H.264 NETWORK
Embedded DVR

16 channel

USER MANUAL
**CAUTION**

RISK OF ELECTRIC SHOCK
DO NOT OPEN

CAUTION: TO REDUCE THE RISK OF ELECTRIC SHOCK DO NOT REMOVE COVER. NO USER SERVICABLE PARTS INSIDE.
REFER SERVICING TO QUALIFIED SERVICE PERSONNEL.

The lightning flash with arrowhead symbol, within an equilateral triangle, is intended to alert the user to the presence of uninsulated "dangerous voltage" within the product's enclosure that may be of sufficient magnitude to constitute a risk of electric shock.
The exclamation point within an equilateral triangle is intended to alert the user to the presence of important operating and maintenance (servicing) instructions in the literature accompanying the appliance.

**WARNING:** TO PREVENT FIRE OR SHOCK HAZARD, DO NOT EXPOSE THIS UNIT TO RAIN OR MOISTURE.

**CAUTION:** TO PREVENT ELECTRIC SHOCK, MATCH WIDE BLADE OF THE PLUG TO THE WIDE SLOT AND FULLY INSERT.
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INTRODUCTION

1.1 PRODUCT INTRODUCE

It is 16 channels CIF resolution digital video recording DVR, which have local recording, playback, support triple code remote network surveillance, data backup, parameter setting, motion detection, I/O alarm setting, PTZ and USB mouse, USB2.0 backup, IE browser and back up.

1.2 PRODUCT FEATURE

- H.264 compression
- Two USB interface, USB2.0 for data backup, USB1.1 for mouse operation.
- 2 pcses 3.5" SATA HDD at most.
- Special file system for security.
- 16 bit color translucent user-friendly GUI, with notes for selected menu items
- Optimized one four channel simultaneously playback
- double level user management
- Support the live view, parameter setting and copy playback video via network.

1.2.1 SPECIFICATION

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### 1.3 Environment Adaptability

For safety while using the DVR and to prolong device life, please pay attention to the following details:

1) When installing device, please comply with all the electric product safety criteria.
2) Power and ground:
   - Do not touch the power and DVR with a wet hand
   - Do not drop liquid on DVR
   - Do not put any object on DVR
   - Please use soft dry cloth to clean DVR; do not use chemical impregnant.
   - The Device will have voltage before startup if the power line is connected to power Source.
   - Please unplug power line from power source if the Device is not intended to be used for a prolonged time.
2 DEVICE OPERATION

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

2.1 REMOTE KEY INSTRUCTION

2.1.1 REMOTE CONTROL

The remote control is the secondary input device for navigating the system’s interface.

To use the remote control:

1. STANDBY: Press to turn standby mode ON/OFF.
2. LOGIN/LOCK: If “Security” has been enabled in the Setup menu, press to open the user password login screen.
3. Number/Channel buttons: While in menus, press buttons 0~9 to enter values; during live viewing, press to view channels in full-screen.
4. Press to switch between quad and split-screen displays.
5. MENU: Opens the main menu.
6. PTZ: Press to open the PTZ control window.
7. EXIT: Close menu windows.
8. Navigation/OK:
   - Move cursor in menus up; Channel Up.
   - Move cursor in menus right; during playback, increase forward playback speed (5X, 15X, 60X).
   - Move cursor in menus down; Channel down.
   - In menus, press to confirm selections; during playback and preview, press to view system information.
9. In menus, press to adjust values.
10. RECORD: Press to start manual recording.
11. STOP: Press to stop manual recording.
12. EXTRA: For the future use.
13. Playback controls:
   - Increase reverse playback speed 1X, 2X, 4X
   - Press to start playback
   - Press to increase forward playback speed 1X, 2X, 4X
   - Press to slow playback speed by 1/2, 1/4, 1/8
   - Press to freeze playback to one frame, then press again to advance frame-by-frame.

TIP: When using the remote control to enter password and camera titles, select the field using the navigation buttons, press ENTER, and then press the number buttons.
2.1.2 MOUSE OPERATION

The mouse is the primary input device for navigating system menus. **NOTE:** Unless otherwise noted, all system functions described in this manual are achieved through mouse input.

To use a mouse with the system:

1) Connect a USB mouse to the **USB MOUSE port** on front panel of the system. **NOTE:** Only the top USB port on the front panel is designed for data backup to a USB flash drive. Do not connect a USB flash drive to the bottom USB port on the rear panel.

2) Use the mouse buttons to perform the following:

   - **Left-Button:** Click to select a menu option; during live viewing in split-screen, double-click on a channel to view the selected channel in full-screen.; double-click the channel again to return to split-screen view
   - **Right-Button:** Click to open the Sub-Menu

3) **Scroll-Wheel:** No function.
2.1.3 **MENU TREE**

You can control the DVR by a lot of menu operation. This tree will show you the menu structure and it will be in details in after chapter.
2.2 SYSTEM OPERATION

2.2.1 USER LOGIN

1. STARTING THE SYSTEM

To power the system ON/OFF:

Connect the power cable to the DC 19V port on the rear panel. At startup, the system performs a basic system check and runs an initial loading sequence. After a few moments, the system loads a live display view.

Standby Mode

The system can also be put into Standby Mode. Power will remain to the system but will not be recording.

To start/stop Standby mode:

1) Press and hold the POWER button on the front panel or remote control until the prompt closes. The system enters standby mode.
2) Press and hold the POWER button on the front panel or remote control until the system beeps. The system will begin powering up.

Password

ATTENTION: By default, passwords are disabled on the system. You do not need to enter a password when accessing any system menus. However, for security purposes, it is highly recommended to enable passwords on the system using the Password Menu.

NOTE:

1) 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.
2) 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.

2. SYSTEM LOGIN

When you login, you will find the window as follow if the password is enabled, Input device ID and user password via numeric key-board, and you can access to main menu via press 【Apply】

Remark: default device ID is: 000000, and the password is :user password is 000000 and Admin password is 020818, in order to manage the device more convenience, please setup the user password and change the device ID in the base setup. You can setup user and admin password, Administrator has all authorities, operator has limited authorities who they can only watch, playback, please change the unit ID and default password in time for system security.
DEVICE ID: You just need to enter the unit ID as the right frame.
PASSWORD: enter the admin password or user password.

2.2.2 GUI OPERATION

The main menu include
“CAMERA”, “RECORD”, “NETWORK”, “SEARCH”, “DEVICES”, and “SYSTEM”.

Remark: You must after pressing “APPLY” to make the setting for submenu valid. It will no use when exit directly. This DVR have a special feature is: when you move the mouse to everywhere, there will have the explanation information showed auto.

2.2.2.1 CAMERA
Move the cursor to 【CAMERA】（Icon highlighted when selected）, press 【Enter】 to enter into the setting interface.
CH1~CH4: you can select the CH1~CH4, CH5~CH8, CH9~CH12, CH13~CH16 here.

NAME: press 【Enter】 to enter into the setting interface.

POSITION: press 【Enter】 to switch name location, there are 5 options.

COLOR: press 【Enter】 to enter into setting interface, as following:

Press 【Enter】 or 【+】 【-】 key or directly drag the cursor to set colors, including chroma, brightness, contrast and saturation, press 【APPLY】 to save the parameters.

LIVE: ON: Means the channel is allowed to view the live mode, OFF means not.
DISPLAY TIME WHILE IN LIVE VIEW: ON: Means yes, OFF means not.
DISPLAY TIME WHILE RECORDING: ON: Means yes, OFF means not.

2.2.2.2 RECORD SETUP

Move the cursor to 【RECORD】 (Icon highlighted when selected), press 【Enter】 to enter into the setting interface. Press 【Confirm】 and enter into the setup interface, and you can use direction keys and cursor to change the options.
CH1~CH4: you can select the CH1~CH4, CH5~CH8, CH9~CH12, CH13~CH16 here.

RECORD: ON: Means the channel enable for recording.

QUALITY: There are three options, corresponding different data stream standard

AUDIO: ON: Means enable the audio recording for all channels, OFF: Means disable audio recording

REC.MODE:
  POWER UP: Means the device will start recording when it startup.
  TIME: Recording as the schedule, you can setup the schedule as you want as follow.

CHANNEL: You can select all channels or just one channel to setup schedule.

WEEKLY: You can setup each as you want. There are ALARM, NORMAL, NO REC three modes, if you select this, there will have a √ in the frame, that means when you select the period of the day it will record as this mode, and you can just setup one day, then copy the setting to all other days. Different color means different record mode: Red means alarm record, green means normal record, grounding means no record.

PACK TIME: There are 15min, 30min, 45min, 60min four options, that means it will pack as the mode you selected
  Scroll to APPLY and press ENTER to save the new settings.

2.2.2.3 NETWORK SETUP
  Use the Network Setup menu to configure your network and DNS review.
To configure network settings:

1) Under TYPE, select DHCP, PPPoE, or STATIC. If PPPoE, go to step 2. If STATIC, go to step 3.

**NOTE:** DHCP allows you to quickly connect to your network by obtaining an IP address from the router. 【AUTO DHCP】is DNS server1 which is obtained automatically, while 【DNS】is DNS server2 which should be filled in by yourself. To obtain an IP address automatically and to avoid adding the MEDIA PORT and WEB PORT in your router, you should set UPNP as OPEN.

To configure UPNP settings:

- Enable the **UPNP** function in your Router.
- Under DVR GUI, Open the **MAIN MENU** and click **ADVANCE**.
- From the **Advanced Setup** menu, click **NETWORK**.
- Under **UPNP**, select **OPEN**.
- Click **APPLY** to save your settings and then click **OK** in the confirmation window.
- Using a remote PC, open **Internet Explorer**.
- In the address bar, enter your Router WAN IP address immediately followed by :WEB PORT (no spaces).
  http://XXX.XXX.XXX.XXX(Router WAN IP):XXX(WEB PORT)
- Enter your system **ADMIN** password and select **INTERNET**.

**NOTE:** If you have not enabled passwords on the system, leave the password field blank.

2) If you select PPPoE in step 1, enter your **PPPoE user name** and **password** in the respective fields using the Virtual Keyboard.

3) If you selected STATIC in step 1, enter your **IP Address**, **Net mask**, **Gateway** and **DNS** in the respective fields using the Virtual Keyboard.
NOTE: The default IP address of the system is 192.168.2.234.
4) If necessary, change the Media and Web Ports.

NOTE: For added security, we strongly recommend changing Web port 80 on the system to any desired port not blocked by your Internet service provider (ISP). Please note however, that you will also need to update the Web port in your browser and open this new port in your router.

5) Click APPLY. Click CLOSE in the confirmation window.
6) Click EXIT in all menus until all windows are closed. The system restarts automatically.

Manual DNS
Enter the Primary or Secondary DNS from your router. This is required for DDNS to function properly.

To obtain your Primary or Secondary DNS:
1) In your web browser, log in to your router using its Default Gateway address.

NOTE: Refer to your router’s manual or software for login information. You can also get the Default Gateway on your PC by selecting Start>Run. Type CMD and press Enter. In the Command Prompt window type ipconfig and press Enter.

2) View its WAN settings. Enter the Primary or Secondary DNS address in the MANUAL DNS field on your system.

DDNS:
A DDNS account allows you to set up a web site address that points back to your Local Network.

To configure DDNS settings:

1) From the Network Setup menu, enter **Primary or Secondary DNS** from the WAN settings of your router in the **MANUAL DNS** field.
2) Click **DDNS SETTINGS**.
3) Under DDNS, select **ON**.
4) Under SERVICE, select 3322, dyndns or perfecteyes.
5) Under DOMAIN NAME, enter your **DDNS domain** from the confirmation email.
   For example, if your domain name is adam@dyndns.com, you need to enter adam@dyndns.com, in the text field.
6) Enter your DDNS **user name** and **password** in the respective fields.
7) Click **APPLY**. Click **CLOSE** in the confirmation window.
8) Click **EXIT**. The system will prompt you that it must restart. Click **CLOSE**.

### 2.2.2.4 SEARCH

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

**DATE**: You can adjust the checking date and time, press **【Enter】** input the number directly to adjust the year, month, date. After finishing the time setting, move the cursor to "SEARCH" and press "APPLY", can see the recording status of this date. As follow:

**Instruction**:

1. **MONTH**: It will show all the recording status in this month. Green means normal recording, Red means alarm recording, Grounding means no recording. Click any date in this frame can search the recording status of that day, the searching result will be showed in the below date frame.
2. **DAY**: It will show all the recording status in this day, you can playback the record file in this period via click the corresponding period.
3. **PLAY**: You can press **【Enter】** input number directly to setup playback time. After setting, move the cursor to "PLAYBACK", and then press "APPLY" to enter into video playback of that time. Also
you can select any period of time in the video status frame after searching, press "APPLY" to enter into the video playback of this period.

FILE LIST: Enter into the video file list interface of the selected date.
LOG SEARCH: Enter into the log searching interface.

1. FILE LIST
Setup the searching date, after pressing "SEARCH", move the cursor to "FILE LIST" and press "APPLY" to enter into the video file list of this date.
Then you can select four channels as you want to playback, because 16CH DVR support 4 channels playback at the same time.

![Select playback channels, max 4 channels](image)

**Instruction:**

1. 【FILE LIST】，“CHANNEL” is the recording file which belong to which channel, “SIZE” is display the size of this file (Unit: MB), “TYPE” is display the type of recording file, there are two types: normal and alarm. Press “BACKUP” button can export the selected files to USB storage.

2. After moving the cursor up and down and select the files, and press 【APPLY】 to enter into playback interface. If the all channels have recording files, it will be playback all windows at the same time.

3. If setup as “on” in the 【RECORD TIME】 in 【BASIC SETUP】, it will show the date/time when playback record file; If setup as “off” it will not display time.

4. When playback, can press 【SLOW】 to play slowly; press 【FORWARD】 and 【REVERSE】 to speed. reverse play; also can press 【PAUSE/STEP】 to pause and frame by frame play; Press 【Exit】 to exit from playback and return to the former menu;

5. When finished playback files, it will return to the file list interface.

**2. LOG SEARCH**

Move the cursor to “LOG SEARCH” and press “APPLY” to enter into the log file list of DVR, as follow window.

**3. BACKUP**

You can use USB for backup, should insert USB device into the USB2.0 port before backup files. And it is support USB OTG.

You can select the recording file by direction keys or 【+】、【-】, and press 【Enter】
means selected OK (There is a “√” at the end of the selected recording files) and press 【Enter】 again the “√” will disappear that means cancel the select, we can start export the recording files after selecting, and press 【BACKUP】 to start to backup, as follow:

Instruction:
1. When the space in backup device less than recording file, the system will prompt “Space no enough”.
2. You can move USB device directly when backup finished.

2.2.3 DEVICES SETUP

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

Advanced Features include HDD, ALARM, PTZ, MOBILE and MOTION DETECT.

2.2.3.1 HDD MANAGE

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 status is ok means the HDD is ok. If HDD can not run normally (including unformat and no HDD), there is a 【H】 display on video live view, 16CH DVR can support 4 HDD at most, so you can select the HDD you want to format here.

OVERWRITE: ENABLE: means when HDD space less than 4G, it will delete HDD earliest recording file, and it will stop deleting when the space is 10G; DISABLE: means when HDD space less than 500M it will stop recording, and an prompt will display in live view “please shutdown and replace HDD”

HDD FORMAT: Move cursor there to select device and press 【APPLY】 to start formatting.

U DISK FORMAT: format the external thumble drive.

2.2.3.2 ALARM SETUP

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

CH1~CH4: you can select the CH1~CH4, CH5~CH8, CH9~CH12, CH13~CH16 here.

I/O ALARM: Each channel has an I/O status, that is, when an alarm triggered, it will activate the corresponding channel to start alarm recording.

N.O: indicate I / O input level from high to low effective
N.C: indicate I / O input level from low to high effective

HDD LOSS: ON means it will trigger a 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: ON: If the space less than 500M, there is a remark in live view: No enough space, please change HDD after shutdown.

VIDEO LOSS: ON: when one channel has no video input, it will display “video loss” in live view.

ALARM MANAGE: There are alarm output, buzzer and post REC three items.

OUTPUT: when an alarm triggered, the alarm output time will be:
0 second, 10 seconds, 20 seconds, 40 seconds and 60 seconds
● **BUZZER:** buzzer calling time setup when alarm triggered: 0 second, 10 seconds, 20 seconds, 40 seconds and 60 seconds
● **POST REC.**: post recording time setup: 30 seconds, 1 minute, 2 minutes and 5 minutes

### 2.2.3.3 PTZ SETUP

Move the cursor to [PTZ SETUP] (Icon highlighted when selected), press [Enter] to enter into setting interface, you can setup the parameters for each channel separately.

- **CH1~CH4:** you can select the CH1~CH4, CH5~CH8, CH9~CH12, CH13~CH16 here.
- **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:** there are 1 and 2 to select, 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

<table>
<thead>
<tr>
<th>PTZ SETUP</th>
</tr>
</thead>
<tbody>
<tr>
<td>PROTOCOL</td>
</tr>
<tr>
<td>BAUD RATE</td>
</tr>
<tr>
<td>DATA BIT</td>
</tr>
<tr>
<td>STOP BIT</td>
</tr>
<tr>
<td>PARITY</td>
</tr>
<tr>
<td>ADDRESS</td>
</tr>
</tbody>
</table>

### 2.2.3.4 SYSTEM INFO

Move the cursor to [SYSTEM INFO] (Icon highlighted when selected), press [Enter] to enter into setting interface, at this interface mainly display system hardware features and firmware version, include: Software version, MAC address and serial number.

<table>
<thead>
<tr>
<th>SYSTEM INFO</th>
</tr>
</thead>
<tbody>
<tr>
<td>SERIAL NUMBER</td>
</tr>
<tr>
<td>FIRMWARE VERSION</td>
</tr>
<tr>
<td>MAC ADDRESS</td>
</tr>
</tbody>
</table>

### 2.2.3.5 MOBILE

Move the cursor to [MOBILE] (Icon highlighted when selected), press [Enter] to enter into setting interface.
**CHANNEL SELECTION:** select the channel for mobile view, and press [Enter] to switch different channels.

**MOBLESS LAN:** Select different mobile network from the options of 3G, 2.5G and 2.75G, and press [Enter] to switch different network.

**PORT:** the port for mobile view, you should open the port in the router for mobile view.

### 2.2.3.6 MOTION DETECT

Move the cursor to 【MOTION DETECT】 〈Icon highlighted when selected〉, press 【Enter】 to enter into setting interface.

**CH1~CH4:** you can select the CH1~CH4, CH5~CH8, CH9~CH12, CH13~CH16 here.

**STATUS:** Each channel has corresponding channel switch, press 【Enter】 to turn on or turn off the motion detection for each channel.

**SENSITIVITY:** Each channel has corresponding sensitivity setting, including four standards high, higher, medium and low, press 【Enter】 key to switch

**MD AREA:** each channel has corresponding regional motion detecting setting, move the cursor to corresponding 【setting】 , press 【Enter】 to enter regional setting interface, red area means it have activated motion detection, transparent block means it have not activated motion detection.
Move the direction key on remote control to make cursor move in the small pane, green frame means the cursor has moved to this pane, press 【Enter】 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 the entire screen.
- Mouse operation: click left and drag the frame to setup the region for motion detection.

### 2.2.3.7 SYSTEM MAINTAIN

Move the cursor to 【SYSTEM MAINTAIN】 (icon highlighted when selected), and press 【Enter】 to enter into system maintain setup interface.

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

**SYSTEM UPDATE:** Copy the update file to the dvrupgrade folder in the root directory of the thumb driver, and insert it into USB 1.0, then press [Enter] to upgrade the firmware, and it will display the process of the system upgrading, as following:
LOAD DEFAULT: Restore all the settings as the factory setting.
REBOOT: means restart the device.
STANDBY: The system enters standby mode, but the power is still on.
PARAMETER EXPORT: Copy the system settings of the device to an empty USB flash drive.
PARAMETER IMPORT: Import system settings from another device.

2.2.3.8 EXIT
Move the cursor to 【EXIT】（Icon highlighted when selected）, press 【Enter】 to back to main menu.

2.2.4 SYSTEM SETUP
Move cursor to select “SYSTEM SETUP” (The big icon means selected) and press 【ENTER】 to enter into the system language setup interface.

System setups include time/date, password, video/audio, language, info and maintain six options.

2.2.4.1 DATE/TIME SETUP
Move cursor to select “date/time” (icon highlighted when selected) and press 【ENTER】 to enter into the date/time setup interface.
DATE: Setup system date via numeric key.
DATE FORMAT: Press ENTER to switch between the date patterns, there are YY-MM-DD and MM/DD/YY two options.
TIME: Setup system time via numeric key.
TIME FORMAT: Press ENTER to switch between the date patterns, there are 12 HOURS and 24 HOURS two options.

Remark: You must move the cursor to the 【MODIFY TIME AND DATE】 and press 【APPLY】 to save it, otherwise it won’t save the modify if you exit this interface.

DST: DST settings, you can setup DST as you want here.

2.2.4.2 PASSWORD
Move the cursor to【PASSWORD】(Icon highlighted when selected), press【Enter】to enter into the setting interface.

DEVICE ID: Press number key to setup the unite ID
PASSWORD: Press 【APPLY】 to start or close user password. If it is “ENABLE”, you must input password when log in, otherwise, you can enter into main Menu directly.
USER PASSWORD: Press number keys to setup user password.
ADMIN PASSWORD: Press press number keys to setup admin password.
NETWORK PW CLEAN: Means the password for IE, if you select it, you can reset the IE password, the default password is blank.

2.2.4.3 VIDEO/AUDIO SETUP
Move the cursor to【VIDEO/AUDIO SETUP】(Icon highlighted when selected),press【Enter】 to enter into setting interface.
VIDEO SYSTEM: press 【Enter】 to switch camera system, has PAL and NTSC two options

VIDEO PORT: there are two options: live-out and spot-out, correspond with the two video out on the back panel of DVR, live out means it will display the channel loop function, and spot-out means just display the live view.

DWELL TIME: the interval for channel loop function

SEQUENCE: you can setup the channel sequence as you want here.

VGA RESOLUTION: press 【Enter】 key to setup the VGA resolution, there are 1024*768、800*600 two options.

VOLUME: move cursor to 【VOLUME SETUP】 ,press 【Enter】 to enter into volume setup interface, press number keys or directly drag the cursor to adjust volume.

Remark: it will restart if you modify the video system or VGA resolution.

2.2.4.4 LANGUAGE

Move cursor to select “system language” (The highlighted when selected) and press 【ENTER】 to enter into the system language setup interface.

System language have Chinese and English two options, you can setup the language you want in here.

Remark: The device will restart when you setup system language success.
3 IE OPERATION

3.1 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.

Remark: Operating system Windows XP, Windows Vista and Browser IE6.0, IE7.0 is recommended

3.2 USING REMOTE SURVEILLANCE

With your system connected to your local area network, you can now log in to your system using Internet Explorer.

NOTE: Your system must be connected to your local or wide area network before attempting remote access.

Logging In to Your System

With your IP address, you can now log in to your system over your local or wide area network.

NOTE: You must configure DDNS settings locally.

To access your system:

1) Open Internet Explorer. In the address bar, enter the IP address of your system (i.e. 192.168.0.102).

2) You must install the ActiveX® in order to access your system. Click the NOTICE bar at the top of the main page and select Install ActiveX Control. DVR Net viewer will reset.
Click the ActiveX NOTICE bar

3) In the warning box click **Install**. The login page appears.

4) Leave the password field blank (default).

**NOTE:** If you have enabled passwords on your system, enter your USER or ADMIN password. However, only the ADMIN can change settings and options on the system.

5) Select **LAN** or **INTERNET** from the drop-down menu and click **LOGIN**. The process will last for 1~2 minutes.
3.3 REMOTE SURVEILLANCE MAIN SCREEN

Upon login, the Remote Surveillance main screen appears in your browser.

1) **Modes**: Click LIVE, REPLAY (playback), and SETUP.
2) **Main Screen**: Main display screen for live viewing and playback.
3) **Time Stamp**: Time stamp appears on each channel.
4) **Channel**: Channel number appears in the top left corner.
5) **PTZ Control**: PTZ control for any connected PTZ cameras (not included).
6) **Functions**: Click the icons to show/hide channels, take screen captures, and record.
7) **Display Modes**: Click the icons to view channels in single-channel full-screen, quad, and split-screen configurations.
8) **Volume/Mute**: Select a channel (outlined in red) and then click the bars to increase/decrease volume; click the icon to mute/unmute volume.*

*Audio capable cameras (not included) required for audio listening and recording.
3.3.1 LIVE VIEWING

By default, remote surveillance opens in Live Viewing mode (split-screen).

To use Live Viewing:

1. Click **LIVE** at the top of the main screen.
2. Click the display mode icons to view the main screen in **single-channel**, **quad**, or **split-screen** configurations. You can also double-click a channel at any time to view it in single-channel.
3. Click **** to show or hide all the channel windows.
4. Click **** to start/stop manual recording to your PC on ALL channels. For more details see RECORDING.
5. Select a channel (outlined in red) and then click the audio bars to increase or decrease listen-in volume. Click the icon to mute/unmute.

**NOTE:** The Talk function is not supported.

*Audio capable camera (not included) required for listen-in audio.

3.3.1.1 RECORDING

You can record video directly to your PC using the remote surveillance software.

To record video to your PC:

From Live viewing, click to start/stop manual recording to your PC on ALL channels.

**NOTE:** You will record video to your PC regardless of the recording mode on the system itself. By default, recorded files are saved in C:\DVR\[ip_address]\Record.

3.3.1.2 SUB-MENU

Right-click any channel to open the sub-menu.

The sub-menu contains the following options:

- **Open Window**
- **Close**
- **Open All**
- **Close All**
- **Start Record**
- **Stop**
3.3.1.3 PTZ CONTROL

You must have a PTZ camera (not included) connected to the system in order to use the PTZ controls.

![PTZ Control Figure]

To control a PTZ camera:
1. Select the channel of the connected PTZ camera(s).
2. Click the navigation arrows to pan and tilt the camera.
3. Click + / - to control zoom, focus, and iris.
4. Enter presets.
5. Click SETTING, HAND, and CLEAR to further control presets.

3.3.1.4 SCREEN CAPTURES

Use the remote surveillance software to take a snapshot of the channels on the main display screen. Screen Captures can be useful for your own records, or may be needed by authorities in case of a security incident.

To take a screen capture:
1) From Live Viewing, select the channel you want to capture. The selected channel will be highlighted in a red frame.
2) Click .
3) Click OK in the confirmation window. Screen captures are saved as BMP files to the default save location (C:\DVR\...).
3.3.1.5 PLAYBACK

Use the Replay menu to search and playback recorded video on your system.

To use the replay menu:

1) Click **REPLAY** at the top of the main screen. The main screen will be grey.
2) Click **REFRESH** below the calendar to view the recorded files for the current month.

**NOTE:** Normal recording is indicated by a clock icon; alarm recording (alarm, loss, and motion events) are indicated by an exclamation mark icon.

3) Double-click a file from the File List to playback the file in the main screen. The icon in the file list changes to "▶". Control playback using the buttons at the bottom of the main screen.

**Progress bar**

The purple bar indicates the download progress. The green marker indicates playback progress. You can click and drag the playback marker (will turn from green to orange) to advance or rewind playback as needed.

<table>
<thead>
<tr>
<th>Button</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pause</td>
<td>Switch between pause/play</td>
</tr>
<tr>
<td>STOP</td>
<td>Stop play</td>
</tr>
<tr>
<td>F.F.</td>
<td>Fast play</td>
</tr>
<tr>
<td>SLOW</td>
<td>Slow play</td>
</tr>
<tr>
<td>NEXTFRAME</td>
<td>Pause at next frame</td>
</tr>
</tbody>
</table>
**SEARCH**

Use the calendar and drop-down menus to search for recorded video on your system.

1) Click < > to change the month on the calendar. Dates with recorded video data will appear in **bold**.
2) Click the date. Recorded video files will populate the File List.
3) From the Channel drop-down menu, select a **specific channel** or select ALL CHANNEL and then click **SEARCH**.
4) From the Type drop-down menu, select COMMON (normal recording), ALARM, or ALL TYPE and then click **SEARCH**.
5) Double-click the file from the File List to playback the file in the main screen.

**REMOTE BACKUP**

You can backup recorded video files from your system to your PC using the Replay menu in the remote surveillance software.

To backup files remotely:

1) Click **REPLAY** at the top of the main screen.
2) Select a date(s) on the calendar and click **REFRESH**.
3) Double-click a file from the File List to begin playback.
4) Click **BACKUP**. Backup begins to C:/DVR/[ip_address]/Backup

**NOTE:** If you playback a file, you must wait for the file to load before backing it up otherwise you may receive an error message.

5) When file backup is complete, click **OK** in the confirmation window. The confirmation window show the save path of the backup file.

**NOTE:** Backup files are saved as .264 files.
NOTE: Use the Player Software included on the software CD to playback backed up video.
3.3.2 REMOTE SETUP

Use the Setup tab to configure the settings of your system from a remote location.

**NOTE:** If the Main Menu is open on the system, you will not be able to make changes to the system from the remote location.

To open remote setup:

Click **SETUP** at the top of the main screen. The Remote Setup menu features the following tabbed options:

- RECORD
- ALARM
- PTZ
- NETWORK
- SETTING
- HOST INFO

Click to enter into setup interface; this interface includes record, alarm, PTZ, network, setting, and system information six menus.

3.3.2.1 RECORD

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

3.3.2.2 ALARM SETTING

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

Click to access setup interface; you can check the parameter settings in GUI of DVR.
3.3.2.4 NETWORK

Click to access setup interface; you can check the parameter settings in GUI of DVR.

![Network Setup Interface]

3.3.2.5 SETTING

Click to access setup interface; you can check the parameter settings in GUI of DVR.

![Setting Setup Interface]

**BANDWIDTH:** Set the bandwidth in kbps (128k, 192k, 256k, 384k, 512k, 1024k) that you want to allocate for traffic that matches the internet. This bandwidth does not include audio.

**FILE SAVE PATH:** the save path of captured picture and recording video. IE login password and
DST settings you can set as DVR setting.

### 3.3.2.6 HOST INFO

Click to access system information interface (see below picture). This interface includes HDD status, remain record time, firmware version and MAC Address. All the information is fixed.
4 DVR INSTALLATION

4.1 PRODUCT OVERVIEW

1. The Definition of Buttons and Connectors on Front Panel

### Buttons on Front Panel

<table>
<thead>
<tr>
<th>#</th>
<th>Button</th>
<th>Name</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>USB</td>
<td>USB2.0 port</td>
<td>Derive video data through U disk</td>
</tr>
<tr>
<td></td>
<td></td>
<td>USB mouse port</td>
<td>For mouse connect</td>
</tr>
<tr>
<td>2</td>
<td>Control Keys</td>
<td>Navigation</td>
<td>use these buttons to choose different items on menu; when setting PTZ, use them to control the direction of PTZ.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>OK/PTZ</td>
<td>Confirm/Activate PTZ control</td>
</tr>
<tr>
<td>3</td>
<td>Menu</td>
<td>MENU/EXIT</td>
<td>Activate main menu/Exit without saving the settings under sub-menu</td>
</tr>
<tr>
<td>4</td>
<td>Number/Playback Control</td>
<td>Number</td>
<td>Input the number in textbox</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Playback Control</td>
<td>Realize the operation of fast-forward, rewind, pause, etc.</td>
</tr>
<tr>
<td>5</td>
<td>LED</td>
<td>HDD</td>
<td>HDD flashing means reading the data</td>
</tr>
<tr>
<td></td>
<td></td>
<td>REC</td>
<td>Recording</td>
</tr>
</tbody>
</table>
2. The definition of buttons and connectors on front panel

<table>
<thead>
<tr>
<th>Item</th>
<th>Physical connector</th>
<th>Connector description</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>POWER input</td>
<td>DC 19V/3A</td>
</tr>
<tr>
<td>2</td>
<td>POWER SWITCH</td>
<td>POWER ON/OFF</td>
</tr>
<tr>
<td>3</td>
<td>Video output</td>
<td>Two video output for connecting TV or monitor (BNC)</td>
</tr>
<tr>
<td>4</td>
<td>Video input</td>
<td>For connecting analog video signal input (BNC)</td>
</tr>
<tr>
<td>5</td>
<td>Audio Input</td>
<td>For connecting audio signal</td>
</tr>
<tr>
<td>6</td>
<td>Alarm Input</td>
<td>8 I/O alarm input</td>
</tr>
<tr>
<td></td>
<td>Alarm Output</td>
<td>I/O output for alarm</td>
</tr>
<tr>
<td></td>
<td>RS485</td>
<td>RS 485 for connecting PTZ</td>
</tr>
<tr>
<td></td>
<td>RS232</td>
<td>For connecting PC</td>
</tr>
</tbody>
</table>
3. Connectors for Alarm
Peel off the color skin of the cable and then insert the cable into the slot on the rear panel DVR (The connection part for alarm).

4. Alarm Input and Output
There are 8 sets alarm input connector and 1 set output for this DVR. Alarm input is for connection IR annunciator, fog sensor. The connection diagram of DC alarm input as following:
Connection diagram of AC alarm input as following:

The connection diagram of alarm output as following:

5. System Network Diagram
4.2 HDD INSTALLATION

**Caution:** When working with electrostatic sensitive devices such as hard disk driver or DVR unit, make sure you use a static-free workstation. Any electrostatic energy coming in contact with the hard disk or DVR can damage it permanently.

Please installation the HDD as the following steps:

1) Open the cover of the DVR and then you will see one HDD plate as follow.

2) Connect HDD cables as follow

3) Affix HDD onto HDD plate as indicated below with the screws provided.
4) Install the HDD plate back into DVR and close cover.

Notice: Newly installed HDD should format before recording

5. FAQ

If your problem is not listed below, please call our toll-free number for more support.

1. **Question: DVR is not working after starting?**
   
   **Answer:**
   - Check the adaptor input
   - Check the on-off power line, is it well-connected?
   - Check the power on-off
   - Check the upgrade procedure
   - Check the main board of DVR

2. **Question: DVR is rebooting automatically or stopped after starting the DVR for 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 boards
   - The hardware of DVR is defective

3. **Question: No output of single channel, multi channel or all channel video?**
   
   **Answer:**
   - Please check the adaptor of camera whether to see if it is well-connected
   - Please check the cable for connecting video input/output in the back panel of DVR
   - Please insert the video source directly into the display device and check if they are causing the problem.
   - Check the brightness of the picture 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 defective

4. **Question: DVR cannot record after startup and the interface is showing "H"**
   
   **Answer:**
   - Make sure power adaptor is DC 19V
   - Make sure HDD is formatted
   - Check the power and data connection cables of the HDD
5. Question: What is meaning of “R” “M” “I” “H” showed in interface?
   Answer:
   - “R” means the channel is recording
   - “M” means the channel is on motion detection
   - “I” means the channel is on alarm
   - “H” means there is either no HDD, the HDD is bad or the HDD is full

6. Question: DVR is having problem with real-time images, such as bad image color or serious brightness distortion
   Answer:
   - If PAL and NTSC is not correctly selected on the BNC output, the images will be in black and white
   - DVR is not compatible with monitor
   - The video transmission distance is too far
   - The setting of DVR color, brightness and so on are wrong

7. Question: No audio sound when monitoring?
   Answer:
   - Check sound box or speaker functions. Also check possible short circuit.
   - Audio source may be connected to the video channel. You can click to full-screen to check.
   - The hardware of DVR is defective

8. Question: No audio sound when playing back?
   Answer:
   - Setting problem: open audio-video item
   - Check the audio to see if it is closed in playback interface

9. Question: System time is not correct?
   Answer:
   - Wrong setting or user did not click “Edit” to confirm
   - Battery is not connected properly
   - Battery is dead. Please change.

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: “Stop recording” function by the right mouse button does not work. How to stop recording?
    Answer:
    The “Stop recording” by the right mouse button is for Manual Recording only. It can not stop recording when it is in "start recording" or the video is in video plan. If you want to stop recording, please set the time to not recoding.

12. Question: Motion detection is not working?
    Answer:
    - The setting of motion detection area is not correct
    - Sensitivity is too low

13. Question: CD-writer /USB backup error
    Answer:
    - The data exceeds the capacity of backup device
    - The backup device is incompatible
    - The backup device is damaged

14. Question: Remote control cannot 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: WEB cannot login?**
   **Answer:**
   - Please check the network to see if it is connected. Check if LINK or 100M LED is displayed normally on the panel; use ping xxx.xxx.xxx.xxx (DVR IP) to check if the Internet is linked properly.
   - Recommended to use Windows XP or Vista operating system, also use IE6.0 browser or IE7.0 browser.
   - ActiveX control has been blocked. Please manually install ActiveX control again.
   - Please install DX8.1 and upgrade your video card driver.

16. **Question: There is no picture or picture is not clear when you preview the recording or playback the recording via IE**
   **Answer:**
   - If you access DVR by IE, please choose "Wan" in "web environment".
   - Please try "Close windows" by the right mouse button, and try "Open windows" again.

17. **Question: It displays "other members are setting......" while setting DVR by IE**
   **Answer:**
   - It probably means someone else is setting the DVR. Please check the DVR configuration interface or exit DVR.