

« Clarevision™

Network Video Recorder (NVR) User Manual

Safety Instructions

This manual is intended to ensure that user can use the product properly without danger or any property loss. Please read it carefully and do not discard for future reference. Precaution measures are divided into "WARNINGS" and "CAUTIONS" as below:

WARNING: Neglecting any of the warnings may cause serious injury.

CAUTIONS: Neglecting any of the CAUTIONS may cause injury or equipment damage.



Warning Follow these safeguards to avoid death or serious injury



Caution Follow these precautions to Prevent potential injury or Property loss



• Use recommended cord sets (power cords) with the correct specifications.

- Do not place or install equipment directly in sunlight or near heating devices.
- Keep equipment installed correctly and fully.
- Install the equipment in a well-ventilated place, do not block vents.
- Only use equipment within rated input/output.
- Transport, use, and reserve the equipment within the proper humidity range (10 to 90%) and temperature range (14 to 131°F, -10 to 55°C).
- When cleaning the device, unplug the power cord and completely shut off the power.
- Do not use volatile solvents such as alcohol, benzene, or thinner when cleaning the device. Do not use strong or abrasive cleaning agents. This can damage the surface coating.
- Purchase the NVR dedicated hard drive recommended by the equipment manufacturer from the correct channels to ensure the quality and usage requirements of the hard drive.
- Make sure that the alarm cable is firmly installed with a solid contact.
- Make sure that the NVR is properly grounded.

NOTE: After receiving the product, verify the contents of the package according to the packing list in the box.

Contents

Chapter 1: Product Introduction
1.1 Product Manual6
1.2 Defaults
1.3 Product Features
1.4 Function Features6
Local monitoring7
Hard disk management7
Video Record and Playback7
User Management7
Data backup7
Alarm and exception management8
Other Local Functions
Network Function
Chapter 2: NVR Appearance9
2.1 Front Panel9
2.2 Rear Panel9
2.3 Mouse Input10
2.3 Mouse Input10
Chapter 3: Connecting NVR11
3.1. Hard Disk Installation11
3.1.1 Hard disk installation11
3.1.2 Device Connection11
Chapter 4: NVR Setup (WEB)13
4.1 Internet connection13
4.2 Browser Login14
4.2.1 Change password14
4.2.3 Forgot password15
4.2.4 Exiting Web Console17
3.3 Install the necessary browser plugins17
4.4 Preview
Chapter 5: Configuration22

Page 3 | 53

5.1 Configuration	
5.1.1 Local Configuration	
5.2 Channel	
5.2.1 Camera	
5.2.2 PoE Power Configuration	
5.2.3 PoE Bonding Configuration	
5.3 OSD	
5.4 Image	
5.4 Privacy Mask	
5.6 Channel Name	
Chapter 6: Storage	
6.1 Record	
6.1.1 Record	
6.1.2 Encode	
6.2 Storage Device	
6.2.1 HDD	
6.2.2 Cloud Storage	
Chapter 7: System	
7.1 General	
7.1.1 Device Settings	
7.1.2 Date	
7.1.3 DST	
7.2 Network	
7.2.1 TCP/IP	
7.2.2 DDNS	
7.2.3 E-Mail	
7.2.4 P2P	
7.2.5 FTP	
7.2.6 UPNP	
7.2.7 PPPOE	
7.2.8 Address Filter	
7.3 User	

Page 4 | 53

7.4 Local Alarm	
7.4.1 Alarm Input	
7.4.1 Alarm Output	
7.5 Normal Event	
7.5.1 Motion Detection	
7.5.2 Exception	41
7.5.3 Video Loss	
7.5.4 Buzzer	
7.5 Smart Event	
7.5.1 Human Body Detection	
7.5.2 Line Crossing	
7.5.3 Regional Intrusion	
7.5.4 Loitering	
7.5.5 People Gathering	
Chapter 8: Maintenance	
8.1 Device	
8.2 Log	
8.3 Manual Upgrade	
8.3 Schedule Reboot	
8.3 Default	
Chapter 9: Video Playback	51
Chapter 9: Picture	
Chapter 10: NVR maintenance and best practices	53

Chapter 1: Product Introduction

1.1 Product Manual

ClareVision NVRs provide local video streaming preview, multi-screen split display streaming, local real-time storage of video files, support for mouse shortcuts, and remote management and control.

This manual will guide you through all NVR settings, options, and provide additional information on NVR operation.

1.2 Defaults

The factory default username is "admin" and password being the first six characters of the UUID.

NVR and PoE NVR factory default is set to DHCP.

1.3 Product Features

This section introduces the camera product features:

- The "device" mentioned in this manual mainly refers to the NVR.
- The "IP device" mentioned in this manual mainly refers to the IP Camera.
- The "channel" mentioned in this manual refers to the NVR's IP channel.
- Click the "X" or "Cancel" button to return to the previous screen.
- Click All Interfaces Default to restore the current factory default settings.
- Click "Apply", "Confirm", and "Save" on all screens to save the current settings.
- Click "Copy" on all interfaces to enter the copy channel interface. Select the channel in which to copy the current channel.

1.4 Function Features

- H.264 videos condense format, support 4K/6M/5M/4M/3M/2M/1080P/720P/D1 resolution network camera input.
- G.711U, G711a, ADPCM_DVI4, AAC audio condense format.
- Each channel supports three-stream encoding, including an MJPEG stream.
- Windows-style user interface embedded real-time Linux3.0 operating system.
- Support for independent adjustment of coding parameters for each channel, including coding type, resolution, frame rate, and bitrate.
- Manual capture and image playback.
- Preview, recording, playback, and backup.
- Select NVRs support fisheye correction, dual-screen preview, PoE, humanoid detection, crossover detection, regional intrusion, people gather detection, and people gathering.
- Only one USB interface: The NVR needs to use USB interface for task such as Configuration import, Configuration export, backup, camera update, and manual update. You must first select the corresponding function, such as click "Config import", and then you receive a pop-up "Please insert the USB disk". Follow the prompt within the 60 second countdown, and then unplug the mouse and plug it into the USB device before the countdown ends. After the NVR recognizes the USB device, it automatically proceeds to the next step.

Local monitoring

- Supports local VGA and HDMI output, with HD supporting up to 4K resolution output.
- Screen previews:
 - 4-channel NVRs support 1/4
 - 8-channel NVRs support 1/4/8
 - 16-channel NVRs support 1/4/8/9/16
 - o 32-channel NVRs support 1/4/8/9/ 6/25/32
- Adjustable preview channel position (drag them to the desired position using the mouse).
- Set manual or auto-tour preview with an automatic polling cycle.
- Supports video motion detection, video loss detection, and intelligent detection.
- Achieve IP PTZ camera control through the ONVIF protocol.

Hard disk management

- Each SATA interface supports up to an 8T hard drive.
- Hard disk formatting.
- Hard disk loss and hard disk abnormal alarm.

Video Record and Playback

- Video compression standard is H.264/H.264+/H.265/H.265+, with timed recording function.
- Supports recording schedules using drawing and editing methods.
- Supports simultaneous main and sub-stream recording.
- Supports cyclic writing.
- A maximum of 6 recording times can be set each day. The recording trigger mode can be set independently for different time periods.
- Recording trigger modes include Normal, Motion, Alarm, M&A, Smart Events.
- Supports video data retrieval and playback by channel, video type, and date.
- Multiple playback modes (adjustable with mouse): Play/Pause, Reverse, Stop, Single Back, Single Forward, Speed Down, and Speed Up.
- Select the screen area for local zoom.
- Supports multi-channel simultaneous playback of video.

User Management

• Three-level user management: Administrators can create multiple operation users and set their privileges.

Data backup

- Support for backup via USB2.0 or USB3.0 interface.
- Support for U disk or mobile hard disk in FAT32, NTFS, exFAT and other formats.
- Support for batch backup by file and time.
- Support for iVMS320 clip-by-clip backups.
- Support for webpage clip and download video files by time.

Alarm and exception management

- Select models support multi-channel external alarm input and output.
- Support for video loss alarm, motion alarm, network disconnection alarm, IP conflict alarm, hard disk error, and no disk alarm.
- Support our smart IPC face detection, Crossover, Regional intrusion, people stay, people gathering, and other intelligent detection access and linkage.
- Various alarms can be set to trigger the buzzing alarm, sending mail and screen display.
- Various alarms can be set to trigger pop-up alarm prompts, voice warnings, and send emails notifying users.

Other Local Functions

- Users can quickly and easily set the system parameters using the NVR buttons and USB mouse.
- Complete operations: alarms, exceptions, information logging and retrieval.
- Select models support local alarms and upgrades for front-end features.
- Supports gesture password function.

Network Function

- 3536D series devices support a 10M/100M adaptive network interface and the 3536/3536C series devices support 10M/100M/1000M adaptive network interface.
- Support for remote client privileged access helps improve system security.
- Supported protocols: TCP/IP protocol cluster, DHCP, DNS, HTP, SMTP, RTSP, UPnP, HTTPS and other protocols.
- Embedded WEB SERVER and support for ONVIF protocol access to platform.
- Remote access to playback, download, parameter configuration, FTP server configuration, running status, systems log, alarm status, manual trigger & stop recording, manual trigger & stop alarm output, alarm pushes, PTZ control, remote formatting of hard disk, upgrading the program, restart, and other operations for system maintenance.

Chapter 2: NVR Appearance

2.1 Front Panel

No.	Name	Description			
1	Switch	urn the device on/off.			
2	Hard disk indicator	splays hard drive connection status.			
3	Power Indicator	Illuminates when powered on.			
4	Network Indicator	Displays network connection.			
5	USB2.0	Allows connection for mouse or USB memory stick backup.			

Table 2-1

2.2 Rear Panel

Rear panel diagram for ClareVision NVRs



Figure 2-3

No.	Name	Description	
1	HD Video Output	Connects to HD display devices such as computer monitors	
2	VGA	Connect to VGA display devices such as computer monitors	
3	Audio Input	Equipment audio input interface	
4	Audio output	Equipment audio output interface	
5	PoE network port	Connects IP devices and power IP devices and networks	
6	Ethernet port	Connects Ethernet to the network	
7	USB port	Allows connection to the mouse or U disk or removable hard disk	
8	Power Connector	Device power connector	

2.3 Mouse Input

Mouse actions	Function
	1. Selects an option
Left click	2. Inserts the cursor to enter or modify the value of a parameter
	3. Click the timeline during playback to switch the playback progress
	1. Interface not locking - accesses the system menu pop-up
Right click	2. Interface locking on a real-time preview interface - login interface pop up
	3.When on the submenu returns the user to the previous menu
Double left click	Switches between single and multi-screen when in the preview and playback state
	1. Rotates the direction when in the pan/tilt control state
	2. Sets the area range when in the video occlusion alarm and motion detection alarm area settings
Mouse drag	3. Select the area for electronic zoom
	4. Selections a channel and switches to other channel locations when in the preview interface
	5. Switches the playing video file in the progress bar
	1. Allows time setting modification
Scroll wheel	2. Selects drop-down menu values
	3. Switches preview channels
	4. Zooms in and out of a video image

Operate the NVR using the mouse (left button, right button, and scroll wheel).

2.3 Mouse Input

Input method includes lowercase and uppercase English letters.

Click on the left to switch the input method and symbol.

Click do backspace and delete incorrect/accidental input.





Page 10 | 53

Chapter 3: Connecting NVR

3.1. Hard Disk Installation



Disconnect power before installation. Use the NVR dedicated monitor hard drive recommended by the device manufacturer.

Installation tools

A Phillips screwdriver •

3.1.1 Hard disk installation

The hard disk is installed is shown in Figure 3-1.

To install the hard disk:

- 1. Loosen the securing screw on the cover, and then open the cover.
- 2. Connect one end of the hard disk data cable and power cable to the motherboard, and then connect the other end of the cables to the hard disk.
- 3. Hold the hard disk in place, turn over the chassis, and then secure the hard disk with the screw at the indicated position.
- 4. Turn over the chassis, and then secure the cover with screw.











Figure 3-1

3.1.2 Device Connection

Use a VGA cable or HDMI cable to transmit the NVR signal to the display. If it is a controllable PTZ, use the wire to connect the RS485 A cable and the RS485 B cable to the corresponding RS485 interface on NVR, as show in Figure3-2.



Figure 3-2



Devices with built-in PoE network ports support IPC plug-and-play functionality. When adding IP devices using the PoE network port plug-and-play method, make sure that the IP devices support PoE.

Chapter 4: NVR Setup (WEB)

4.1 Internet connection

Before using the browser to log in to the web console, verify that the network between the PC and the NVR is normal. Using the <u>IP Search Tool which can be downloaded from the Clare Help Center by following the ling HERE</u> or from the resources tab on the SnapAV device page, you can search for the NVR on the Local Area Network (LAN) and display the IP, MAC address, version, port, and other information of the NVR, as shown in Figure 4-1:

Use the IP Search Tool to discover all available online devices found on the network.

					SEARCH	TOOL				₹ - □>
Online										
	Index	Model	Device Name	Firmware \	/ersion	IP Address	Subnet Mask	GateV	NetWork Param	Upgrade
	001	NVR	CLR-V200-8PNVR2	NVR_MC6830_16CH_8POE_	PNP_TK_V5_V21.1.1	192.168.1.129	255.255.255.0	192.168.	IP Address	
									SubnetMask	
									GateWay	
								>	DNS	
								1	HTTP Port	
									RTSP Port	
									DHCP	
									SECURITY Username	VERIFY
									Password	
									Mod	fy
4 0									Forget Pas	asword

Figure 4-1

- 1. Confirm that the NVR device is properly connected to the network.
- Set the IP address, subnet mask, and gateway for the PC and NVR devices. If there is no routing device on the network, allocate the IP address of the same network segment: If there is a routing device on the network, you need to set the corresponding gateway and subnet mask. The default IP address of the NVR device is 192.168.1.88.
- 3. Verify that the network between the PC and the NVR device is normal. The method is as follows: When the network between the PC and the NVR device is normal, you can log in to the web interface of the NVR through the PC.
 - On the PC, ping NVR IP address to verify that the network is connected and the returned TTL value is generally equal to 255.
 - Log in to the local interface of the NVR device, and fill in the IP address of the PC on the "Network Test" interface to test whether the network is connected. For details, see 5.3.7.7 Network Detection.

4.2 Browser Login

Open a browser (for optimal experience and to view video playbacks in the browser, Internet Explorer is recommended) on your computer and enter the camera IP address in the web address bar.

Enter "admin" for the username and the first six characters of the UUID for the password.

Clare TM Professional Video Surveillance	
Please sign in.	
Forgot Password	
Login	
© 2020 Clare Terms of Use-Privacy-Contact Us	

Figure 4-2



IMPORTANT NOTES:

The default administrator username is "admin".

The default password is the **first six characters of the UUID** found on the NVR, packaging box, and Quick Start Guide. You will be prompted to change the password once the default login information is entered.

4.2.1 Change password

After a successful login, the interface will prompt you to change the password, as shown in Figure 4-3 and 4-4:

Tips 🔘 adm	
The current pas password!	sword is too simple, please modify the
	Modify

Figure 4-3

E System	User Management	
Security	Users to edit	
	Username	admin
	User Type	Admin
	Old Password	
	Modity Password	
	Password	
	Confirm Password	······
	Do you want to set a new secur	thy question
	Security issue1	
	Answer1	
	Security issue2	
	Answer2	
	Security issue3	
	Answer3	
	key export	
		lem and don't have the key file, you need to return the equipment to the factory.
	Save	

Figure 4-4

To change your password, follow these steps:

- 1. Enter the old password and enter the new password in the Password and Confirm Password fields.
- 2. Set security questions 1, 2, and 3, and enter the answers.
- 3. Click "**key export**" to save the key file to your computer. It is recommended to have the customer save this key file in their email or on their computer.
- 4. Click "Save" to complete the password modification.

	Į
	$\langle \rangle$
17//	1
$ \mathcal{M} $	
<u>~</u>	

IMPORTANT NOTE:

When setting a new password, you must set at least 8 characters and contain both letters and numbers.

4.2.3 Forgot password

If you forget your password, you can reset the password by using the security question verification or security key verification.

Security question verification

- 1. On the login interface, click "Forgot Password".
- 2. Select the verification method as "Security question validation" (as shown in Figure 4-5), enter the answers to security questions 1, 2, and 3, and click "Next"
- 3. Enter the new password and confirm the password (as shown in Figure 4-6) and click "Next".

0)	
Verify Identity	Set New F	assword	Carry O
Authentication Mode	Security question	validation	×
Security issue1			V
Answer1			
Security issue2			×
Answer2			
Security issue3			$\mathbf{\mathbf{Y}}$
Answer3			
	Next	Clear	

Figure 4-5

Verify Identity		Set New F		Carry Out
	Set New Password Confirm Password	•••••		
		Next	Clear	



4. Click "Re-login" to return to the login interface (as shown in Figure 4-7).

Verify Identity	Set New Password	Carry Out
Dear user, the pass	word has been reset.Please click on " re-login "to ent	er the login interface
	re-login	

Figure 4-7

Security Key verification

- 1. On the login interface, click "Forgot Password".
- 2. Select the verification method as "Security Key Verification" (as shown in Figure 4-8) and click "Import" to import the key file exported when the password is modified.



Figure 4-8

3. Enter the new password and confirm the password (as shown in Figure 4-9) and click "Next".

Verify Identity		Set New		Carry Out
	Set New Password Confirm Password	•••••		
		Next	Clear	



4. Click "Re-login" to return to the login interface (as shown in Figure 4-10).

Verify Identity	Set New Password	Carry Out
Dear user, the pass	word has been reset.Please click on " re-login "to ente	er the login interface
	re-login	





IMPORTANT NOTE:

When selecting "**Security question validation**", enter the correct answers to 2 questions to enter the "**Set New Password**" interface and proceed to the next step.

When setting a new password, you must set at least 8 digits and contain both letters and numbers to set it successfully.

An NVR key file can be used multiple times to reset the password if you forget it.

4.2.4 Exiting Web Console

When you access the NVR web console, you can quickly log out of the console by tapping on the "**Logout**" button in the top-right corner of the screen.

3.3 Install the necessary browser plugins

The browser plug-in needs to be downloaded and installed when logging in to the device for the first time, Figure 4-11. Click "Please click here to download the browser plug-in, please close the browser when the download is finished", install it, and then follow the prompts to complete the installation.



Figure 4-11



IMPORTANT NOTE:

After the NVR upgrades to a new version, you need to delete the original control, download, and then install the control again.

WIN 7 could have problems regarding backup and recording. If so, check the Admin setting, procedure as follows:

User Account Co. Cell me monuelo	ntrol helps prevent potentially hamilial programs from making changes to not liber Account Control settings	your computer.	Make changes to your user account	
Hanga nothy	Hours suffy an advant Programs to to install software or mains barries to more than the software of the software	Menoga yana cendendari Centra aparander and na Litata antine Di Managa yana fita anaka antifician Configen anti-anti- configen anti-anti- configen anti-anti- configen anti-anti- configen anti-anti-anti- configen anti-anti-anti- configen anti-anti-anti- configen anti-anti-anti- configen anti-anti-anti-anti- configen anti-anti-anti-anti-anti-anti- configen anti-anti-anti-anti-anti-anti- configen anti-anti-anti-anti-anti-anti- configen anti-anti-anti-anti-anti-anti-anti- configen anti-anti-anti-anti-anti-anti-anti-anti-	Change your picture	admin Admonster
ontrolis	- fox	Ser als		

(WIN7-1 WIN 7-2)

If the Active X cannot be loaded. Please adjust the security level and firewall setting to the lowest setting and make some adjustment to IE as well: Tool-Internet Option- Custom level-ActiveX- enables all the options below ActiveX, and then click "OK". The Active X is downloaded and installed automatically, Figure 4-12.

ttings			
-	> Prompt		
the second se	lun ActiveX controls and plue	g-ins	
-	Administrator approved	1997	
	Disable		
6	Enable		
0	D Prompt		
0 5	cript ActiveX controls marke	d safe for scripting*	
(Disable		
0	Enable		
	D Prompt		
COW	nloads		
1 1 C	Automatic prompting for file of	lownloads	
0	Disable		
-	🗇 Enable		
- C	ile download		
-	Dirabla III		
Tabar of	fect after you restart Intern	ak Eurolanaan	
I alves el	leccarde you restarce them	er explore	
set custo	im settings		
set to:	Medum (default)	•	Reset

Figure 4-12

4.4 Preview

After logging the live preview interface displays, Figure 4-13.



Figure 4-13

- 1. System Menu: Including Live View, Playback, Picture, Configuration, Help, Logout, and show login username.
- 2. Real-time Monitoring Channel: Open/Close Preview, record, and stream switching.

Mark	Specification
★ Channel 01	Open/close corresponding preview channel.
Ū	Start/stop recording, save video on local computer hard drive.
	Main/sub bit stream switching.
	For voice calls, click to automatically connect to the device to make a real-time call.
Q	Prerequisites for local device calls: There are audio input/audio output interfaces on the local device, and both mic and speakers have been connected.
	Note: The app and web interfaces cannot talk to the local device at the same time.

3. Real-time Monitoring Channel: Open/Close Preview, **record**, and stream switching.

Mark	Specification
	Preview window toggle. From left to right are: 1 split screen, 4 split screen, and 9 split screens. The preview number varies per device.
:1	Switch all preview channel master, sub streams, and open previews.
▶ , ■	Open/Close all preview channels.
	Click this icon to take a picture.
Ó	The default storage path of the picture is C:\Record. You can enter the Configuration \rightarrow Local Config interface to modify the storage path.
1.	Click this icon to start recording on all channels; click the icon again to stop recording.
K.B	The default storage path of the recording is C:\Record. You can enter the Configuration \rightarrow Local Config interface to modify it.
Ð	Local electronic zoom, click this icon to open the electronic zoom function, select to enlarge the channel, hold down the left mouse button to select the area to be zoomed in, release the left button, and select the area to be enlarged; in the zoom channel, click the right mouse button to restore the original status.
Į Ì	1 Split screen preview, click to switch between channels.
🎕 , 🖤	Turn on/off the speaker. If the audio is not turned on, there is no sound when listening.
	Full-screen playback, press the keyboard Esc to exit the full screen.

4. Preview channel shortcut button:

Mark	Specification
$\kappa \downarrow \varkappa \leftrightarrow \kappa \uparrow \varkappa$	PTZ directional control
U	PTZ self-test
Q	Zoom button
0	Focus button
0	Aperture control button
5	The step size is mainly used for speed control. The larger the value, the faster the rotation speed. For example, the rotational speed of 7 is much larger than the rotational speed 1.
р	Preset point setting
	Call presets
\$	Settings
×	Delete settings
Ø	Cruise path setting
•	Turn on / off cruise

Chapter 5: Configuration

5.1 Configuration

5.1.1 Local Configuration

In the main interface, click **Configuration** \rightarrow **Local Config** \rightarrow **Local Config** to enter the local configuration interface, Figure 5-13. Here you can the local file recording settings including captured video and clips to the local computer's save path, click **Browse** to select the path to save, and click **Save** to complete the path settings.

	NVR	Preview	Playback	Picture	Configuration				¢
ø	Local Config	Local Config							
۲	Channel	Record File Settin	gs						
8	Storage	Save video recordi	ngs to	C:INVRIR	lecord		Browse		
₽	System	Save downloaded	Save downloaded files to		C:/NVR\DownloadFiles		Browse		
0	Maintenance	Picture and Clip S	iettings						
		Save live view sna	oshots to	C:WVRIC	apture		Browso		
		Save playback sna	pshots to	C:/NVR/P	laybackPics		Browse		
		Save clips to		C:WVR\P	laybackFiles		Browse		
		Save							



5.2 Channel

5.2.1 Camera

In the main interface, click **Configuration** \rightarrow **Camera** \rightarrow **Camera** to enter the add camera interface, Figure 5-14 and 5-15. Here you can add, edit, and delete devices as needed.

Add: Assign ClareVision and ONVIF-compatible cameras to a channel.

Manual Add: Manually input camera parameters and settings to assign to a channel.

Delete: Delete selected camera channels.





5.2.2 PoE Power Configuration

In the main interface, click **Configuration** \rightarrow **Camera** \rightarrow **Add Camera** \rightarrow **PoE Power Configuration** to enter the PoE Power Configuration interface. Here you can check the connection status of each channel and adjust the power configuration for each channel according to the distance of the tether. Figure 5-16.

	NVR	Preview	Playback	Picture	Configuration	
ø	Local Config	Camera		PoE Bonding Configurati	on	
0	Channel	Channel	Long Distance	Short Distance	Channel Status	Actual Power
	Camera	1	Long Distance		Connected	4.61w
	OSD	2		<u>v</u>	Connected	2.40w
	Image	3		2	Disconnected	0.00w
	Privacy Mask	4		2	Disconnected	0.00w
		5		2	Disconnected	0.00w
	Channel name	6		<u>.</u>	Disconnected	0.0Dw
	Storage	7			Disconnected	0.0Dw
Q	System	8		 ▼	Disconnected	0.00w
_						
0	Maintenance					
				_		
		Actual pr	ower: 7.01W.	Rema	aining power: 92.99W.	
_		Note:				
		1.PoE port rated pow				
		2. The normal power	range of each PoE port is 0W-30.0V	v.		
		Save				

Figure 5-16

5.2.3 PoE Bonding Configuration

In the main interface, click **Configuration** \rightarrow **Camera** \rightarrow **Add Camera** \rightarrow **PoE Binding Configuration** to enter the PoE Power Configuration interface. Here you can set each PoE port to bind with the desired camera. Figure 5-17.

	NVR	Preview	Playback	Picture	Configuration	
٥	Local Config	Camera	PoE Power Configuration	PoE Bonding Configurati	tion	
۲	Channel	Enable			Channel name	
	Camera	~			IPCamera 1	
	OSD				IPCamera 2	
	Image	✓			IPCamera 3	
	Privacy Mask	⊻			IPCamera 4	
	Channel name				IPCamera 5	
	Channel name	✓			IPCamera 6	
	Storage				IPCamera 7	
Ģ	System	\checkmark			IPCamera 8	
0	Maintenance					
		Save				



5.3 OSD

In the main interface, and then click **Configuration** \rightarrow **Camera** \rightarrow **OSD** to enter the OSD setting interface, Figure 5-18. Here you can adjust he On Screen Display settings to view channel text, date, and other related information.





- [Time] Turn on / off the preview interface time display.
- [Text] Turn on / off the preview interface OSD text display.
- [Date Format] Set the preview interface to display the date format, default day / month / year, switchable month / day / year, and year / month / day options.
- **[OSD Position]** Set the preview interface to display the time or OSD text position, the default is the Top Left You can switch the Bottom Left.
- [Channel Name] Display the channel name.
- [Mirror] Adjust image orientation.

5.4 Image

In the main interface, click **Configuration** \rightarrow **Camera** \rightarrow **Image** to enter the Image setting interface, Figure 5-19. Here you can view and adjust each channel image settings, including Image Adjustment, Exposure Settings, Focus, Backlight Settings, Day and night switch, White Balance, Video Adjustment, Image Enhancement, Defog Mode, Distortion, and Image rotation as shown in Figure 5-19.



Figure 5-19

[Image adjustment] You can manually set brightness, contrast, saturation, sharpness. The scope of valid values is from 0 to 255, you can drag the slider to set, and the default value is 128, as shown in Figure 5-20.

Image adjustment						
Brightness Contrast Saturation Sharpness	128 128 128 128					
→ Fill light						
► Exposure setting						

Figure 5-20

[Exposure settings] The default is automatic exposure. To set specific exposure settings, select Manual, and the Exposure Time and Gain Control is activated, click "**Save**". As shown in Figure 5-21

 Exposure setting 	I				
Exposure settings Exposure time	Auto 1/25	O Manual			
Gain Control			12		
 Backlight setting 					



[Backlight Settings] Used to set backlight compensation and strong light suppression. The default is OFF, it can be turned on manually, allowing backlight, strong light suppression intensity, and dark area boost strength settings to be configured, as shown in Figure 5-22.



Figure 5-22

[Fill Light] The fill light mode defaults to automatic with sensitivity set to 3. Filter time is 3 seconds, light mode is auto, **Light Brightness** is 100, as shown in Figure 5-23. When the fill mode is "**Automatic**", the device will turn on the fill light according to the actual environment. The user can switch the fill mode to "**Day**", "**Night**" and "**Scheduled Switch**" according to the actual scene environment and switch the sensitivity and filter time of the device according to the fill mode.

 Fill light 					
Fill light mode	Auto	\checkmark			
Sensitivity	3	\checkmark			
Filtering time	3	\checkmark			
light brightness			100		
Exposure setti	ng				

Figure 5-23

[White balance] Default is Auto, can be switched to Manual for adjusting the Red, Green, and Blue color gains as shown in Figure 5-24.

White balance					
White balance	Auto		~		
Red gain					128
Green gain					128
Blue gain					128
Video adjustment					



[Video adjustment] Here you can turn on and set 2D or 3D digital noise reduction, as shown in Figure 5-25.

 Video adjus 	 Video adjustment 						
DNR model 2D DNR 3D DNR	Off	32 32					
Image enha	ncement						

Figure 5-25

[Image enhancement] Including flicker control, wide dynamic switch, HDR, as shown in Figure 5-26.

 Image enhancement 		
Flicker control	Indoor NTSC	
Sensor linear WDR	Shutdown	~
Defog mode		

Figure 5-26

- **Flicker control:** The flash mode is selected according to the camera installation environment and the flicker standard. The default setting is NTSC (60HZ).
- Sensor linear WDR: The default is Shut Down (off). You can switch select: Automatic, Weak, Moderate, Strong, Super.

[Defog mode] Used to set the defog mode and strength, as shown in Figure 5-27.

 Defog mode 		
Defog mode	Off	
Defog strength		0

Figure 5-27

- **Defog Mode:** The default is off; you can choose from the drop-down menu to On or Auto.
- **Defog Strength:** The default is 0, when the fog mode is open, you can set the fog strength, can be set to a value range of 0-255.

5.4 Privacy Mask

In the main interface, click **Configuration** \rightarrow **Camera** \rightarrow **Privacy Mask** to enter the privacy mask setting interface, Figure 5-28. Here you can add three shielding areas. This feature blocks a portion of the camera view from being viewed and recorded.



Figure 5-28

You can choose up to 3 privacy areas. Hold down the left mouse button and drag to select the area in the area. Region 1, Region 2, and Region 3 will show the corresponding coordinates, width, and height of the region. If you want to delete a region, uncheck the corresponding privacy checkbox. Click on "**Save**" after completing the setting.

5.6 Channel Name

In the main interface, click **Configuration** \rightarrow **Camera** \rightarrow **Channel Name** to enter the channel name setting interface, Figure 5-29. Here you can view and modify the names of all channels of the NVR.

	NVR	Preview	Playback Pio	ture
ø	Local Config	Channel name		
0	Channel			
	Camera	Channel1	CH1	
	OSD	Channel2	CH2	
	Image	Channel3	СНЗ	
	Privacy Mask	Channel4	CH4	
		Channel5	CH5	
	Storage	Channel6	CH6	
	System	Channel7	CH7	
-		Channel8	СН8	
0	Maintenance	Channel9	CH9	
		Channel10	CH10	
		Channel11	CH11	
		Channel12	CH12	
		Channel13	CH13	
		Channel 4		
		Save	Restore Default	

Figure 5-29

Chapter 6: Storage

6.1 Record

6.1.1 Record

How to configure video settings:

 Access the main interface, click Configuration → Storage → Record → Record to enter the recording setting interface, Figure 6-30.



Figure 6-30

2. Set parameters using the table below.

Parameter	Description
Channel	Select the channel number for setting the recording, and you can set different recording plans for different channels. If you set the same for all channels, select "All".
Enable	Enable/Disable the current channel recording function.
Del	Delete the selected recording time period.
Delete All	Click to delete all recording settings.
Selected All	Click to set all channels to normal video and motion detection recording from Monday to Sunday.

۵	Copy to. After setting the video for a certain day, click ⁶ to apply the settings of that day to other times.
Time period setting	Click one of the set recording time periods, pop up the time period setting, select the recording type, set the time period, and click Save to complete the setting. When you click Del, the selected time period is deleted.
More Settings	Click to enter the pre-record time setting interface, set the prerecord action status 0 seconds to 30 seconds before the recording, click OK.

Table 6-31

3. Click Save to complete configuration.

6.1.2 Encode

In the main interface, click **Configuration** \rightarrow **Storage** \rightarrow **Record** \rightarrow **Encode** to enter the encoding setting interface Figure 6-32. Here you can view and set the encoding parameter values for accessing each camera.

	NVR	Preview	Play	yback	Picture	Configuration
ø	Local Config	Record	Encode			
0	Channel	Channel		CH01		~
۵	Storage	Stream Type		Main Stream		
		Video Encoding		H264	·	~
	Storage Device	Main Stream				
Ţ	System					_
0	M-1-1	Resolution		2560x1440	· · · · · · · · · · · · · · · · · · ·	~
0	Maintenance	Stream Type		Video&Audio		~
		Bitrate Type		Variable		$\mathbf{\tilde{\mathbf{v}}}$
		Bitrate(Kb/S)		4096		
		Bitrate Range(Kbp	s)	3456~5760		
		Frame Rate		15		⊻.
		H264+/H265+				
		H264+		Disable		×
		Save				
		Save				



6.2 Storage Device

6.2.1 HDD

In the main interface, click **Configuration** \rightarrow **Storage** \rightarrow **Storage Device** \rightarrow **HDD** to enter the HDD interface, Figure 6-33. Here you can view hard drive details, connected cameras, and format the hard drive.

	NVR	Prev	view Pla	yback Picture	e Configuration		
ø	Local Config	HDI	Cloud Stora	ge			
()	Channel						
8	Storage	No.	Status	Total Capacity 1953.514GB	Residual Capacity 857.592GB	Device Type SATA	
	Record						^
Ģ	System						
()	Maintenance						
							\sim
			Format Warnin	g:The device will reboot automatic	ally after disk formatting!		
				•			

Figure 6-33

6.2.2 Cloud Storage

In the main interface, click **Configuration** \rightarrow **Storage** \rightarrow **Storage Device** \rightarrow **Cloud Storage** to enter Cloud Storage and IPEYE setting interface, Figure 6-34. Here you could enable and set the function of Cloud Storage and IPEYE, the specific setting steps are consistent with the NVR local settings.

		- ·		-		
		Preview	Playback	Picture	Configuration	
0	Local Config	HDD	Cloud Storage			
0	Channel					
۸	Storage	Cloud Storage				
	Record	Enable				
	Storage Device	Google Cloud Web		Bind	7	
Ţ	System	Authorization Code				
0	Maintenance	Test				
		Upload Folder	event	picture		
		Username		Capacity	Used	
				0.00MB	0.00MB	
		Save				

Figure 6-34

Chapter 7: System

7.1 General

7.1.1 Device Settings

In the main interface, click **Configuration** \rightarrow **System** \rightarrow **General** to enter the device setting interface, Figure 7-35. Here you could view and adjust language settings, record mode, record days, video standard, resolution, and other information. Click Save to complete the setting.

	NVR	Preview	Pla	yback		Picture		Configuration
٥	Local Config	Device Settings	Date		DST			
()	Channel						_	
		Language		Englis	sh		\sim	
	Storage	Record Mode		Overv	write		~	
Ţ	System	Record Days		No Li	mit		~	
	General	Resolution		1280>	(1024		<	
	Network	Auto Login						
	User	Auto Logout		~	10 Min		~	
	Local Alarm	Device Name		CLR-	V200-8PNVR	2		
	Normal Event	Fullscreen Time(sec))	10			~	
	Smart Event							
0	Maintenance	Save						

Figure 7-35

7.1.2 Date

Set the system date of the device, and manually set the system time, synchronize with the computer, or set the system date using the Network Time Protocol (NTP) function as needed.

	NVR	Preview	Playback	t	Picture	Configuration	
ø	Local Config	Device Settings Da	ite	DST			
0	Channel	Time Zone	GMT	.05:00 Fastom T	ime (USA and Canad	ia) 🔽	
۸	Storage	Set Date/Time Manually	Gill	00.00 Eastern 1	inio (oorrand ounde		
Ģ	System	Date/Time	2021	-05-18 1	6 🔽 27	✓ 45 ✓	
	General	Synchronize with the comp	outer 2021	/5/18 16:27:45	j		
	Network	Enable NTP					
	User	NTP Server	time.	nist_gov		×	
	Local Alarm	Custom					
	Normal Event	NTP Port	123				
	Smart Event	Interval(Min)	720				(30-1440)
()	Maintenance	Date Format	Day	Month Year		$\mathbf{\mathbf{Y}}$	
		Separator	-			~	
		Time Format	24 He	ours		~	
		Channel Check Time					
		Select All					
		✓ GH01 ✓ GH02 ✓ GH03 ✓		H05 🗸 CH06 🗸	СН07 🗹 СН08 🗸 С	H09 🗸 CH10 🗸 CH11 🗸	CH12 🗸 CH13 🗸 CH14 🗸 CH15 🗸 CH16
		Interval(Min)	60				
		Save					

Figure 7-36

Set the system date as follows:

- Access the main interface, click Configuration → System → General → Date to enter the date setting interface, Figure 7-36.
- 2. Select the setting date type (3 ways):

- Enable Set Date/Time Manually: Select the date and time manually, and then click Save, the system automatically synchronizes with the manually set time.
- Enable Synchronize with the computer: Click Save, the system automatically synchronizes the time to the computer that logs into the WEB page.
- Enable Receive Date/Time from NTP: Select the NTP server (or select a custom server, enter the custom server domain name), select the time zone where the device is located, enter the NTP port, set the NTP update interval, date format, date separator, time format, click "Save", system time, and then the NTP server time is synchronized.

The date setting parameters are described in the following table:

Parameter	Description
NTP Server	Select the server domain name where the NTP service is installed.
Custom NTP server	When the NTP server selects "Custom", enter the NTP server domain name.
NTP Port	Enter NTP server port.
Date Format	Set the date display format for NVR devices, including Year Month Day, Month Day Year, Day Month Year, Day Month Year.
Time Format	Set the time format of NVR devices, including 24-hour and 12-hour.
Date Separator	Set the separator between year, month, and day.
Time Zone	Set the time zone of the NVR device.
Channel Check Time	Select the NVR channel.

Table 7-37

Set the channel check time as follows:

- Access the main interface, click Configuration → System → General → Date to enter the date setting interface, Figure 7-37.
- 2. Select the channel or select "All", and then click Save to complete the configuration.

7.1.3 DST

- 1. Access the main interface, click **Configuration** → **System** → **General** → **DST** to enter the DST setting interface, Figure 6-20.
- 2. Turn on daylight-saving time, set the type, start time, end time, and offset.
- 3. Click **Save** to complete the configuration.

		Preview	Pla	yback		Pic	ture		Co	nfigurat	ion		
0	Local Config	Device Settings	Date										
0)	Channel												
	Storage	Enable DST		Week	~								
-	System	Start Time		Mar.		2nd	~	Sun.	~	02	~	00	
	General	End Time		Nov.	×	1st	~	Sun.	~	02	~	00	
	Network	Offset(min)		60	×								
	User												
	Local Alarm	Save											
	Normal Event												
	Smart Event												
D	Maintenance												

Figure 7-38

7.2 Network

7.2.1 TCP/IP

In the main interface, click **Configuration** \rightarrow **System** \rightarrow **Network** to enter the IP/Port setting interface, Figure 7-39. Here you can set the IP Address, Network Mask, Gateway, Port, DNS, and other network information.

	NVR	Preview	Playback		Picture	Configuration			
ø	Local Config		DDNS	E-mail	P2P	FTP	UPNP	PPPOE	Address Filter
٢	Channel								
	Storage	NIC Settings							
	ciciago		Enable	DHCP 🗸					
Ţ	System	IP Address	192.16	8.1.129					
	General	Network Mask	255 25	5.255.0					
		Gateway	192.16	8.1.1					
	User	TCP Port	5000						
	Local Alarm	RTSP Port	554						
	Normal Event	HTTP Port	80						
	Smart Event	Private Port	6000						
0	Maintenance	MAC Address	58:67:	7F:47:34:29					
						-			
		DNS							
		Primary DNS	192.16	8.1.1					
		Secondary DNS	8.8.8						
		Internal Net Card	I IP						
		Internal Net Card IP	192.1	68.11.2					
		Save							

Figure 7-39

7.2.2 DDNS

In the main interface, click **Configuration** \rightarrow **System** \rightarrow **Network** \rightarrow **DDNS** to enter the DDNS setting interface, Figure 7-40. Here you can enable and set the DDNS function.

	NVR	Preview	Play	back	Picture	Configuration			
ø	Local Config	TCP/IP	DDNS	E-mai	P2P	FTP	UPNP	PPPOE	Address Filter
0	Channel								
	Storage	DDNS							
	System	Enable DDNS							
-		DDNS Type		NO-IP		<u>_</u>			
	General	Refresh Time(Sec)		60					
		Usemame	ſ						
	User	Password							
	Local Alarm	Domain	ĺ			1			
	Normal Event		L						
	Smart Event	Save							
0	Maintenance								

Figure 7-40

7.2.3 E-Mail

In the main interface, click **Configuration** \rightarrow **System** \rightarrow **Network** \rightarrow **E-mail** to enter the email setting interface, Figure 7-41. Here you can open and set the mail function.

Address Filter

Figure 7-41

7.2.4 P2P

In the main interface, click **Configuration** \rightarrow **System** \rightarrow **Network** \rightarrow **P2P** to enter the P2P setting interface, Figure 7-42. Here you can enable/disable the P2P function, check the serial number of the device, use the mobile phone to scan the QR code to download the app.

	NVR	Preview	Playbac	k	Picture	Configuration			
ø	Local Config	TCP/IP	DDNS	E-mail	P2P	FTP	UPNP	PPPOE	Address Filter
١	Channel	✓ Clare							
	Storage	Glare							
Ģ	System	■ 86 5	1						
	General	- 250 5	25.						
	User		분분 📕						
	Local Alarm	KM2E98W3SMD9	ERHM111A						
	Normal Event								
	Smart Event	Status	Onli	ne					
0	Maintenance	Encryption	NO	NE	×]			
_		Push interval(min)	5		~	-			
Γ		Save							

Figure 7-42

7.2.5 FTP

In the main interface, click **Configuration** \rightarrow **System** \rightarrow **Network** \rightarrow **FTP** to enter the FTP setting interface, Figure 7-43. Here you can enable and set the FTP server function.

	NVR	Preview	Playbac	k P	licture	Configuration			
ø	Local Config	TCP/IP	DDNS	E-mail	P2P	FTP	UPNP	PPPOE	Address Filter
۲	Channel	FTP							
۸	Storage								
Ģ	System	Enable FTP FTP Server	0.0.0).0		Test	1		
	General	FTP Port	21]	2		
		Usemame							
	User	Password				ĺ			
	Local Alarm	Confirm							
	Normal Event	File Upload]			
	Smart Event	Channel	СНО	11	~				
0	Maintenance	Week	Tue.		 	-			
		Time Period1 📕	0	: 0 ~ () : 0				
		Time Period2 📕	0	: 0 ~ 0	. 0]			
		Save							

Figure 7-43

7.2.6 UPNP

In the main interface, click **Configuration** \rightarrow **System** \rightarrow **Network** \rightarrow **UPNP** to enter the UPNP setting interface, Figure 7-44. Here you can enable and set the UPNP function.

NVR	Preview	Play	back	Picture	Configuration			
Local Config	TCP/IP	DDNS	E-mai	P2P	FTP	UPNP	PPPOE	Address Filter
Channel	- Factor							
Storage	Slatus							
System	Internal IP	[
General	External IP							
	Port Mapping Table							
	No.	Serve	mame	Protocol	Internal Port	External Port		
Normal Event								
Smart Event								
Maintenance								
	Add		Delete					
	0							
	Save							
	Local Config Channel Storage System General Network Local Alarm Normal Event Smart Event	Local Config TCP/IP Channel Storage System General User Local Alarm Network Normal Event Smart Event Maintenance	Local Config TCP/IP DDNS Channel Image: Control of the second state stat	Local Config TCP/IP DDNs E-mail Channel E-mails Status Image: Status Image	Local Config TOPJP DDNS E-mail P2P Channel E-mail E-mail P2P Storage Satus	Local Config TCP/IP DDNS E-mail P2P FTP Channel Intrade Intrad	Local Config TCP/IP DONS E-nail P2P FTP UPNP Channel	Local Config TOP/IP DDNS E-mail P2P FTP UPNP PPPOE Channel E-mail Site E-mail FTP UPNP PPPOE Storage Satus E-mail FTP UPNP PPPOE Storage Satus E-mail E-mail FTP UPNP PPPOE Storage Satus E-mail E-mail
Figure 7-44

7.2.7 PPPOE

In the main interface, click Configuration \rightarrow System \rightarrow Network \rightarrow PPPOE to enter the PPPOE setting interface, Figure **7-45**. Here you can enable and set the PPPOE function.





7.2.8 Address Filter

In the main interface, click **Configuration** \rightarrow **System** \rightarrow **Network** \rightarrow **Address** Filter to enter the Address Filter setting interface, Figure 7-46. Here you can enable and set the Address Filter function of the NVR.



Figure 7-46

7.3 User

In the main interface, click **Configuration** \rightarrow **System** \rightarrow **User** to enter the User management interface, Figure 7-47. Here you can add, delete, edit users, user settings.

	NVR	Previe	w Playba	ick Picture	e Con	figuration		
ø	Local Config	User Manaç	gement					
0	Channel	No.	Username	Security	Level	Authority	Modify	Delete
8	Storage	1	admin	Medium Strength	Administrator	-	Modify	·
Ģ	System							
	General							
	Network							
	Local Alarm							
	Normal Event							
-	Smart Event							
0	Maintenance							
			Add					



7.4 Local Alarm

7.4.1 Alarm Input

In the main interface, click **Configuration** \rightarrow **System** \rightarrow **Local Alarm** \rightarrow **Alarm Input** to enter the Alarm Input interface, Figure 7-48. Here you can set the alarm input of the device to the alarm of the external alarm device.



Figure 7-48

7.4.1 Alarm Output

In the main interface, click **Configuration** \rightarrow **System** \rightarrow **Local Alarm** \rightarrow **Alarm Output** to enter the Alarm Output interface, Figure 7-49. Here you can set the alarm output of the device to the alarm of the external alarm device.



Figure 7-49

7.5 Normal Event

7.5.1 Motion Detection

Motion detection uses computer vision and image processing techniques to analyze the video images to see if there are enough image changes. When the moving target appears on the monitoring screen and the moving speed reaches the preset sensitivity, the system performs an alarm linkage action.

Regional Settings

In the main interface, click **Configuration** \rightarrow **System** \rightarrow **Normal Event** \rightarrow **Motion Detection** to enter the motion detection setting interface, Figure 7-50. Here you can view and set device motion detection related information.

- 1. Select the desired channel and add a checkbox next to "Enable" to turn on motion detection events.
- 2. Adjust the sensitivity setting as needed.
- 3. Use the mouse to draw the motion detection area on the channel video.

Settings Include:

Channel: Select to set the channel.

Enable: Check to turn on/off motion detection alarm.

Set Area: Select all areas by default, click to enter the area setting interface, set the range of the dynamic detection area, press and hold the left mouse button to select the alarm area. After selection, the alarm area is replaced by the red grid. Select the red grid again to cancel the alarm area setting.

Sensitivity: Can be set 0 to 10, the higher the value, the more sensitive the device.

Buzzer Alarm: Check to turn on/off the buzzer alarm function.

E-mail Notification: Check to turn on/off when the device alerts the mail function.

Channel Recording: Check to turn on/off the channel recording function.

Full Screen Monitoring: When an alarm is triggered on the preview interface, the real-time video of the device channel is displayed in full screen.

Alarm Output: Select the alarm output port, it is connected to the alarm device, within the set alarm time range, when the device motion detection alarm, it will trigger an external alarm device to alarm.



Figure 7-50

Arming Schedule

As shown in Figure 7-51, you can view, edit, and delete the arming time of motion detection. The default is to arm the alarm 24 hours a day.



Figure 7-51

7.5.2 Exception

In the main interface, click **Configuration** \rightarrow **System** \rightarrow **Normal Event** \rightarrow **Exception** to enter the exception setting interface, Figure 6-33. Here you could set the alarm mode of abnormal events. When an abnormal event occurs during the operation of the NVR, the system executes the alarm linkage action. Supported event types include "No Disk", "Disk Error", "Broken Network", and "IP Conflict".

- 1. Select the event type, and then add a check box next to "Enable" to turn on the exception alarm.
- 2. Select the alert type (Screen Display, E-mail Notification, Buzzer Alarm), and then select the alarm output port.
- 3. Click "Apply" to save the settings.





- Enable: Turn on event alert type.
- Screen Display: When an alarm occurs, the device pops up an alarm screen to show a warning.
- E-mail Notification: When an alarm occurs, the device sends an email as a warning.
- Buzzer Alarm: When an alarm occurs, the device beeps to give a warning.

7.5.3 Video Loss

In the main interface, click **Configuration** \rightarrow **System** \rightarrow **Normal Event** \rightarrow **Video Loss** to enter the video loss setting interface, Figure 7-53. Here you could enable channel video loss and set the corresponding alarm when the video is lost. The relevant parameters are consistent with the local settings of the NVR. When there is a channel losing video signal, the device will alarm and notify the user.

- 1. Select the desired channel and enable the video loss.
- 2. Set normal linkage and alarm output as required.
- 3. Click "Apply" to save the setting.

	NVR	Preview	Playba	ack P	icture
ø	Local Config	Motion Detection	Exception	Video Loss	Buzzer
(0)	Channel	Channel	CH01 V		
	Storage	Select All		Alarm Output	
Ţ	System	Enable		1	
0	General Network User Local Alarm Normal Event Smart Event Maintenance	E-mail Notificatio	n		
		Save			

Figure 7-53

- **Channel:** Select the channel.
- Enable: Check to turn on/off video loss alarm.
- Screen Display: When an alarm occurs, the device pops up an alarm screen to show a warning.
- E-mail Notification: When an alarm occurs, the device sends an email as a warning.
- Buzzer Alarm: When an alarm occurs, the device beeps to give a warning.

7.5.4 Buzzer

In the main interface, click **Configuration** \rightarrow **System** \rightarrow **Normal Event** \rightarrow **Buzzer** to enter the buzzer alarm setting interface, Figure 7-54. Here you could set the duration of the buzzer alarm. The related parameters are consistent with the local settings of the NVR.

- 1. Set the buzzer time for the alarm.
- 2. Click "Apply" to save the settings.



Figure 7-54

• **Test:** Click Test to confirm the volume and duration of the buzzer alarm.

7.5 Smart Event

Intelligent detection includes face detection, crossover detection, regional intrusion detection, people stay and people gathering detection. Smart events are only available on ClareVision Performance Series of cameras.

7.5.1 Human Body Detection

In the main interface, click **Configuration** \rightarrow **System** \rightarrow **Smart Event** \rightarrow **Humanoid** to enter the Face detection setting interface, Figure 7-55. Here you could set the alarm upon detection of a human body.

- 1. Add a check box next to "**Enable**" to turn on Humanoid detection.
- 2. Configure alarm notification settings as needed: Buzzer Alarm, E-mail, Channel Recording, Full Screen Monitoring, and Alarm Output Triggering.
- 3. Adjust the detection sensitivity under Rule Settings.



Figure 7-55

7.5.2 Line Crossing

In the main interface, click **Configuration** \rightarrow **System** \rightarrow **Smart Event** \rightarrow **Line Crossing** to enter the Crossover detection setting interface, Figure 7-56. Line crossing detection can detect whether there is an object crossing the set warning surface in the video and perform linkage alarms according to the result.

- 1. Choose the channel, and then click Line Crossing to enter line crossing detection setting mode.
- 2. Add checkbox next to "Enable".
- 3. Select Rule Setting, to set the rule of line crossing detection, the specific steps are shown as below:
 - a. In the "Rules" drop-down list, select rules as needed.

NOTE: Line crossing detection can set 4 rules.

b. Set the Time Threshold (Seconds) and sensitivity of the rule.

Sensitivity: It is used to set the size of the control target object. The higher the sensitivity, the easier the object is judged to be the target object. The lower the sensitivity, the larger the object will be judged as the target object. The sensitivity can be set in the range of 0 to 100. **Direction:** There are three options: "A <-> B (bidirectional)", "A-> B", "B-> A", which refers to the direction in which an object passes through the warning area to trigger an alarm.

- "A<->B" (Bidirectional) Indicates that the alarm is triggered in both directions.
- "A->B" Indicates that the object will trigger an alarm when it crosses from A to B.
- "B->A" Indicates that the object will trigger an alarm when it crosses from B to A.
- c. Click **Draw A Line**, and then move the mouse to the preview screen and click the left mouse button in sequence to draw the two endpoints of the warning line.

NOTE: Modify the drawn warning line through the Clear All and Draw A Line.

- 4. Expand "**Processing Method**", and then set alarm linkage as required (Buzzer Alarm, E-mail Notification, Channel Recording and Trigger Alarm Output).
- 5. Click "**Apply**" to save the settings.



Figure 7-56

7.5.3 Regional Intrusion

In the main interface, click **Configuration** \rightarrow **System** \rightarrow **Smart Event** \rightarrow **Regional Intrusion** to enter the regional intrusion detection setting interface, Figure 7-57. Here you could set the alarm for regional intrusion detection. The regional intrusion function detects whether an object in the video enters the set area, and then conducts a linkage alarm based on the result.



Figure 7-57

- 1. Select the channel to set the regional intrusion, and then click "**Regional Intrusion**" to enter regional intrusion setting mode.
- 2. Check "Enable" \rightarrow Rule Setting to set the rule of regional intrusion.
 - a. In the "Rules" drop-down list, select any rule as you need.
 - b. Regional intrusion can set any 4 rules.
 - c. Set the Time Threshold (Seconds) and sensitivity of the rule.

Sensitivity: Set the size of the control target object. The higher the sensitivity, the easier the object is judged to be the target object. The lower the sensitivity, the larger the object will be judged as the target object. The sensitivity can be set in the range of 0 to 100.

Time Threshold (s): An alarm is generated after the target enters the warning zone for a continuous dwell time. If the time threshold is set to 5 seconds, the target intrusion zone is triggered for 5 seconds. The range is 1 to 10 (seconds).

d. Click **Draw A Quadrilateral**, and then move the mouse to the preview screen and click the left mouse button in sequence to draw the endpoints of the quadrilateral warning zone to complete the zone drawing.

NOTE: You can modify the drawn warning line using Clear All and Draw A Quadrilateral.

- 3. Click "**Processing Method**", set the alarm linkage (Buzzer, E-mail Notification, Channel Recording, Full Screen Monitoring), and then Trigger Alarm Output.
- 4. Click "**Apply**" to save the settings.

7.5.4 Loitering

In the main interface, click **Configuration** \rightarrow **System** \rightarrow **Smart Event** \rightarrow **Loitering** to enter the Wandering detection setting interface, Figure 7-58. Here you could set the alarm for people stay detection. The loitering function can detect the dwell time of the target in the set area. When the dwell time exceeds the set time threshold, an alarm linkage is triggered.



Figure 7-58

- 1. Select the channel you need to set the loitering, and then click "Loitering" to enter the loitering setting mode.
- 2. Check "Enable" → Rule Setting, to set the rule of loitering, the specific steps are shown as below:
 - a. Loitering can set any 4 rules.
 - b. Set the Time Threshold (Seconds) and sensitivity of the rule.

Sensitivity: It is used to set the size of the control target object. The higher the sensitivity, the easier the object is judged to be the target object. The lower the sensitivity, the larger the object will be judged as the target object. The sensitivity can be set in the range of 0 to 100.

Time Threshold (s): An alarm is generated after the target enters the warning zone for a continuous dwell time. If the time threshold is set to 5 seconds, the target intrusion zone is triggered for 5 seconds. The range is 1 to 10 (seconds).

c. Click **Draw A Quadrilateral**, and then move the mouse to the preview screen and click the left mouse button in sequence to draw the endpoints of the quadrilateral warning zone to complete the zone drawing.

NOTE: You can modify the drawn warning line using Clear All and Draw A Quadrilateral.

- 3. Click "**Processing Method**", set alarm linkage (Buzzer, E-mail Notification, Channel Recording, Full Screen Monitoring), and Trigger Alarm Output as required.
- 4. Click "**Apply**" to save the settings.

7.5.5 People Gathering

In the main interface, click **Configuration** \rightarrow **System** \rightarrow **Smart Event** \rightarrow **People Gathering** to enter the people gathering detection setting interface, Figure 7-59. Here you could set the personnel gathering detection alarm. The people gathering function can detect the density of the human body in the set area, if it exceeds the set threshold, it will trigger an alarm linkage.



Figure 7-59

- 1. Select the channel you need to set the people gathering, and then click people gathering to enter people gathering setting mode.
- 2. Check "Enable" \rightarrow Rule Setting, to set the rule of loitering, the specific steps are shown as below:
 - a. People gathering can set 4 rules, you can choose any rule.
 - b. Set the proportion of rules.
 Proportion: Represents the proportion of personnel in the entire warning area, when the proportion of personnel exceeds the set proportion value, the system alarm is triggered, otherwise the system does not alarm.
 - c. Click **Draw A Quadrilateral**, and then move the mouse to the preview screen and click the left mouse button in sequence to draw the endpoints of the quadrilateral warning zone to complete the zone drawing.

NOTE: You can modify the drawn warning line using Clear All and Draw A Quadrilateral.

- 3. Click "**Processing Method**", set alarm linkage (Buzzer, E-mail Notification, Channel Recording, Full Screen Monitoring), and Trigger Alarm Output as required.
- 4. Click "**Apply**" to save the settings.

NOTE: When the device supports an external alarm device, the alarm processing method can trigger the alarm output.

Chapter 8: Maintenance

8.1 Device

In the main interface, click **Configuration** \rightarrow **Maintain** \rightarrow **Device** to enter the version information interface, Figure 8-60. You can view the system's hardware features, software version, and release date on the version information interface.

	NVR	Preview	Playback	Picture	Configuration	
ø	Local Config	Device				
0	Channel	Device Name:	CLR-V200-8PN	VR2		
∎	Storage	Model No:	CLR-V200-8PN	VR2		
	System	SystemVersion:	NVR_MC6830_	16CH_8POE_PNP_	TK_V5_V21.1.17.3_A0003	36070
		Device Version:	3.3.0.6			
0	Maintenance	Date:	Apr 27 2021 2	1:06:05		
		WEB Version:	21.1.04.210127	,		
	Log	Plugin Version:	21.1.2.1			
	Manual Upgrade	Total Number Of Channels:	16			
	Scheduled Reboot	Total Number Of POE Channels	8			
	Default					

Figure 8-60

8.2 Log

In the main interface, click **Configuration** \rightarrow **Maintain** \rightarrow **Log** to enter the log interface, Figure 8-61. Here you can search and clear the device logs.

		F	review	Pla	yback		Picture	Configuration			
(O)	Local Config	Log									
0	Channel	Туре			All Logs						
	Storage	Start T	ime		System Managerr User Managemen Parameter Config	nen nt jura	t ition				
Ģ	System	End Ti	те		Parameter Config File Operations Status Prompt Alarm Event						
()	Maintenance							- 			
	Device		Query		Clear		Export	Export All			
		No.	Time				Event		Username		
	Manual Upgrade									\sim	
	Scheduled Reboot										
	Default										
										\sim	

Figure 8-61

- **Type:** Select the type of log to find.
- Start/End Time: Enter the time range of the log.
- Export: Export the searched log information and store it on the U disk of the connected device.
- **Export All:** Export and store all log information on the U disk connected to the device.
- **Query:** Search logs by setting search criteria and display them in the log list.
- **Prev Page/Next Page:** Page turning function, when there are multiple logs in the query period, click to view other log information.
- **Clear:** Clear all the information for the log.

8.3 Manual Upgrade

In the manual upgrade interface, you can reboot and upgrade your device. Figure 8-62.



Figure 8-62

- 1. Select browse and navigate to the location where the firmware update is saved on your computer.
- 2. Select the firmware and tap "Open".
- 3. Click "**Upgrade**", wait for the interface to finish loading the progress bar. The NVR will restart, completing the upgrade.

8.3 Schedule Reboot

In the main interface, click **Configuration** \rightarrow **Maintenance** \rightarrow **Schedule Reboot** to enter the scheduled reboot settings interface, where you can set the period and time for the device to restart. Figure 8-63

	NVR	Preview	Playback	Picture	Configuration
ø	Local Config	Scheduled Reboot			
0	Channel	Scheduled Reboot			
۸	Storage	Never			
Ţ	System	Every Day Every Week Every Month			
0	Maintenance	Every Month Sa			
	Device				
	Log				
	Manual Upgrade				
	Default				

Figure 8-63

8.3 Default

Set the restore default to restore the device default parameters to the factory defaults. Figure 8-64.

	NVR	Preview	Playback	Picture	Configuration
ø	Local Config	Restore Default			
0	Channel	Restore Default			
	Storage	Channel Recording	Channel Record	ing	
Ţ	System	Camera	Camera		
()	Maintenance	System	System		
	Device	Maintain	Maintain		
	Log	Restore all settings to factor	ory default		
	Manual Upgrade Scheduled Reboot	Restore all settings to factor	ry default		
		Save			



- 1. Select the checkbox "Restore all settings to factory default".
- 2. Click "Save" and the selected parameters are restored to the factory defaults.

3. Additional settings can be restored to default including camera and system settings.

Chapter 9: Video Playback

In the main interface, click Playback to enter the playback interface, Figure 9-65. Here you can view the equipment video, capture, download and other actions.



Figure 8-65

- **Timeline:** Displays the type of recording under the current conditions and the time period in which it is located. In the 4-picture playback mode, 4 playback time corresponding to the selected four channels can be displayed. In the other single-screen playback modes, only one time axis is displayed. Use the mouse to click a point in the blue area and drag to the yellow line position, that is, playback from that point in time.
- Layout: Click ⊞/□ to toggle the video playback window.
- **Play/Pause:** After querying the video file, click \triangleright / **II** to start/pause playback of the searched video.
- Stop: When the video is played, press 🔲 to stop playing the video.
- Slow Forward: When the video is played, click 1/2, 1/4, 1/8. After switching, you can check the playback speed in the status of the upper right corner of the preview interface.
- **Fast Forward:** When the video is played, click D. The video will be slow to play, the specific speed of choice 2, 4, 8. After switching, you can check the current playback speed in the status of the upper right corner of the preview interface.
- Mute/Open the Sound: When the video is played, click $\sqrt[4]{4}$ to turn on/off the sound of the recorded video.
- Enable Electronic Zoom: When the video is played, click (a) / (b) to turn on/off the electronic zoom function of the recorded video. Turn on the electronic zoom function by holding down the left mouse

button, and then select the position to zoom in on the playback screen. Release the mouse, select the

location screen is placed, and then click $^{\textcircled{0}}$, the magnification screen is restored.

- Snapshot: When the video is played, click 🔛 to capture the settings to the local configuration settings.
- Clip: When the video is played, click for start recording, and then click Save Clip File again, storing the clip in the local configuration settings.
- Download: After querying the video file, click to enter the video file list, select the download file, click Download, and then the video file starts to download. The file download interface is shown in Figure 6-49. The "First Page", "Prev Page", "Next Page", and "Last Page" are used to scroll through all video files. You can use "Edit" under "Set date/time manually" to intercept and download the video file.
- Full Screen: When the video is played, click the full-screen playback video. Press Esc on the keyboard to exit the full-screen playback interface.
- **Drag and drop:** Drop and drag the video playback, using the left mouse button click on the time axis to play the position. Drag left and right, drag it to the middle of the yellow time point position, and playback channel to play the point in time recording.

Chapter 9: Picture

In the picture interface, you can view and download all the pictures captured on the device side. Figure 9-67

NVR	Prev	iew	Playback	Picture	Configuration			(a) admin	⊘ Help 😢 Logout
Picture									
Channel	≡ ⊞								Download
CH1 O Event Type	Select All	Channel -	File Name 0			Time 0	File Size	Previews	
All	1	1	01_0002_2021-05-1	18_00-03-01.jpg		2021-05-18 00:03:01	43.30Kb	0	^
Start Time	2		01_0002_2021-05-1	18_00-03-42.jpg		2021-05-18 00.03:42	43.29K0	ø	
2021-05-18 00:00.00	3	1	01_0002_2021-05-1	18_00-04-23.jpg		2021-05-18 00:04-23	43.32Kb	0	
End Time 2021-05-18 21:11:24	4		01_0002_2021-05-1	8_00-05-05.jpg		2021-05-18 00:05:05	43.39Kb	ø	
	5		01_0002_2021-05-1	18_00-05-46.jpg		2021-05-18 00.05:46	43.26Kb	0	
م	6	1	01_0002_2021-05-1	8_00-06-14.jpg		2021-05-18 00:06:14	43.19Kb	G	
	7	1	01_0002_2021-05-1	8_00-06-28.jpg		2021-05-18 00:06:28	43.38Kb	ø	



- 1. Access the main interface, and then click Picture to enter the picture interface.
- 2. Select the channel, click OK, select the event type, and then set the search time range.
- 3. Click , the searched image is displayed on the right side of the interface.
- 4. Select the picture, click Download to select the storage path, click OK, and then select the image to

download to the specified folder. Click e corresponding to the preview position to view the image.

- **Channel:** Select the channel to search for image files. Select one channel individually or multiple channels or Select All at the same time.
- **Event Type:** Capture image type, the drop-down box option consists of All, Manual capture, Motion capture, Face detection, Regional Intrusion, Crossover, Wandering, and Staff Gathering.
- Start/End Time: The time range for capturing image files.
- Query: Click , the system will query the corresponding picture file according to the set channel, event type and time range, and display it in the file list.
- **Details:** The image searched by clicking **I** is displayed in the list as detailed information.
- **Big icon:** The image searched by clicking **H** is displayed in the list as a large icon. Figure 9-68.

Page 52 | 53

• **Download:** Select the picture, click Download, select the storage path, click OK, and then select the picture to download to the specified folder.





Chapter 10: NVR maintenance and best practices

- When NVR shutdowns, don't turn off the power switch directly. Use the shutdown button of system to avoid data loss or damage of the hard disk.
- Ensure that the NVR is away from high temperature heat sources.
- Keep the NVR free of dust and in an area of good ventilation.
- Do not hot swap the audio/video signal line and RS-485 interfaces, or these ports will be damaged.
- Check the HDD power cable and data cable of the NVR regularly and check for damage.
- Avoid the audio/video signal affected by other circuits and devices as much as possible, prevent the hard disk damaged by electrostatic or induced voltage.