3	ALL	Preview all Channel
4	Menu	Enter/Exit Main Menu
5	A	Up Key
6	▼	Down Key
7	◄/ ▶	Left / Right Key
8	SEL	Select Key/ Edit Key
9	◄ ◀	Rewind key
10	•	Play Key, Enter to recording search menu
11	>>	Forward Key
12	•	Manual Recording
13	Ш	Pause / Frame Play
14		Stop manual recording; Stop Playback
15	Audio	Undefined
16	Mute	Undefined

Mouse Operation

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

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

List 2-3

Chapter 3: DVR Installation

3.1 Hard Drive Installation

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

- (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 Open Auto-drawn screen

After opening DVR, press in/out key of auto-drawn screen, and the screen will pop up automatically.

Press menu key of the screen, you can select the below menu in turn

Brightness→Contrast→Hue→Volume→Display Mode→Image Rotation→Reset (restore to fault value)→Close Menu

Press +/- key to adjust value of the menu you want to set.

4.3 Main Interface



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 quad mode 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 menu.

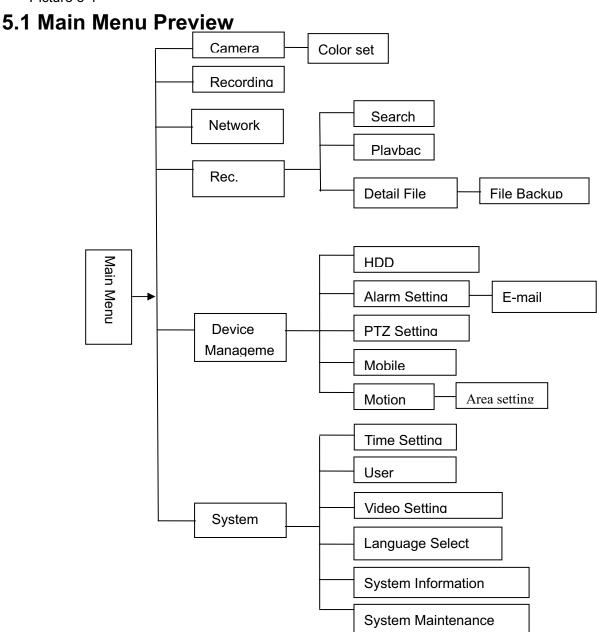
Chapter 5: DVR Menu

Pop-up Menu



After system initialization finishes, click right button of mouse on main interface display to enter into Pop-up Menu. You can also use the Remote Control or the buttons on the front panel of the DVR. Now you can set parameters and control Main Menu, Menu lock, Recording search, PTZ control and recording etc.

Picture 5-1



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). You can also use the Menu button on the front panel to bring up the window, when using the front panel buttons use the FWD and REW button to move in the menu, and the SEL button to select the icon. You use the ESC button to return to previous window. 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



Picture 5-4

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.

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



Picture 5-5

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

Functions:

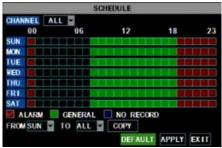
- 1. The [Rec Mode] button allows you to setup recording 24 hours, on motion, or on a set schedule.
- 2 [PACK time] indicates maximum continuous time length of recorded files (15, 30, 45, 60 min).

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 turn 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 respectively. 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 Set

Enter into [Main Menu-Network Set] to proceed network set (Shown as picture 5-7):



Picture 5-7

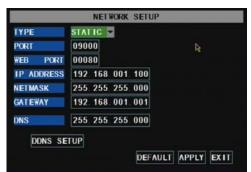
After selecting network mode - such as DHCP, PPPOE and static allocation and setup web port, you could visit DVR remotely via network.

When selecting DHCP, DHCP server will allocate DVR IP address automatically.



Picture 5-8

When selecting PPPoE, you need to input user and password provided by ISP supplier and set up web port (details please refer to the below picture 5-8).



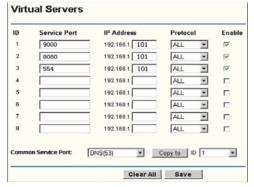
When selecting static allocation, you need to setup IP address, net-mask, gateway and web port (shown as picture 5-9).

Picture 5-9



If you apply for DDNS service and set up net parameter of DVR accordingly, you could visit DVR remotely via IE browser. (shown as picture 5-10)

Picture 5-10



Picture 5-11

If you need to visit DVR via Internet, you should setup the inflection of video port at the public Router located in the DVR (shown as Picture 5-11).

Host Port: 9000 Web Port: 8080

LAN IP address of DVR: 192.168.1.101

Input http:// router IP:8080 (192.168.1.101:8080) to you computer IE browser,then you will visit your DVR freely.

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

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 click [Backup] button. When the backup is completed you will be notified. Please click [OK] button to save your backup (shown as Picture 5-14).

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.



Picture 5-14

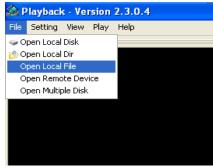


Picture 5-15

5.2.5 Multi player

- 1. Copy backup file to your PC.
- 2、Open multimedia player and click [File→ Local (F)] to find/select the backup file, and then click [open] button

Note: the file type you have selected should be *.264 format.



Picture 5-16



Picture 5-17

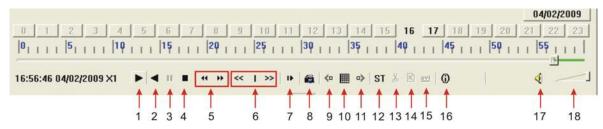
3. Open backup file:



(1), Click [Play] menu (P) on the top of multimedia player interface to select playing the backup file;

Picture 5-18

- (2). Click pop-up menu button on the bottom of multimedia player and [Play-] button, then the backup file will be played on the according channel.
 - (3). The Menu brief on the bottom of multimedia player:



Date: 04/02/2009 recording date for the current backup file shown as right corner;

24H recording time: lie under [Date] menu. Black number button stands for current recording playback is normal recording for the time line.



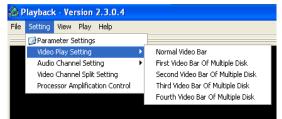
0~60 Minute recording time quantum: Green part on play processing bar stand for recording length for one hour recording.



Recording date and time processing for the current recording file

1	Play	10	All the windows
2	Previous recording file	11	Add window
3	Pause	12	Start
4	Stop	13	Cut
5	Previous frame / Next frame	14	Delete
6	Slow play, Normal play, Fast Play	15	Convert AVI
7	Next Hour	16	OSD
8	Capture picture	17	Mute switch
9	Reduce window	18	Volume adjust

4. Please refer to the below [Video on] setting procedure (System default - video for every channel is on)



Picture 5-19

Setting→Video play setting →Normal video
Bar→Select the channel you want to display→ Select

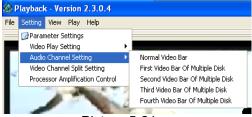
to play the video→Apply→OK



Picture 5-20

5. Refer to the below for [Audio on] setting procedure. (Setting parameter will be available after re-starting multimedia player after [Audio on] set up.)

Setting \rightarrow Audio channel setting \rightarrow Normal video Bar \rightarrow Select the channel you want to playback the audio \rightarrow Select \checkmark the channel has audio files \rightarrow Apply \rightarrow OK.





Picture 5-21

Picture 5-22

After successfully setting the above, when you playback the current channel, you can open the channel's audio function at the same time as the video

5.2.6 Device Management



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

Picture 5-23

5.2.6.1 HDD Management



Click [Main Menu→Device → HDD] to enter [HDD Management] menu (shown as Picture 5-24)

Picture 5-24



Picture 5-25

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 5-25)

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.

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.

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.

USB FORMAT: Use this option to format USB devices.

5.2.6.2 Alarm Set



Picture 5-26

Click [Main Menu→Device → Alarm] to enter into [Alarm setup] menu to setup Alarm warnings (shown as Picture 5-26).

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) and alarm duration time (0s, 30s, 1minute, 2minute, 5minute).

Alarm Type	Function
Video Loss	Sends alarm when DVR can't receive video signal (such as camera damage, cable
Video Loss	broken or damaged or power supply malfunction).
Motion Detection	When an object moves into motion detection area, alarm will be triggered. You
Motion Detection	can adjust sensitivity level to suit the needs of your actual application
I /O Shakur	System can convert alarm signal triggered by external sensor into signal
I/O Status	identified by system.
IIDD 1	When Hard Drive is not detected (HDD damage, power supply malfunction), or HDD
HDD loss	auto-overwrite is off, and free space is not enough, an alarm will be triggered.

List 5-1

Email Alarm Notification

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



Picture 5-27

Click the [Email setup] menu to enter into its sub menu (shown as Picture 5-27).



On the [Email setup] mode, refer to its parameter setup shown as picture 5-28 when setting email alarm to "on".

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.

Picture 5-28

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.



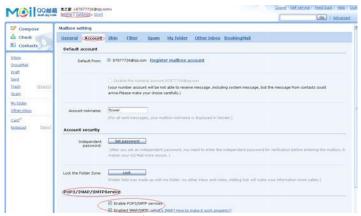
Picture 5-29

SMTP Port: indicates sender port of SMTP server. Generally the SMTP port value is 25, but there are exceptions, for example, SMTP port of G-mail server should be 465.

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 ima ge transmitted from motion detection alarm of DVR. Please clear the images you have received as s oon as possible to avoid overloading your email account. For detailed SMTP protocols settings refer to the below picture 5-30



Picture 5-30

5.2.6.3 PTZ Setup



Picture 5-31

Enter into [Main menu → Device →PTZ Setup] to select the PTZ channel you want to control and set PTZ protocol (Pelco-D, Pelco-P), Baud rate (1200, 2400, 4800, 9600), Data bit (8, 7, 6, 5), Stop bit (1, 2), Parity Check (None, Odd, Even Mark Space) and address code respectively. Please note the above-mentioned channel settings must match the settings of the PTZ camera.

5.2.6.4 Mobile



Picture 5-32

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.

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 procedure:

1. Webcam installation

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.





투부집안 🎥 Start Choose a location to install "digitalsail QQeye": Device ○\Storage Card Space Needed: 482 KB Space Available: 51960 KB Pic 3

17

- 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 9

User name: same as user name setup in DVR under Menu, Devices, 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).







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.







Pic 5

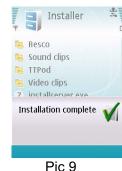


Click the Continue button (red box in Pic 5) on the information box displaying the program and current version. This will display the window in Pic 6.

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 12

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, 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 [] By clicking on the image you can see it full screen as in Pic 13



Pic 13 **5.2.6.5 Motion Detect**



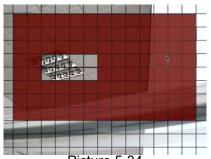
Picture 5-33

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.



MD AREA: This option allows you select the area you want to be sensitive to motion. The channel is separated into a 13*10 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.

Picture 5-34

5.2.7 System Function



Picture 5-35

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.

.

5.2.7.1 Time Set



Picture 5-36

Click the [Main menu > System > Date/Time] in turn to enter into [Time Set] menu. You could not only modify system date, time and format, but also set daylight saving time and mode.

5.2.7.2 Password



Picture 5-37



Picture 5-38

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 5-38), you can setup a user password and administrator password respectively. The password supports up to 6 characters.

5.2.7.3 Video Setup



Picture 5-39

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

(PAL, NTSC) In the USA we use NTSC. Note: This model does not have a VGA port so VGA resolution does not apply

5.2.7.4 Language



Picture 5-40

Enter into [System Language] menu to select the language you want to use on the DVR (shown as Picture 5-40) and click [APPLY] button. The selection will be available after system Auto restarts.

5.2.7.5 Info.



Picture 5-41

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.

5.2.7.6 System Maintenance



Picture 5-42

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 5-42).

When opening auto-maintain function, you can setup system to restart regularly.

5.3 Menu Lock



Picture 5-43

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 5-43).

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

5.4 Video Search

Click pop-up menu video search to enter into [Video Search] menu you search files and playback recordings. For more information on this operation refer to the previous section 5.24.

5.5 PTZ Control



Picture 5-44

We introduced setting PTZ parameters previously in chapter 5.2.5.3. 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 5-44). 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.

5.6 Record

When you want the system to start recording click [Rec] button to start manual recording.

5.7 Stop recording

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

Chapter 6: Net-Viewer Program

6.1 Plug-ins download and installation

Open IE browser and input IP address and web port of DVR, such as http://172.18.6.202:80/ 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.

6.2 Log-in to NetViewer



Picture 6-1

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

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 6-2).

6.3 Main Interface of Net-viewer



Picture 6-3

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)

Menu column include [Live] menu, [Replay] menu and [Setup] 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
PLAY STOP F.F. SLOW NextFrame 264 TO AVI

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.

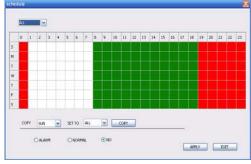
Explanation: Only when DVR is on the status of live display, you could modify and save its parameters remotely at this moment, the settings are available. The modification method to DVR via Net-viewer is the same as local adjustment of DVR.

1 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



Picture 6-6

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

2 Alarm

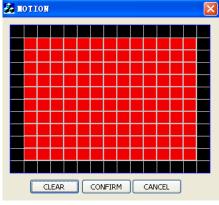


Picture 6-7

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 6-8

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

③ PTZ Control



Picture 6-9

Click [PTZ control] 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).

4 Network



Picture 6-10

Click [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.

Setting



Picture 6-11

6 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.

Click [setting] menu to enter into the menu interface

Click [...] button to preview net-viewer recording

The menu also allows you to set a lower bandwidth for Internet video transmission, set user password, turn

saving path and screen capture saving path.

(shown as Picture 6-11);

daylight saving time on/off, etc.

Picture 6-12

6.3.2 PTZ Control (Numbers 2, 3, 4 on Picture 6-3)

- 2).PTZ control: indicates focus, zoom and iris control of PTZ
- ③. Setting: this option allows you to setup PTZ parameters.
- 4. Invoke: Invoke PTZ settings
- ⑤.Clear: clears current PTZ parameters.

6.3.3 Live Play Control (Numbers 6 through 10 on Picture 6-3)

- ⑥ On / Off Live display []: When Live display status is "On", Clicking the button closes Live display. When "Off" clicking the button opens the Live display.
 - 7.Capture []: Capture Screen image and save to PC as *bmp image.
 - 8. Recording [Property of the continuous of
- - ①. Volume control [-----] Click or slide the control bar to adjust sound volume.

Chapter 7: Specification

User Manual

Video System	NTSC / PAL(Optional)
Compression Format	Video+H.264 / Audio+8kHz*16bit ADPCM
Video Output	4 / 8 / 16 -CH BNC Input/ 2-CH BNC Output
Audio I/O	4-CH RCA audio Input / 1-CH RCA audio Output
Display Resolution	D1-704h576(PAL) 704h480 (NTSC)
Frame rate	Single CH PAL-25 fps 'NTSC-30 fps
Recording Resolution	PAL: CIF(352*288), HD1(704*288) D1 (704*576v NTSC:CIF(352*240),HD1(704*240) D1 (704*480)
Recording Frame Rate (shared)	PAL-25 fps@D1, 50 fps@HD1, 100 fps@CIF NTSC-30 fps@D1, 60 fps@HD1,120 fps@CIF)
HDD	1 SATA HDD, up to 1024GB-USB removable HDD
Video Mode	Always / schedule / manual /motion detection / sensor triggered
Record Pack Time	15/30/45/60min
Video backup	USB flash disk / removable HDD'USB Burner, Network backup to AVI File Format
Playback Mode	PLAY /SLOW /FWD/Frame by Frame
Alarm I/O	4-CH alarm inputs, 1-CH alarm output
Alarm Type	Motion/ sensor triggered/Video loss/HDD Space/HDD Loss
PTZ Control	Built-in RS-485 port, supports PELCO-P & PELCO-D
USB 2.0 Port	Supports USB mouse'removable HDD'USB flash drive to backup to AVI file and upgrade system
Ethernet	One RJ-45 10M/100M self-adaptable Ethernet interface
Network Protocol	Supports TCP/IP, DHCP, UDP, DDNS, PPPOE network Protocol
Network Function	Support preview live display remotely via mobile phone and real time monitoring via IE-based
Network Function	browser and/or network, and support parameter setting of DVR remotely.
Power consumption	1015W (exclude HDD)
Power Adapter	DC 12V / 5A
Working Temperature	50°F to 104°F (10¢ to 40¢_
Working humidity	10%~90%

Chapter 8: Appendix

8.1 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.

Recording alarm setting			Recording Mode				
		Alarm icon	Recording	Timing recording		rding	Manuel Recording
			after power on	AMR	NLR	NOR	Wander Recording
	MD alarm	M	AMR	AMR	NLR	\perp	NLR
Alarm	I/O triggered alarm	I	AMR	AMR	NLR		NLR
mode	HDD loss, HDD space full	H		1	上	\perp	
	Video Loss	Video Loss	上	上	1	\perp	

List 8-2

When DVR is on recording mode, [I] icon or [I] icon will occur on the screen. But there are [I] icon and [I] icon on the screen, those are not always recording or starting recording. When [I] icon occur on the screen, that mean only alarm occur. After setting recording mode freely for every time quantum at [Recording mode > Schedule] mode, recording file for the time quantum will be saved as normal recording file once alarm was triggered during [general recording] mode. However, recording file will be saved as alarm recording file once alarm was triggered during [alarm recording] mode.

8.2 Email server check list (The below info only for your ref.)

(Web site)	Email address	Sender server (25)	Receiver server (110)		
	@163.com	smtp.163.com	pop3.163.com		
	@vip.163.com	smtp.vip.163.com	pop.vip.163.com		
www.163.com	@188.com	smtp.188.com	pop.188.com		
<u>www.103.com</u>	@126.com	smtp.126.com	pop3.126.com		
	@netease.com	smtp.netease.com	pop.netease.com		
	@yeah.net	smtp.yeah.net	pop.netease.com		
www.163.net		smtp.163vip.net	popx.163vip.net		
www.sina.com	@sina.com.cn	smtp.sina.com.cn	pop3.sina.com.cn		
www.yahoo.com	@yahoo.com.cn	smtp.mail.yahoo.com.cn	pop.mail.yahoo.com.cn		
www.yanoo.com	@yahoo.com	smtp.mail.yahoo.com	pop.mail.yahoo.com		
www.google.com	@gmail.com	smtp.gmail.com(465/587)	pop.gmail.com(995)		
www.china.com	@china.com	smtp.china.com	pop.china.com		
www.sohu.com	@sohu.com	smtp.sohu.com	pop.sohu.com		
<u>www.163.net</u>		smtp.163.net	pop.163.net		
www.163vip.net		smtp.163vip.net	pop.163vip.net		
www.tom.com	@tom.com	smtp.tom.com	pop.tom.com		
www.263.net	@263.net	smtp.263.net	pop3.263.net		
x263.net		smtp.x263.net	pop.x263.net		
263.net.cn		smtp.263.net.cn	pop.263.net.cn		
www.qq.com	@qq.com	smtp.qq.com	pop.qq.com		
www.139.com	@139.com	smtp.139.com	pop.139.com		
www.21cn.com		smtp.21cn.com	pop.21cn.com		
21cn VIP mail		vip.21cn.com	vip.21cn.com		
etang.com		smtp.etang.com	pop.etang.com		
elong.com:		smtp.elong.com	pop3.elong.com		

List 8-3

User Manual

8.3 Usage Maintenance

- 1 Please make sure DVR keep away from heating source.
- 2 Clean the internal dust regularly, keep DVR aeration well and be easy to heat dissipate.
- Please not plug in RS-232 and RS-485 when power is on to avoid any damage to the port.
- 4 Please check the HDD cable and data cable to avoid the cable aging.
- 5 Please avoid other electronics device interfere video/audio signal of DVR a.s.a.p., or static electricity and induced voltage damage to DVR.
- 6 Suggest user replace BNC cable regularly to keep signal input stable.





4 video outputs



8 video outputs



16 video output

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