ICREALTIME Network Video Recorder Quick Start Guide

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Welcome

Thank you for purchasing our network video recorder!

This quick start guide is designed to be a reference tool for your system.

Please open the accessory bag to check the items one by one in accordance with the list below.

Contact your local retailer ASAP if something is missing or damaged in the bag.

Important Safeguards and Warnings

1. Electrical safety

All installation and operation here should conform to your local electrical safety codes. We assume no liability or responsibility for all the fires or electrical shock caused by improper handling or installation.

2. Transportation security

Heavy stress, violent vibration or water splash are not allowed during transportation, storage and installation.

3. Installation

Keep upwards. Handle with care. Do not apply power to the NVR before completing installation. Do not place objects on the NVR

4 . Qualified engineers needed

All the examination and repair work should be done by the qualified service engineers. We are not liable for any problems caused by unauthorized modifications or attempted repair.

5. Environment

The NVR should be installed in a cool, dry place away from direct sunlight, inflammable, explosive substances and etc.

This series product shall be transported, storage and used in the specified environments.

6. Accessories

Be sure to use all the accessories recommended by manufacturer. Before installation, please open the package and check all the components are included. Contact your local retailer ASAP if something is broken in your package.

7. Lithium battery

Improper battery use may result in fire, explosion, or personal injury! When replace the battery, please make sure you are using the same model!

Before your operation please read the following instructions carefully.

- Installation environment
- ♦ Keep away from extreme hot places and sources;
- ♦ Avoid direct sunlight;
- ♦ Keep away from extreme humid places;
- ♦ Avoid violent vibration;
- Do not put other devices on the top of the NVR;
- ♦ Be installed in well ventilated place; do not block the vent.

• Accessories

Check the accessories after opening the box:

• Please refer to the packing list in the box *

1 Hardware Installation and Connection

Note: All the installation and operations here should conform to your local electric safety rules.

1.1 Check Unpacked NVR

When you receive the NVR from the forwarding agent, please check whether there is any visible damage. The protective materials used for the package of the NVR can protect most accidental clashes during transportation. Then you can open the box to check the accessories.

Please check the items in accordance with the list (Remote control is optional). Finally you can remove the protective film of the NVR.

1.2 About Front Panel and Rear Panel

For detailed information of the function keys in the front panel and the ports in the rear panel, please refer to the *User's Manual* included in the resource CD.

The model label in the front panel is very important; please check according to your purchase order. The label in the rear panel is very important too. Usually we need you to represent the serial number when we provide the service after sales.

1.3 After Remove the Chassis

Please check the data cable, power cable, COM cable and main boar cable connection is secure or not.

1.4 HDD Installation

Important:

Please turn off the power before you replace the HDD.

The pictures listed below for reference only

You can refer to the *User's Manual* for recommended HDD brand. Please use HDD of 7200rpm or higher. Usually we do not recommend the PC HDD.



1 Use the screwdriver to loose the screws of the rear panel and then remove the front cover.



② Put the HDD to the HDD bracket in the chassis and then line up the four screws to the four holes in the HDD. Use the screwdriver to fix the screws firmly to secure HDD on the HDD bracket



③ Connect to the HDD data cable to the main board and the HDD port respectively. Loosen the power cable of the chassis and connect another end of the power cable to the HDD port.



④ After connect the cable, put the front cover back to the device and then fix screws of the rear panel.

1.5 Front Panel

The front panel is shown as in Figure 1-1.

| 7 8 9 10 11 12 12 14 15 16 STATUS ACT 2011 | <u>ل</u> |
|--|----------|
| < 9 2 1 < 5 REC ESC | |
| | |
| | |
| | |

Figure 1-1

Please refer to the following sheet for front panel button information.

| | • | • |
|------|------|----------|
| Name | lcon | Function |

| Power button | U | Power button, press this button for three seconds to boot up or shut down DVR. |
|---------------|----------------|--|
| USB port | ~ C | To connect USB storage device, USB mouse. |
| Up/Down | ▲、▼ | Activate current control, modify setup, and then move up and down. |
| | | Increase/decrease numeral. |
| | | Assistant function such as PTZ menu. |
| | | Input number 1/4. |
| Left/Right | | Shift current activated control, and then move left and right. |
| | | When playback, click these buttons to control playback bar. |
| | | Input number 2/3. |
| Enter | ENTER | Confirm current operation |
| | | Go to default button |
| | | Go to menu |
| Reverse/Pause | | In normal playback or pause mode, click this button to reverse Playback Input number 5. |
| Play/Pause | ► II | In normal playback click this button to pause playback |
| | | In pause mode, click this button to resume playback. |
| | | Input number 6. |
| Slow play | Þ | Multiple slow play speeds or normal playback. Input number 8. |
| Fast play | * | Various fast speeds and normal playback. Input number 7. |
| Play previous | 14 | In playback mode, playback the previous video. Input number 9. |
| Play Next | → I | In playback mode, playback the next video Input number 0. |
| ESC | ESC | Go to previous menu, or cancel current operation. |
| | | When playback, click it to restore real-time monitor mode. |
| Assistant | Fn | One-window monitor mode, click this button to display assistant function: PTZ control and image color. |
| | | Backspace function: in numeral control or text control, press it for 1.5 seconds to delete the previous character before the cursor. |
| | | In motion detection setup, working with Fn and direction keys to realize setup. |
| | | In text mode, click it to switch between numeral, English character(small/capitalized) and etc. |
| | | In HDD management interface, you can click it to switch HDD record information and other information (Menu |
| | | prompt) Realize other special functions. |
| Shift | • | In textbox, click this button to switch between numeral, |
| - | | English(Small/Capitalized),donation and etc. |

| Record | REC | Manually stop/start recording, working with direction keys or numeral keys to select the recording channel. |
|---------------------------------|--------|---|
| Remote control indication light | ACT | Remote control indication light |
| Status indication light | Status | If there is Fn indication light, current status indication light is null. |
| Power indication light | Power | Power indication light |
| Record light | 1-16 | System is recording or not. It becomes on when system is recording. |
| IR Receiver | IR | It is to receive the signal from the remote control. |
| CD-ROM button | | Pop-up or insert the CD. |

1.6 Rear Panel

The NVR708MP series rear panel is shown as below. See Figure 1-2.

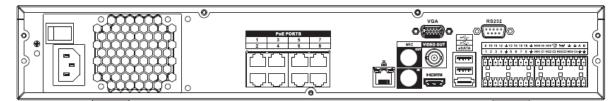


Figure 1-2

The NVR716MP series rear panel is shown as below. See Figure 1-3.

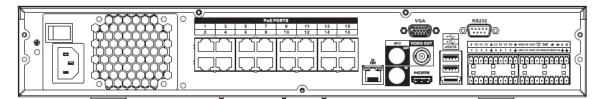


Figure 1-3

Please refer to the following sheet for detailed information.

| lcon | Port Name | Function | | | | |
|---------------------|------------------|---------------------|--|--|--|--|
| Power on-off button | | Power on-off button | | | | |
| | Power input port | Input AC 220V. | | | | |

| Icon | Port Name | Function | | | | |
|------------|------------------------------------|--|--|--|--|--|
| PoE PORTS | PoE port | Built-in Switch supports PoE function. | | | | |
| MIC IN | Audio input port | Bidirectional talk input port. It is to receive the analog audio signal output from the devices such as mike phone, pickup. | | | | |
| MIC OUT | Audio output port | Audio output port. It is to output the analog audio signal to the devices such as the sound box. Bidirectional talk output. Audio output on 1-window video monitor. Audio output on 1-window video playback. | | | | |
| VIEDEO OUT | Video output port | CVBS output | | | | |
| НДМІ | High Definition Media Interface | High definition audio and video signal output port. It transmits uncompressed high definition video and multiple-channel data to the HDMI port of the display device. | | | | |
| 1~16 | Alarm input port 1~16 | There are four groups. The first group is from port 1 to port 4, the second group is from port 5 to port 8, the third group is from 9 to 12, and the fourth group is from 13 to 16. They are to receive the signal from the external alarm source. There are two types; NO (normal open)/NC (normal close). When your alarm input device is using external power, please make sure the device | | | | |
| ⊥ | Alarm input port | and the NVR have the same ground. | | | | |
| - | ground end | | | | | |
| NO1~NO5 | Alarm output port $1 \sim 5$ | 5 groups of alarm output ports. (Group 1: port NO1~C1,Group 2:port NO2~ | | | | |
| C1~C5 | | C2,Group 3:port NO3~C3, Group 4: port | | | | |
| NC5 | | NO4~C4, Group 5: port NO5, C5, NC5).Output alarm signal to the alarm device. Please make sure there is power to the external alarm device. | | | | |
| | | NO: Normal open alarm output port. C: Alarm output public end. NC: Normal close alarm output port. | | | | |
| A | RS485 (RS-485) communication | RS485_A port. It is the cable A. You can connect to the control devices such as speed dome PTZ. | | | | |
| В | port | RS485_B.It is the cable B. You can connect to the control devices such as speed dome PTZ. | | | | |
| CTRL 12V | 1 | Controller 12V power output. It is to control the on-off alarm relay output. It can be used to control the device alarm output. At the same time, it can also be used as the power input source of some devices such as the alarm detector. | | | | |

| lcon | Port Name | Function | | | |
|------------------------------|---------------------|---|--|--|--|
| +12V | / | +12V power output port. It can provide the power to some peripheral devices such as the camera or the alarm device. Please note the supplying power shall be below 1A. | | | |
| | Network port | 10M/100M/1000M self-adaptive Ethernet port. Connect to the network cable. | | | |
| eSATA | eSATA port | External SATA port. It can connect to the device of the SATA port. Please jump the HDD when there is peripheral connected HDD. | | | |
| ← USB2.0 port. | | Connect to USB2.0 storage device , mouse, burner and etc | | | |
| RS232 (RS- 422) | RS232 debug COM. | It is for general COM debug to configure IP address or transfer transparent COM data. | | | |
| VGA VGA video output port | | VGA video output port. Output analog video signal. It can connect to the monitor to vie analog video. | | | |

2 GUI Operation

Connect the device to the monitor and then connect a mouse and power cable. Click the power button at the rear panel and then boot up the device to view the video output. You can use the mouse to implement some GUI operation.

2.1 Login

After device booted up, the system is in multiple-channel display mode. See Figure 2-1. Please note the displayed window amount may vary. The following figure is for reference only.

You can overlay the corresponding date, time and channel name on each screen. You can refer to the following sheet for channel record or alarm status information.

| 1 | 0 | Recording status | 3 | ? | Video loss |
|---|----------|------------------|---|---|-------------|
| 2 | U | Motion detection | 4 | | Camera lock |

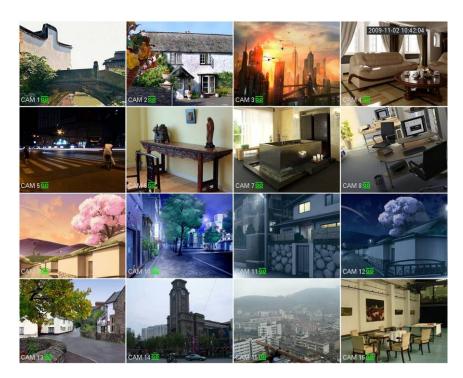


Figure 2-1

Right click mouse, you can see the login interface. Please input user name and password. See Figure 2-2. System consists of four accounts:

- Username: admin. Password: admin.
- Username: 888888. Password: 888888.
- Username: 666666. Password: 666666.
- Username: default. Password: default.

You can use USB mouse to input. Click **123** to switch between numeral, English character

(small/capitalized) and denotation.

| V | SYSTEM LOGIN | | | | | | |
|----------|------------------------------------|--|--|--|--|--|--|
| | User Name 8888888 Password 123 | | | | | | |
| | OK Cancel | | | | | | |

Figure 2-2

Important:

For security reason, please modify password after you first login.

Within 30 minutes, three times login failure will result in system alarm and five times login failure will result in account lock!

2.2 System Setting-Schedule

After the system booted up, it is in default 24-hour regular mode. You can set record type and time in schedule interface.

In the main menu, from Setting to Schedule, you can go to schedule menu. See Figure 2-3. There are total six periods.

- Channel: Please select the channel number first. You can select "all" if you want to set for the whole channels.
- Week day: There are eight options: ranges from Saturday to Sunday and all.
- Pre-record: System can pre-record the video before the event occurs into the file. The value ranges from 1 to 30 seconds depending on the bit stream.
- Redundancy: System supports redundancy backup function. It allows you backup recorded file in two disks. You can highlight Redundancy button to activate this function. Please note, before enable this function, please set at least one HDD as redundant. (Main menu->Advanced->HDD Management).
 Please note this function is null if there is only one HDD.
- Snapshoot: You can enable this function to snapshoot image when alarm occurs.
- Record types: There are four types: regular, motion detection (MD), Alarm, MD & alarm.
- Holiday: Highlight the button here, the holiday settings in General interface (Chapter 5.6.1 in User's Manual) becomes activated.

Please highlight icon loss to select the corresponding function. After completing all the setups please click save button, system goes back to the previous menu.

At the bottom of the menu, there are color bars for your reference. Green color stands for regular recording, yellow color stands for motion detection and red color stands for alarm recording. The white means the MD and alarm record is valid. Once you have set to record when the MD and alarm occurs, system will not record neither motion detect occurs nor the alarm occurs.

| 6 | | | S | CHEDUL | Ξ | | | | |
|----------|-----------------|----------|--------|---------|--------|---------|--------|--------|-----|
| Channel | [1 _▼Pı | reRecord | 4 sec. | Redunda | ncy Sr | napshot | Holida | ıy 🗌 | |
| Period | Tue 🔻 | Record | Туре | Regular | MD | Alarm | MD&A | larm | |
| Period 1 | 00:00 | -24 :00 | | | | | | | |
| Period 2 | 00:00 | -24 :00 | | | | | | | |
| Period 3 | 00:00 | -24 :00 | | | | | | | |
| Period 4 | 00:00 | -24 :00 | | | | | | | |
| Period 5 | 00:00 | -24 :00 | | | | | | | |
| Period 6 | 00:00 | -24 :00 | | | | | | | |
| | Regular | MD | | 📕 Alarr | n | MD8 | Alarm | | |
| 0 3 | 3(| ĵ | 9 | 12 | 15 | | 8 | 21 | -24 |
| | | | | | | | | | |
| | | | | | | | | | |
| | | | | | | | | | |
| Defaul | t Co | ру | | | | |)K | Cancel | |



Tips

Copy function allows you to copy one channel setup to another. After setting in channel 1, click Copy button, you can go to interface Figure 2-4. You can see current channel name is grey such as channel 1. Now you can select the channel you wan to paste such as channel 5/6/7. If you wan to save current setup of channel 1 to all channels, you can click the first box "ALL". Click the OK button to save current copy setup. Click the OK button in the Encode interface, the copy function succeeded.

Please note, if you select ALL in Figure 2-4, the record setup of all channels are the same and the Copy button becomes hidden.

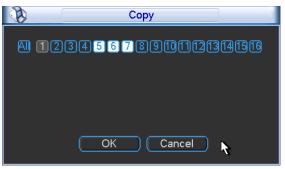


Figure 2-4

2.3 System Setting-Network Setup

Here is for you to input network information. See Figure 2-5.

- IP Version: There are two options: IPv4 and IPv6. Right now, system supports these two IP address format and you can access via them.
- MAC address: The host in the LAN can get a unique MAC address. It is for you to access in the LAN. It is read-only.
- IP address: Here you can use up/down button (▲▼) or input the corresponding number to input IP address. Then you can set the corresponding subnet mask the default gateway.

- Default gateway: Here you can input the default gateway. Please note system needs to check the validity of all IPv6 addresses. The IP address and the default gateway shall be in the same IP section. That is to say, the specified length of the subnet prefix shall have the same string.
- DHCP: It is to auto search IP. When enable DHCP function, you can not modify IP/Subnet mask /Gateway. These values are from DHCP function. If you have not enabled DHCP function, IP/Subnet mask/Gateway display as zero. You need to disable DHCP function to view current IP information. Besides, when PPPoE is operating, you can not modify IP/Subnet mask /Gateway.
- TCP port: Default value is 37777. You can change if necessary.
- UDP port: Default value is 37778. You can change if necessary.
- HTTP port: Default value is 80.
- RTSP port: Default value is 554.

Important: System needs to reboot after you changed and saved any setup of the above four ports. Please make sure the port values here do not conflict.

- Max connection: system support maximal 20 users. 0 means there is no connection limit.
- MTU: It is to set MTU value of the network adapter. The value ranges from 1280-7200 bytes. The default setup is 1500 bytes. Please note MTU modification may result in network adapter reboot and network becomes off. That is to say, MTU modification can affect current network service. System may pop up dialog box for you to confirm setup when you want to change MTU setup. Click OK button to confirm current reboot, or you can click Cancel button to terminate current modification. Before the modification, you can check the MTU of the gateway; the MTU of the NVR shall be the same as or is lower than the MTU of the gateway. In this way, you can reduce packets and enhance network transmission efficiency.

The following MTU value is for reference only.

- ♦ 1500: Ethernet information packet max value and it is also the default value. It is the typical setup when there is no PPPoE or VPN. It is the default setup of some router, switch or the network adapter.
- ♦ 1492: Recommend value for PPPoE.
- ♦ 1468: Recommend value for DHCP.
- ♦ Please make sure MTU port does not conflict with other ports.
- Preferred DNS server: DNS server IP address.
- Alternate DNS server: DNS server alternate address.
- Transfer mode: Here you can select the priority between fluency/video qualities.
- LAN download: System can process the downloaded data first if you enable this function. The download speed is 1.5X or 2.0X of the normal speed.

Important

For the IP address of IPv6 version, default gateway, preferred DNS and alternate DNS, the input value shall be 128-digit. It shall not be left in blank.

After completing all the setups please click save button, system goes back to the previous menu.

| ۵¢ | NETWORK | (T) | NETWORK |
|----------------|-----------------------|----------------|------------------------------|
| IP Version | (IPv4 * | IP Version | [IPv6] |
| IP Address | 10 · 43 · 3 · 63 DHCP | LinkAddr | fe80::9202:a9ff.fe94:42l1/64 |
| Subnet Mask | 255 . 255 . 0 . 0 | IP Address | 2001:da8:207::9403 /64 |
| Gateway | 10 . 43 . 0 . 1 | Gateway | 2001:da8:207::9401 |
| TCP Port | 37777 HTTP Port 80 | TCP Port | 37777 HTTP Port 80 |
| UDP Port | 37778 RTSP Port 554 | UDP Port | 37778 RTSP Port 554 |
| Max Connection | 20 MTU (1500 | Max Connection | 20 MTU (1500 |
| Preferred DNS | 8 . 8 . 8 . 8 | Preferred DNS | ::##:8.8.8.8 |
| Alternate DNS | 8 . 8 . 4 . 4 | Alternate DNS | ::##:8.8.4.4 |
| 0 | LAN Download | | LAN Download |
| (NETWORK SE | TTING) | (NETWORK SE | TTING) |
| Default | Save Cancel | Default | Save Cancel |

Figure 2-5

2.4 System Setting-Alarm

Before the operation, please make sure you have properly connected the alarm devices. You can refer to the User's Manual for reference.

Alarm interface is shown as below. See Figure 2-6.

- Alarm in: Here is for you to select channel number.
- Event type: There are four types. Local input/network input/IPC external/IPC offline alarm.
 - > Local input alarm: The alarm signal system detects from the alarm input port.
 - > Network input alarm: It is the alarm signal from the network.
 - IPC external alarm: It is the on-off alarm signal from the front-end device and can activate the local NVR.
 - IPC offline alarm: Once you select this item, system can generate an alarm when the front-end IPC disconnects with the local NVR. The alarm can activate record, PTZ, snap and etc. The alarm can last until the IPC and the NVR connection resumes.
- Type: Normal open or normal close.
- Enable: Please you need to highlight this button to enable current function.
- Period: Click set button, you can set alarm period. System can only generate an alarm in the specified period. There are six periods in one day.

Please highlight icon loss to select the corresponding function. After setting all the setups please click save button, system goes back to the previous menu.

| | | ALARM | | |
|----------------------|--------------|------------------|------------------|--------|
| Event Type Enable | Local Alarm | Alarm In Type | 1 Normal Open | J |
| Period | Set | Anti-dither | 5 |]sec. |
| Alarm Out | 123 | Latch | 10 | sec. |
| Show Message | Alarm Upload | Send Email | | - |
| Record Channel | 123456 | 7891011(| 1213141516 | |
| PTZ Activation | Select | Delay | 10 |]sec. |
| □Tour | 123456 | 789111(| 1213141516 | |
| Buzzer | | | | |
| | | | | |
| Сору De | efault | | Save | Cancel |

Figure 2-6

For the 32-channel series product, the alarm interface and PTZ setup is shown as below. See Figure 2-7 and Figure 2-8.

| 9 | | ALARM | | |
|----------------|---------------|-------------|---------------|--------|
| Event Type | Local Alarm 🔻 | Alarm In | 1 |) |
| Enable | | Туре | Normal Open 🔻 | |
| | | | | |
| Period | Set | Anti-dither | 5 | sec. |
| Alarm Out | 123456 | Latch | 10 | sec. |
| Show Message | Alarm Upload | Send Email | | |
| Record Channel | 123456 | 78910111 | 213141516 | |
| | 171319202122 | 23242526272 | 323606162 | |
| PTZ Activation | Select | Delay | 10 | sec. |
| Tour | 123456 | 78910111 | 213141516 | |
| | 171819202122 | 23242526272 | 329606162 | |
| Snapshot | 123456 | 78910111 | 213141516 | |
| | 171319202122 | 23242526272 | 329808182 | |
| Buzzer | | | | |
| Default C | ору | | Save | Cancel |

Figure 2-7

| CAM 1 | None - | 0 | CAM 2 | None | - 0 |
|--------|--------|---|--------|------|-----|
| CAM 3 | None 💌 | 0 | CAM 4 | None | • 0 |
| CAM 5 | None 🔻 | 0 | CAM 6 | None | - 0 |
| CAM 7 | None - | 0 | CAM 8 | None | • • |
| CAM 9 | None | 0 | CAM 10 | None | • 0 |
| CAM 11 | None 🔻 | 0 | CAM 12 | None | - 0 |
| CAM 13 | None 🝷 | 0 | CAM 14 | None | - 0 |
| CAM 15 | None 🔻 | 0 | CAM 16 | None | • 0 |
| CAM 17 | None 🔻 | 0 | CAM 18 | None | - 0 |
| CAM 19 | None - | 0 | CAM 20 | None | • 0 |
| CAM 21 | None 💌 | 0 | CAM 22 | None | - 0 |
| CAM 23 | None 🔻 | 0 | CAM 24 | None | - 0 |
| CAM 25 | None - | 0 | CAM 26 | None | - 0 |
| CAM 27 | None 💌 | 0 | CAM 28 | None | • 0 |
| CAM 29 | None 🔻 | 0 | CAM 30 | None | - 0 |
| CAM 31 | None | 0 | CAM 32 | None | • 0 |
| | | | | | |

Figure 2-8

2.5 System Setting-PTZ

Please note:

- Slight difference may be found in the user's interface, due to various protocols.
- Please make sure the speed domes A/B cables are properly connected to the A/B ports of NVR.
- You have properly set PTZ information. (Main menu->Setting->PTZ).
- Please switch camera monitor channel to current window.

2.5.1 PTZ Setup

The pan/tilt/zoom setup includes the following items. Please select channel first. See Figure 2-9.

- Channel: Please select the connected IPC.
- PTZ type: Please select from the dropdown list. There are two options: local/remote.
- Protocol: Select corresponding PTZ protocol such as PELCOD.
- Address: Input corresponding PTZ address.
- Baud rate: Select baud rate. Default value is 9600.
- Data bit: Select data bit. Default value is 8.
- Stop bit: Select stop bit. Default value is 1.
- Parity: There are three choices: none/odd/even. Default value is none.

| 3 | | PAN/TILT/ZOOM | |
|-----------|----------|---------------|------------|
| Channel | 1 | | |
| PTZ Type | Local 🔻 | | |
| Protocol | PELCOD - | | |
| Address | 1 | | |
| Baudrate | 9600 🔻 | | |
| Data Bits | 8 🔻 | | |
| Stop Bits | 1 | | |
| Parity | None 🔻 | | |
| | | | |
| | | | |
| | | | |
| | | | |
| | | | |
| | | | |
| Default | Сору | (S; | ave Cancel |

Figure 2-9

If you are connecting to network PTZ, the PTZ type shall be remote. See Figure 2-10.

| 4 | ð | | | PAN/TILT/ZOOM | |] | |
|---|---------------------|-------------|----------|---------------|------|---|--------|
| | Channel PTZ Type | 1 Remote | • | | | | |
| | | | | | | | |
| | | | | | | | |
| | | | | | | | |
| | Default | Сору | | | Save | | Cancel |

Figure 2-10

After completing all the setups please click save button, system goes back to the previous menu.

2.5.2 PTZ Operation

In one window display mode, right click mouse (click "Fn" Button in the front panel or click "Fn" key in the remote control).

Click Pan/Tilt/Zoom, the interface is shown as below. See Figure 2-11.

Here you can set the following items:

- Step: value ranges from 1 to 8.
- Zoom
- Focus
- Iris

Please note current command is grey if current series product does not support this function. Double click the PTZ menu head to hide it.

Click icon 🔄 and 🔛 to adjust zoom, focus and iris.

Here you can set PTZ direction, speed (step), focus, zoom, iris, preset, tour, pattern, scan, aux call, light, rotation and etc. Please use the direction keys to set.



Figure 2-11

In Figure 2-11, please click direction arrows (See Figure 2-12) to adjust PTZ position. There are total 8 direction arrows. Please note if you use front panel, you can use just four directions (Up/down/left/right). The speed value ranges from 1 to 8. You can click the software keyboard or the front panel to input. The speed 8 is faster than speed 1.



Figure 2-12

| Name | Function | function | Shortcut | Function | function | Shortcut |
|-------|------------|----------|----------|----------|----------|----------|
| | key | | key | key | | Key |
| Zoom | | Near | | Ð | Far | |
| Focus | | Near | • | Ð | Far | |
| Iris | \bigcirc | close | ◀ | Ð | Open | ► II |

Here is a sheet for you reference.

You can click set button in Figure 2-11 (or click REC button in the front panel) to set preset, tour, and pattern.

You can click page switch button in Figure 2-11 (or click Fn button in the front panel) to call main function.

2.6 Remote Device

Important

Do not connect the switch to the PoE port, otherwise the connection may fail!

2.6.1 UPNP

Please connect the network camera to the PoE port of the device rear panel (Figure 2-13), system can auto connect to the network camera. Please note the following figure is for reference only.

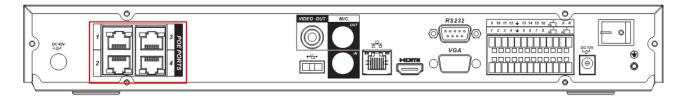


Figure 2-13

2.6.2 Built-in Switch Setup

The built-in switch function is for product of PoE port.

From Network->Network Server->Switch, you can set switch IP address, subnet mask, gateway and etc. See Figure 2-14.

| | Switch S | ettings | | - |
|-------------|----------|---------|-------|---|
| | | | | |
| IP Address | 192 . 16 | 68 . 1 | . 106 | |
| Subnet Mask | 255 . 25 | 5 . 255 | . 0 |] |
| Gateway | 192 . 16 | 68 . 1 | + 1 |] |
| | | | | |
| | | | | |
| | | | | |
| | ок) | Cance | | |
| | | | | |

Figure 2-14

2.6.3 Remote Device Connection

In the main menu, click the Remote Device icon to go to the corresponding interface. The remote device interface is shown as in Figure 2-15.

- IP search: Click it to search IP address.
- Add: Click it to connect to the selected device and add it to the Added device list. Support Batch add.
- Show filter: You can use it to display the specified devices from the added device.
- IPC config: Double click the eigen on the IPC config column, you can go to the IPC setup interface.

See Figure 2-16.

- Gain mode: It is to set video noise. Check Auto, system automatically sets video gain. Check Manual, you can set gain threshold, brightness and etc.
- ☆ Gain threshold: Here is for you to set gain value. The different series product has different default values. The lower the value is, the lower the noise is. But the video brightness may become too dark under the low illumination. If the value is high, it can enhance the video brightness under the low illumination, but the video noise may become high.
- ♦ BLC: Check the box here to enable backlight compensation function. System can automatically expose according to environment so that you can view the darkest section of the video.
- ♦ Day/Night mode: Here is to set video color or black and white mode.
 - a) Color: Camera only outputs color video.
 - b) Auto: Camera auto selects color or black and white video according to device feature (Video whole brightness or there is any IR light or not.).
 - c) Black and white: Camera only outputs black and white video.
- ♦ Exposure mode:

- a) Auto: The video whole brightness can adjust automatically within the normal exposure threshold according to different environments. The lower the gain value is, the smaller the noise is.
- b) Manual: It is to display manual exposure value.
- Delete: Please select one device in the Added device list and then click it to remove.
- Manual add: Click it to add the IPC manually. The port number is 37777. The default user name is admin and password is admin.

| Ş | <u>}</u> | | | REMOT | E DEVICI | | | - 1 |
|-----|----------|---------|-----------|-----------------------|----------|-------------|----------------|----------|
| ، ا | 136 | Edit | IP Addre | ss Poi | | vice News A | Manufacturer | |
| | 130 | | | | | | | |
| | 1 | _ Ģ | 10.43.8. | | | SVR | Private | 目 |
| | 2 | _ Ģ | 10.43.7.1 | | | | Onvif | |
| | 3 | Ģ | 10.43.0.1 | 60 377 | 77 | NVR | Private | |
| | 4 | Ģ | 10.43.1.5 | 54 377 | 77 | NVR | Private | |
| | 5 | ē | 10 43 8 6 | <u>5 377</u> | 77 | N\/R | <u>Private</u> | |
| | <u>▲</u> | | | | | | | |
| (| IP Sear | ch) 🚺 A | dd) | | | Show Filter | No | ne 🔻 |
| | | | | | | | | |
| Ι, | Added D | evice — | | | | | | |
| 1 | channe | l Edit | Delete II | ² C Config | Status | IP Address | Port | _ |
| | 1 | / | × | | | 10.43.8.65 | 37777 | |
| | 2 | / | × | _ | <u> </u> | 10.43.8.65 | 37777 | |
| | 3 | 1 | × | -4 | _ | 10.43.0.77 | 37777 | |
| | 4 | 1 | × | _ | _ | 10.43.0.187 | 37777 | |
| | 5 | · · · · | × | _ | <u> </u> | 10.43.8.65 | 37777 | |
| | <u> </u> | | <u> </u> | | <u> </u> | 10 40 0 61 | <u>דרדר</u> | |
| | • | | | | | | | |
| [(| Delete | e) Manu | ual Add | | | | | |
| [] | | | | | | | | |
| | | | | | | | | |
| | | | | | | (OK |) (Canc | el |
| | | | | | | | | |

Figure 2-15

| 8 | IPC Conf | ig |
|-------------|-----------------|---------------|
| Channel | 4 | |
| Gain Mode | O Auto 🔍 Manual | Gain 74 |
| Auto Iris | O On 🌢 Off | Brightness 50 |
| | | Contrast 50 |
| | | Hue 50 |
| | | Saturation 50 |
| BLC Mode | Off | |
| Day & Night | Color | |
| Exposure | Auto O Manual | |
| | Default Refresh | Save Cancel |

Figure 2-16

Click the Manual Add button; you can go to the following interface. See Figure 2-17.

This series product max supports 32-channel standard definition video/high definition non-real-time video and the transmission rate is 1mbps per channel. It can also max supports 4-channel high definition video and the transmission rate is 8mbps. The delay time of each channel is below 500ms.

| Model | System Performance |
|--------------|--|
| 4-ch series | Max support 4-channel video. Total resources:400/480fps@D1,200/240fps@720P.100/120@1080P. |
| 8-ch series | Max support 8-channel video. Total resources:400/480fps@D1,200/240fps@720P.100/120@1080P. |
| 16-ch series | Max support 16-channel video. Total resources:400/480fps@D1,200/240fps@720P.100/120@1080P. |
| 32-ch series | Max support 32-channel standard definition video. Support 8-channel 1080p/5mbps (extra stream D1/1mbps), 16-channel 720p/2mbps (extra CIF/640kbps), 32-channel D1/1mbps. |

This series product supports the IPC from many popular manufactures such as Sony, Hitachi, dynacolor, Axis, Samsung, arecont, Dahua, onvif and custom type. You can just input URL address, user name, and password to login the front-end device.

In the following interface, you can see there are three connection modes: auto, TCP (default), UDP.

| | Manual Add |
|----------------|------------|
| Channel | 2 7 |
| Manufacturer | Private |
| IP Address | |
| TCP Port | 37777 |
| User | admin |
| Password | •••• |
| Remote Channel | 1 |
| Decoder Buffer | 280 msec |
| | OK Cancel |
| | |

Figure 2-17

2.6.4 Short-cut Menu

In the preview interface, for the channel of no IPC connection, you can click the icon "+" in the centre of the interface to quickly go to the Remote Device interface. See Figure 2-18 and Figure 2-19.



Figure 2-18

| 36 | IP Address • | Port | Device ID | Manufacturer | Туре | |
|------------------|---------------|-------|------------------|--------------|------|--|
| 1 | 10.42.0.75 | 37777 | | Onvif | | |
| 2 | 10.42.0.66 | 37777 | | Private | | |
| 2 3 | 10.42.2.103 | 37777 | | Private | | |
| 4 | 10.42.0.37 | 4000 | HDVR | Onvif | HDVR | |
| 5 | 10.42.0.21 | 37777 | NVR | Private | NVR | |
| | 10.42.2.104 | 37777 | DVR | Private | DVR | |
| 6 7 8 9 | 10.42.0.35 | 37777 | HDVR | Onvif | HDVR | |
| 8 | 10.42.1.111 | 37777 | | Private | | |
| 9 | 10.42.1.147 | 37776 | HDVR | Private | HDVR | |
| 10 | 10.42.0.62 | 37777 | | Onvif | | |
| 11 | 10.42.1.71 | 37777 | DVR | Private | DVR | |
| 12 | 10.42.2.236 | 37777 | | Private | | |
| 13 | 10.42.1.52 | 37777 | HDVR | Onvif | HDVR | |
| 14 | 10.42.0.6 | 37710 | NVR | Private | NVR | |
| 15 | 10.42.2.36 | 37777 | | Private | | |
| 16 | 10.42.1.55 | 37777 | 1233333333333333 | Private | NVR | |
| 17 | 10 42 2 62 | 77777 | | Private | | |
| P Searc | h) Manual Add | | | Show Filter | None | |



2.6.5 Remote Device Info

Please go to the main menu->system info, click the remote device info button to view the detailed information. It includes remote device channel status, connection log and network load and etc. Please refer to the user's manual for detailed information.

2.7 Advanced-HDD Management

Here is for you to view and implement hard disk management (main menu->Advanced->HDD management). See Figure 2-20.

You can see current HDD type, status, capacity and record time. The operation includes format HDD, resume from error or change HDD property (Read/write HDD, read-only HDD). It can also set the HDD alarm and HDD specified storage setup.

| HDD MANAGE | | | | | | |
|---------------|--|--|--|--|--|--|
| SATA ESATA | 1 Alarm Set (HDD Setting) 0 Alarm Release (Channels Setting) 2 3 4 5 | | | | | |
| | · · · · | | | | | |
| HDD No. | 1 Set to Read/Write Execute | | | | | |
| Туре | Read/Write | | | | | |
| Status | Normal | | | | | |
| Capacity | 232.87 GB | | | | | |
| Record time | 10-09-26 17:30:36 / 11-03-02 09:36:00 10-09-23 12:20:10 / 10-09-26 17:30:37 | | | | | |
| | ОК | | | | | |

Figure 2-20

3 Web Operation

Important

- Slightly difference may be found in the interface due to different series.
- The following operation is based on 16-channel series device. For the 32-channel series product, there is 32-channel option.

This series NVR product support the Web access and management via PC.

Web includes several modules: Monitor channel preview, record search, alarm setup, system configuration, PTZ control, monitor window and etc.

3.1 Network Connection

Before web client operation, please check the following items:

- Network connection is right
- NVR and PC network setup is right. Please refer to network setup(main menu->setting->network)
- Use order ping ***.***.***(* NVR IP address) to check connection is OK or not. Usually the return TTL value should be less than 255.
- Open the IE and then input NVR IP address.
- System can automatically download latest web control and the new version can overwrite the previous one.
- If you want to un-install the web control, please run *uninstall webrec2.0.bat*. Or you can go to C:\Program Files\webrec to remove single folder. Please note, before you un-install, please close all web pages, otherwise the un-installation might result in error.
- Current series product supports various browsers such as Safari, firebox browser, Google browser. Device only support 1-channel monitor on the Apple PC.

About PoE address setup, operation and allocation.

1) Insert PoE

After you insert PoE, device may try to set a corresponding IP address of the Switch network adapter. First, system tries to set via arp ping. It then uses DHCP if it finds the DHCP is enabled. After successfully set IP address, system may use Switch to send out broadcast, system thinks the connection is OK when there is any response. Now system is trying to login the newly found IPC. Now please check the interface, you can see the corresponding digital channel is active now. You can see a small PoE icon at the top left corner. You can see the PoE channel, PoE port information and etc from the connection list of the remote device interface (Chapter 5.6.11 in the User's Manual). For the IP search list, you need to click the IP search to display or refresh.

2) Remove PoE

After you removed PoE, you can see the corresponding digital channel becomes idle (disable). On the remote device interface, it is removed from the connected list. For the IP search list, you need to click the IP search to refresh.

- 3) After you insert PoE, system follows the principles listed below to map channel.
 - a) If it is your first time to insert PoE, system can map it to the first idle channel. After map, the channel can memorize the MAC address of the IPC. It is a <<u>Channel>---<IPC mac></u>map. If current channel does not connect to other device, system can memorize current MAC

address, otherwise it can refresh to the newly added device and memorize the <PoE port>--- <Channel>.

- b) If it is your second time to insert the PoE, system can check the saved MAC address according to <Channel>---<IPC mac> map to make sure current IPC has connected or not. If system finds the previous information and the channel is idle, system can map it to the previously used channel. Otherwise system goes to the next step.
- c) Thirdly, according to the <PoE port>---<Channel> map, system can know the previous mapping channel of current PoE port. System can select current channel if it is free. Otherwise, it goes to the next step:
- d) Fourthly, system goes to find the first idle channel it can get.

Generally speaking, once you insert PoE, system follow the steps listed above to find the channel available.

4) When you insert PoE, all channels are in use now.

System can pop up a dialogue box for you to select a channel to overwrite. The title of the pop-up interface is the name of the current operation PoE port. In this interface, All PoE channel become grey and can not select.

3.2 Login

Open IE and input NVR address in the address column. For example, if your NVR IP is 10.10.3.16, then please input http:// 10.10.3.16 in IE address column.

System pops up warning information to ask you whether install webrec.cab control or not. Please click yes button.

If you can't download the ActiveX file, please modify your IE security setup.

After installation, the interface is shown as below. See Figure 3-1.

Please input your user name and password.

Default factory name is **admin** and password is **admin**.

Note: For security reasons, please modify your password after you first login.

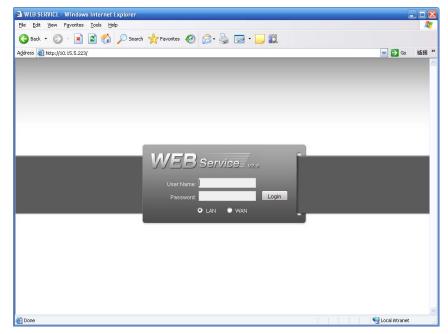


Figure 3-1

3.3 Main Window

3.3.1 LAN Login

For the LAN mode, after you logged in, you can see the main window. See Figure 3-2. Click the channel name on the left side; you can view the real-time video.



Figure 3-2

3.3.2 WAN Login

In WAN mode, after you logged in, the interface is shown as below. See Figure 3-3.

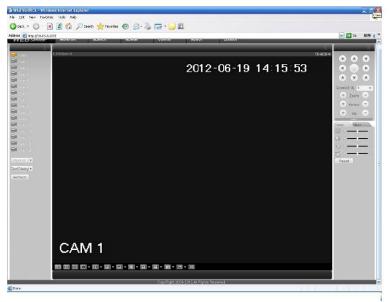


Figure 3-3

For detailed operation information, please refer to the User's Manual included in the resources CD.

| Appendix Toxic or Hazardous | Materials or Elements |
|-----------------------------|-----------------------|
|-----------------------------|-----------------------|

| Component Name | Toxic or Hazardous Materials or Elements | | | | | | | | |
|---------------------------------|--|----|----|-------|-----|------|--|--|--|
| | Pb | Hg | Cd | Cr VI | PBB | PBDE | | | |
| Sheet Metal(Case) | 0 | 0 | 0 | 0 | 0 | 0 | | | |
| Plastic Parts (Panel) | 0 | 0 | 0 | 0 | 0 | 0 | | | |
| Circuit Board | 0 | 0 | 0 | 0 | 0 | 0 | | | |
| Fastener | 0 | 0 | 0 | 0 | 0 | 0 | | | |
| Wire and Cable/AC Adapter | 0 | 0 | 0 | 0 | 0 | 0 | | | |
| Packing Material | 0 | 0 | 0 | 0 | 0 | 0 | | | |
| Accessories | 0 | 0 | 0 | 0 | 0 | 0 | | | |

Note

O: Indicates that the concentration of the hazardous substance in all homogeneous materials in the parts is below the relevant threshold of the SJ/T11363-2006 standard.

X: Indicates that the concentration of the hazardous substance of at least one of all homogeneous materials in the parts is above the relevant threshold of the SJ/T11363-2006 standard. During the environmental-friendly use period (EFUP) period, the toxic or hazardous substance or elements contained in products will not leak or mutate so that the use of these (substances or elements) will not result in any severe environmental pollution, any bodily injury or damage to any assets. The consumer is not authorized to process such kind of substances or elements, please return to the corresponding local authorities to process according to your local government statutes.

Note

- For detailed operation introduction, please refer to our resource CD included in your package for electronic version of the *User's Manual*.
- Slight difference may be found in user interface.
- All the designs and software here are subject to change without prior written notice.
- All trademarks and registered trademarks are the properties of their respective owners.
- If there is any uncertainty or controversy, please refer to the final explanation of us.
- Please visit our website for more information.