

# **USER MANUAL**

### 8000 Series Network Video Recorder

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# Chapter 1 Installation

## 1.1 Unpacking

During installation of the NVR:

- Ensure that the device is installed in a well-ventilated and dust-free environment.
- The device shall be used indoors only.
- Keep all liquids away from the device.
- Ensure that the environmental conditions meet the factory specifications.
- Turn off the device before connecting and disconnecting accessories and peripherals.

### 1.2 Hard Disk Installation

#### Before starting:

Disconnect the power from the NVR before installing a hard disk drive (HDD). A factory recommended HDD should be used.

#### Tools required: a screwdriver.

#### NVR with 1 or 2 HDDs.

#### Steps:

1) Remove the cover from the NVR by untightening the screws on the rear and side panels.



2) Insert the hard disk along the slot and tighten the screws.



3) Connect the device to the power and the data cable to the NVR and HDD.



4) Reinstall the cover and tighten the screws.



#### **NVR with 4 or 8 HDDs.**

#### Steps:

1) Remove the cover from the NVR by untightening the screws on the side and rear panels.



2) Fix the HDD with screws at the bottom.



3) Connect the device to the power and the data cable to the NVR and HDD.



4) Reinstall the cover and tighten the screws.



# Chapter 2 Getting Started

### 2.1 Starting up and Shutting down

### 2.1.1 Starting up

Plug in the power cord, press the power switch, then the power indicator should light up, and the device will start to boot. After the device starts, the video output mode is set as multiple-screen by default.

### 2.1.2 Shutting down

**Option 1:** Press the power key on the rear panel to shut the device down (should be supported by the device).

Option 2: Click on Start → Shutdown → Confirm ( ☺

**Prompt:** It is recommended to use this way, in order to avoid damages when the device is suddenly powered down.)

🔥 Menu
G Logout
米 Reboot
🖒 Shut down

Figure 2.1 Shutdown Menu

### 2.2 Logging in

If NVR first start-up or has logged out, you must log in to the device before operating the menu and other functions, as shown in Figure 2.2.

	Login Interface				
User Name	admin	<b>~</b>			
Password					
	ок	Cancel			

Figure 2.2 Login Interface

#### Steps:

1) Click on the **Start** button on the Lower left corner of the

screen.

- 2) Click on the **Login** button from the pop-up menu.
- 3) Input the **password** on the pop-up interface (Default password: 123456).
- 4) Click on **OK** to log into the system.

### 2.3 Using the Guide

The guide starts immediately after the login, as shown in Figure

2.3.



Figure 2.3 Wizard

#### Operating the guide

- The system will guide you through some basic setup of the NVR. If you do not want to use the guide right now, click on the solution. You may also choose to use the guide next time by unchecking the "Open the Wizard next time start" check-box.
- 2) Click on the **Next step** button to enter the system setting interface, as shown in Figure 2.4.



Figure 2.4 System Settings

 After setting the display and language, click on the Next step button to enter the Time configuration interface, as shown in Figure 2.5.

	Wizard		8
Welcome > System Setting > Time configuration	> Local Network Config		
Time Zone	(UTC +08:00)Beijing, Hongkong, Urumqi, Singapore		~
System Time	2018-12-11	15:49:17	A V
Date display format	ነሳሳሳ-MM-DD Year-Month-Day		~
Time display format	24Hour		~
		Previous Page	Next Step

Figure 2.5 Time Configuration

 After setting the time, click on the Next step button to enter the Local Network Config interface, as shown in Figure 2.6.

		Wizard			8
Welcome > System Setting > Time configuration > Local Natwork Config					
Network Card	LAN1				*
Enable DHCP					
IP Address	192	168	. 130		250
Subnet Mask	255	, 255	. 255		0
Gateway Address	192	. 168	. 130		
Enable automatic access to DMC server					
Professed DNS	192	168	130		
Alternate DMR	202		120		
Alternate UNS	202	FI 80	FI128		80
HTTP Pert	80				
RTSP Port	554				
				Previous Page	Complete



#### 5) Click on **Complete** button to finish the wizard.

### 2.4 Menu operations

After successful login, you may set the system accordingly on the main Menu interface by clicking your right mouse button as shown in Figure 2.7.



Figure 2.7 Main Menu Operations

### 2.4.1 Setup

Click on the icon, then the interface as show in Figure 2.8 will pop up.

Menu
G Logout
<u> </u>
🖒 Shut down

Figure 2.8 Setting Up

- 1) Logout: Click on the **Logout** button to log off.
- Reboot: Click on the **Reboot** button and confirm, then the device will automatically reboot.
- Shutdown: Click on the Shutdown button and confirm, then the device will automatically shut down.

# **Chapter 3 Preview**

### 3.1 Introduction of Preview

Preview shows you the video image obtaining from each camera in real-time. The NVR will automatically enter live video mode when turned on, as shown in Figure 3.1.

			at man		a ZKTece
or <b>ZK</b> Teao	ze ZKTran	a ZKTrao	ZKTran	en ZKTrao	en ZKTaco
ana ZKTarao	ZKTran	en ZKTraso	ent ZKTrase	ar ZKTrao	zer ZKTecco
oss ZKTeco	ZKTros	an <b>ZIC</b> Teon	022 ZKTreen	21CTrees	ZICTecor
on ZKTeon	ZKTrees	oar ZICTecon	ZKTrees	ZICTrees	216Tecor
an ZKTecco	zik Tecos	en ZKTeco	™ ZKTsco	on ZKTeco	2KT1000
🗢 O O O O O O 🛛 🕺 O O = 🛦 🔷 🛧 寻 se 🛛 S S 1:22					

Figure 3.1 Preview Interface

#### **Channel preview icons**

In the preview mode, there are hidden icons on the interface of each channel, which will appear when you move the cursor to the bottom of the window.

٩	🎲 🖳 🤶	<b>.</b>	🌢 🖳 🕼	
lcons	Descriptions	lcons	Descriptions	
	Open/ close PTZ	Ì	Show/ hide smart detection	
	Snapshots	<b>P</b>	Turn voice intercom on/ off	
	Turn audio on/ off		Turn manual recording on/off	
	Instant playback			
0	Media parameters			
	Face Detection			

Table 3.1 Icons Descriptions

Media parameters: you may adjust the brightness, contrast, saturation and hue of the channel that the current mouse selected, one click to restore the default value when necessary, as shown in Figure 3.2.



Figure 3.2 Media Parameters

#### PTZ/ Preset/ Cruise/ Pattern:

Please confirm whether the related parameters is correctly set before controlling the PTZ. After setting up the parameters, select the channel to be controlled on the preview interface, then control the direction of the lens, focal length, focus, aperture amplification and narrow in PTZ operation interface, and adjust the speed of PTZ, as shown in Figure 3.3. For detailed operations of PTZ control part, please see below.



Figure 3.3 PTZ Control

### 3.2 Operations in Preview Mode

In preview mode, there are many functions provided, which are listed below.

On the bottom-right corner, there are some icons of real-time information, as shown in Figure 3.4.



Figure 3.4 Real-time Information

1) P2P information

When you click on , the interface will pop up the P2P information, as shown in Figure 3.5.





2) Real-time alarm information

When you click on **A**, the interface will pop up the alarm

information, as shown in Figure 3.6.

Alarm Information							
	No.		Alarm Type	Police So	urce	Time	
	∞ 1		IP Conflict			12-08 17:01:40	
					Disarming	) Off	

Figure 3.6 Alarm Information

3) Network Information

When you click on 🛄, the interface will pop up the Network

information, as shown in Figure 3.7.

Network Information			8
Network Card	LAN1		•
MAC Address	22:C9:EE:F8:32:24		
Network Status	100M/Full Duplex		
DHCP Status	Not Enabled		
IPV4 Address	192 . 168	. 130 .	251
Subnet Mask	255 . 255	. 255 .	0
Gateway	192 . 168	, 130 .	
Preferred DNS	192 168	130	

Figure 3.7 Network Information

4) System Sound

When you click on s, the interface will pop up the system

sound, as shown in Figure 3.8.



Figure 3.8 System Sound

#### 5) Other functions

lcons	Descriptions	lcons	Descriptions
1	Single screen	4	4 screens
6	6 screens	8	8 screens
9	9 screens	16	16 screens
25	25 screens	36	36 screens
64	64 screens	Ø	Audio adjustment
(III)	Cruise on settings	*	Linkage preview
ſ	Page up	€	Page down

Table 3.2 Descriptions of Other Functions

### 3.3 Using the Mouse in Preview

When you right-click, you can open the shortcut menu as shown in Figure 3.9.



Figure 3.9 Shortcut Menu

Names	Descriptions		
Menu	Access the main menu		
Wizard	Access the wizard interface.		
Channel Manage	Quick access to the channel management interface.		
Record Manage	Quick access to the record management interface.		
Playback	Quick access to the playback interface.		
PTZ Control	Access the PTZ interface.		
Image color	Quick access to the image color interface.		
4-split-screen	Select and access the 4-screen mode.		
6-split-screen	Select and access the 6-screen mode.		
8-split-screen	Select and access the 8-screen mode.		
9-split-screen	Select and access the 9-screen mode.		
16-split-screen	Select and access the 16-screen mode.		
25-split-screen	Select and access the 25-screen mode.		
36-split-screen	Select and access the 36-screen mode.		
Previous	Switch to the previous settings.		
Next	Switch to the next settings.		
Full Screen/ Exit Full Screen	Quickly access/exit the full screen mode.		

Table 3.3 Descriptions of Right-click Functions

# **Chapter 4 Playback**

### 4.1 Instant Playback

#### Purpose:

Play the recorded videos from a specific channel in the live video mode

#### Steps:

Choose a channel in live video mode and click on the  $rac{1}{86}$ icon on the bottom of the channel, as shown in Figure 4.1.



000-0-ത e. **m** 



## 4.2 Playback by Normal Search

### 4.2.1 Recording Playback

Click on the



icon to enter the playback interface, as

shown in Figure 4.2.



Figure 4.2 Normal Playback Interface

#### Playback by time

#### Purpose:

Play video recorded in specified time duration. Multi-channel

simultaneous playback is supported.

#### Steps:

- 1) Enter the **Playback** interface.
- Check the check-box(es) of the desired channel(s) in the channel list and then double-click to select a date on the calendar.
- Click on the button to start playback, as shown in Figure 4.3.



Figure 4.3 Video Playback

#### Notes:

8

If there are video files recorded by the camera on a specific day,

the icon representing that day shown in the calendar will be



#### Playback Interface

You may use the toolbar in the bottom part of the playback interface to control the playing, as shown in Figure 4.4.



Buttons	Descriptions	Button	Descriptions
	Play/ pause	$\bullet$	Stop
	Fast forward	◄	Rewind
	Single frame		30 seconds forward/backward
	Slow down		Speed up
	Single screen	4	4 screens
6	6 screens	8	8 screens
9	9 screens	16	16 screens
l	Page up/ page down	0	Backup
đ	Capture		Hide/ show the time bar
<b>19</b> 2	On/Off Audio		Change the time bar

Figure 4.4 Playback Toolbar

Table 4.1 Descriptions of Toolbar Icons
## 4.2.2 Playback by Event Search

### Purpose:

Play recorded files on one or several channels searched out by event type (e.g. alarm detection, motion),as shown in Figure 4.5.



Figure 4.5 Event Search

### Steps:

- 1) Enter the playback interface.
- Select the retrieving type: count alarm, motion, across the line, regional, alarm detection and object left/loss...
- Click on the Search button to obtain information of the results.
- 4) Click on the 🕑 button to play the file back.

## 4.2.3 Playback of Pictures

### Purpose:

The captured pictures stored in the HDDs of the device can be searched and viewed, as shown in Figure 4.6.



Figure 4.6 Picture Playback

### Steps:

- 1) Enter the playback interface.
- 2) Select playback modes: image playback.
- 3) Select "Search by day" or "Search by time".
- Select picture source: IPC snapshot (preview snapshot) or playback snapshot.
- 5) Choose condition: Meet random or Meet all.

- 6) Select Retrieving type.
- 7) Select "Search Channel".
- Click on the Search button to search for the captured pictures.
- 9) Check the check-box behind the picture shown, then click to view the picture.
- The toolbar in the bottom of the playback interface can be used to control the playing.

Buttons	Functions	Buttons	Functions	
$\mathbf{\mathbf{b}}$	Play/ stop		Stop	
+	Next picture	t	Last picture	

Table 4.2 Descriptions of Playback Toolbar

## 4.2.4 Playback of External Files

#### Purpose:

Perform operations according to the following steps to look up and play back files in the external devices, as shown in Figure 4.7.



Figure 4.7 USB Playback Interface

### Steps:

- 1) Enter the playback interface.
- 2) Select playback modes: USB playback.
- 3) Click on the **Refresh** button to refresh the list.
- Select and click on the button to play the video back.

# 4.3 Playback Backup

### Purpose:

The video stored on the hard disk can be exported to a USB drive or removable hard disk, as shown in Figure 4.8. Here are the steps.

Deputer Plasheck *	Platest	8
Channel Lint •		
* Observed Livit - 20 to 0.018 20 to 0.011 20 to 0.012 20 to 0.013 20 to 0.013 20 to 0.013 20 to 0.013 20 to 0.014 20 to 0.01		
₩ 049 ₩ 04 048	Barkay 😮	
07         047           06         048           06         049           07         041           08         01           09         041           01         041           01         041           01         041           01         041           01         041           01         041           01         041           01         041           01         041           01         041           01         041		
+ 017432 + 017432	File Type NT III Papelar II Madee II Name II Seart II NHL	
	File Tope	
	File Farmat AM	
★ 12 2010 ►	Start Time 2016-12-11 💼 00.00.00	
25 86 27 88 29 14 1	Ged Tana 2010-12-11 💼 22.59539 🖶	
2 3 4 3 8 7 💶	Pår Elan	
• 10 11 12 13 14 15		
16 17 18 19 29 21 22		
	Deckey Gancel	
Teach Method		
@ Avy @ All		
Fortienel Tape:	0 0 0 © © © 0 × 0 0 0 0 0 0 0 0 I N ≡ ≫	
Smart E Unselected Types *		
Brank		



### Steps:

1) Insert a USB drive or removable hard disk into the NVR's

USB port.

- 2) Enter the **Playback** interface.
- 3) Check the check-box(es) of the desired channel(s) in the

channel list

4) Click on the button to enter the backup interface as shown in Figure 4.9.

	Backup	8
D1 - 32 D33 - 36	A4         7         2         3         2         4         5         6         7         2         6           1         1         2         2         3         2         4         5         6         6         7         2         6           1         1         1         1         2         1         3         1         5         5         6         7         2         6         1         5         6         6         7         2         6         6         1         5         6         6         7         2         6         6         1         7         2         1         3         6         1         5         6         6         7         2         6         1         5         6         6         7         2         6         1         2	
File Type File Type File Format Blast Time End Time File Size	All         Regular         Marine         Marine         Marine         AMI           Research         V         Amin         V         V         V           All         Image: State St	
	Backup Cancel	

Figure 4.9 Backup Interface

5) Select the starting and ending time, and make sure the backup time is correct, or you may click on the time and date to modify them.

6) Click on the **Backup** button and select the USB drive or removable hard disk, then select the folder and click on

### Backup button.

7) A backup progress bar will appear. Wait until the system finish reading. Then, pull out your USB drive or removable hard disk.

# Chapter 5 PTZ Controls

# 5.1 Setting PTZ Preset, Cruise, Pattern & Linear Scan

### Before starting:

Please make sure that the preset, cruise and pattern should be supported by PTZ protocols, as shown in Figure 5.1.



Figure 5.1 Interface of PTZ Settings

### 5.1.1 Preset Settings

Follow the steps below to set the preset position that you want

the PTZ camera to be in when an event occurs.

### Steps:

- Use the directional button to turn the camera to the position where you want to set a preset, and the zoom and focus operations can be recorded in the preset as well.
- After setting the name of a preset, click on the button to save the changes. Repeat the above steps to save more presets.

### 5.1.2 Cruise Settings

### Purpose:

You may set a cruise to move the PTZ to different locations and have the camera stay there for a set duration before moving on to the next location. The locations are corresponding to the presets. The presets can be set following the steps mentioned in **Preset Settings** above.

#### Steps:

 Select the number of cruises in the drop-down list of cruise. 2) Click on the button to add key points for cruise, as shown in Figure 5.2.

Tour Line1 😵										
No.	Preset	Tour Time	Tour Speed							
•										
Preset	1 V Tour Time	:(s) 1 💙 Tour S	ipeed 1 V							
Increase	Delete	Save	Cancel							

Figure 5.2 Tour Line

3) Configure parameters of key points, such as the number of a key point, duration of staying for one key point and speed of cruise. The key point is corresponding to the preset. The Key Point No. determines the cruise order of the PTZ. The Cruise time refers to the time span to stay at the corresponding key point. The Cruise Speed defines the speed at which the PTZ will move from one key point to the next one.

- Click on the Add button to add the next key point to the patrol.
- 5) When finished, click on the Exit button.

## 5.1.3 Pattern Settings

### Purpose:

Patterns can be set by recording the movement of the PTZ. You can call the pattern to make the PTZ moves according to the predefined path.

### Steps:

- 1) Choose a pattern number in the drop-down list.
- Click on the button to begin and click on corresponding buttons in the control panel to move the PTZ camera, then click on the button to end. Then.

the movement of the PTZ is recorded.

## 5.1.4 Linear Scan Settings

### Steps:

1) Select a number, use the directional button to spin the

camera to the location where you want to set a starting



2) Spin the camera to the location where you want to set an

ending point, then click on the 🖾 button.

Click on the O button, then the PTZ camera will spin 3) from the starting point to the ending point.

# Chapter 6 Search

### Purpose:

The record files can be backed up to various devices, such as

USB devices, including USB flash drives and USB HDDs.

Click on the icon to enter the local backup interface, as shown in Figure 6.1.



Figure 6.1 Search Interface

## 6.1 Log Retrieval

				Scards			0
🚺 Lag Robieved							
Recent Reviewal	Leg Hain Type Secondary Type Channel	NI Types NI Shik Type NI Chaesech					
Licease Plate Retrieval	Start Time End Time		02.08.90 23.58.59				
n Internet							
Alekaes .						Search	

Figure 6.2 Log Retrieval Interface

### Steps:

- 1) Set the type and time of file to backup.
- 2) Click on the **Search** button to view the file size.
- 3) Click on the **Export All Log** button to start the backup.
- 4) When finished, click on **Confirm**.

## 6.2 Image Retrieval



Figure 6.3 Interface of Image Retrieval

### Steps:

- 1) Select channels to start backup.
- 2) Select the Image Source and Retrieval Type.
- 3) Set the time of file to backup.
- 4) Click on the **Search** button to view the file size.

Click on the **Start Backup** button to start the backup.

## 6.3 Video Retrieval

							•
🚺 LegRetrievel							
						M 64	
Tel provinceson							
The Image Retrieval							
- 14							
Licence Plate Hebieval	P 103	0 ам	9 ms	🖉 pas			
Sea Returned							
Robert .						Search	

Figure 6.4 Interface of Video Backup

### Steps:

- 1) Select channels to start backup.
- 2) Set the time of file to backup.
- 3) Select a file format.
- 4) Click on the **Search** button to view the file size.
- 5) Click on the **Start Backup** button to start the backup, as shown in the following picture.
- 6) When finished, click on **Confirm**.

# Chapter 7 Channel Management

# 7.1 Adding IP Cameras

### Purpose:

Before obtaining a live video or recording any videos, you should add the network cameras to the connection list of the device.

### Before starting:

Ensure the network connection is valid and correct, and the IP camera to be added has already been activated.

### Steps:

 Click on the <sup>•</sup> icon , enter the "Channel Information" interface, as shown in Figure 7.1.

			(hansel H	lanage				0
Channel Device								
📆 Augular Config	Income Dasdwidth 15/21874bps						444 Ch.	**
Regular Extention	Channel No.	Concestion Address			Connection Distan			
	01							
A Andrew Destroyance								
Characel Zero Solting								
K Robars						Support Config	Export Costig 1	Deliver All

Figure 7.1 Interface of Quick Adding of IP Cameras

- Click on Add Channel, then the system will automatically search for all IP cameras connected to the NVR.
- 3) You may click on the **Refresh** button to refresh the list of online IP cameras manually. Select a detected IP camera and click on **OK** to add it to the connection list directly,as shown in Figure 7.2.

					(based M					(
Channel (Series	Osmel				Edd Char	uud luud		0		
-										10 mm
Contraction Contraction										
🙀 Repulse Detection		944.0	Oracand No.	*****	Pretost		Overian belows ation	Consections In	2.000	H
							ENGECOMENT/200444			
· ·							424381237499-6893944			
Channel Cora Coming							ENGELINGHOM 10011998			
							641402345000057			
							B-00123470/0404			
							0000.0et2001eeeeee00			
							80001 840581aaacaed0			
							400801+77600++++##		0	
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									Ċ.	
factor 1										



4) Or, you may edit the parameters in the corresponding text field to add an IP camera, then click on **Save** to add it to the connection list, as shown in Figure 7.3.

				Channel Manage					0
Channel Dorsen									
	Income Residential 21 O Villages	Edi Danuel O					MO	ared	
Playeta Castin									
Pepula Detector		C	Channel He.			Dates			
G	01								
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Channel Zone Testing		110							
		"	Conversion Address						
		110							
			area martales						
🅎 naa							Super Cody	Equal Desting	Dama All



# 7.2 Regular Configuration

## 7.2.1 Channel Display

### Purpose:

You can configure the OSD (On-screen Display) settings for the camera, including the camera name, date/time, and so on.

### Steps:

- Enter the channel display configuration interface.
   Channel Management → Regular Configuration →
   Channel Display
- Select a channel to which the desired camera is connected and start to configure OSD settings.
- 3) Setting the "Local Channel Name"
  - Tick the check-box in front of "Show Local Channel Name", then enter the name of the local channel in the text field.
  - Click on the Save button, then the name input will be shown on the screen. You may click and drag the text frame on the window with your mouse to adjust the OSD position.

- Setting the "IP Camera Name" (should be supported by the camera)
  - Tick the check-box in front of "Show Channel Name", then enter the channel name in the text field.
  - Click on Save, the name input will be shown on the screen. You may to click and drag the text frame on the window with your mouse to adjust the OSD position, as shown in Figure 7.4.



Figure 7.4 Interface of OSD Configuration

- 5) Select the date and time format (should be supported by the camera).
- 6) Image parameters: adjust the brightness, contrast,

saturation and hue of the channel, as shown in Figure 7.5.



Figure 7.5 Interface of Image Settings

lens parameters: set parameters for the channel camera lens, as shown in Figure 7.6.

	Ler	s Param	otors		•
Day/Night Switch			Exposure		
Day/Night Switch	Auto				
Trigger Value	Default		Auto	Manual	
Switch Time					
Day to Night Switch Threshold			Electrical Shutter	1/30(1/25)	
Night to Day Switch Threshold	35				
Advanced Setting					
Image Mode	Standard		Lens Iris	Non-auto Iris	
Mirror	0#				
WDR	Off		uama		
3DNR	Low		Gama Mode	Curve_2_0	
Sharpness	128		Power Frequency	Off	-
	ок		Cancel		

Figure 7.6 Interface of Camera Lens Parameters Settings

Click on **Save** to save the settings.

### 7.2.2 Media Parameters

### Purpose:

Sometimes you need to edit the parameters for channel camera recordings for better image quality.

### Steps:

1) Enter the interface of media parameters, as shown in Figure 7.7.

				Channe	Manage						0
Channel Device											
The sector function	MINATION				Oarest	Disease Type	Video Type	Persisten	beage Daality	Encoding Type	
			11-11-3005 BELL	2			Composite Divese	778*120	• Dest	• нам	
Regular Detection	14-1		4		098940			010289500	• Dert	¥ H264	
Arthred Intelligence		5 1. 6				Main mean	Composite Stream *	100011112011000	* Den	+1265	
Charact Zara Setting		E Bat-G			E0(040)		Composite Stream	V54042480	* Dert	+ Has	
	1 Miles		and the second se				Camposita Diveza	10809(1828*1888)	* Best	- Hanki	
	and the	- 24	Electro Local				Composite Diverse	ворания	* Best	- IGM	
							Composite Stream *	54925521540	* Bert	- H285	
	Okannel Televi	miani A					Composite Stream	01/220/5398	* Den	+ 1095	
	Street Tage	Main stream	I frame lelevel				Composite Stream •	10007(1928*1000)		+ Has	
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		1000511828-1000				Main vieram	Radea Dream				
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						Main ritean	Kidea Stream				
	Advanced Delling					Sub stream					
						Main (Pran	Video Deseri				
<u> </u>											
The fues							Provina				1

Figure 7.7 Recording Parameters

2) Set the video parameters:

Channel Select: Select the channel of camera to configure the

encoding type.

Stream Type: Select main stream or sub stream.

Video type: Select the video type.

**Resolution:** Select the video resolution.

Image Quality: Select the image quality when using the

VBR(variable bitrate) encoding method .

Encoding type: Select H.264 or H.265

Advanced settings:

Bitrate Type: CBR and VBR available.

Bitrate: Set the bitrate.

Frame Rate: Select the frame rate.

3) Click on **Save** to save the settings.

## 7.2.3 Snapshot Parameters

You may set the resolution of the local snapshots and relevant parameters on this interface as shown in Figure 7.8 below.

		annel Manage		0
👽 Chanael Device				
Render Conte		Ganari	Resolution	Brapshal bileved Time
	And the second s		Auru	* 35eccod *
Regular Defention			here	* 35ecced *
Aritical Intelligence	the states and		Auto	* Ibecent *
Canad Inv Leting			Anta	* 11ecand *
			Awin	* 3Second *
			Auto	* Heccod
			Aura	* Ilecced *
			8400 -	v Ileand v
				v 3Second v
			hata	* Heccod
			Aura	* Ilecced *
			840a	v Ileand v
			Aura	* 3Second *
			hana	* 35ecced *
			Aura	* Ibecad *
			Aura	v Ibrand v
takan 👘				

Figure 7.8 Snapshot Parameters

## 7.2.4 PTZ Settings

Follow the procedure below for setting the parameters for PTZ. The configuration of PTZ parameters should be completed before controlling the PTZ camera.

### Steps:

1) Enter the PTZ Setting interface as shown in Figure 7.9.

		Channel Manage		0
Characel Device				
Regular Config				
Trapiler Detection				
Andread belefity and				
Charact Zera Sotting				
4				
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2) Set the parameters for PTZ

Channel: Choose a channel.

Protocol: Choose the protocol for your PTZ.

Decoder Address: Choose a decoder address.

Baud Rate: Select a baud.

Data Bit: Select a data bit.

Stop Bit: Select a stop bit.

Parity: Select the verify, Non Parity by default.

Stream Control: Select the stream control; the default setting

is "No Flow Control".

3) Click on **Save** to save the settings.

## 7.2.5 Tour Grouping

The role of setting tour Grouping is to group the channel and preview, can group according to a standard, as shown in Figure 7.10, that is group according to the region. The same channel can be divided into different groups as needed.



Figure 7.10 Interface of Tour Grouping settings

Functions of different icons are as shown below.

lcons	Descriptions	lcons	Descriptions			
+	Create a group	×	Delete a group			
/	Modify the group name	>	Add channel			
«	Delate channel	*	Move up the group			
*	Move down the group					

Table 7.1 Functions of the Icons

# 7.3 Regular Detection

## 7.3.1 Motion Detection

On the motion detection interface as shown in Figure 7.11 below, you may set related parameters for motion detection.

			hannel Manage								0
Charact Derice											
Regular Carring	Second Second	80000 8000	Channel	Defect Made	•	Enable	Secula	*	Percentage	Arning Plan	Linkage Delling
			01(041)	PC Detection	•		Physical	•	1	Aming	Untege
		FFF		<b>FC</b> Detection							
Adduct backgross											
	as as an		PC Detection								
				PC Evention							
		FC Evention									
				FC Detection							
				PC Detection							
	Eenikäy Piptert										
	RatioMillions of proportion										
nature and the second s											

Figure 7.11 Motion Detection

**Detect Mode:** The default setting is "IPC Detection". You can switch mode to "Local Detection" if the NVR support this function.

**Sensitivity:** Change the accuracy of the motion detection trigger.

**Zone settings:** Left click and hold the mouse in the video area, drag it to the area that needs motion detection. The red plaid area is the selected motion detection area, as shown in Figure 7.12.

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			2			1945		- 14									
		-						4	~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~							-	



**Arming Plan:** Set the schedule that needs arming, as shown in Figure 7.13.

	Arming P	"an	8
Week Monday			
Period1	00:00	23:59	ŧ
Period2			
Period3			
Period4			
Period5			
Period6			
Period7			
Period8			
Copy to 🚺 All	sday 📕 Wednesday	Thursday Friday Sa	turday 🚺 Sunday
		Cancel	



60

### Linkage Setting: Choose the mode that needs linkage, as

shown in Figure 7.14.

		Syste	m Linkage		8
System Linkage	📝 Email Linkage	📝 Audio Alarm	📝 Monitor Alarm	💹 Upload Center	Front-end alarm output
Alarm Output	All				
D1 - 1					
Linkage Preview	All				
					7 🔜 8
D1 - 32				13 📗 14	15 🚺 16
D33 - 36				21 📃 22	23 🚺 24
	25 28		28	29 🔲 30	31 32
Linkage Record	All				
	2 1		- E 4 E E	5 📗 6	7 🖪 8
DT - 32	9 🔲 10	11	12	13 📗 14	15 🚺 16
D33 - 36	17 📃 18	19	20	21 📃 22	23 🚺 24
	25 📃 26	27	28	29 📗 30	31 🚺 32
Linkage Snapshot	All				
01.00	1 2	🛄 3	4	5 🛄 6	7 8
01 - 32	9 📃 10	11	12	13 📃 14	15 🚺 16
D33 - 36	📕 17 🛛 📕 18	19	20	21 📃 22	23 📃 24
	25 🚺 28	27	28	29 🔲 30	31 32
PTZ Control	Remove Binding				
D1-D16	1 No Action V	✓ <sup>2</sup> No Action		No Action	<sup>4</sup> No Action V
	5 No Action	V 6 No Action	v v 7	No Action	8 No Action
D17-D32	<sup>9</sup> No Action	✓ <sup>10</sup> No Action	11	Ne Action Y	12 No Action
	13 No Action Y	✓ <sup>14</sup> No Action	v v 15	No Action Y	16 No Action V V
			Cancel		

Figure 7.14 Linkage

Clear all: Click on



to clear motion detection zone on

the video area set before.

## 7.3.2 Video Lost

Below is the interface of video lost configuration.

	Chantel Mangin											
👽 Channel Device												
📆 Faqular Lanky		Channel	Ender	Anning Plan	Ladage Setting							
-		Eremen	94	- Arriang	Unkapt							
	Con the second											
Math and Bradingsons												
Channel Zoon Serving	A PERSON NOT THE REAL PROPERTY OF											
	A A A											
	Arrive											
tana ing tanan i												

Figure 7.15 Video Loss

Channel: Choose a channel number.

Planning: Set the arming schedule for video loss, as shown in

Figure 7.16.

	Arming	Plan	8
Week Monday			
Period1			
Period2			
Period3			
Period4			
Period5			
Period6			
Period7			
Period8			
Copy to All Monday T	uosday 📕 Wednosday	🗌 Thursday 📕 Friday 📕 Satur	Jay 🔲 Sunday

Figure 7.16 Planning

Linkage: Set the linkage mode, as shown in Figure 7.17.

			Sy	item Linkage					8
System Linkage	Em:	ail Linkage		lio Alarm	Mo	nitor Alarm	🔲 Upl	ad Center	
Linkage Preview									
D1 - 32		2	<b>3</b>	4	5		■ 7 ■ 11		
033-36	17	11	19	20	21	22	23	24	
Linkage Record									
D1 - 32	■ <u></u>			4		6			
		10	<u> </u>	12	<b>11</b>	14	15	16	
D33 - 36	17	18	19	20	21	22	23	24	
	25	26	27	28	29	30	31	32	
Linkage Snapshot									
01 - 22				4		6			
01-34		10	11	12	13	14	15	16	
D33 - 36		18	19	20	21	22	23	24	
	25	26	27	28	29	30	31	32	
PTZ Centrol									
01-016	<sup>1</sup> No Action		<sup>2</sup> No Action		<ul> <li><sup>3</sup> No Acti</li> </ul>	on ¥	👻 4 No Ar	tion 🖌	~
	5 No Action		8 No Action		v 7 No Acti	on Y	• • No Ar	tion 🖌	~
D17-D32	9 No Action		10 No Action		11 No Acti		▼ 12 No Ar	tion 🖌	~
D33-D36	13 No Action		14 No Action		15 No Acti	on 🗸	✓ 16 No A	tion Y	~
					ancel				

Figure 7.17 Linkage

## 7.3.3 Video Tampering

### Purpose:

Trigger the alarm when the lens is covered and perform other response action(s) regarding the alarm.

### Steps:

 Enter the interface of video mask alarm of channel parameter and choose a channel which you want to set up a video mask alarm, as shown in Figure 7.18.

	o	hannel Manage				0
Channel Donice						
Tagelar Carling	Present Report Provide	Channel	Enable	Terribility	Arming Flan	Linkage Setting
		D140HO	Cill .	(~~ *	Annieg	Longe
						Linkaya
Additional Indepenses						Listage
Chancel Zero Letting	A A A A A A A A A A A A A A A A A A A					Listage
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						Untope
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						Unkepe
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						Untege
						Unkepe
						Linkspel
						Linksyn
news						Leve Canool

Figure 7.18 Video Tampering

- 2) Set the video mask alarm handling action of the channel.
  - > Tick the check-box of Enable Video Tampering.
  - Select the sensitivity.
  - Use the mouse to draw an area that you want to detect video masks.
- Set up the planning of the channel, as shown in Figure 7.19.

	Arming Plan	
Week Monday		
🖉 Period1	00:00	
Period2		
Period3		
Period4		
Period5		
Period6		
Period7		
Period8		
Capy to All Monday Tuesday	🖉 Wednezday 📳 Thursday	Friday Saturday Sunday

Figure 7.19 Planning

 Set up the linkage operation of the channel, as shown in Figure 7.20.

			Byste	rm Linkage				G
System Linkage	🗐 Em.	ail Linkage	📰 Asdia	Alarm	📰 Menit	or Alarm	📃 Uples	ud Cantar
Linkage Preview								
								E •
01 - 32								16
D23 - 36				20	21			24
	25	28		28	29	<b>30</b>		32
Liskage Record								
								E •
D1 - 32								16
D33 - 36								24
	<b>25</b>	26		20	29	E 10		E 32
Linkage Snapshot	📰 All							
								E •
01 - 32								E 16
013 - 16								24
		26		20	29	<b>20</b>		32
PTZ Centrel								
D1-D16	<sup>1</sup> No Action		<sup>2</sup> No Action		<sup>3</sup> No Action		4 No Acti	en ¥ ¥
	5 No Action		<sup>6</sup> No Action		7 No Action		* <sup>8</sup> No Acti	en Y Y
017-032	9 No Action		10 No Action		11 No Action		12 No Acti	•• •
033-036	13 No. Antina		14 Mar Antina		15 No. Antion		16	
2	No Action		NO Action		No Adden		No Add	
				Can	el			

Figure 7.20 Linkage

5) Click on the **Save** button to save the settings.

**Note:** Onvif protocol does not support the video tampering feature.

## 7.3.4 Privacy Mask

### Purpose:

You may configure the four-sided privacy mask zones that cannot be viewed by the operator. The privacy mask can prevent certain surveillance areas from being viewed or recorded.

### Steps:

 Enter the **Privacy Mask Settings** interface, as shown in Figure 7.21.





- 2) Select the camera to set the privacy mask.
- Tick the check-box of Enable Privacy Mask to enable this feature.
- 4) Use the mouse to draw a zone on the window. You may configure up to 4 privacy mask zones and adjust the size of each area respectively.
- 5) You may click on the button to clear the configured privacy mask zones on the window.
- 6) Click on **Save** to save the settings.

**Note:** Onvif protocol does not support the privacy mask feature.

## 7.4 Intelligent Video Analysis

Intelligent Video Analysis is the vital function of NVR. This chapter will give you thorough and clear instructions in terms of the intelligent performance, operation process and parameter configuration.

## 7.4.1 Brief Introduction

Smart features of NVR include:
- Behaviour analysis: target counting, object left/lost, intrusion detection, tripwire detection, scene changes.
- Some of our NVRs are also equipped with features such as face detection, sound detection, fire detection, VQD, etc.

**Note:** Behaviour analysis supports both front-end and local detection modes, subject to the actual capacity of the product; while scene changing supports local detection mode only.

## 7.4.2 Enable Smart Analysis

Some NVR models disable local smart detection by default. To enable smart analysis, access the device parameters interface and set the preview capability to the mode with the smart analysis feature, as shown in Figure 7.22.



**Note:** Currently the NVR's front-end smart function only supports ZKTECO protocol, so only when ZKTECO protocol accesses IPC can the IPC detection be turned on.

## 7.4.3 Function Configuration

### Detect Mode

As shown in Figure 7.21, there are "IPC detection" and "local detection" modes; the former is the default setting. The IPC detection mode requires the IPC to support smart detection. If IPC front-end detection is not supported, the NVR Local Detection mode is then selected.



Figure 7.23 Detection Mode

### Behaviour Analysis

Behaviour analysis includes the following functions: target counting, object left/lost, area detection, line crossing detection.

The target triggering rule is based on the centre of the target's lower edge (except height limit detection), which is generally the position of the human foot. So, when setting the detection line or detection area, the line/ area should not be suspended in the air.

The minimum height of the target should not be less than 1/32

of the image height; the minimum width should not be less than 1/64 of the image width; the maximum width of the proposed object should not exceed 1/4 of the image width; the maximum height should not exceed 1/2 of the image height.

Set the detection line or the detection area, but not too close to the target location. It also requires that the scope of view of the camera cannot be too small and the target cannot be too large.

#### Precautions:

- Camera installation: install the device vertically to maintain static, avoid occlusion of vision, and make height appropriate (higher than two meters).
- 2) Scene selection: ensure adequate lighting, reduce the complexity of the site, try to avoid areas that may affect accuracy of detection, such as detection areas where there are leaves vibration, severe shadows, birds, insects and more; also, try to avoid reflective objects and scenes with glass, floor tiles, lakes and so on;
- 3) Alert area requirements: the warning area for intelligent analysis requires more than 1/8 of the area of the video

screen; if it is a cordon, the distance between the lines should exceed the image width or 1/4 of the height.

#### Target counting

The purpose of this page is to configure relevant parameters so that the target count alarm occurs when a moving object whose area or volume is larger than a pre-defined value strides across the set detection line to obtain the number set by the detection rules, as shown in Figure 7.21. The following describes the parameters of the pages on the set method.

The purpose of this page is to configure relevant parameters so that the target count alarm occurs when a moving object whose area or volume is larger than a pre-defined value strides across the set detection line to obtain the number set by the detection rules, as shown in Figure 7.24. The following describes the parameters of the pages on the set method.

		hannel Manage						0
Channel Durice								
Forgalian Careby		Outsel	Dated Mode	Enable	Mainon Rata	Maximum Patis	Anning	Linkapa
		01		10	0	a 🗄	Annang	Lohage
The party for home of	A REAL PROPERTY AND INCOME.							
And the late is proved								
Channel Zone Suffing								
	Molean Tato							
	Aming Unit-spi							
netwo Periors								

Figure 7.24 Target Counting

Channel Select: Select a channel.

**Detect Mode:** There are two modes: front-end and local. The two models to the actual capacity of the product subject. The front-end mode requires front-end access to IPC support; while the local model requires specific equipment.

**Enable:** Enable or disable the target count function.

**Show in Preview:** When enabled, you may see the detection line and the statistical results on the preview interface.

**Detection line:** Each screen supports up to four detection lines. Left-click and drag the mouse directly on the screen to draw the line, then release the left button and right-click to

complete the setting. Area between the detection lines are AB Area. The statistical results will be displayed on the upper side.

A → B: Acquiesce is area A to area B to increase counting, area
A/ B location on both sides of detection line can be
exchanged.

**B**  $\rightarrow$  **A:** "Increment Count" or "Flow Count Results = 'A-> Count of B' + 'B-> Count of A'"; "Count Down" > Count of B '-' B-> Count of A "; 'Ignore' or 'Count of flow statistics' ='.

**Ratio:** Only when the size of a moving object on the screen is larger than the set size will be considered as a "target". A yellow dotted rectangle will appear as a reference when setting the centre of the view on the screen.

**Traffic Statistics:** Enable statistics and set the "Traffic Statistics Interval and Alarm Threshold".

**Total Statistics:** After the initial settings, you can set the "statistical time and total alarm threshold".

**Arming:** Set the deployment time. The default setting is all-day deployment.

**Linkage:** You can enter the linkage configuration page when the alarm is triggered and perform relevant linkage configuration operations. **Delete:** Click to clear the screen to set the history setting line. In accordance with the above settings, every 30s account for 150 times the number of objects through the detection line 1, trigger the alarm, as shown in Figure 7.25 and 7.26 is the pre-alarm and alarm occurs when the real-time preview screen.



Figure 7.25 Pre-alarm



Figure 7.26 Alarming

### Object Left/Lost

The purpose of this page is to configure the relevant parameters, so that more than the proportion of objects in the set detection area lost/ left over time detection time that goods detection alarm. The main parameters on the page set method are as shown in Figure 7.27.

		David Manage					0
Characel Device							
Tegeles Looky		Charlent	Defect Mode	Enable	Preview	Arming Plan	Linkage Swilling
		01	IPO Detection			Aming	Linkage
And cial Intelligence							
Channel Jack Lotting							
			Advanced Setting		0		
		frances bee					
		Refe	Objects Laut Objects Laut	-	-		
		Detection Time (0-1					
	Advanced Entring						
🅎 84.0							vo Curcel

Figure 7.27 Goods Detection

Channel Select: Select a channel.

**Detect Mode:** There are two modes: front-end and local. These two modes to the actual capacity of the product subject. The front-end mode requires front-end access to IPC support; while the local model requires specific equipment.

Enable: Check to enable the target count.

**Display when Preview:** When this feature is enabled, you can see the detection line and the statistical results on the preview interface.

**Detection Area:** You may set up a maximum of 4 detection areas on each screen. Left-click and drag the mouse directly on

the screen to draw a line; after that, release the left button, move the cursor to the desired location, left-click and drag the mouse again to form another line, then right-click after the automatic closure of the formation of the region to complete forming the detection area (i.e. setting up a valid detection area by manually draw at least two lines).

**Detection Type:** "objects loss", "objects left", "objects loss or left".

**Ratio:** Moving objects in the screen than the size of the set when the size can be used as "items".

**Detect Time:** When the number of detected lost/ left items exceeds this set value, the system will trigger an alarm.

In accordance with the above settings, in the channel screen, the proportion of more than 150 items in the detection area disappeared more than 30s, triggered object left/lost alarm, alarm before and after the real-time preview screen, respectively, as shown in Figure 7.28 and Figure 7.29. (Which identifies the blue rectangle that is missing the area where the goods)



Figure 7.28 Pre-alarm



Figure 7.29 Alarming

### Area Detection

The purpose of this page is to configure the relevant parameters, so that more than the proportion of moving objects, enter / leave / hovering in the set detection area, over time detection zone detection alarm occurs. The interface as shown in Figure 7.30 describes the main parameters of the setting method.

		Channel Manage				0
Charlest Derice						, ,
Trendar Carlos		Channel	Dated Hoda		Arming Plan	Linkage Setting
					Arriang	Linkage
Regular Evaction		03/738+020	IPG Detection			Linkspr
Real and the lagrance						Linkspr
Charactizers Satisty						Linkept
			Advanced Setting	0		Listape
		Decision Law		T-1		Linkage
		Bette	TergetLeaves			Lokepe
	Channel Solicit 01 *	Detection Time (b-12)	TargetHorer (r 6			Linkspr
	Detect Mide: Prost-cod/Read IPC regions; Local			- 0		Unkept
	🗹 Easter 📄 Digitaratus Daview					Linkeps
	Avvirg Linkspr					Listape
	Detection Area 1					Linkage
	Advanced Serling					Intege
						Linkept
						Linkspe
						Linkape
to Radian						n Canal

Figure 7.30 Area Detection

Channel: Select a channel.

**Detect Mode:** There are two modes: front-end and local. These two models to the actual capacity of the product subject. The front-end mode requires front-end access to IPC support; while

the local model requires specific equipment.

Enable: Set whether to enable the zone detection feature.

**Show In Preview:** Set whether to display the set rules and test results on the preview interface.

Detection area: the screen with the mouse to draw the area.

**Detection type:** "target to enter", "target to leave", "target to enter or leave", or "target wandering".

**Ratio:** The system will only consider a moving object captured by the camera shown on the screen as a "target" when its size or area is larger than the set value, a ratio of the size of the moving object to that of the detection area, which is measured in  $\frac{1}{2}$ .

**Detect Time:** When the number of target activity detected is more than this set value, the system will trigger an alarm.

For your reference, when you set the value of the ratio to 1000, once there is a moving object (e.g. a vehicle) of which the size is over 1000‰ of the detection area enters such area for more than 5 seconds, the system will trigger the alarm. Below is the preview interface of the real-time picture taken when the alarm is triggered; the blue rectangle identifies the target that enters the area.



Figure 7.31 Area Detection

### Line Crossing

The purpose of this page is to configure the relevant parameters, so that more than the proportion of moving objects, across the set of test lines, the virtual alarm immediately alarm line. Below describes the main parameters of the page setting method.

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		01	IPC Detection			Entering	Lokege
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Figure 7.32 Line Crossing

Channel: Select a channel.

**Detect Mode:** There are two modes: front-end and local. These two models to the actual capacity of the product subject. The front-end mode requires front-end access to IPC support; while the local model requires specific equipment.

Enable: Set whether to enable the zone detection feature.

**Show In Preview:** Set whether to display the set rules and test results on the preview interface.

**Detection Line:** On the screen with the mouse to draw the test line, a key exchange A/B;

Detection Type: There are two types: "A-> B Alarm" and "A <->

#### BAlarm".

**Area:** Filter out less than the proportion of the set of moving objects.

According to the above settings, in this picture captured by a channel, accounted for more than 30 of the moving object, across the detection line from A region to B area, triggered area detection alarm, as shown in figure 7.33 is the alarm occurs real-time preview images (where the detection line or the red and green are blinking alternately, and the alarm is triggered, And the blue rectangle moves with the target crossing the cordon).



Figure 7.33 Line Crossing

### Scene Change

Figure 7.34 shows the situation where the front-end IPC

detects a change on the screen caused by manual or environmental factors, such as the camera being deflected, the camera being blocked, and the camera's angle or position being changed.

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Characel Zone Series						
	Chanest Select 01(0134-2225) *					
	Aming Labour					
to Robust						Sees Carael

Figure 7.34 Scene Change

Channel: Select a channel.

Detect Mode: Only local detection mode is supported, and

local device support is required.

Enable: Set whether to turn on scene change function.

# 7.5 Channel Zero Settings

## 7.5.1 Parameter configuration

The interface of parameter configuration is shown in Figure 7.33, then set the related channel information after enabling the parameter configuration.



Figure 7.35 Parameter Configuration

**Resolution:** Set the video resolution.

Bitrate Type: Choose the bitrate type; the default setting is

CBR.

Bitrate: Set the bitrate's upper limit.

Video frame rate: Set the frame rate according to specific

requirements.

## 7.5.2 Channel Configuration

Below is the channel configuration interface.



Figure 7.36 Channel Configuration

# Chapter 8 Record Management

# 8.1 Record Configuration

### Before starting:

Make sure that the HDD has already been installed. If not,

please install an HDD.

#### Steps:

Enter the Record Configuration interface to configure the

recording parameters, as shown in Figure 8.1.

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- Select a channel you want to configure.
- Select the record mode.
- Click on the Setting button to set the record time, as shown in Figure 8.2.

		Arming	Plan		8
Week	Monday				
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Period2					
Period3					
Period4					
Period5					
Period6					
Period7					
Period8					
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			Cancel		

Figure 8.2 Arming Schedule

- Pre-Record: The time you set to record before the scheduled time or event.
- Record Delay: The time you set to record after the scheduled time or event.

**Note:** Use the "Copy to" button to duplicate the same settings to other channels as needed.

# 8.2 Manual Operations

## 8.2.1 Snapshots

Here is the snapshot interface.



Figure 8.3 Snapshot

# Chapter 9 Storage Management

Click on the icon to access the interface of disk backup. There are three modules on this interface. the following instructions, respectively.

## 9.1 Disk Information

Information on this page explains the detailed situation of the current NVR receive the hard disk, as shown in Figure 9.1. The device connects 1 hard disk and is in normal state video recording.

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floture											Red of		

Figure 9.1 Disk Information

**Process after HDD full:** There are two ways: "Auto Overwrite" and "Stop Recording". The default setting is "Auto overwrite".

SMART processing: There are two ways: "Ignore error,

continue recording" and "Error happen, stop recording".

**SMART information:** Click on the icon, then the system will pop up the SMART information list of the current hard disk.

**Loss alarm:** Detect that the SATA port will give an alarm if there is no hard disk connected;

Format: Check the hard disk which needs to be formatted,

then click on the Formatting button. (Note: when the status is "Need to be formatted", only when the corresponding hard disk only when finish formatting corresponding hard disk, can the hard disk continue video, note: please don't do other operation in the process of formatting)

## 9.2 Disk Group

#### Automatic Grouping

The system default is video in accordance with the "Automatic grouping", which means that videos recorded by all channels are defaulted to write video data on a hard disk, switch to next hard disk after finish video, if the NVR connect only one hard disk, namely, in accordance with the type of storage management page in the "video post-processing" selected, cover the history video or stop video.

Please note that, when the number of channels of device video is more than 32 and connect multiple hard disk, to ensure the efficiency and performance of hard disk, default to video on two hard disks, video in one hard disk first 32CH of the video channel, the remaining channel video in another hard disk video.

#### Manual Grouping

Manual grouping is to group channels together for better management. Channels from different groups can store videos on different hard disks. Each channel can be assigned quotas, as shown in Figure 9.2.



Figure 9.2 Manual Grouping

Above the middle column function button respectively are" Create a group", "delete the group", "quota setting", "Right move to add channels to group", "Left move to delete channels to group", note that, the channel preview without being added into the group won't video, the hard disk without being grouped is free hard disk, there would be no writing data.

**Note:** During manually grouping, the system may erase the old videos stored on the hard disk, please be careful when operating to avoid irreparable loss.

# Chapter 10 System Management

Click on the ficon to access the interface of system management. This sections includes four parts. For details, please see the below.

## 10.1 System Information

You may view the information of the device. Streaming information is available here.

## 10.1.1 Version Information

Below is the interface of device information, where you may view the versions of hardware and software.



Figure 10.1 Version Information

## 10.1.2 Streaming Information

You may view the stream status of the current device here, as illustrated in Figure 10.2.

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Content Information				
n System Tara				
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## 10.2 Time Settings

### 10.2.1 Device Time

Below is the time settings interface, where you may set the

device's time and time zone.



Figure 10.3 Time Settings

Data Format: Set the data format.

Device time: Manually modify the device time.

Time zone: Switch between time zones. When you tap on this

button, the system will pop up a new date and time.

Enable DST: Click to enable daylight time. All you need to do

is to set the starting and ending time.

NTP: Enable or disable the NTP. Before enabling, please make

sure the device is connected to the network properly.

## 10.2.2 IPC Time

Below is the interface of IPC's time settings.



Figure 10.4 IPC Timing

**Manual Timing:** Click on this button to adjust the time of the IP camera as the device's time.

**Auto Timing:** When the auto-timing feature is enabled, time of the IP camera will not be the same as the device's time.

**Reconnect with Time:** When this feature is adopted, the time of the IP camera will synchronize with that of the device it is connected to.

**Timing Sync:** When this feature is adopted, the clock of the IP camera will synchronize with the time server of the NVR at the specified time per day.

## 10.3 System Parameters

Below is the interface of setting device parameters.



Figure 10.5 System Parameters

### 10.3.1 Display Parameters

Below is the interface of display settings.

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Figure 10.6 Display Parameters

Device ID: Click on this area to change the device ID.

Device Name: Click on this area to change the device name.

Language: Click on this button to change the language. The

device will reboot after you change the language.

**Resolution:** Click on this button to select the desired resolution .

### 10.3.2 Other Configuration

Below is the interface of setting other configuration.

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Figure 10.7 Other Configuration

**Enable Start Wizard:** Click on this button to adjust the start wizard.

**Instant Playback Time:** Click on this button to select the time of instant playback. You can change it from 5 minutes to 30 minutes.

Automatic Logout Time: Click on this button to select the time duration of remaining inactive before automatic logout. The device will not automatically log out when you change this feature to Off.

**Record bitrate information:** Click on this button to select the record bitrate.

IPC Protocol Management: Click on this button to select the

IPC protocol, as shown in Figure 10.8.



Figure 10.8 IPC Protocol Management

Mouse Speed: Move this button to adjust the cursor speed.

## 10.4 System Maintenance

### 10.4.1 Auto Maintenance

You may set the maintenance mode on this interface as shown in Figure 10.8. The default setting is "Disable". You may change it to **once/ every day/ every week**.


Figure 10.9 Auto Maintenance

#### 10.4.2 System Upgrade

You can upgrade the device on this interface, as shown in Figure 10.10.





### 10.4.3 Configuration Restoring

Below is the interface of configuration restoring.



Figure 10.11 Configuration Restoring

**Export config:** Click on this button to export system config information.

**Import config:** Click on this button to import system config information.

**Restore Factory Default:** Click on this button to restore the device to factory settings.

# Capture 11 Network Management

The module has 5 pages, the following description respectively.

### 11.1 Basic Settings

Below is the interface of network settings. You may set the IP parameters here, as shown in Figure 11.1.

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	© MA TOTA THE MARKET ♥ Darfander (ME Market	
	Protect/096 192 356 120 1	
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Figure 11.1 Basic Settings

Network card: You may choose a card type as needed.

MAC Address: View the physical address of the current

network interface; the address is not editable.

**DHCP:** When this feature is enabled, IP/mask/the gateway cannot be set. If the current DHCP is effective, then it will obtain a new IP/mask/gateway the router assigned (remote login is required to use the new IP address). If the change is not effective, the system will show the original address of the IP/mask/gateway. You may use the original IP address to remotely log in to the device.

**IP:** Set the IP address. The default IP of the network card 1 is 192.168.1.88.

Subnet Mask: Set the subnet mask.

Gateway: Set the gateway address.

## 11.2 Advanced Settings

Below is the interface of advanced settings.



Figure 11.2 Advanced Settings

#### 11.2.1 Enable PPPoE

You need to fill in the correct user name and password to use PPPoE. If the network is connected, the dynamic address of the device can be obtained.

#### 11.2.2 Enable UPnP

The defaulted port numbers of RTSP, RTMP, HTTP, HTTPS and ONVIF are 554, 1935, 80, 8081 and 8082, respectively. The port numbers can be modified. After modification, the internal port need to restart the device to make the changes effective. The UPnP status is ineffective by default. The system will obtain the external IP address after the new UPNP setting.

#### 11.2.3 DDNS Settings

The status is "Disable DNS" by default. Each set column cannot be set before switching the setting to "Enable DNS" status, as shown in Figure 11.3. Please ensure that the device is properly connected to the network before operation.

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	User Name		$\exists$
Totwork Test	Centron Password		5
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4			
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Figure 11.3 DDNS Settings

DDNS Type: 5 types available.

Server Address: Each type of server corresponds to the domain

name of the existing default server.

**Port:** Each type of server corresponds to the existing default port.

The User Name and Password: Manually enter the correct

user name and password.

**Domain:** Manually enter the correct domain name. After the function is OK, you may use the domain name remote access device.

**Update Interval:** Update the interval time.

### 11.2.4 Email Settings

Settings on this interface is used with "Email Linkage" in "Linkage Setting". You need to input the sender's email address and password, the recipient's email address, the address of the SMTP server and information of the port information in the corresponding fields according to the requirements for the format. Here are other additional features on the page, as shown in figure 11.4.

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Figure 11.4 Email Settings

1) Fill in the multiple recipient mailbox. The sender's email address will send E-mail to multiple recipients' mailbox at

the same time.

- 2) Tap the Attachment checkbox. The mail the recipient received in his mailbox is with attachments. The attachment is a linkage capture file, in zip format, of the corresponding channel.
- 3) Click on the *icon corresponds to the "Test mail"* field. Let the sender's mailbox send a mail to the recipient's mailbox. Whether the mail is sent successfully or not, the system will show you a prompt.

**Notice:** use the e-mail linkage function to ensure good networking and smooth access to the external network.

### 11.3 Management Platform

This page is the enable interface of the platform agreement, as shown in Figure 11.5. The default setting is enabling the Web Server protocols, which support remote login. You may enable other protocols as needed. Please note that the changes will only be effective after the device is restarted.





Click on the



icon to view the AntarView Pro QR

code, as shown in the figure below.



#### 11.4 Network Flow

As shown in Figure 11.6, you may monitor the network traffic of

the current device in this module.





#### 11.5 Network Test

Below is the interface of network test.





**NIC Select:** Select a network card; the default setting is network card 1.

**Destination Add:** Input the network address of the network that needs to be tested.

**Network Wireshark:** Click on **browse**, set up the storage path, click on **Wireshark backup**, then complete backup.

# Capture 12 Alarm Management

This module consists of 3 interfaces. Below is the description of each one.



Figure 12.1 Alarm Management Interface

### 12.1 Abnormal Events

You can change the type of abnormal events alarm on this interface, as shown in Figure 12.2.

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lan Abarra						
🦺 Alarm Inged	Abacenal Type	Audio Alana	Monitor Alarm	Uplead Center	Mann Oxford	
🕐 Maren Dalgat						
	Notecch Disconnected					
						Г
Bahas					Lore	

Figure 12.2 Abnormal Events

Audio Alarm: The buzzer will be triggered when it receives an alarm signal.

**Monitor Alarm:** Show the alarm information on the preview interface.

**Upload Center:** Upload a warning message to the network center when an alarm is triggered.

Alarm Output: Relay or warning outputs will operate when certain conditions occur.

## 12.2 Alarm Input

Below is the interface of alarm input.

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Figure 12.3 Alarm Input

Alarm Input: Select an alarm channel.

Alarm Input Name: Edit the name of an alarm.

Alarm Status: Set the alarm state. The default setting is "always open".

Arming Time: Set the arming schedule, as shown in Figure

12.4.

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Week M	onday			
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Period3				
Period4				
Period5				
Period6				
Period7				
Period8				
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	ок	Cancel		

Figure 12.4 Arming Plan

Linkage Mode: Choose the type of alarm linkage, as shown in

Figure 12.5.

			0		
System Linkage	📗 Email Linkage	🔲 Audio Alarm	Monitor Alarm	Upload Center	Front-end alarm output
Alarm Output					
D1 - 1					
Linkage Preview	all 📃				
D1 - 32	1 2	3	4 5	6	7 8
D33 - 36	17 18	19	20 21	22	23 🔲 24
	25 26		28 29	30	31 🔲 32
Linkage Record	E All				
D1 - 32	1 2	3	4 5		7 🔜 8
	17 18	11	20 21	14	15 16
D33 - 36	25 26	27	28 29	30	31 32
Linkage Snapshot	all 📰				
01 22					
	9 10		12 13		15 16
D33 - 36	17 18	19	20 21	22	23 24
PTZ Control	Remove Binding				
D1-D16	1 No Action	× <sup>2</sup> No Action	• • • 3 No Ad	tion Y	<sup>4</sup> No Action ¥
	5 No Action V	✓ <sup>6</sup> No Action	~ ~ <sup>7</sup> No Ac	tion Y	<sup>8</sup> No Action V
D17-D32	8 No Action	✓ <sup>10</sup> No Action	v v 11 No Ac	tion v	12 No Action 👻 👻
	13 No Action	▼ <sup>14</sup> No Action	v v 15 No Ad	tion Y	16 No Action Y

Figure 12.5 Linkage mode

### 12.3 Alarm Output

Below is the interface of alarm output settings.

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Figure 12.6 Alarm Output

Alarm Output: Select an alarm output.

Alarm Output Delay: Set the alarm delay time.

Arming Time: Set the schedule that needs arming, as shown in

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Figure 12.7 Arming Plan

# Capture 13 User Management

The user management interface is shown in Figure 13.1. You may modify the user information and user permissions here.



Figure 13.1 User Management

**Modify User:** Modify the selected user password, as shown in Figure 13.2.

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Figure 13.2 Modify users

**Add User:** Add a new user, as shown in Figure 13.3, then fill in the user name, password and select User Type.

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	1000		
	Add Ever	0	
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Figure 13.3 Add User

**Delete users:** You may delete the selected users, except the admin and default users.

User Permission: Set the permissions for selected users, as

shown in Figure 13.4.



Figure 13.4 User Permission

# Appendix

## List of compatible HDD already tested

Manufacturer	Capacity	Model
TOSHIBA	1.0TB	DT01ABA100VOCT-2015
	1.0TB	DT01ABA100VMAY-2015
	2.0TB	DT01ABA200VFEB-2015
Seagate	1.0TB	ST1000VM002
	1.0TB	ST1000DM003
	2.0TB	ST2000VX000
WD	500GB	WD5000AVDS-63U7B1
	2.0TB	WD20PURX-64P6ZY0
	3.0TB	WD30PURX-64P6ZY0