User's Manual

Model NO: HDVR7-702X

7" LCD Digital Wireless DVR w/Network



PLEASE READ CAREFULLY AND SAVE

This manual contains important information about this product's operation. If you are installing this product for others, you must leave this manual -or a copywith the end user.

Please read before installing and using this product

Damages caused by non-compliance with this operating manual will void the warranty! We will not assume any liability for damages to items or persons caused by improper handling or non-compliance with the safety notices! Any warranty claim will be null and void in such cases.

- 1. Do not drop, puncture or disassemble the camera; otherwise the warranty will be voided.
- 2. Avoid all contact with water, and dry hands before using.
- 3. Never tug on the power cords. Use the plug to unplug it from the wall outlet.
- 4. Do not expose the camera to high temperature or leave it in direct sunlight. Doing so may damage the camera or cause camera temporary malfunction.
- 5. Use the devices with care. Avoid pressing hard on the camera body.
- 6. For your own safety, avoid using the camera or power off the camera when there is a storm or lightning.
- 7. Remove the power adapter during long periods between usages.
- 8. Use only the accessories and power adapters supplied by the manufacturer.
- 9. To meet the regulations pertaining to parental responsibility, keep the devices out of the reach of infants.
- 10. Check power cables, do not get crushed or damaged by sharp edges whenever the devices are in operation.













FCC Compliance Statement:

This device complies with Part 15 of the FCC Rules.
Operation is subjected to the following two conditions:
(1) this device may not cause harmful interference, and
(2) this device must accept any interference
received, including interference that may cause
undesired operation.



Products with CE Marking comply with EMC Directive (2004/108/EC); Low Voltage Directive (73/23/EEC); R&TTE(1999/5/EC) issued by the Commission of the European Community. Compliance with these directives implies conformity to the following European Norms:

EMC: EN 301 489 LVD: EN 60065 Radio: EN 300 328

FCC/CE WARNING

This equipment has been tested and found to comply with limits for a Class B digital device, pursuant to Part 15 of the FCC rules and ETSI (EN) 300 328. These limits are designed to provide reasonable protection against harmful interference in residential installations. This equipment generates, uses, and can radiate radio frequency energy, and if not installed and used in accordance with the instructions, may cause harmful interference to radio communications.

However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause interference to radio or television equipment reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

- -Reorient or relocate the receiving antenna.
- -Move the equipment away from the receiver.
- -Plug the equipment into an outlet on a circuit different from that to which the receiver is connected.
- -Consult the dealer or an experienced radio/television technician for additional suggestions.

You are cautioned that any change or modifications to the equipment not expressly approved by the party responsible for compliance could void Your authority to operate such equipment.

Disposal

If the camera system no longer functions or can no longer be repaired, it must be disposed of according to the valid statutory regulations. Disposal of spent batteries / accumulators:





You are required by law (Battery Ordinance) to return all spent batteries and accumulators. Disposing of spent batteries/accumulators with common household waste is prohibited! Batteries/accumulators that contain hazardous substances are marked with the symbols on the side. These symbols indicate that it is prohibited to dispose of these batteries/accumulators in the household waste.

The abbreviations for the respective heavy metals are: Cd= cadmium, Hg= mercury, Pb= lead. You can return spent batteries and accumulators that can no longer be charged to the designated collection points in your community, outlets or wherever batteries or accumulators are sold. Following these instructions will allow you to fulfill the legal requirements and contribute to the protection of our environment!

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14. Question: Why can't remote control work?

Answer: :

- ♦ The address of remote control is not correct
- ♦ The distance of remote control is too far or the angle is too biased
- ♦ Remote control batteries run out
- ♦ Remote control is damaged or the front panel of dvr is damaged

15. Question: Why can't WEB log?

Answer:

- Please check the network whether it's connected. And check if the panel LINK or 100M LED display normal; use ping xxx.xxx.xxx (DVR IP) to check if the internet is well linked
- ♦ Recommended Windows XP or Vista operating system, using IE6.0 browser or IE7.0 browser
- ♦ ActiveX control is been blocked. Please manual install ActiveX control.
- ♦ Please install DX8.1 and upgrade your video card driver

16. Question: Is there no picture or not clear when you preview the recording or playback the recording by IE?

Answer:

- ♦ If you visit DVR by IE, please choose "Wan" in "web environment"
- Please try to "Close windows" by the right mouse button, and try to "Open windows"

17. Question: Why does it display "other members are setting....." while setting DVR by IE?

Answer:

Please check the DVR configuration interface is in the state of open. Please exit DVR.

18. Question: Why users can not resume the system while it is in standby mode?

Answer:

♦ Press the "standby" key for 5 sec on Remote controller to resume. Any other keys are not available.

Answer:

- ♦ Setting wrong, or users didn't click "Edit" to make it valid
- ♦ Battery not connected well
- ♦ The battery is invalid. Please change one.

10. Question: Why the "Stop recording" by the right mouse button does not work, how to stop recording?

Answer: :

- The "Stop recording" by the right mouse button is only suitable for Manual recording. It can't stop recording when it's in "start recording" or the video in video plan.
- ♦ If you want to stop recording, please set the time is not recording.

11. Question: How much space of HDD for recording per hour?

Answer:

- ♦ Each channel takes about 14Mbyte for audio recording
- ♦ HDD space cost is related with "Best, Good, Middle" in "Record mode>Bit rate" and the video size of the period. If the video is still, HDD cost will be small; if the video is moving, HDD cost will be large. "Best" will take 320Mbyte of each channel per hour; "Good" 50~100Mbyte of each channel per hour when video is still or few moving, 100~200 Mbyte of each channel per hour when video has big moving or much moving; "Middle" 50~100Mbyte of each channel per hour when video is still or few moving, 100~150 Mbyte of each channel per hour when video has big moving or much moving.

12. Question: Why it can't do motion detection?

Answer: :

- ♦ The setting of the area of motion detection is not correct.
- ♦ Low sensitivity

13. Question: CD-writer/USB backup error

Answer:

- ♦ The data exceeds the capacity of backup device
- ♦ The backup device incompatible
- ♦ The backup device is damaged

Chapter 1 INTRODUCTION

1.1 Main Feature

HDVR is 4channel CIF resolution digital video recorder. Both of them have local recording, playback, support treble code remote network surveillance, data backup, parameter setting, motion detection.

1.2 Product features

- ♦ Advanced Linux:
- ♦ H.264 compression, support D1;
- ♦ USB IE to upgrade software;
- ♦ USB mouse control;
- ♦ PTZ (not used temporarily) and network function;
- Multi-Language is selectable;
- Support 2 channel digital wireless camera.
- Support mobile surveillance;
- ♦ Support network center management system(CMS);
- Remote power supply for 4 channel cameras;
- support TV function;
- ♦ Applied in large surveillance area such as supermarket, gas station, factory etc.

Model NO.	HDVR7		
Operation System	Embedded Linux		
Compression	H.264		
Video Input/Output	2 channelsBNC input/1 channel BNC output		
Audio Input/Output	2 channels RCA input/1 channel RCA output		
Display Frame Rate	NTSC: 120fps (4 × 30fps)		
	PAL: 100fps(4 x 25fps)		
Record Frame Rate	NTSC: 120fps(4 × 30fps)		
Record Flame Rate	$PAL: 100fps(4 \times 25fps)$		
Record Mode	Manual, Schedule , Motion Detection Alarm Trigger		
Image Quality	CIF/HDI/DI selectable		
Record Resolution	NTSC: 704 ×480(D1). 704 × 240(HD1). 352 × 240 (CIF)		
Record Resolution	PAL: 704 ×576(D1), 704 ×288(HD1), 352 ×288 (CIF)		
Playback Mode	1 channel or 4 channels		
Search Mode	By time/By event/By channel		
HDD Internet	Support large-capacity of SATA Hard Disk		
Remote Control	Yes		
USB Mouse Control	Yes		
USB Port	Support USB 2.0		
PTZ Control	Yes (Option)		
Language Support	Chinese, English, Spanish, French, Polish, Portuguese, German, Russian, Turkish, Thai Language.		
TFT Monitor	7" Digital TFT		
VGA	No		
Software Upgrade	USB/IE		
Mobile Surveillance	Support Symbian s60 v3.0, Mobile Pocket PC operation system Apple Iphone MAC system		
Digital Wireless Camer	NA		
Power Supply	DC 12V/5A		
Remote Power Supply	Yes		
Working Temperature	-10℃~+50℃		
Working Humidity	10%-90%		
N.W	2500g		
Meas(L*W*H)	230+200+130mm		

Chapter 2 ENTIRONMENT ADAPTABILITY

Notice

For the saftly using DVR and prolonging device life, please pay attention to the following details:

- When installing device, please comply with all the electric product safty criterion;
- 2 Power and ground:
 - ♦ Do not touch the power and DVR with a wet hand
 - ◆ Do not drop liquid onto DVR
 - ♦ Do not put others on DVR
 - ♦ Please use soft dry cloth when clean DVR, do not use chymistimpregnant
 - ◆ When the power line connects with jack, even don't startup device. There still have voltage
 - ◆ If you do not use device for a long time, please take the power line away from jack.
- 3 Humidity requirement

Please install the device under good conditions, it's better to prevent from humidity, drip sites, etc.

Chapter 3 Device operation manual

In device operation, the enter key on remote control has the same function with mouse left click.

3.1 Remote key instruction

3.1.1 Remote control



Handheld IR Controller Key Functions:

[0-9**]** keys: During setup, number keys are used to input values. For viewing channels 1, 2, 3 and 4, use 1, 2, 3 and 4 on numeric keypad respectively.

▲, ▼: Up, Down directional keys: Move selection up and down in setup menu.

▶: Left, Right directional keys: Move cursors left or right in setup menu.

[: Switch 4 Channels;

[Fast fordward the video while playback. press to return to normal speed;

【STANDBY】: Reset the MDVR to Power on and Power off mode. (standby and start up);

[LOGIN/LOCK]: If the security is enabled in the setup, use LOGIN/LOCK key to enter the user setup. It is

Answer:

- ♦ Check the DVR whether it use by DC 19V power adaptor
- ♦ Check the HDD whether it is formatted in DVR
- ♦ Check the HDD power line and the data line whether they are well-connected or bad
- ♦ The HDD has problem
- ♦ The SATA port has problem

5. Question: What's meaning"R""H" show in interface?

Answer:

- ♦ "R"means the channel is recording
- ♦ "M" means the channel is being motion detection
- ♦ "H"means there is no HDD, the HDD is bad or the space of HDD is full

6. Question: Why DVR has the problem of real-time image, such as video image color, serious bright distortion?

Answer:

- ♦ BNC output, select PAL and NTSC is not correct, the image will be black and white
- ♦ DVR does not match with monitor
- ♦ The video transmission distance is too far
- ♦ The setting of dvr color, brightness and so on is wrong

7. Question: Why there is no voice when monitoring?

Answer:

- ♦ Check if it is using positive sound box or speaker, users can have short circuit to check.
- Is activation of the audio source connected to the video channel? You can click to full-screen to determine.

♦ The hardware of DVR is fault

8. Question: Why there is no voice when playing back?

Answer:

- ♦ Setting problem: open audio-video item
- ♦ Check the audio whether it is closed in playback interface

9. Question: Why the system time is not right?

Chapter 7 FAQ

If your problem is not in below, call our hotline and we will resolve any issues or problems you may have.

1. Question: Why DVR can't work after starting it?

Answer:

- ♦ Check the adaptor input
- ♦ Check the on-off power line, does it well-connected?
- ♦ Check the on-off power
- ♦ Check the upgrade procedure whether it's wrong
- ♦ Check the main board of DVR whether it's ok

2. Question: Why DVR will automatic reboot or stop after starting DVR several minutes?

Answer:

- ♦ Instability or low input voltage
- ♦ Bad track hard drive or the line of hard drive is bad
- ♦ On-off power supply is not enough
- ♦ The front-end video signal instability
- ♦ High temperature, too much dust, too bad the DVR operating environment
- ♦ The main board is not well-connected with other board
- ♦ The hardware of DVR is fault

3. Question: Why there is no output of single channel, multi channel or all channel video?

Answer:

- ♦ Please check the adaptor of camera whether it is well-connected
- ♦ Please check the connect line for connecting video input and video output in the back board of

DVR

- Please directly insert the video source into the display device, and check whether the video source and display device aspect of the problem.
 - ♦ Check the brightness of the picture is 0, and bring it back to its original default setting
 - ♦ No video input signal or too weak
 - ♦ Display settings in the preview set to be closed
 - ♦ The hardware of DVR is fault

4. Question: Why the DVR can't record after startup and the interface shows "H"?

important to remember the password due to without restoration function. Log in(to enter into "User ID select" and "Password" input interface) and lock functions (To exit setup and operation)

[MENU]: Press OSD for main menu:

[PTZ]: PTZ control, press this key to enter into PTZ control interface when at single live view;

[EXIT]: Exit to the preview or return to the last menu;

【RECORD】: Start manual record

[STOP]: Stop manual record

【EXTRA 】 For future use

3.1.2 Mouse Operation

You can use mouse to make operation of the menu besides IR remote controller. (The operation is the same as PC Windows). Please inserts the mouse into USB Port.

Click right key	Click the right key on the live view to enter into shortcut menu for selectable		
	Click the left key to enter into the setting interface in the shortcut menu.		
	Double Click the left key to zoom in the window on the live view and playback video. Double		
	click the left key can exit to the live view and playback multi-window interface.		
	1. Volume adjustment, color adjustment VGA border operation. It is for		
	setting the single channel and color adjustment. If it is multi-window, please use		
	the left key to select the single window.		
	2. The remark when click the left key, color adjustment, VGA border is as follow:		
Click left	a. There is a sticker to show the volume on the volume adjustment interface. Move the		
key	mouse to the corresponding position and click the left key. The right side of sticker will		
	show the volume ,click "x" to exit.		
	b. Color adjustment can refer to the volume adjustment interface operation.		
	When there are many options in the option frame, click left key to see down-pull menu.		
	To click the left key on the playback interface can make >> means forward, << means raw, >>I		
	means Slow play, I> means Pause frame play,> means Play, X means exit.		

	1. In the input frame, click the left key can activate the keyboard. The number, symbol, English		
	can be input by clicking the mouse.		
	2. Pinyin also can be input by the soft keyboard when enter Chinese, the method is the same as		
Click left	remote control. You can use the left/right key to turn over the page when check on		
key	Pinyin/Chinese word.		
	3. When input number, click the right key, the number soft keyboard will bob up first, and then		
	use the left key to select the corresponding numerical value. Also click the left key to exit the		
	number keyboard.		
	1. Press the left key to move the mouse can adjust the parameter on the volume, color, VGA		
Mouse	border interface. And the corresponding parameter will be display at the same time.		
move	2. In the Motion Detection setting interface, you can use the left key to drag the frame to set the		
	motion detection area.		

Chapter 6 Device Part

6.1 Check DVR part

1. Digital Video Recorder 1 SET:



2. Standard Part



3. Optional Part



5.4 Camera Specification

	Camera
Communication Range	200 metres in open space
Resolution	640 x 480 (VGA)
Operating Temperature	-10°C∼ +50°C
Operating Voltage	DC 5V/1A
Current Consumption	650mA(max)
Night Vision Range	3~8 m
Dimension	182 x 64 x 47 mm

3.2 System Operation

3.2.1 START-UP

Connect the power adapter to DVR. When start up the DVR, 【POWER】 LED will be on and 4 images will be display on the screen. If it has setup ignition recording or time recording, the system will record automatically and the corresponding LED will be on, and the system work normally.

Remark:

- If there is no HDD in device, or the device didn't read the HDD, or the HDD didn't be formatted it will
 display an 【H】 in the video preview interface.
- You must format the HDD in the DVR before first using. The steps as follows: menu > HDD management > format. After formatting, the system will restart.

3.2.2 SYSTEM LOGIN

Remark: default device ID is: 00000, and there is no password. In order to keep safe, please modify the user password and change the device ID in the base setup. You can setup user and admin password, Admin has all authorities while user has limited authorities of viewing image, searching and play backing video. When you input a password, the system will automatically match and offer different password with different authorities.

When DVR started, click right key by mouse. If you open a password, it will enter into user login interface. The picture is as follows:



Ddvice ID: You just need to enter the device ID as the right frame.

Password: enter the admin password or user password.

3.2.3 GUI OPERATION

The main menu include "SEARCH", "RECORD", "HDD", "BASIC", "ADVANCE", and "Exit".



Remark: You must press "APPLY" to make the setting for submenu valid. It will be no use when exit directly.

There is a special feature of this DVR: when you move the mouse somewhere, the explanation information will be showed automatically.

1 RECORD SEARCH

Move the cursor to 【RECORD SEARCH】 (Icon highlighted when selected) ,press 【 OK 】 to enter into the setting interface.

There are three methods of searching record.

Method 1: playback by date

Date input: You can adjust the checking date and time, press [OK] or input the number directly to adjust the year, month, date. And then input time in the next box, click "playback" and then you can see the recording video.

Method 2: playback by recording status:

Input the date, click 【search】 and you can see the recording status on this date.

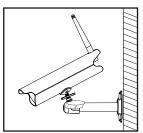


Instruction:

MONTH: It will show all the recording status in this month. Green means normal recording, Red means
alarm recording and the default color means no video. Click any date in this frame can search the recording

5.3 Camera Installation

Step1: Digital Wireless Camera Installation

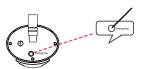


Step2: System Operation

- A. Make sure all connections are correct as above diagram instructed. Press the Power Button on DVR back Panel to turn on the LCD display. CH1 CH2 will display images of 2 Digital Wireless cameras.
- B. Digital wireless camera and riceiver are paired in factory. Follow below steps for Digital Wireless Camera Pairing if necessary!.
- ⚠ It is highly recommended to pair the camera before hardware installation.
- ⚠ Before pairing the camera, make sure camera is power ON, camera status indicator as shown.











- a. Press (PAIR1 or PAIR2)on the receiver..
- b. System will count down within 60 seconds, system
 message as shown:
- Within 60-second count down, press the Pair Key on the back of camera.
- d. Once pairing Completed, camera and receiver status indicators as above shown.

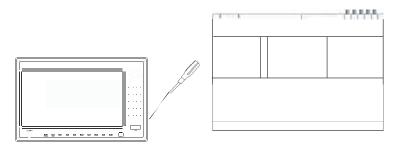
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5.2 DVR HDD Installation Demonstration

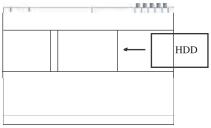
5.2.1 HDD Installation

Attention: To prevent any damage to DVR and HDD, it is better to ask professionals to install HDD.

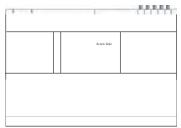
1) Uninstall the DVR and then you will see one HDD plate as following.



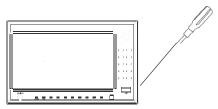
2) Connect HDD line as follows:



3) Install the HDD onto HDD plate as shown in the following diagram, and then screws around.



4) Fix the HDD plate on the DVR device and then cover the DVR and screw.



Notice: Newly installed HDD should format before recording.

status of that day. The searching result will be showed in the below date frame.

2. DATE: It will show all the recording status in this day, you can playback the record file in this period via click the corresponding period. Every grid stands for one hour.

Method 3: playback by file list:

Input the searching date, click "SERACH" and you can see the recording status. Click an exact day and then click "file list" and then you can see the interface of "detail file".

CHANNEL: There are CH1, CH2, CH3, CH4 and QUAD, 5 options in total. Press 【 ok 】 and you can change the channel to be displayed.

TYPE: There are all, normal and alarm, totally 3 options. Press [Enter] and the content will be displayed in a list.



Instruction:

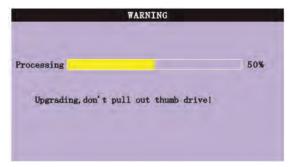
- 【File List】, "Channel" number shows the recording file belong to number showed channel record.
 "Recording time" is the recording beginning time to end time. "SIZE" is the size of this file (Unit: MByte),
 "TYPE" is the type of recording file. There are three types: all normal and alarm, "Backup" in the lower right corner of menu can backup the selected files to USB storage;
- 2. Moving the cursor to select the files, and press [OK] to enter into playback interface of more than one channel have recording files during selected time, will playback all at the same time;
- 3. If let 【RECORD TIME】 available in 【BASIC SETUP】, it will show the date/time when playback record file; If 【RECORD TIME】 is not available, it will not show the time;
- 4. When playback, press [SLOW] to let the playback slow; press [FORWARD]. [REVERSE] to speed, reverse play; press [PAUSE/STEP] to pause or playback frame by frame; Press [Exit] to exit from playback and return to the Previous menu;
- 5. When selected recording file playback finished, it will continue following files; if no followed record file, it

will return to 【File List】 automatically

2. BACKUP

Via USB Storage to backup, connect USB device via USB2.0 port before backup.

Select the recording file by direction keys, and press [Enter], There will be a " $\sqrt{}$ " sign if select is ok, and then press [BACKUP] to begin backup as follow:



Instruction:

- 1. When USB device space is less than recording file, the system will show "Space no enough".
- 2. Disconnect USB device directly when backup finished.

3 RECORD MODE

Move the cursor to 【RECORD】 (Icon highlighted when selected), and press 【Enter】 to enter into the setting interface(As follow showed). use direction keys and cursor to change the options.



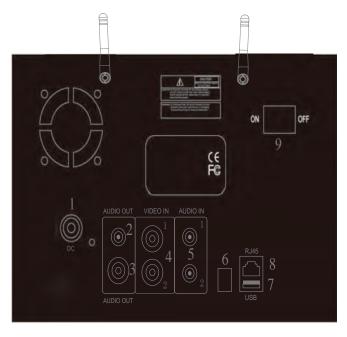
CHANNEL: ON: Means the channel enable for recording.

RESOLUTION: There are D1,HD1,CIF three options, D1 means the resolution best,

corresponding to D1, HD1, CIF resolution.

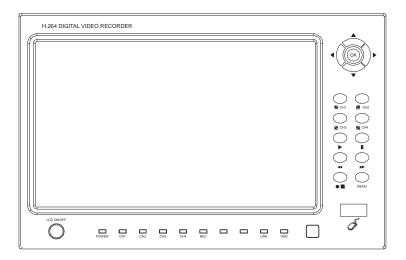
QUALITY: There are BEST, FINE and NORMAL three option, They are corresponding HIGHEST, HIGH and NORMAL data stream standard

5.1.3. The definition of buttons and connectors on rear panel



Interface	Connection Description
1 DC12	12V DC power input
2 AUDIO OUT	This interface provides audio signals to external devices such as speakers. While in the audio playback will be output of this connector.
3 VIEDO OUT	Connection Monitor with this device.
4 VIEDO IN	Connection wired camera(CH1/CH2) with this device
5 AUDIO IN	Connection wired camera(CH1/CH2) with this device
6 485A	PTZ function jack
7 USB	For software upgrade
8 NET	RJ-45 network interface, can be connected to cable for network remote view or control.
9 Power Switch	Power key for unit

5.1.2 The Definition of Bottoms and Connectors on Front Panel



Туре	Name	Illuminations
	Direction key	Direction key include: up 【▲】、down【▼】、left【◀】、 right 【▶】 four buttons, which can move cursor to setup
	OK	Confirm operation
	Start/Stop key	【●■】Start/Stop button
Control	Speed choice	[] fast forward button [] fast reverse button
button	Pause key	【 】 pause key
	Single image	CH1、CH2、CH3、CH4 single image choice
	palyback	PLAY recording playback button
	MENU/EXIT	Enter into main menu under live view, or exit sub menu

Power (red):steady light when system is power on .

CH1/CH2/CH3/CH4 (Red):steady light when video loss for certain channel.

REC(Green):steady light when record is processing.

LINK(Green):steady light when styetem is connected to internet.

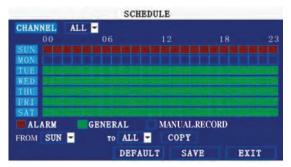
HDD(Green):flash when HDD is installed to HDVR system.

AUDIO: ENABLE: Means enable the audio recording for all channels, DISABLE: Means disable audio recording REC.MODE

POWER UP: Means DVR start to record when power on.

It is not available to click the manual/stop record in shortcut menu when setting the record mode as power up.

TIME: Recording as the schedule. When chose Time recording, 【Recording period setting】 will be show on in the right. Move cursor there, and press 【Enter】 to the interface as below:



CHANNEL: You can select all channels or just single channel

REC. MODE: There are ALARM, GENERAL, MANUAL RECORD three modes, if set for detailed time, please set in [Recording period setting] and then press [Enter]. Impress color means no recording during this time. Different colors mean different recording modes: Red means alarm recording, green means normal recording, blue means no recording.

RECORD SIZE: Press [Enter] or [+]/[-] to choose the record size time.

There are 15min, 30min, 45min, 60min four options, that means it will pack as the mode you selected

4 Hard Disk Management.

Move the cursor to 【HDD】 (Icon highlighted when selected) ,press 【Enter】 to enter into the setting interface, and you can use direction keys and cursor to change the options.



HDD STATUS: There are three status available, normal, un-format, No HDD. If HDD can not run normally (including unformed and no HDD), there is a **【H】** display on video preview interface.

- 12 -

OVERWRITE: ENABLE: means when HDD space is less than 4G, it will delete the earliest recording file, deleting can stop until the space is no less than 10G; DISABLE: means when HDD space is less than 500M it will stop recording, and an prompt will display "please shutdown and replace HDD"

FORMAT: Move cursor to select device and press [APLLY] to format

FORMAT Flash Disk: Move cursor there to select device and press [APLLY] to format

Note: DVR system will restart after HDD formatted, but no restart for U Flash disk format.

5 BASIC SETUP

Move cursor to select "BASIC SETUP" (The big icon means select ok)and press 【ENTER】 to enter into the system language setup interface.



Basic setup includes language, date/time, password, display, and video/audio and exit six options.

6 SYSTEM LANGUAGE SETUP

Move cursor to select "system language" (The big icon means select ok)and press 【ENTER】 to enter into the system language setup interface.



Multi-language is selectable(10 kinds total), press **[ENTER]** or **[+]** / **[-]** to choose.

Remark: System will restart after changing language.

7 DATA/TIME SETUP

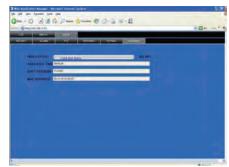
Move cursor to select "date/time" (The big icon means select ok)and press 【ENTER】 to enter into the

BANDWIDTH: Set the amount of bandwidth in kbps (128k, 192k, 256k, 384k, 512k, 1024k) that you want to allocate for traffic that matches internet, this bandwidth depends on the place, normally around 256 or 384 kbps. FILE SAVE PATH: capture picture and recording video save path.

IE login password and DST settings you can check as DVR setting.

4.4.16 HOST INFO

Click "HOST INFO" to enter into system information interface (see below picture), this interface shows HDD status, remain record time, firmware version, MAC Address, and all the information is fixed.



Chapter 5 DVR Installation Guideline

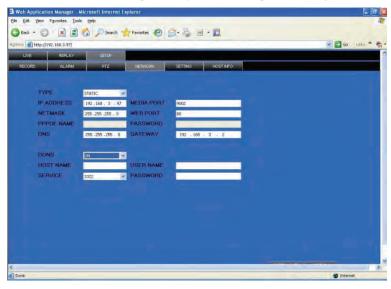
5.1 Product Overview

5.1.1 Product Photo



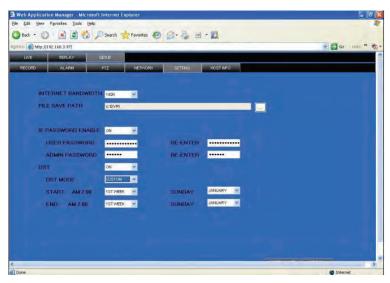
4.4.14 NETWORK

Click "NETWORK" to enter into setup interface; you can check the parameter settings as in GUI of DVR.



4.4.15 System setting

Click" SETUP" to enter the system setting interface as follows:



date/time setup interface.



DATE: Press [Enter] or [+] / [-] or press number key to chose the date.

DATE FORMAT: Press ENTER to switch between the date patterns, there are YY-MM-DD and MM/DD/YY two options. When chose the date format, left date will be displayed with corresponding format.

TIME FORMAT: Press ENTER to switch between the time patterns, there are 12 HOURS and 24 HOURS two options. Left time will be displayed with corresponding format.

Daylight Saving Time: open and enter into DST pattern: default and custom.

The default DST time starts at 02:00 in the second Sunday on March, and ends at 02:00 in the first Sunday on November. In addition, user can choose beginning and end DST time according to different demands. When system time enters into DST beginning time, it will be in the range of DST, then DST takes effect, system time will add 1 hour to become DST, when DST ends or closes, DST will minus 1 hour to ge back to system time.

Remark: Have to move the cursor to the 【MODIFY TIME AND DATE】 and press 【APPLY】 to save it, otherwise it won't save the modification if you exit this interface.

8 PASSWORD

Move the cursor to \P PASSWORD \P (Icon highlighted when selected), press \P to enter into the setting interface.



DEVICE ID: Press [+] / [-] or number key to setup the ID

PASSWORD: 【Enter】 key to choose whether password enable or disable. "enable" means user need insert password when log in, "disable" means without password and user can enter into main menu directly.

USER PASSWORD: Press number key to setup.

ADMIN PASSWORD: Press or number key to setup.

NETWORK PW CLEAN: Users need to input password at remote PC for viewing if the remote login is protected by password

9 DISPLAY SETUP

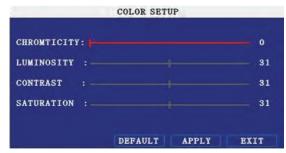
Move the cursor to [BASIC SETUP] (Icon highlighted when selected), press [Enter] to enter into the setting interface.



NAME: press **[**Enter**]** to enter into the setting interface.

POSITION: press **[**Enter**]** to switch name location, there are 5 options: bottom left, top left, bottom right, top right and OFF.

COLOR: press **[**Enter**]** to enter into setting interface, as following:



Press [Enter] or directly drag the cursor to set colors, including chromaticity, luminosity, contrast and saturation, press [APPLY] to save the parameters.

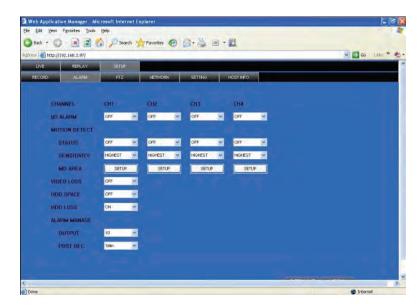
PREVIEW: ON: Means the channel is allowed to view the live mode

PREVIEW TIME: ON: Means displaying system date and time above video.

RECORD TIME: ON: Means clock will display in the playback of current file

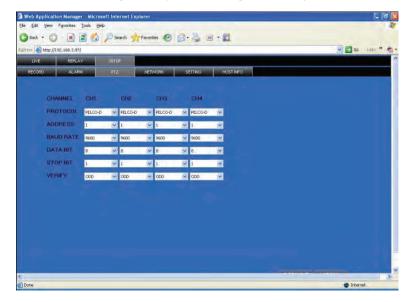
10 VIDEO/AUDIO SETUP

Move the cursor to 【VIDEO/AUDIO SETUP】 (Icon highlighted when selected), press 【Enter】 to enter into setting interface.



4.4.13 PTZ

Click "PTZ" to enter into setup interface; you can check the parameter settings as in GUI of DVR.





SOURCE FILE: Click to setup the H.264 file to convert

DESTINATION FILE: Click to setup the directory for saving avi file

After setting, click Convert , file convert start, the convert progress bar (see below picture) will see the progress of convert.



4.4.10 SETUP

Click "SETUP" to enter into setup interface, this interface include record, alarm, PTZ, network, setting and system information six menus.

4.4.11 RECORD

Click "RECORD" to enter into setup interface; you can check the parameter settings as in GUI of DVR.

4.4.12 ALARM SETTING

Click "ALARM" to enter into setup interface; you can check the parameter settings as in GUI of DVR.



VGA Resolution: press **[** Enter **]** to setup resolution, there are 1024*768 and 800*600 two options.

Camera System: Press [Enter] to switch PAL between NTSC for camera.

Loop Time: Set up the scan time interval.

Volume Setup: Move the cursor to 【Volume Setup】, press【Enter】enters into volume setup interface, setup volume by number key or dragging cursor.

Remark: Unit will restart when modify the camera system.

11 ADVANCE SETUP

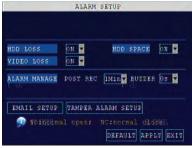
Move the cursor to 【ADVANCE SETUP】 (Icon highlighted when selected), press 【Enter】 to enter into setting interface. Picture is below:



Advanced Function include Alarm settings, system information, Motion detection, mobile phone monitoring, system maintenance, PTZ and network setting.

12 ALARM SETUP

Move the cursor to [ALARM SETUP] (Icon highlighted when selected), press [Enter] to enter into setting interface. Picture is below:



HDD LOSS: turn on means it will trigger an alarm if there is no HDD, and it will display an **[H]**On the bottom left of channel 1 in the live view

HDD SPACE: turn on: If the space is less than 500M, there is a remark in live view: No enough space, please change HDD after shutdown.

VIDEO LOSS: turn on: when one channel has no video input, it will display "video loss" in live view.

BUZZER: buzzer calling time setup when alarm triggered: 0 second, 10 seconds, 20 seconds, 40 seconds or 60 seconds

POST REC.: post recording time setup: 30 seconds,1 minute,2 minutes or 5 minutes

13 SYSTEM INFO

Move the cursor to [SYSTEM INFO] (frame is red when selected), press [Enter] to enter into system info interface, on this interface mainly display system hardware features and firmware version, include: software version, MAC address, serial number. Picture is below:

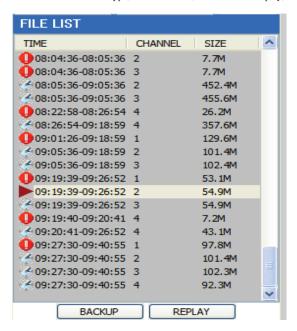


14 MOTION DETECTION

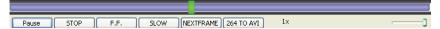
Move the cursor to 【MOTION DETECT】 (Icon highlighted when selected), press 【Enter】 to enter into motion detect setting interface. Picture is below:

click the date will search that days' recording file list. For example, the above picture display 2008, Dec. 3rd,4th,5th,6th,8th,9th,10th,11th,12th,17th,18th have recording video, and system date is 18th, Dec, 2008, currently search date is 17th, Dec.

At the below of calendar select channel and type, click SEARCH, the result will display, as follow.



Double click one item of listed recording video, the recording video will playback, meanwhile the file icon will change to , and will occur the below picture play buttons:



The above purple progress bar shows download progress, green progress bar shows playback progress



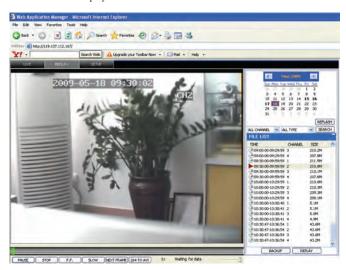
264 TO AVI Convert H.264 file to H.avi file, click this button access into file convert setting interface, as follow.

You can open, shut down and start this channel's record via shortcut menu.

Click right key at one live view screen, click" open all windows" or "close all windows", will quickly open/close all windows.

4.4.9 REPLAY

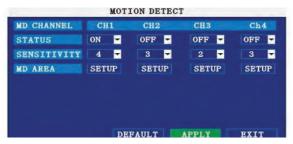
Click" REPLAY" to enter into playback interface.



Click right up of calendar interface and , to setup the month for searching, click" refurbish", at the calendar interface will display the recording information of current month



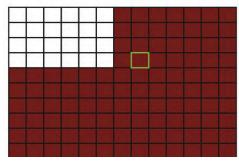
The highlighted date means that day have recording video, RED FRAME means the date is system date,



CHANNEL SWITCH: Each channel has corresponding channel switch, press **[OK]** to turn on or turn off the motion detection for each channel..

SENSITIVITY: each channel has corresponding sensitivity setting, including four standards high, relative high, medium and low, press [OK] key to switch

MD AREA: each channel has corresponding regional motion detecting setting, move the cursor to corresponding [setup], press [OK] to enter regional setting interface, red area means it have activated motion detection, transparent block means it have not activated motion detection. Picture is below:



Move the direction key on remote control or make cursor move to the need designed area, green frame means the cursor has moved to this pane, press [OK] to select or cancel motion detection of this small pane, when setup finished, press [exit] to back to MD setup interface, it will save automatically.

Remark:

IR Operation: press [Menu] key to select or cancel full screen.

Mouse operation: click left and drag the frame to setup the region for motion detection.

15 Mobile Surveillance

Move the cursor to [MOBLE] (Icon highlighted when selected), press[OK] to enter into setting interface. Picture is below:



NETWORK CHANNEL: select the channel for network transfer, and press [OK] to switch different channels.

WIRELESS NETWORK: Select different mobile network from the options of 3G, 2.5G and 2.75G, and press [OK] to switch different network.

NOTE: Detail setting up please refer to appurtenance.

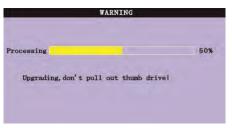
16 SYSTEM PROJECT

Move the cursor to **[**SYSTEM PROJECT] (Frame turns red means selected), and press **[**Enter] to enter into system project setup interface. Picture is below:



AUTO RESET: When switch is on, you can setup the time for device to restart.

SYSTEM UPDATE: Copy the update file to the root directory of the flash disk, and insert it into USB groove, then press [OK] to upgrade the firmware, and it will display the process of the system upgrading, picture is below:







4.4.4 Focus



4.4.5 Iris



4.4.6 PTZ PRESET



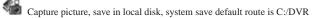
You can control it via the below three buttons:



4.4.7 PLAY

Move cursor to the icons, it will highlighted when selected





Quickly start all channels' recording video, here the left up corner of each channel have normal recording video symbol 【R】, click icon to switch between signal screen /quad /nine //16 split .



Volume adjust button

4.4.8 OTHER OPERATION

- Select one channel at preview screen (the selected channel's frame will be change to RED), double click left key, enter to the selected channel single screen display.
- Click one Chanel via left key at preview screen, then click right key, will occur window shortcut Menu, see below picture



Chinese/English selectable.

PASSWORD: Administrator has all authorities, operator has limited authorities who they can only watch, playback, please change the unit No. and default password in time for system security.

NETWORK: LAN/WAN, according to the net type of your computer and DVR.

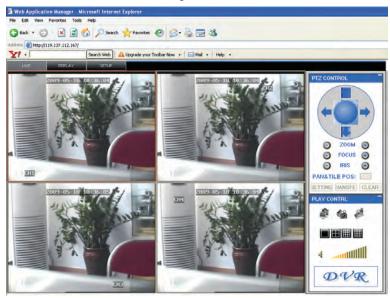
Click"Login" to enter IE interface. If input is wrong, click "Reset" to delete and rein put.

4.4 OPERATION INTERFACE

There are Live view, Playback and Setup options in the main interface, please press them to access it.

4.4.1 LIVE

Click to enter into the interface as followings



4.4.2 PTZ CONTROL

Change the focus, preset aperture to control the PTZ.

Click to up/down/left/right control movement of the PTZ. When hold on the one direction key, the PTZ will keep circling as that direction after user press the stop key in the center of the wheel.

DEFAULT SETTINGS: Restore all the settings as the factory setting.

NOTE: make sure that the U drive and power is steady when it is upgradeing.

17 PTZ SETUP

Move the cursor to [PTZ SETUP] (Icon highlighted when selected), press[OK] to enter into setting interface, you can setup the parameters for each channel separately. With direction key or move cursor to the option, and press [OK] to switch different channels.

CHANNEL: The channel of PTZ connected.

PROTOCOL: select the protocol of different PTZ, there are two protocols to switch, and the default is Pelco-D

BAUD RATE: select the different baud rate for your PTZ, there are 1200, 2400, 4800, and 9600

DATA BIT: there are 5,6,7,8 options to select, default setting is 8.

STOP BIT: 1 and 2 are optional, the default setting is 1.

VERIFY: there are None/Odd/Even/Mark/Space to select, the default setting is none.

ADDRESS: Fill the code of respective PTZ with relative channel.



Remark: PTZ function is not supported temporarily for this system

18 NETWORK SETUP

Move the cursor to [NETWORK SETUP] (icon highlighted when selected), and press 【Enter】 to enter into setting interface .picture is below:



CONNECT NETWORK TYPE: There are PPPOE, DHCP & Static three options

♦ 1 Static

Select [Static] in the CONNECT NETWORK TYPE, and press [Enter] to enter into the interface as followings



MEDIA PORT: transfers video data between client and device.

WEB PORT: setup the port of IE browser via HTTP.

IP ADDRESS: setup the IP address, and press [OK] [+] / [-] or input numbers to fill IP address.

NETMASK:.press [OK] [+] / [-] or input numbers to fill netmask.

GATEWAY: press [OK] [+] / [-] or input numbers to fill default gateway.

♦ 2 DHCP

Select the DHCP, and enter into the interface as followings.



MEDIA PORT: same as static setup

WEB PORT: same as static setup.

NOTE: restart system when select DHCP, and it will automatically connect with DHCP server. Will allot

IP address when connect is ok and the address will be showed on the interface.

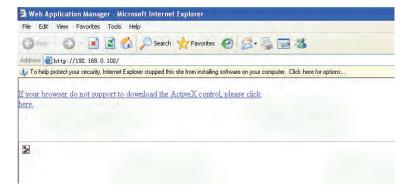
♦ 3 PPPoE

Select the PPPOE, and enter the interface as followings:

4.3 User login

Input the DVR local IP in IE browser, if the web port number is set as 80, directly input IP address into IE address column; If not 80, port number should add behind IP. E.g. when IP is 192.168.0.102, set port is 8088, http://192.168.0.102:8088 should input.

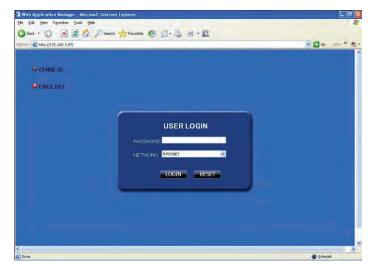
When the net is connected, IE will automatically download the file to PC as following,



The process will last for 1~2 minutes.

Please click "If your browser does not support the ActiveX to download, please click here" when downloading is not successful.

System will automatically enter GUI as follows:



- 6. Operate normal data via computer. This can check if above setting is correct;
- 7. Input IP address to check if it can visit DVR
- 8. Add DVR's port transfer function. Add DVR's media port and WEB port
- 9. Use internet remote PC. Check if DDNS is successful via ping xxx.xxx.xxx (DVR 's domain name)
- Input DDNS into IE address, if the WEB port is not 80, port number should add. Please refer to IE operation chapter;
- 11. After downloading IE active tool successfully, login the interface, default is no password, press OK to enter preview interface and have your following operation.

3 Manufacture has applied Internet line, DVR should connect with internet via IP and router.

- 1. Make sure DVR connect with the internet is correctly;
- 2. Use still configuration mode;
- Please refer to internet setting chapter of "Installation guide", it can help to set port number, IP address, sub mask, gateway, etc;
- 4. Net admin add DVR port transfer or sending relation in router;
- 5. Use a computer of LAN, input IP of LAN and port number into IE address column to visit the DVR;
- Use internet remote computer, input IP and port number of router to IE address column to visit DVR; you can start DDNS function. After finishing DDNS register and setting, users can visit via DDNS and port number.
 This can avoid remembering complex IP.

Chapter 4. IE OPERATION

4.1 FEATURE

Through the IE browser of OS and install the software, you are able to do the network operation remotely, which is much more convenient. DVR support C/S, B/S, and visit in LAN and WAN, also support IP and domain name visiting.

It supports users revise server port. At the same time, it supports PPPOE, DHCP and four channel video / audio.

4.2 Restriction condition

To ensure PC's stable visiting of DVR, recommend Windows XP, Windows Vista operation system, recommend browser as IE 6.0, IE 7.0.



MEDIA PORT: Port for private protocol of DVR and PC, default: 9000. If this port of computer is applied by other server, please change to other free port.

WEB PORT: Http port. Default: 80. If admin change WEB port to: e.g. 8088, port No. should be added behind IP, http://192.168.15.145:8088 should input into IP of IE.

IP address: Fill in IP address according to the net of DVR;

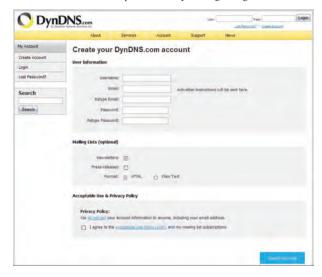
Net mask: Fill in net mask according to the net of DVR.

Gateway: According to the net of DVR, set gateway. If no router of the net, please distribute IP address of same web segment; corresponding gateway should set.

19 Application of DDNS

You should register a host name, user name and password from DDNS manufacture, now we take dyndns for instance, to show you how to register.

Please type in the IE address as follow: http://members.dyndns.org/ to register a new user



- 1. Fill out all the information then submit.
- Minutes later, you will get a mail from dyndns, which include the primary password for the user you just register.
- Then please login http://members.dyndns.org/ with the new user and password, click "domain name management" to enter into the operating interface, then select "new" under the Dynamic DDNS.
- 4. Create a domain name you need, then press to apply; now you have registered a host name success.

20 DVR group network

This chapter mainly narrates some networks' setting method for your reference:

- 1. Applied ADSL, only one DVR need to connect with Internet
- 1. Make sure the DVR has successfully connected to ADSL modem; the LED is flashing means success.
- 2. Network type: PPPoE
- 3. Input media port and web port. Please refer to "Setup instruction" network setup;
- 4. Type in the PPPoE user name and password;
- 5. Fill in DNS IP, such as:202.96.128.166 or 10.95.0.3. Users can refer to local computer DNS setup, (in DOS input ipconfig/all in DOS to query);



- Since the public IP will change after restart, please use DDNS function, and mapping the public IP to a fixed domain name.
- Save and restart device, it will connect to internet via PPPoE mode automatically, if success, it will get a
 dynamic public IP.
- ping xxx.xxx.xxx.(The public IP of DVR) to check whether the network is ok, and ping xxx.xxx.xxx (the
 domain name of DVR) to check whether the DDNS settings is ok.

- Open IE browser, and type in the domain name of DDNS (if WEB port is not 80, you should add a port, please refer to IE setup)
- 10. Please download the IE control, then enter into login interface, the default setting has no password. Press enter and into the preview interface, and do what you want according to your need.

2. Applied ADSL, many types of equipment should share and connect with internet

- 1. Need to confirm with internet manufacture, the ADSL you applied should permit multi share of the internet.
- 2. You should buy a router, currently many small routers of 4 port Hub is in the market; or your ADSL Modem has router function;
- 3. Refer to router user manual to ensure equipment connection correct;
- 4. Start PPPOE function of PPPOE, use router to have ADSL:
- Suggest stopping router's DHCP function. DVR and the computer all adopt IP. Notice: DVR, computer and
 router's IP must in the same subnet, and the sub mask, gateway,

DVR internet setting:



Computer internet setting:

