
NVR PNI House 1080p

16 CH full HD 1080P 2MP

- USER MANUAL -



MAIN FUNCTIONS

Real time surveillance

Surveillance via monitor: Analog output, VGA or HDMI interface

Storage

The HDD only works during recording, which reduces energy consumption and extends its life.

Note: The HDD is not included in the package

Backup

Via the USB interface: on USB storage devices

Playback

Real-time video recording

Multiple playback mode: 1 or 16 channels on the screen

Zoom on certain areas of the image

Intelligent operation

Control device from the mouse

Quickly copy settings from one channel to another

USAGE INSTRUCTIONS

Installing the storage unit

At first use, please install the storage unit. Two internal HDDs with a maximum capacity of 4TB (the HDD is not included in the package) can be installed in the recording unit casing.

- Unscrew the case
- Remove the NVR cover
- Fix the HDD
- Connect the data cables
- Fix back the NVR cover
- Connect the power cord

Turning on the NVR

Insert into the main the power cord in order to turn on the device.

If the start time falls within the preset recording schedule, then the recording function will start automatically.

Notes:

1. Check that the input voltage corresponds to the recommended device voltage. The power supply voltage is $220V \pm 10\%$ / 50Hz.
2. We suggest using an UPS to protect the device from voltage variations.

Turning off the NVR

There are two ways to stop the device:

1. Go to the main menu (right-click on the screen) and select the Logout option - Shutdown
2. Turn off the power supply.

Special warnings:

1. Restart after voltage drop: if the device is abnormally shut, it can make a backup and restart from that status after the power returns.

2. Replacing the battery on the mainboard: Before replacing the battery, you must save your system settings and turn off the power source. Device's time and hour must be rescheduled after replacing the battery. We recommend replacing the battery every year.

Remote control of the NVR

You can control the device as follows:

1. through dedicated CMS software, compatible with Windows
2. via Internet Explorer:

NOTE: To access via Internet Explorer you must install the ActiveX plug-in.

Set browser security level:

[Internet options] -> [Security] -> [Custom level] -> [ActiveX] (click Enable on all options).

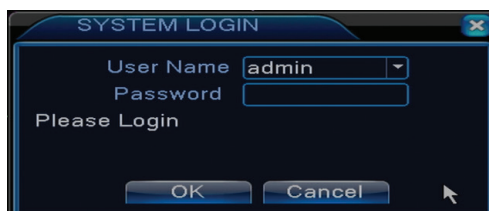
3. through the dedicated XMEye-app compatible with iOS, Android.

Authentication in the system

After turning on your device, log in to your system.

By default, the user **admin** has **1234** password. If your password is entered incorrectly 5 times consecutively, your account will be blocked. By restarting your device or after half an hour, your account will be unlocked automatically.

Note: For the security of your system, please change your password after your first login.



Channel preview

You can display 1, 4, 8, 9 or 16 channels on the screen. Or double-click on one of the channels to switch to full-screen mode.

Menu

In preview mode you can access the on-screen menu by right-clicking on the image below.

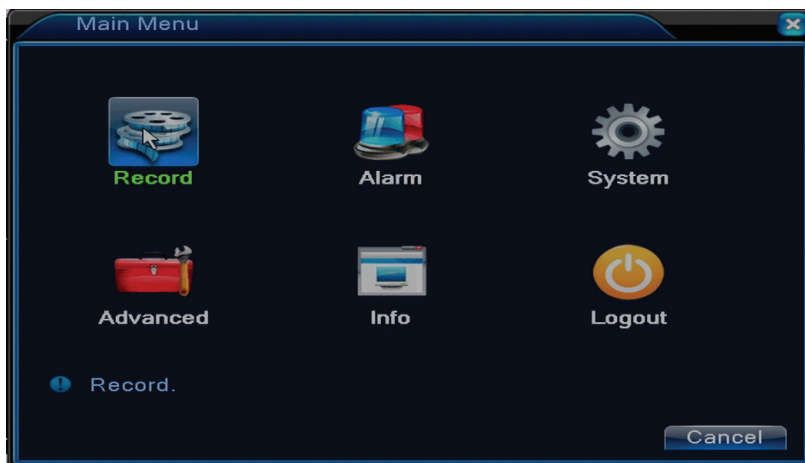


The menu includes:

Main menu, Guide, Quick set, Record Mode, Playback, PTZ Control, High Speed PTZ, Color setting, Output Adjust, Logout, Full screen.

1. MAIN MENU

By accessing the main menu the interface will look like the picture below.



1.1 Record

The recording operations include: Record config, Playback and Backup.

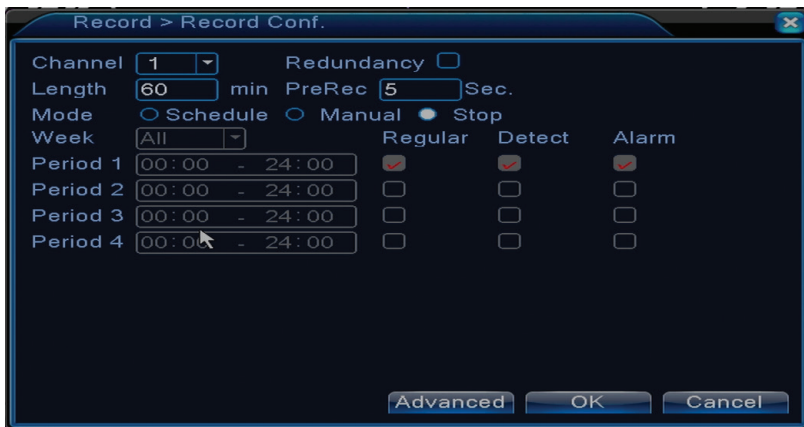


1.1.1 Record config

Go to Main menu - Record - Record config

Set recording parameters on each channel or all channels at the same time. The system is set to start recording 24 hours continuously.

Note: The HDD must be set in read / write mode.



Channel: choose the channel number for which you want to set the recording. Choose **All** to make settings for all channels at the same time.

Redundancy: the function is not active for this model

Length: set the length of each recording file (in minutes). Default is 60 minutes.

Pre-Record: registered between 1 and 30 seconds before an alarm event

Mode: set the recording type: scheduled, manually, or off.

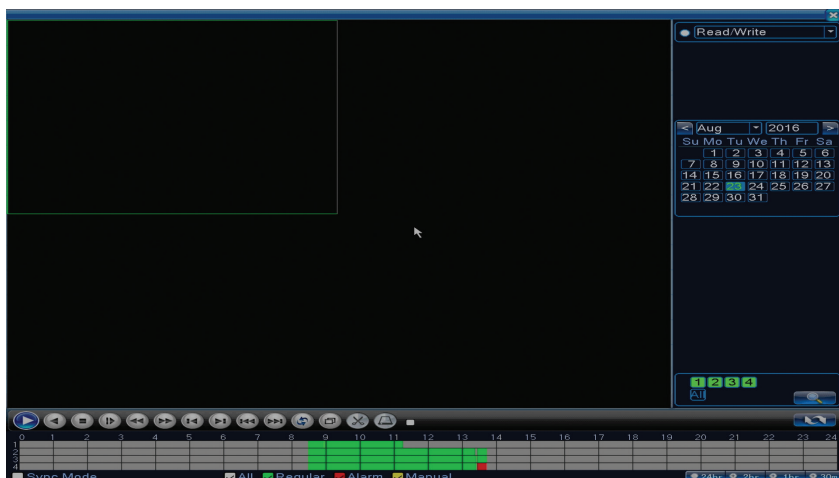
- **Scheduled recording:** You can choose 4 recording periods (between 0:00 and 24:00 hours) and 3 modes (normal recording, motion detection and alarm):
 - Regular recording: The device records over time set. Video file type is "R".*
 - Detect: the device records on motion detection. The video file type is "M".*
 - Alarm: the alarm recording function includes: motion detection, image loss, video loss.*
- **Manual recording:** Click the button and the corresponding channel will record regardless of the current status.
- **Stop:** click the button and the corresponding channel will stop recording regardless of the current status.

Note: The Advanced button opens the following menu: Up Window, Show desktop, Copy, Paste, Default, Restore, configuration of the storage unit.

1.1.2 Playback

There are two ways you can play the recorded files on the internal HDD:

- Right click on the screen - Playback
- Right click on the screen - Main Menu - Record - Playback



Note: The internal HDD you want to play records should be set in read-write mode.

Icons description:

		Play Pause		Back
		Stop		Slow playback
		Fast forward		Fast backward
		Next frame		Previous frame
		The next file		Previous file
		Full screen		Cyclic play

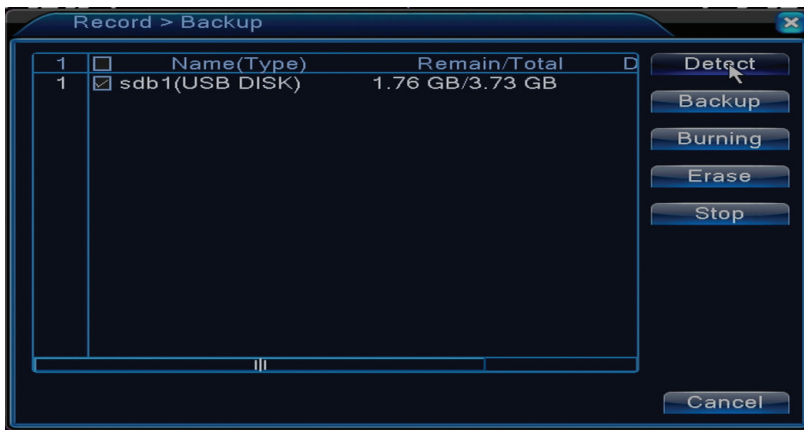
Note: For frame-by-frame playback, the movie will be paused.

Special functions:

Local Zoom: When the system displays a single channel on the screen, you can select a portion of the screen with your mouse to zoom in by clicking the left mouse button. You can then return to the normal screen by double-clicking.

1.1.3 Backup

NOTE: The USB memory must be installed in the NVR before starting to run the backup. Once executed, the created backup file can be played back individually.

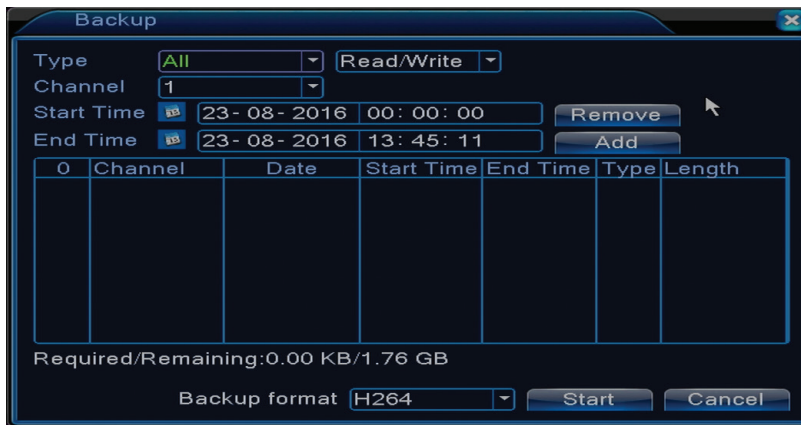


Detect: detects the USB recording drive connected to the NVR

Erase: format the selected unit

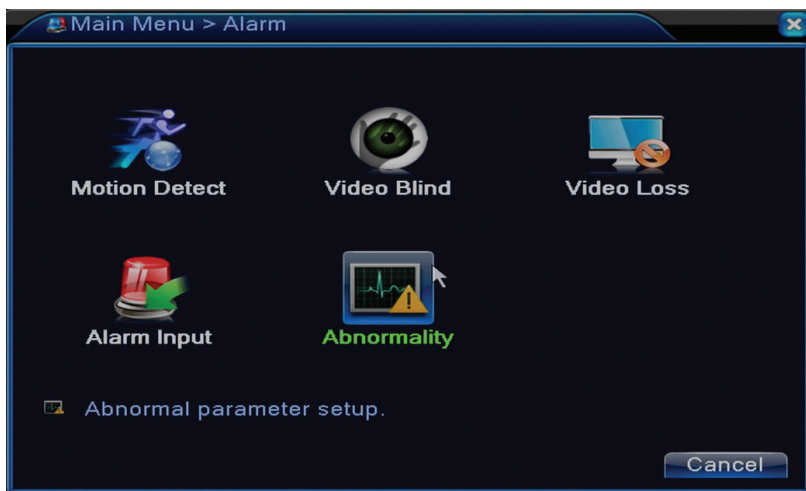
Stop: stops running the backup

Backup. By pressing this button, the backup configuration screen appears:



1.2 Alarm

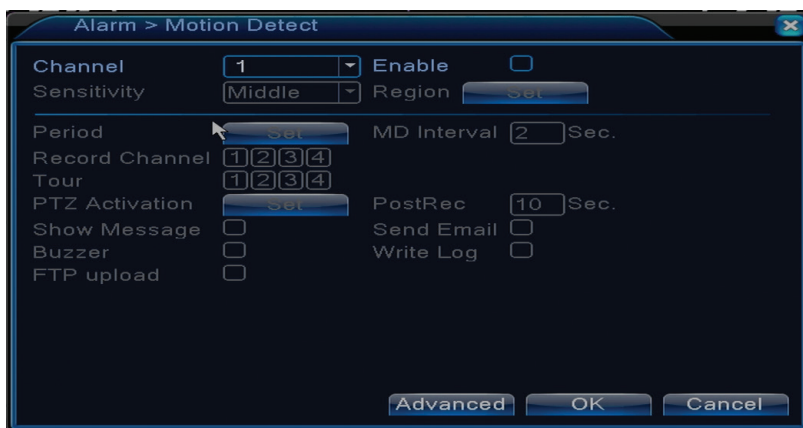
The alarm recording function includes: motion detection, image loss, video loss, abnormalities.



1.2.1 Motion detect

When the system detects the movement that reaches the set sensitivity threshold then the recording will start

Note: The Advanced button opens the following menu: Up Window, Show desktop, Copy, Paste, Default config, Record config (shortcut to the interface configuration of the recording).

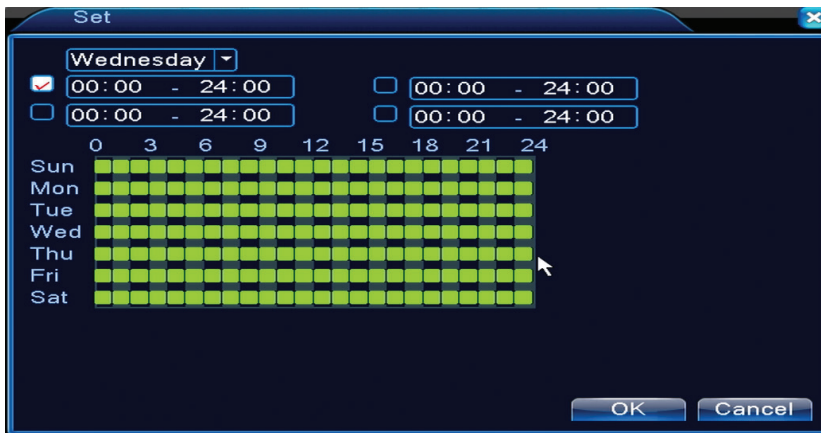


Channel: choose the channel to be configured

Enable: means that the motion detection function is on

Sensitivity: choose one of six levels of sensitivity

Period: activates motion detection within the specified range. You can set different time intervals depending on the day of the week. Each day is divided into 4 sections of time.



In case of motion detection, you can choose the warning mode: displays message, sounds, climbs to FTP server, sends email, saves the event in history.

1.2.2 Video blind

When the video image is influenced by environmental conditions, such as wrong lighting or reaching the sensitivity threshold, an alarm will be triggered in the system.



Settings are the same as motion detection.

Note: The Advanced button opens the following menu: Up Window, Show desktop, Copy, Paste, Default config, Record config (shortcut to the interface configuration of the recording).

1.2.3 Video loss

When the equipment does not receive a video signal, an alarm will be triggered in the system.



Settings are the same as motion detection.

Note: The Advanced button opens the following menu: Up Window, Show desktop, Copy, Paste, Default config, Record config (shortcut to the interface configuration of the recording).

1.2.4 Abnormality

When an abnormal situation occurs, such as lack of HDD, lack of storage space, IP conflict, or lack of network connectivity, the device will alert you by a message or sound.

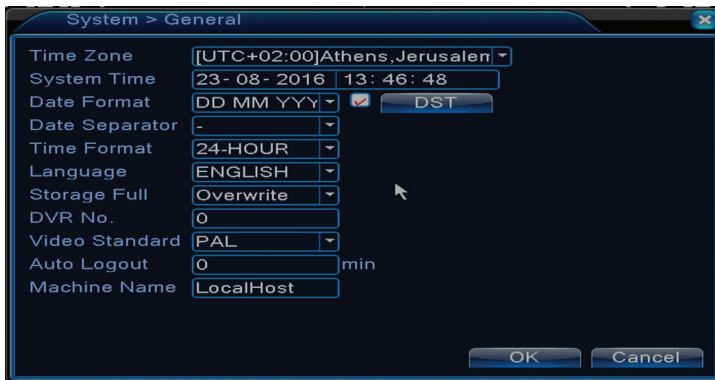


1.3 System

The following interface will appear:



1.3.1 General



Time zone: set the time zone

System time: set the date and time of the system

Data format: choose the date format YMD (year, month, day), MDY (month, day, year), DMY (day, month, year)

Date separator: choose a separator type for the date format

Time format: choose the time format: 12 or 24 hours.

Language: set the display language of the menu

Storage full: The HDD is full choose "Stop record" to stop recording or overwrite to continue writing over old files.

NVR No.: device number

Video standard: PAL or NTSC

Auto logout: set the maximum inactivity time after which the system will clear the account (0 - 60).

1.3.2 Encode

Set the audio and video compression parameters on each channel.



Channel: the channel number you want to configure

Compression: H.264 standard compression

Resolution: D1, AHD-L / 960H

Frame Rate: from 1 to 25fps

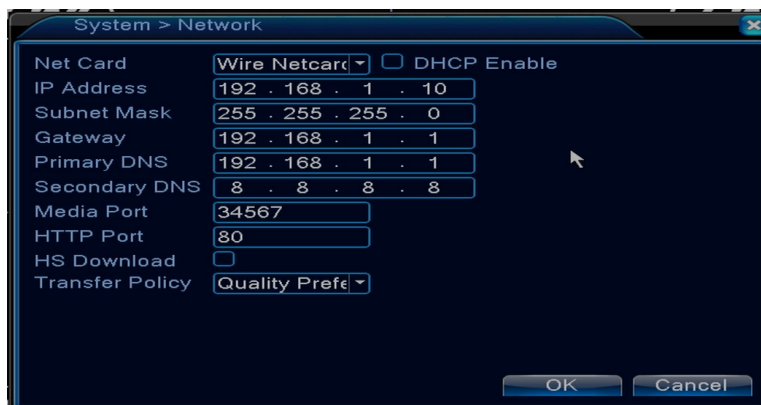
Bit Rate Type: you can choose either limited flow or variable flow. When choosing variable flow, you have 6 image quality options

Bit Rate: the higher the flow value, the better the image quality: D1 1000~1500kbps, CIF 384~1500kbps, QCIF(64~512kbps)

Video/Audio: select the recording type

Note: The Advanced button opens the following menu: Up Window, Show desktop, Copy, Paste, Default (restores default settings).

1.3.3 Network



Net Card: select the option Wire Netcard

DHCP: get your IP address automatically (not recommended).

IP address: set the IP address. The default address is 192.168.1.10

Subnet mask: the default address is: 255.255.255.0

Gateway: the default address is 192.168.1.1

DNS setup: the domain name of the server transforms the domain name into the IP address. The IP address is provided by the network administrator. This address must be set then restarted the system to work.

Media port: default 34567

HTTP port: default 80

HS download

Transfer policy: choose self-adaptation, priority quality or priority flow continuity.

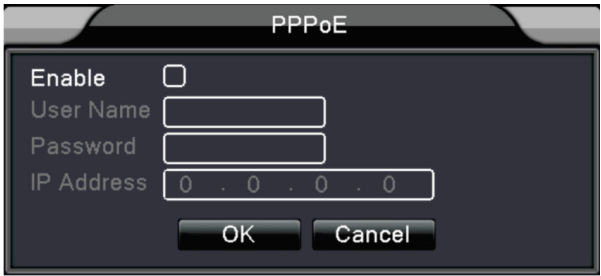
The data flow will be calibrated according to the settings. The self-adaptation strategy represents the compromise between image quality vs. image fluency. Image Fluency and Self-Adaptation are only valid when the Data Flow Wizard is enabled. Otherwise, image quality will prevail.

1.3.4 NetService

Select the desired network and click the Set button to configure the network in advanced mode or double-click the Service button to configure the parameters.



PPPoE



Enable: Check to enable this option

User name/Password: Enter the username and password provided by your internet provider. After saving, restart the system. Then the device will establish a PPPoE network connection. The IP address will change into a dynamic IP address as soon as the above operations are done. After connecting PPPoE, check the IP address and get the current IP address. Then use this IP address to connect to the NVR through the user port.

Email



The EMAIL configuration dialog box has a title bar with 'EMAIL' and a close button. It contains the following fields and controls:

- Enable:** A checked checkbox.
- SMTP Server:** A text box containing 'Your SMTP Server'.
- Port:** A text box containing '25'.
- Need SSL:** An unchecked checkbox.
- User Name:** An empty text box.
- Password:** An empty text box.
- Sender:** An empty text box.
- Receiver:** An empty text box.
- Title:** A text box containing 'Alarm Message'.
- Buttons:** 'Mail Testing', 'OK', and 'Cancel' at the bottom.

If the alarm is on or the connections are made, the system will send an email with alarm information and photos to the set address.

SMTP server: email server address. It can be an IP address or a domain name. The domain name can only be used if the DNS settings are correct.

Port: email server port.

Need SSL: decide whether you want to use a secure protocol or not.

User name: enter the email address for the SMTP server.

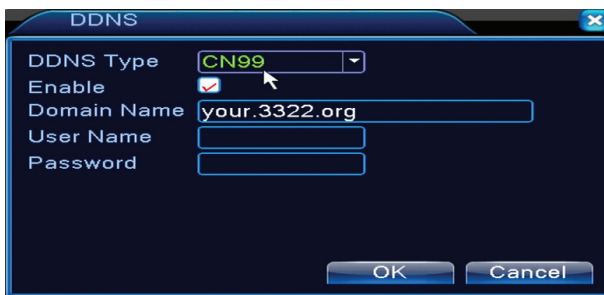
Password: enter your email password

Sender: enter the sender's email address.

Receiver: enter the recipient's email address. You can set up maximum 3 recipients.

Title: enter a title for the alarm email.

DDNS



The DDNS configuration dialog box has a title bar with 'DDNS' and a close button. It contains the following fields and controls:

- DDNS Type:** A dropdown menu showing 'CN99'.
- Enable:** A checked checkbox.
- Domain Name:** A text box containing 'your.3322.org'.
- User Name:** An empty text box.
- Password:** An empty text box.
- Buttons:** 'OK' and 'Cancel' at the bottom.

Enable Check to enable this option

DDNS: is the dynamic domain name of the server.

Domain name: Enter the domain name registered by DDNS.

User name: enter the user name registered by DDNS.

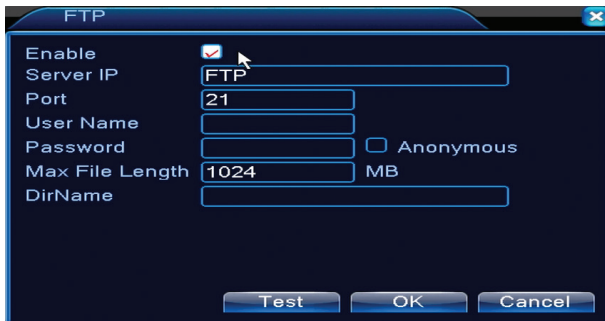
Password: enter the user password registered by DDNS.

When DDNS is successfully configured and turned on, you can enter the domain name in the Internet Explorer browser to access it.

Note: DNS settings must be completed correctly.

FTP setup

FTP becomes active only when the alarm becomes active or when the alarm makes a screen capture and then sends it via the FTP server.



Enable Check to enable this option

Server IP: the IP address of the FTP server

Port: domain port for FTP; the default is 21

User name: the user name for FTP

Password: user password

Anonymous: activates anonymous mode - no longer need to set your username and password

Max file length: Imaximum file size to be archived. The default is 1024MB

Dir name: the directory where the file is going to be uploaded

Note: The user must have the authority to upload files.

1.3.5 Display

In local preview mode are included: time display, channel name, registration status, alarm status, transparency and covered region.



Channel title: assign a title to the channels. Up to 25 letters.

Time display: displays the date and time of the system

Channel title: displays the channel number

Record status: displays the status of the recording

Alarm status: displays the status of the system alarm

Transparency: choose the transparency of the on-screen menu: value between 128 and 255

Resolution: set the screen resolution

Channel: Enter the channel number

1.3.6 PTZ Config

The function is not active for this NVR.

1.3.7 RS232

The function is not active for this NVR

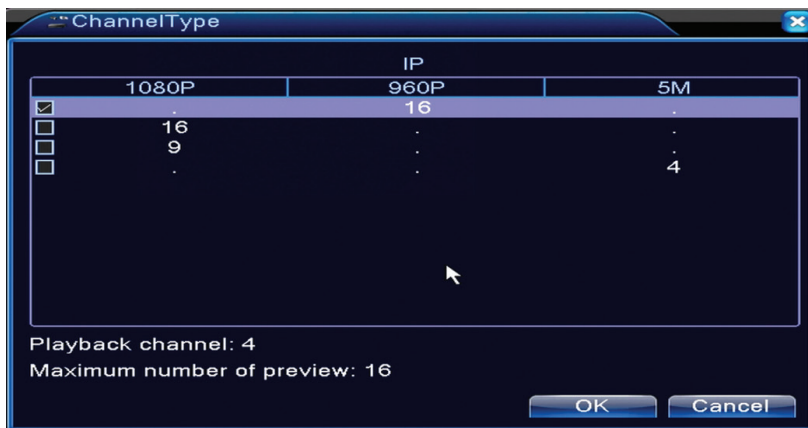
1.3.8 Tour

Activate this function to view a tour of all channels according to the set interval.



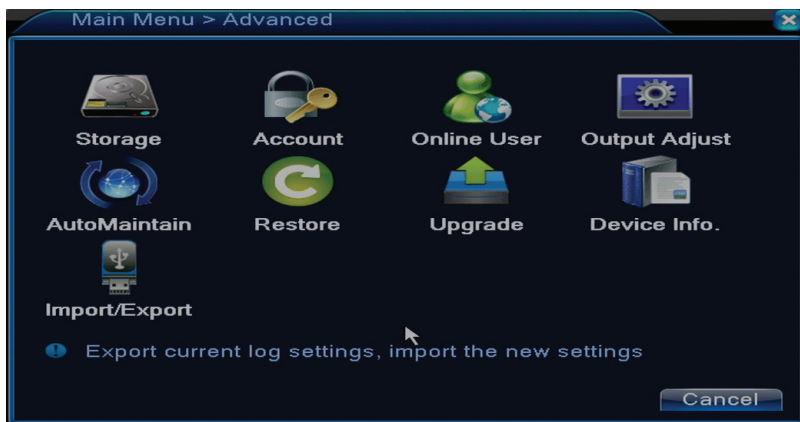
1.3.9 Digital

The Digital Interface displays the number and type of cameras supported by this model:



1.4 Advanced

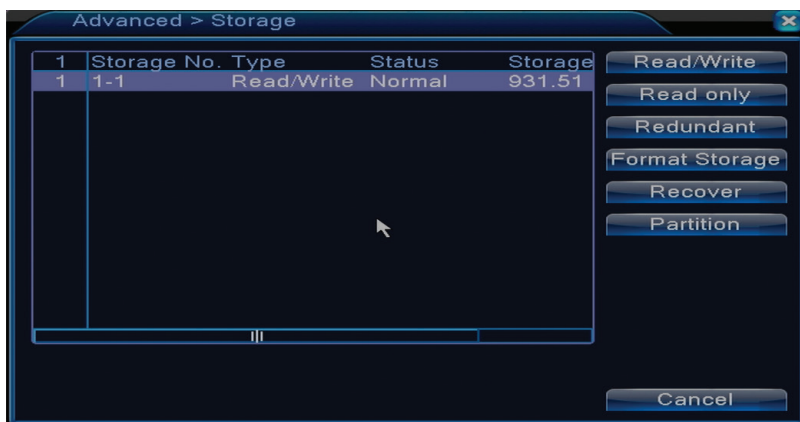
The menu includes: HDD management, user account, online users, video output settings, self-maintenance, factory default settings, updates, device information, import / export.



1.4.1 Storage

The interface displays information about the internal HDD: its number, type, status, and storage capacity.

Choose your storage device and then click on the feature you want to run.



Read/Write: the equipment can be written or read

Read-only: the equipment can only be read

Redundant: the function is not active

Format storage: format the HDD

Recover: recovers information from HDD

Partition: creates partitions on HDD

1.4.2 Account

Note: 1. The length of a user's name can be up to 8 characters long. Free or pre-empty spaces are invalid. The free space in the middle of the name is valid. Allowed characters are: letters, digits, lower dash, minus, point.

2. There is no limit to the number of users or groups of users. You can add or delete user groups based on user settings. Factory settings include: user \ admin. You can set the team the way you want. The user can not assign group competencies.

3. User administration includes: group / user. Group and user name can not be the same. Each

user belongs to a single group.



Modify user: Change the name and rights of the selected user

Modify group: Modify the group's name and rights

Modify password: modify the user's password. You can set a password of up to 6 characters. Free and pre-empty spaces are not valid. Free spaces between words are valid.

Note: The admin user can change his or her own password and password for other users.

Add user: add user. Set the name, password, group, and rights for it

Add group: adds a group of users and assigns rights

Delete user: deletes the selected user

Delete group: deletes the selected user

Update: updates user information

1.4.3 Online user

You can check the information about users connected through the network. You can also select a specific user to disconnect. The disconnected user will only be able to connect after the system is restarted.

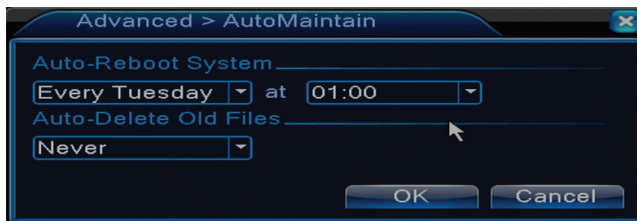
1.4.4Output adjust

Configure the position and color of the video image



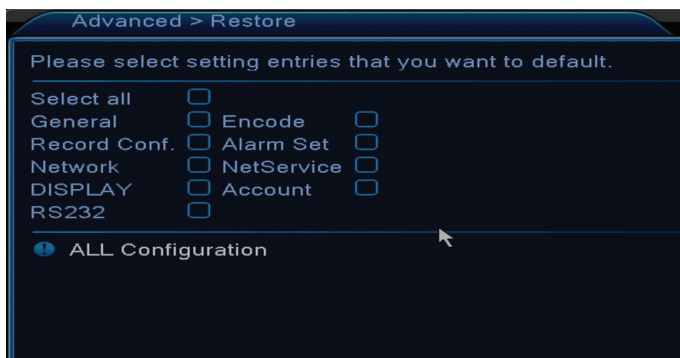
1.4.5 Auto maintain

The user can set the time for automatic restart of the system and for automatic deletion of files.



1.4.6 Restore

The system can be brought to the factory default settings. You can select from the menu the functions to reset.



1.4.7 Upgrade

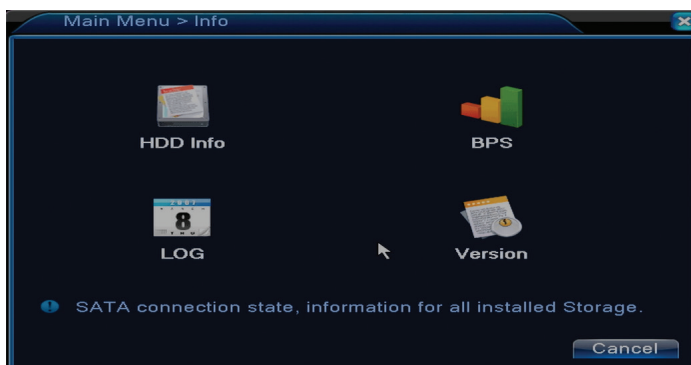
Select the path to the update file.

Note: The file must be saved in the root directory of a USB memory

1.4.8 Device info



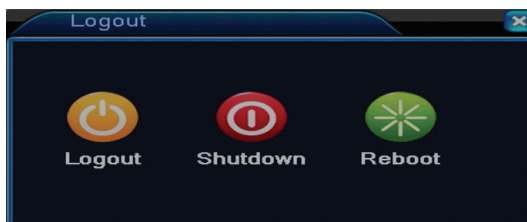
1.5 Info



The interface provides detailed information about the storage device, BPS (displays the Kb / s transfer stream and the capacity of the MB / h storage device in real time), event history, and software version.

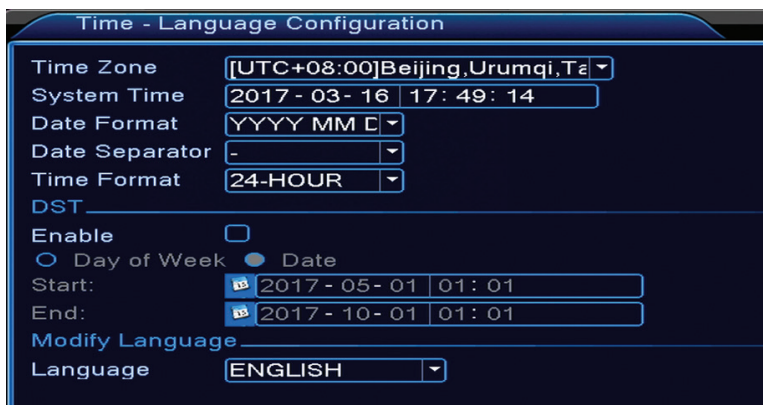
1.6 Logout

The Logout menu is used to exit the account to close or restart the system. You can also right click on the main screen - Logout



2. GUIDE

The interface displays a series of basic setup steps for the device, such as date, time, language, network and link settings for downloading the xmeye application and QR code with the device's serial number.





3. RECORD MODE



Shortage to set recording mode on each channel. More detailed registration settings can be made by accessing Main menu - Record - Record conf.

4. PLAYBACK

Shortcut for accessing the record playback interface.

The same interface can be accessed by entering the Main menu- Record - Playback

5. PTZ CONTROL

The cameras connected to the NVR must have the active PTZ function.

6. HIGH SPEED PTZ

The cameras connected to the NVR must have the active PTZ function.

7. COLOR SETTINGS

The interface allows you to customize the brightness, saturation, contrast, etc. parameters. of the image.



8. OUTPUT ADJUST



The same interface can be accessed by entering the Main menu - Advanced - Output adjust

FREQUENTLY ASKED QUESTIONS AND MENTENANCE

Frequently asked questions

If the problems do not appear in the list below, we recommend that you contact a local service or call the service department.

The device does not start normally

Possible reasons may be:

1. Power is not appropriate.
2. The power adapter is defective
3. Updating the program is wrong
4. The storage device is faulty or the connections are broken
5. The front panel is defective
6. The device's mainboard is faulty.

The device automatically restarts or stops a few minutes after turning on

Possible reasons may be:

1. Power supply voltage is too low or unstable
2. The storage device is faulty or the connections are broken
3. The video signal is not stable
4. The radiator is very heated, there is too much dust or the device runs under unfavorable conditions.
5. The electronic part of the device is faulty.

The system does not detect any storage devices

Possible reasons may be:

1. The power cables of the storage device are not connected
2. The storage device cables are defective or incompatible
3. The storage device is defective
4. The SATA port on the device board is faulty

There is no video on the output

Possible reasons may be:

1. Inappropriate firmware. We recommend updating your firmware.
2. The brightness of the image is 0. We recommend resetting the device.

There is no video input signal or the signal is too weak.

1. The electronic part of the device is faulty.

I can not find the video files in local play mode

Possible reasons may be:

1. Storage device data cable is defective
2. The storage device is defective
3. Update the firmware using the original update file
4. The video files you are looking for are elsewhere
5. The recording function was not started.

The local video file is not clear

Possible reasons may be:

1. Image quality is too low
2. Local rendering does not work. Restart your device.
3. The data cable of the storage device is faulty.
4. The storage device is defective
5. The electronic part of the device is faulty.

There is no audio signal in the tracking area

Possible reasons may be:

1. You have not connected a camera with a microphone
2. There is no active speaker
3. Audio cables are defective

4. The electronic part of the device is faulty.

There is audio in the tracking window but there is no audio signal in playback mode

Possible reasons may be:

1. Setup issues: the audio option is not selected
2. The channel has no audio

Time is wrong

Possible reasons may be:

1. Settings are wrong
2. The battery on the motherboard is not connected properly or is discharged

Motion detection does not work

Possible reasons may be:

1. The set time interval is not correct
2. The sensitivity is too low
3. There are limitations of some versions

I can not authenticate myself via the internet

Possible reasons may be:

1. The operating system is Windows 98 or Windows Me. We recommend that you update your Windows 2000 SP4 operating system to the minimum
2. The ActiveX function is locked
3. Version does not exceed Dx 8.1 Update the video card driver
4. The network connection is interrupted
5. Network settings cause problems
6. Your username or password is invalid
7. The CMS is not compatible with the version of the NVR program

The image is not clear or there is no image in the viewing or playback area

Possible reasons may be:

1. The network is not stable
2. The user's computer does not have enough resources
3. Choose the network play mode from the device settings
4. The user does not have any viewing rights
5. The real-time image of the storage device is not clear.

The network connection is not stable

Possible reasons may be:

1. The network is not stable
2. There are IP address conflicts
3. There are MAC address conflicts
4. The network card or device does not work

Unable to copy to USB

Possible reasons may be:

1. The amount of data is greater than the storage capacity.
2. Backup equipment is not compatible
3. Backup equipment does not work

The alarm can not be turned off or does not work

Possible reasons may be:

1. Alarm settings are not appropriate
2. There are problems specific to each version of the program. We recommend updating the program.

NVR TECHNICAL SPECIFICATIONS

Sistem	Processor	Hi3535
Video	Video compression	H.264 (High Profile)
	Coding capability	16 x 1080P / 16 x 960P
Audio	Audio compression	G.711A
Recording & Playback	Registration mode	Manual, motion detection, scheduled
	Playback	1 canal / 16 canale
Storage & backup	Backup type	Network, U-disk, disc USB, disc SATA
Connections	Video output	1 x VGA, 1 x HDMI
	Audio input	1 x RCA
	Audio output	1 x RCA
	Network interface	RJ45
	USB	2 x USB 2.0 / 1 x USB3.0
Others	HDD	2 x SATA max. 4TB
	Power voltage	12V / 4A
	Dimensions	300 x 225 x 50 mm

