

# Network Video Recorder NEIUS & NEIUS PLATINUM Series

WEB INTERFACE MANUAL

# **Disclaimer**

- This manual may contain technical inaccuracies, or inconsistencies with product functions and operations, or misprint. The Company will keep the contents contained in this Manual up-to-date in accordance with product enhancements and will periodically improve or update the software and hardware products described in this Manual. The updated contents will be reflected in the latest version of this Manual without prior notice.
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- The contents contained in this Manual are for reference and guidance only for users and not guaranteed to be exactly the same with the real product. The real product shall prevail.
- The parts, components and accessories mentioned in this Manual do not represent the standard configurations of the equipment. For detailed configurations, the packing list shall prevail.
- All words, tables and figures in this Manual are protected by relevant national regulations and laws and shall not be used without permission.

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# WEB Client of NVR Network Video Recorder

The equipment supports the synchronous operation on WEB client. Some parameters and actual settings may change according to the algorithm dynamics supported by the front end.

# 1.1 Operating Environment

It is recommended to run under the operating system environment of Win7 and above. In order to better operate and use the system, and fully reflect the performance and effects, please ensure that the following items are set or installed correctly after the system is successfully installed:

- a) The display resolution is set to 1920 × 1080 or higher, and the color is set to enhanced color (32-bit), please refer to Windows help document or online help for how to set the resolution and color of monitor.
- b) Make sure that the font required for this system-Song font is installed in the Windows operating system. If the interface of this system is displayed abnormally, the fonts required by this system may not be installed, or the required fonts have been damaged, and fonts need to be reinstalled.

# 1.2 IE Settings

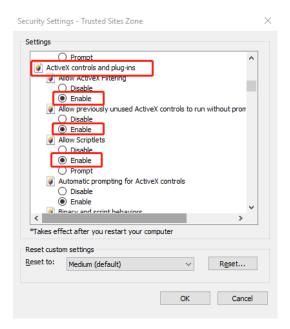
You need to download ActiveX controls before using this series of network video products for the first time. Before downloading, you need to set the IE browser appropriately to ensure that the controls are downloaded successfully.

Note: Use the IE browser of Windows operating system, to ensure that the version is 8.0 or above. Except for Firefox and Google browsers, please do not use other third-party browsers and any IE browser shell programs such as Maxthon, Window of the World. We do not guarantee that you can log in normally with such software.

If the computer is connected to the camera for the first time, please go to "Internet Options"-"Security"-"Trusted Sites"-"Sites" and add the IP of the camera to the list of "Trusted Sites". Then set the "Custom Level" and set all the options in "ActiveX Controls and Plug-ins" to "Enable", to ensure that the computer can download and run the controls normally.



**IE Browser-Internet Options** 



Trusted Site-Custom Level

# 1.3 Login Device

The default IP address of the device is: 192.168.1.3, subnet mask: 255.255.255.0, gateway: 192.168.1.1. Please set the IP address of the computer and the IP address of the device in the same network segment: for example, set the IP address of the computer to 192.168.1.3 to access the device through IE browser. Open the IE browser, input the IP address of the network video device in the address bar, and click "go" to log in to the device. If it is the first time to use, the following interface will appear.

# **Login Device-> Equipment activation**



Equipment activation interface

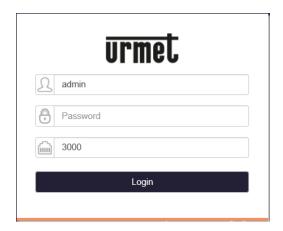
Some devices need to be activated before IE interface is to be used. Set the login password in the activating device window and click OK to enter the IE login interface.



Prompt box for activating device

NOTE: In case that it has been activated at the NVR equipment, then input the user name and password to log in the equipment directly

# **Login Device-> IE login interface**



IE login interface

Enter the correct user name and password in the login window, and click "Login" to enter the preview interface later.

## **Description:**

- The user name is "admin" by default, the password is user self-defined when activating the equipment.
- If the equipment port number is modified, you need to enter the correct port number, and the default port number is 3000.

Please click to download the plugin. If installed already, pleasejust press F5 to refresh it (no need install again). Please close the browser during installing.

Click the text link to open the save or run control interface, as shown in the following figure. Select "save" to download Swallow.exe to the local area, and select "run" to install Swallow.exe automatically after downloading.



Interface for saving or running the control

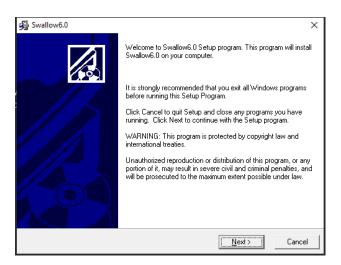
The control needs to be installed after downloading, and the installation program

interface for running the control will pop up, as shown below; and then click the "Run" button.

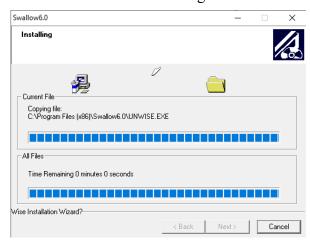


Installation program interface for running the control

When the installation control interface appears, click "Next" or "Next step", as shown below.

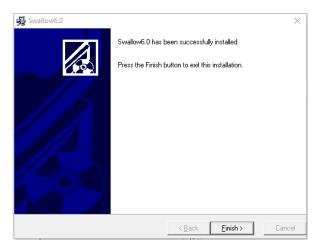


Interface for installing control



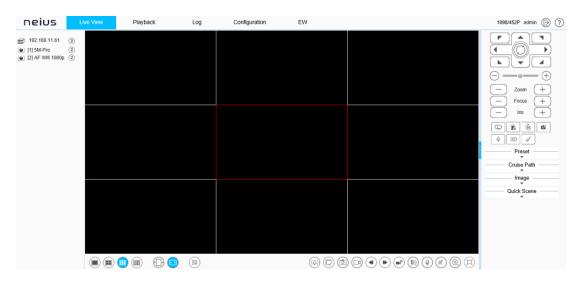
Interface for control installation process





Interface for completing control installation

After the plug-in is installed successfully, refresh the browser to display the preview image.



Preview interface

After logging in to the equipment, click the icon at the top of the interface to switch to different interfaces or execute related commands.

Icon	Description
Live View	Click this icon to enter the interface of "Live View".
Playback	Click this icon to enter the interface of "Playback".
Log	Click this icon to enter the interface of "Log".

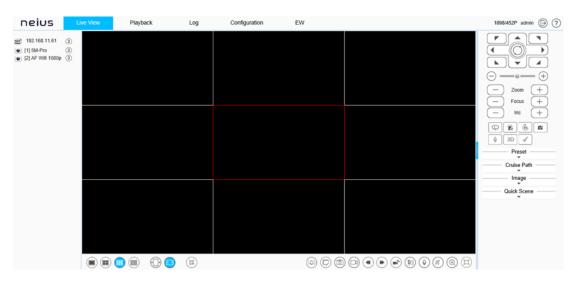
Configuration	Click this icon to enter the interface of "Configuration".
EW	Click this icon to enter the "EW" interface.
admin	Display the user name for this login. (This icon can only be displayed but not be clicked)
₽	Click this icon to log out.
?	Click this icon for online help information.

# 1.4 Live View Interface

After successful login, the system will display the [Preview] interface by default. In other interfaces, users can return to the video preview interface by clicking the [Preview] button at the top of the interface.

Because different models support different functions, the interfaces may also be different, please refer to the actual interface.

# **1.4.1. Live View**



Preview interface

urmet

# **Description:**

- a) Double-click the video to display it in full screen. Double-click again or press the [Esc] key of keyboard to exit the full screen;
- b) Introduction to the functions of keys at the preview interface:

Icon	Description
	Display Equipment IP (This icon can only be displayed but not be clicked)
1 1st Stream 2 2nd Stream	Click to enable, and selected main or sub code stream to preview
•	Click to enable, when selected, the video of the corresponding channel will be closed. Click again to re-display.
	Click enable, when selected, the video window will display 1 screen.
	Click enable, when selected, the video window will display 4 screen.
	Click enable, when selected, the video window will display 9 screen.
	Click enable, when selected, the video window will display 16 screen.
•	Click "Fixed Ratio"; the video will be displayed at a fixed scale.
	Click "Fit Window"; the video will automatically adapt to the computer resolution display.
	QR code button. QR code will appear after clicking it.  Users can scan the QR code according to the type of mobile phone and download the mobile client. A third QR code will appear after the equipment is connected to the public

Icon	Description
	network, and you can add the equipment by scanning on
	the mobile client.
	System alarm button, click to enable and demonstrate the system
(4))	alarm information
	Click to enable and connect all local connections. Click again to
₩ /₩	disconnect all local connections
	Local manual snapshot control button, click enable to
	snapshot and save the preview picture locally, the storage
	path of the snapshot file can be modified by itself, the
	modification page: configuration system settings local
	settings preview snapshot save path.
	Local manual recording control button, click enable, start
	local recording after enabling, the storage path of recording
	file can be modified by itself, modification page:
	configuration - system settings - local settings - saving path
	of recording file.
<b>(4)</b>	Click to enable and switch between the pages,
	On-click remote video recording icon. Click to enable and record
	videos.
(80)	Sound alarm icon. Click to enable and display alarming sounds.
	Voice intercom switch. When enabled, it can transmit local
<b>Q</b>	audio to the front-end equipment through the network for
	output.
(ms) (mg)	Audio preview volume adjustment button, the local output
49,49	volume can be adjusted by adjusting the slider position.
<b>(</b>	Electronic zoom button. After enabling this function, click



Icon	Description
	the left mouse button to draw the area to be enlarged, and
	then you can zoom in and view the area.
	Displays the frame rate button. After clicking, the preview
(Alba)	interface displays the frame rate information of the current
(109)	video. Click again to cancel the display of frame rate
	information. (supported by some models)
	Full screen button. Realize full screen preview video,
口	double click left mouse button or press the [Esc] key of
	keyboard to exit full screen preview video status

#### **Caution**

- a) All icons are valid when pressed.
- b) When there is no video in the interface, the audio preview is invalid.
- c) Talk can only be conducted with one user at the same time, and it is recommended to turn off the intercom in time after completing the talk, so that others can use it.

## 1.4.2. Control Menu

Note: Click the arrow or on the right side of the video window to display / hide the control interface.

## 1.4.2.1. Control Menu - > Pan/Tilt

The functions supported by different models are different, please refer to the actual

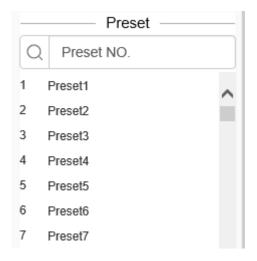
# interface.

Icon	Description
	8 direction keys, press the corresponding direction key to
	control the pan tilt to rotate in the corresponding direction;
	the center button is the scan shortcut key, press center
	button can invoke scan 1.
	The slider can adjust the rotation speed of the device. The
$\bigcirc$ $\longrightarrow$ $\oplus$	closer the "-" end is, the slower the speed is, and the closer
	the "+" end is, the faster the speed is.
	Zoom control button, press "-" control device to perform
	zoom operation, the field angle becomes larger and the
7	scenery becomes smaller; press "+" control device to
_ Zoom +	perform zoom operation, the field angle becomes smaller
	and the scenery becomes larger. (this button can also
	control the electric lens for zooming)
	Focus control button, press "-" control device to perform
	focusing near operation, the near scene is clear and far
- Focus +	away fuzzy; press "+" control device to perform focusing
	far operation, the far scene is clear and near fuzzy. (this
	button can also control the electric lens to focus)
	Iris control button, press "-" control device to perform
- Iris +	aperture reduction operation, and press "+" control device
	to perform iris increase operation.
	The wiper control button supports the wiper device. Click
	the button and the wiper will perform an operation. In
	order to prolong the service life of the wiper, the wiper is
47	equipped with low temperature protection measures, and
	the function of closing when the ambient temperature is
	lower than 0 °C.

Icon	Description
*	Alarm removal button. Alarm can be removed after
=0	pressing the button.
	Flip: control the video image to flip 180 °.
	Snap button: press the button to turn on the front end
	interception function.
	Voice intercom switch. When enabled, it can transmit
Φ	local audio to the front-end equipment through the
	network for output.
[20]	3D positioning icon. By clicking the mouse, replace the scene to
3D	be monitored to the center of the video.
	Alarm light icon. Click to enable and turn on the alarm light. Click
_*_	again to turn off the laser.
	Strong light warning button, click enable, the strong light
*	will turn on after enabling, and then click again, the
	strong light will turn off.
⊚«	Sound warning button. Click "Enable", and play the alert
	tone after enabling.

# 1.4.2.2. Control Menu - > Preset

The preset position function is that the device can store the horizontal angle, tilt angle, focal length and other position parameters of the PTZ in the current state into the memory, and can quickly call these parameters and adjust the PTZ and the camera to the position when necessary. Only supported by RS485 controlled cameras. Enter the preset number, and click the Find button to select the preset operation, including the [set] and [call] operations.



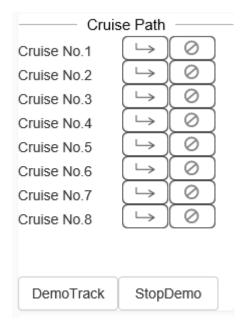
Preset position interface

- a) Click [Preset] to open or hide the parameter setting page.
- b) [Set]: Control the PTZ to move to the specified position, enter the preset position number in the blank field, click the button, and then click the button to add the corresponding preset position successfully; support to add multiple preset positions.
- c) [Call]: Enter the preset position number in the blank field, click the button and then click to call the corresponding preset position, and control the PTZ to move to the specified preset position.

## 1.4.2.3. Control Menu - > Cruise Path

The function is a function that displays the moving path of the ball camera by the cruise path of UI setting when the equipment is connected to ball camera.





Cruise Path interface

- a) Open [Cruise path] to open or conceal the parameter setting page
- b) [Activate]: click to activate the corresponding cruise path, and the PTZ will move to the pointed preset position
- c) [Stop]: click to realize the cruise at pointed cruise path of the equipment, and the PTZ will stop moving.
- d) [Demo track]: click to enable and activate the track according to the default track.
- e) [Stop Demo]: click to enable and stop the track motion.

# 1.4.2.4. Control Menu - > Image

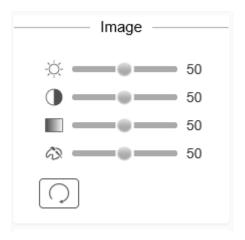


Image parameter setting interface

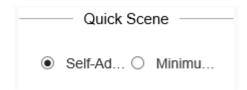
- a) Click [Image] to open or hide the parameter setting page.
- b) Adjust video parameters such as brightness, contrast, saturation and hue by means of adjusting corresponding slider.
- c) If you need to restore all video parameters to the default state, you can click the

[Restore Default] button .

-Ö- — 50	Brightness adjustment: adjust the slider position
ж ———— оо	to change the brightness of the image.
50	Adjust the contrast, adjust the slider position to
0	change the image contrast.
50	Adjust the saturation, adjust the slider position to
30	change the image saturation.
A) 50	Chroma adjustment: adjust the position of the
<i>☼</i> — 50	slider to change the chrome of the image.
	Restore default button. Button press the video
	parameter to restore the default value.

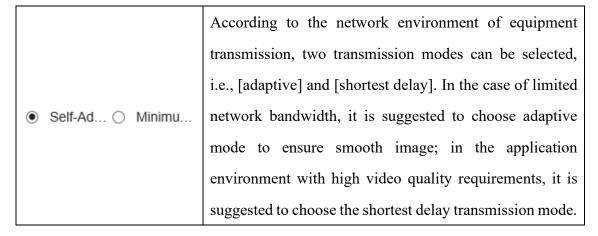


# 1.4.2.5. Control Menu - > Quick Scene



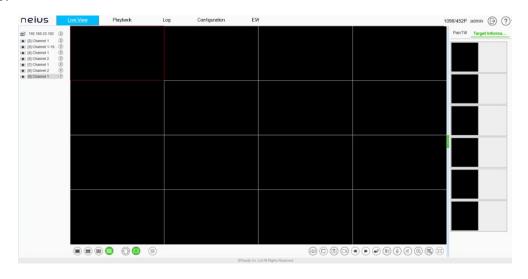
Quick scene setting interface

Click quick scene to open or hide the parameter setting page. The following can be adjusted through this interface.



# **1.4.2.6.** Control Menu - > Target Information

Click [Target Information], the face information will be displayed in the preview interface.



# 1.5 Playback

# 1.5.1. Time Axis Mode



Playback interface

Click [playback] to enter the [playback] interface. In the playback interface, the user can view the video files of the specified date, and can also snapshot and clip the video. See the following table for basic operation:

Icon	Description
	Display 1 × 1 screen. After selection, the video at only 1×1 channel
	will be displayed in the playback interface.
	Display 2 × 2 screen. After selection, the videos at 2×2 channel will
	be displayed in the playback interface.
	Slow forward button. The speed is 1/2 X, 1/4 X, 1/6 X and
(40)	1/8 X.
00	Play / pause button. Click to start/stop playing video file.
	Double speed playback will be canceled if necessary.
	"Stop Playing" button. You can stop playing the current file by
	clicking it.



Icon	Description
	Fast forward button. The speed is 2 X, 4 X, 6 X and 8 X.
(DII)	Stepping button can playback the video in a single frame.
	Browse button, select the video file to play.
(8)	Playback snapshot button, saved by default in C:\Users\john\NetVideoBrowser\CapturePics\
	Synchronous playback icon. Click to start synchronous playback.
	Playback clip button: Click to start the clip, and click again to finish the clip. The default saving location is C: \ users \ John \ netvideobrowser \ snapshotpictures \.
	Clip Management: you can view the type of video clip, video clip progress, current status and other information.
	Volume adjustment button, the local output volume can be adjusted by adjusting the slider position.
<u>*</u>	Download Management: query or download videos and pictures.
Ħ	Full screen play button: in full screen mode, double-click the mouse again at any position to exit from full screen mode.
Sun         Mon         Tue         Wed         Thu         Fri         Sat           27         28         29         30         1         2         3           4         5         6         7         8         9         10           11         12         13         14         15         16         17           18         19         20         21         22         23         24           25         26         27         28         29         30         31	Select a date in the calendar, double-click the date, and find the qualified file according to the query criteria.
Stream  1st Stream	Select the type of code stream

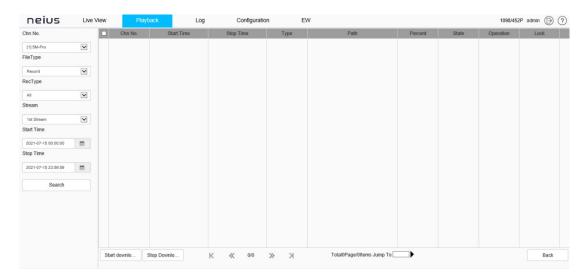
In the time axis mode, users can drag on the time axis to select and view the video

files of the corresponding time. After selecting the time point, click the play button to play. The time axis can be narrowed or enlarged by click.

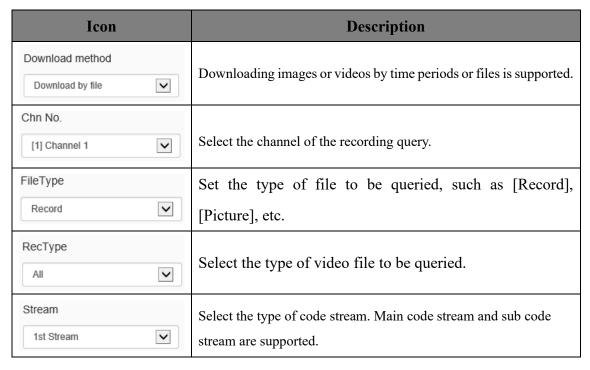
DS1099-041

## **1.5.2.** File Mode

In the time axis mode, click the Download Management button" into file mode, as follows:



In file mode, users can operate according to file type, video recording type, and whether to query remotely. The specific functions of buttons in file mode are as follows:



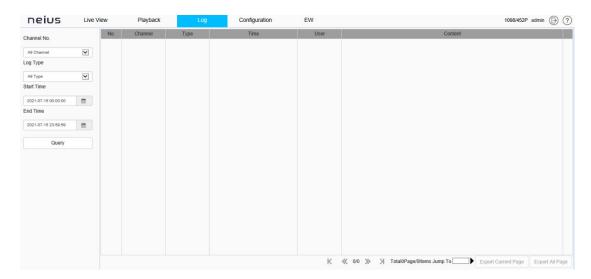


Start Time 2021-01-19 00:00:00	Select the start time of the video query.
Stop Time 2021-01-19 23:59:59	Select the end of the recording query.
K	Jump to the first page of query results.
«	Go to the previous page of the current page.
>>	Go to the next page of the current page.
>	Jump to the last page of query results.
<b>1</b>	Lock: the file can be locked and unlocked. When the disk is full and files need to be deleted, the locked files will not be deleted.
Start downloa	Start downloading selected video files
Stop Download	Stop the selected video file being downloaded.
Jump To	Jump to the specified page.
Back	Return to the playback interface.
Search	Query: Click to query the corresponding video information.
Download	When downloading by file is selected, select the channel number, code stream type, start and end time, and then click to download the video of that period.

# 1.6 Log

After successful login, [Preview] interface will be displayed by default. Click the [Log] icon in the menu bar at the top of the interface to enter the [Log] interface. In the

log interface, users can view various types of logs including the alarm information in a defined time period, and they can also export the query records.



Log interface

Log interface operation instructions

- a) Select the channel number to query from the [Channel No.] drop-down list.
- b) Select the type of log you want to query from the [Log Type] drop-down list.
- c) Select the start date in the [Start Time] drop-down list, and enter the time in the edit box at the back.
- d) Select the end date in the [End Time] drop-down list, and enter the time in the edit box next to it.
- e) Click the [Query] button to query the logs within the specified time range.
- f) When there are many logs, you can use [First Page], [Pre Page], [Next Page], [Last Page] in the lower right corner to turn pages to view the logs, or enter the page number to view directly in [Jump To] to jump to the specified page.
- g) Click [Export Current Page] to export the log of current page to PC.
- h) Click [Export All Page] to export all the logs found to the PC.



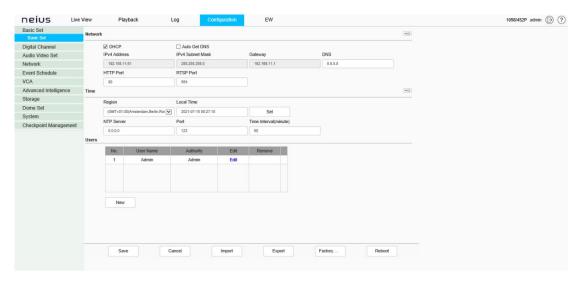
# 1.7 Configuration

After login, [preview] will be displayed by default. Click [configure] in the menu bar at the top of the page to enter the parameter configuration page, where you can set common settings, audio and video parameters, network settings, intelligent analysis, storage settings and system settings.

#### Note:

Because different models support different functions, the interfaces and menus may also be different, please refer to the actual interface.

## **1.7.1. Basic Set**



Basic Set interface

#### **Basic Set - > Network**

[DHCP]: when checked, the DHCP server will automatically assign IP to the device.

[Auto Get DNS]: When DHCP is turned on, the DNS server configuration parameters can be automatically obtained from the gateway, and no user operation or configuration

is needed.

[IPv4 Address]: Set the IP address of the device.

[IPv4 Subnet Mask]: Set the subnet mask of the device.

[Gateway]: Set the gateway of the device.

[DNS]: Set the DNS server address.

[HTTP Port]: Enter [HTTP port number] in the input box on the page, restart the device, and then modify the HTTP port number.

[RTSP Port]: Enter [RTSP port] in the input box on the page, restart the device, and then modify the RTSP port number.

[More...]: Click to jump to the network setting interface.

## **Basic Set ->time setting**

[Region]: The User can set the [Region].

[Local Time]: Display the Local time.

[Set]: The User can synchronize the system time of the device.

[NTP Server]: Setting the Server URL.

[Port]: Setting the Port Number.

[Time interval]: The user can enter the interval time.

[Test]: Test and confirm the setting.

[The more]: Click to jump to the time set interface.

#### **Basic Set - > Users**



## [New]

To add a new user, you need to set the user name, password and permission. The user name and password can only be entered in English letters and numbers. After the above three items are filled in, click the [Save] button.

Note: Only users with administrator rights can add and modify users.

## [Edit]

In the user list, click [Edit] to open the password modification prompt box, input the old password, new password and confirm the password, and then click Modify.

## [Remove]

In the user list, click [Remove] to open the prompt box and click OK.

#### **Basic Set - > Other buttons**

Click the [Save] button to save and make it take effect.

Click [Cancel] to restore the last saved parameter.

[Import]/ [Export]: used for equipment maintenance, mainly divided into three categories:

- a) [Event Server] options include alarm time period and linkage item setting information, excluding intelligent analysis.
- b) [Smart Analytics] options include settings related to intelligent analysis, including rules, time periods, etc.
- c) [System Setting] options include all setting information except the above alarm and intelligent analysis, including character superposition, video recording strategy,

network setting and other information.

[Basic Reset]: restore the default parameters of the device. (key information such as IP address will not be recovered)

[Reboot]: restart the device.

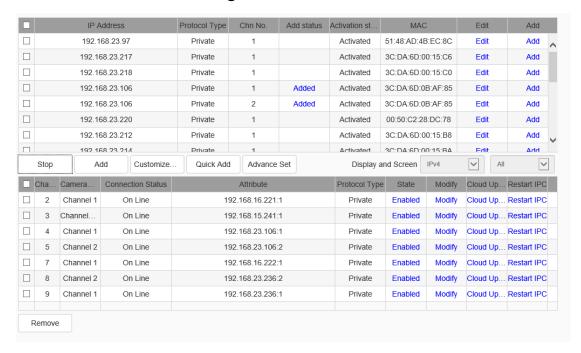
# 1.8 Digital Channel

# 1.8.1. Digital Channel

The device supports the operation of adding and editing digital channels on WEB client

# Digital channel -> Digital channel

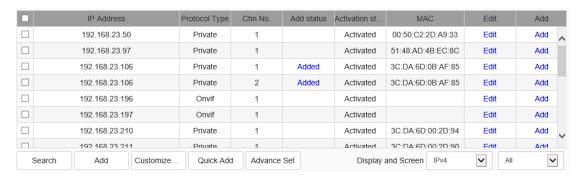
Enter "Configuration-> Digital Channel-> Digital Channel" to enter the page of Digital Channel, as shown in the figure below.



Digital channel interface

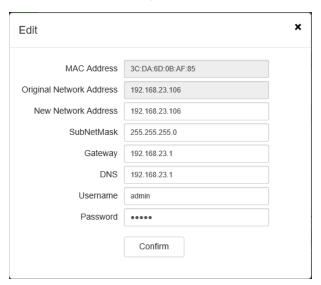


## **Digital Channel**



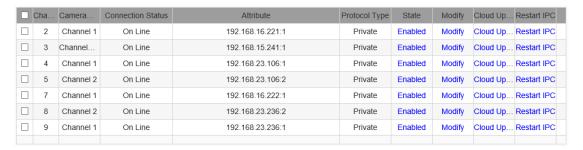
Digital channel setting interface

1. Click "Search" to begin searching. Search results are automatically sorted by IP address. You can modify the IP front end in the search results list. Click "Edit" to display the modify IP interface, as shown in the figure below.



Edit setting interface

2. Select the IP channel to add from the search list, click "Add" or double-click the mouse, and the IP device will be added to the idle channel of NVR. You can add multiple IP channels. The channel search is shown as below.



Channel interface

## **Digital Channel -> Customized Adding**

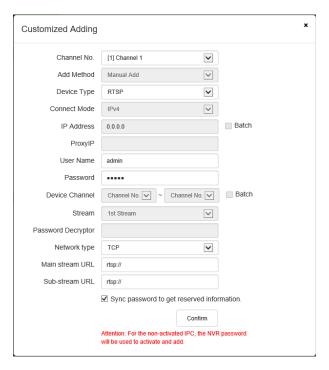
1. On the digital channels interface, click "Customized Adding" to enter the digital channel interface; when device type is private protocol, proceed as shown in the figure below.



Customized adding (private) interface

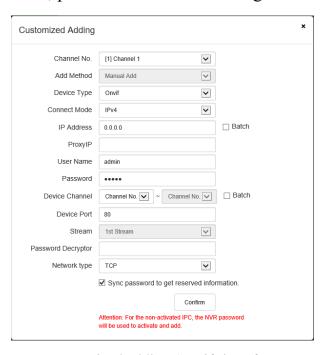
2. Select the channel number to add, check Enable, and select the connection mode according to the device type. When device type is RTSP, proceed as shown in the figure below.





Customized adding (RTSP) interface

When device type is ONVIF, proceed as shown in the figure below.



Customized adding (onvif) interface

3. After entering the IP address or URL address and username and password of the frontend device, click "OK" to add a digital channel. Repeat this operation to add other digital channels.

## Digital channel->Adding POE camera

A PSE channel can be added by means of "Plug & Play" and "Manual Add":

- a) If "Manual Add" is selected, the device shall be connected to the network interconnected with IP channels. Other configuration methods are the same as adding ordinary digital channels.
- b) If "Plug & Play" is selected, the front end to add shall be connected to the device's independent POE-powered Ethernet port. The device will complete the connection automatically.

#### Digital channel-> Quick Add

In order to allow users to quickly add devices, users can choose to enable the "Quick Add" function to add channels. In this mode, the device will be automatically searched and added to the digital channel.



Quick add interface

#### Note:

- The "Quick Add" function will automatically search for IPC and add it to the idle channel. Please pay due attention when using it.
- The PSE device channel list cannot be removed manually.

In order to search the device IP easily, the user may click "Advance Set" to set, as shown in the figure below:



Advance setting interface

#### **Digital Channel ->IPC Central Management**

1. The centralized management function of IPC allows users to import and export parameters of the added front-end devices, upgrade them remotely, and restart IPC, as shown in the figure below.

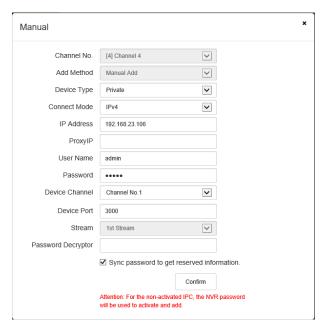


IPC central management interface

2.Enabled/Disabled: Click "Disable" to disconnect the video, and click "enable" to reconnect the video.

# 3.Modify:

- a) Select the front end to be operated in the list of added devices.
- b) Click "Modify" to pop up the content box for manual modification, as shown in the figure:

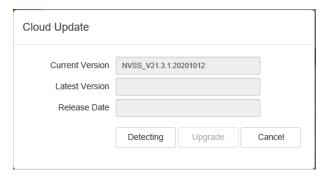


Page of manual modification

- c) Change the information according to the actual conditions.
- d) Click "OK" and the device information will be modified.

### 4. Cloud upgrade

- a) Select the front end to be operated in the list of added devices.
- b) Click "Cloud Update" to display the Cloud Upgrade prompt box, as shown in the picture below.



Cloud update interface

- c) Click "Detecting" button to detect the information of the current version.
- d) Click "Upgrade" button to carry our the cloud update.
- e) Click "Cancel" button to close the page.

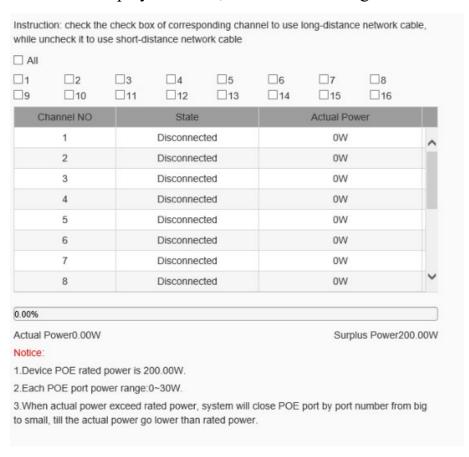


#### 5.Restart IPC

- a) Select the front end to be operated in the list of added devices.
- b) Click"Restart IPC" button to restart the frontend device.

#### **Digital Channel -> POE Power Information**

1. Select "Configuration->Digital Channel-> POE Power Information" to enter the POE power information display interface, as shown in the figure below.



POE Power Information setting interface

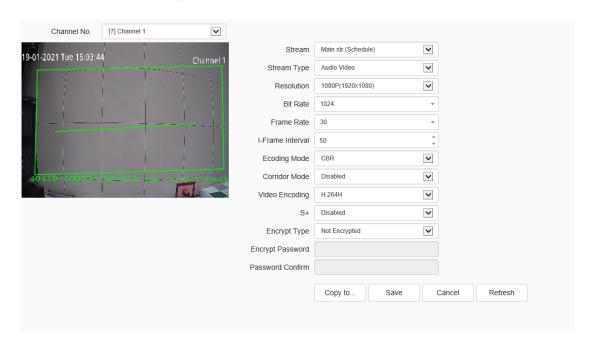
Please refer to the interface for POE power notes.

## 1.9 Audio Video Set

# 1.9.1. Stream

#### **Stream-> Stream**

Enter "Configuration-> Audio Video Set -> Stream" to enter the page of stream interface, as shown in the figure below.



Stream - Stream interface

Parameter	Explanation
Channel	Select the channel for which video parameter information
	needs to be set.
Stream	The video related parameters of the main stream
	(Schedule/Event), the self-definition 1/2 and the sub stream
	can be modified. Select the corresponding code stream of the
	family and modify the parameters of the corresponding code
	stream



Stream Type	You can choose pure video or audio video.
Resolution	Set the resolution of the video. (Different models are
	compatible with different maximum resolutions).
	Set the bit rate of the video in KB / s. Code rate range: $32 \sim$
	16384kb / s.
	Tip: select the required resolution from the [resolution] drop-
	down list, and the code stream can be switched to the specified
Bit Rate	[code rate]. When [compression method] is [constant rate], the
Bit Kate	[code rate] represents the actual code rate of the code stream;
	when [compression method] is [variable rate], the [code rate]
	represents the maximum allowed code rate of the code stream.
	(Different models support different code rates, please refer to
	the actual interface)
	Sets the frame rate of the current video. In the [PAL] system,
	some models support 50 frames, and the maximum support is
Frame Rate	25 frames when the wide dynamic mode is turned on. [NTSC]
Trame Rate	under the system, some models support 60 frames, and when
	the wide dynamic mode is turned on, the maximum support is
	30 frames.
Priority	The video set to [frame rate first] is smoother and the video set
Filolity	to [quality first] is clearer.
I-Frame Interval	The number of frames between every two I frames can be set,
1-1 Tame micryar	and the range can be 10-100.
Ecoding Mode	Set constant rate or variable rate compression. At the fixed bit
	rate, the amount of video data fluctuates little, and the
	bandwidth occupied by the network transmission is stable; at
	the variable bit rate, the amount of video data changes with the
	complexity of the video picture, and the bandwidth is saved
	when the scene is single. In the case of variable bit rate, there

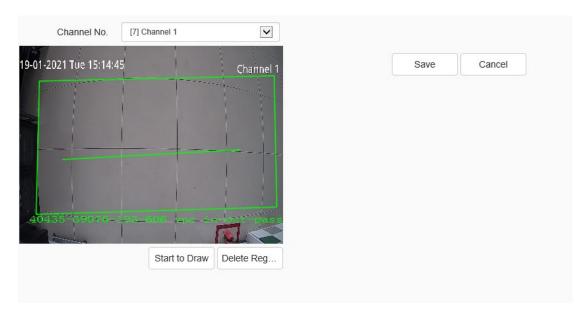
	are several levels. If the better, the higher the average bit rate
	is.
Corridor Mode	The screen is rotated 90 degrees to adapt to the scene where
	the device is installed on the wall. It is off by default.
Wiles English	Set how video is encoded. H. 265 encoding saves bandwidth,
Video Encoding	but some browsers or playback software do not support h.265.
	Switch S + on and off can be selected from the drop-down list.
S.I.	When S + is enabled, functions such as compression mode,
S+	video quality, I-frame frame rate and key area will not be
	available.
	According to the situation, users can encrypt video data to
Encrypt type	improve the security of network transmission. [Encrypt type]
	select the required encryption algorithm (currently only AES
	algorithm is available), [Encrypt password] set the encryption
	password, and [password confirmation] input the encryption
	password again to ensure that the password entered twice is
	the same. Click [Save] to take effect.

After setting, click Save to take effect. Click [reset] to restore the last saved parameter.

## Stream - > ROI

Enter "Configuration-> Audio Video Set -> Stream" to enter the page of ROI interface, as shown in the figure below.





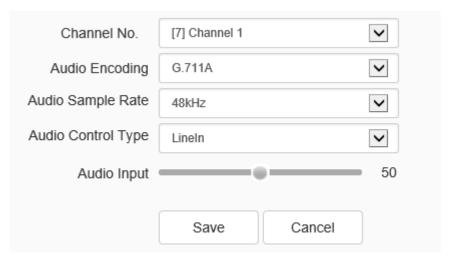
Video parameters key area interface

After the front-end connection supporting the key area setting, you can set the key area here. The image quality displayed in the focus area is higher.

- 1. Click the "Start to Drawing" button to drag the video by holding down the left mouse button, and then you can set the key area. Several key areas can be set up. Click "Delete Area" to delete all the key areas that have been set.
- 2. Click [Save] to save the corresponding parameter settings. Click [Cancel] to restore the last saved parameter.

### 1.9.2. Audio

Enter "Configuration-> Audio Video Set -> Audio" to enter the page of audio interface, the parameter setting will dynamically change according to the frontend support, as shown in the figure below.



Interface of audio parameter setting

Parameter	Explanation
Channel No.	Select the channel for which audio parameter information needs
	to set.
Audio	Set the audio encoding mode of the bit stream.
Encoding	
Audio Sample	Sets the audio sampling rate for the bit stream.
Rate	Sets the audio sampling rate for the oft stream.
	It supports two modes: linein and micin. The control mode needs
	to be selected according to the output signal amplitude of the
Audio Control	external audio equipment. When the external mic small signal
Type	(mv level signal) is connected, please select micin; when the
	external equipment is the active audio equipment (V level signal),
	please select linein mode. (supported by some models)
	The output sound size can be adjusted, and the adjustment range
Valore a valore	is 0-100. The smaller the value is, the smaller the output audio
Volume value	signal amplitude of the device is; the larger the value is, the larger
	the output audio signal amplitude of the device is.
Audio Denoising	The filter level of environmental noise can be set. The default
	level is 1. When the value is 0, turn off the audio noise reduction
	function.

Parameter	Explanation
Audio Output Type	The audio output type includes built-in speaker, external sound
	source and off. When the built-in speaker is selected, the output
	volume can be adjusted.
Echo	Turn on to improve the quality of audio intercom.
Suppression	

After setting, click Save to take effect. Click [reset] to restore the last saved parameter.

#### Note:

• To modify the audio parameters, the intercom function needs to be turned off.

# 1.9.3. Image Setting

In the image setting interface, the image HD parameters, HD template and color-to-black settings can be done. Before modifying, please pay attention to the selected channel number to ensure that the modification is accurate.

# **Image Settings - > Image**

Enter "Configuration-> Audio Video Set -> Image settings" to enter the page of image settings interface, as shown in the figure below.

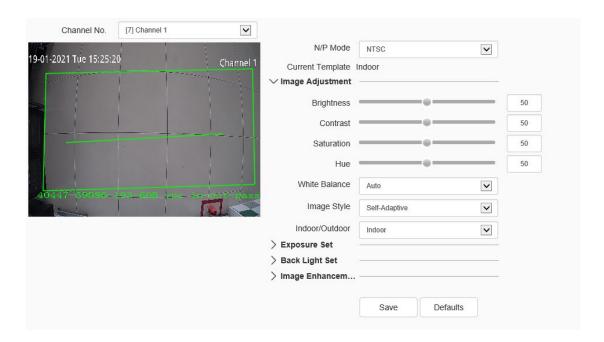


Image interface

The applications of HD parameters are reflected in the form of templates, and the system provides several sets of commonly used templates for use. The HD parameters of each template are independent of each other, and the parameters of the second template will not be affected after modifying the HD parameters of the first template, so please confirm the current template before modifying the parameters.

#### **Image - Template Selection**

[Channel No.]: Select the channel for which image information needs to set.

[N/P mode]: Set image display effect in [N/P mode], PAL and NTSC can be chosen.

### Image -Image Adjustment

Click next to [Image Adjustment] to expand the [Image Adjustment] interface. The user can set the brightness, contrast, saturation, hue, sharpness, white balance, image style and indoor/ outdoor modes of the picture through the image adjustment



menu.

# Image –Exposure Set

Click the button next to [Exposure Set] to expand the [Exposure Set] setting interface.

Parameters	Description
Shutter speed	You can set the maximum exposure time allowed to affect the brightness
	of the image. If the exposure time is too long, the moving image will be
	dragged, and if the exposure time is too short, the video picture will be
	darker.
Automatic gain	The maximum gain allowed can be set to affect the brightness of the
	image. Too much gain may produce more noise.

# Image -Back Light Set

Click the " > " button next to [Backlight] to expand the [Backlight] setting interface.

Parameters	Description
	It is mainly used in road monitoring scenes.
HLC	It can suppress the glare such as car headlights after being turned
	on, thus reducing the effect of glare.
	In the drop-down list, there are [off], [ultra wide dynamic auto],
	[ultra wide dynamic manual] and backlight compensation options.
	Select [ultra wide dynamic auto] or [ultra wide dynamic manual] to
Super-Wide	display the [ultra wide dynamic] slider. Drag the slider to set the
dynamic Grade	wide dynamic level that meets the requirements of the scene. The
	larger the value, the more obvious the effect.
	Select [backlight compensation] and check [set backlight
	compensation area] and click Save to set light compensation and

improve the brightness in the setting area

## **Image - Image Enhancement**

Click the button next to [Image Enhancement] to expand the [Image Enhancement] setting interface.

Parameters	Description
Defog	Select [Enabled], [Disabled] and other options according to
	actual needs.
	In the drop-down list, you can select [close], [normal mode] and
	[expert mode]. Select [normal mode], display the [noise
	reduction level] slider, and drag the slider to set the noise
Digital Noise	reduction level. Select [expert mode], and the sliders of [airspace
Reduction	noise reduction level] and [time domain noise reduction level]
	will pop up respectively. Drag the two sliders to set [airspace
	noise reduction level] and [time domain noise reduction level]
	respectively.

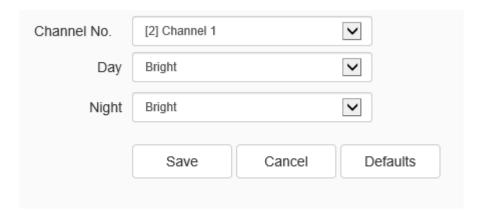
### Note:

After the HD parameters are set, click [Save] to save. Click [Cancel] to restore the last saved parameter. [Defaults]: the parameters of each template can be restored to the default settings.

# **Image setting - > Schedule**

Select the "Configuration -> Audio Video Set - > image Setting" tab to set the parameters of image interface, as shown in the figure below:

urmet



Schedule interface

Users can use different templates for equipment at different time periods by means of using HD template, to ensure that the effects of videos are the best in different time periods.

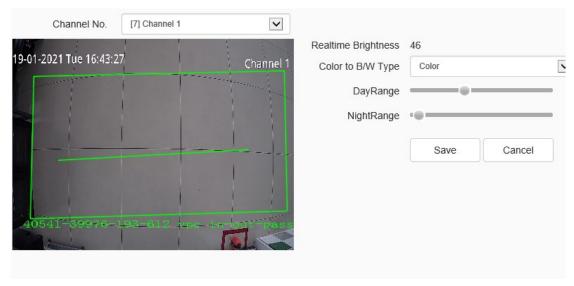
[Day]: Set the HD template during the day.

[Night]: Set the HD template at night.

Click the [Save] button to save and make it take effect.

# **Image settings - > Day/Night**

Select the "Configuration -> Audio Video Set - > image Setting" tab to set the parameters of Day/Night interface, as shown in the figure below:



#### Day/Night setting interface

In the color to black interface, set the device to switch to day or night mode according to the specified conditions, and set the fill light.

[Color to B/W Type]: allows [device] to switch between day and night modes according to different rules. Because the functions of different models are different, please refer to the actual interface.

[Auto (inside)]: in the internal synchronization mode, the [device] will automatically detect the brightness of the video screen. When the video brightness is higher than the brightness value in the day, the video will change from black to color. When the video brightness value is lower than the brightness value at night, the video will change from color to black. The [real-time brightness value] above the page is the detected current brightness value.

[B/W]: The device video is always in black and white mode.

[Color]: The device video is always in color mode.

[Auto (outside)]: Detect the brightness of the external environment through the photoreceptor. When the external brightness is higher than the brightness value in the day, the video changes from black to color. When the external brightness is lower than the brightness value at night, the video changes from color to black.

[Schedule]: In timing mode, you can specify the daylight time and dark time.

[Adaptive]: The device automatically switches between black and white and color mode according to the scene.

[Sensitivity]: Toggle the drop-down box to select sensitivity.



[IR lamp control mode]: Set the IR lamp on mode.

[Brightness of IR lamp]: Slide the slider to set the brightness value of IR lamp. The maximum value is 100.

[White Light Control Mode]: Set the white light on mode.

[Brightness of White Light]: Slide the slider to set the brightness value of white light. The maximum value is 100.

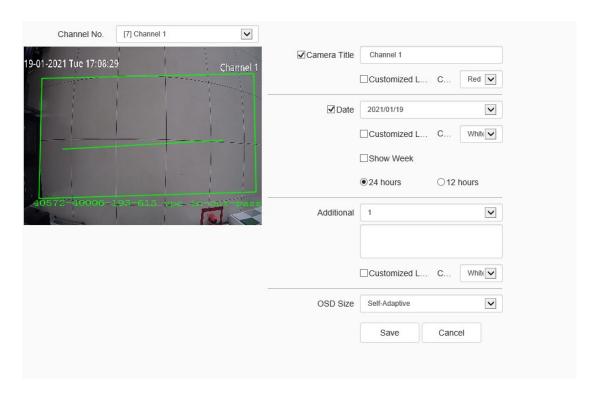
Click the [Save] button to save and make it take effect.

Click [Cancel] to restore the last saved parameter.

## 1.9.4. OSD

#### OSD -> OSD

Select the "Configuration -> Audio Video Set - > OSD" tab to set the parameters of OSD interface, in this interface, the modification of the channel name, date format and the text content to be added can be done, as shown in the figure below:



Interface of OSD

[Channel]: Select the channel for which OSD needs to be set.

[Stream]: select the code stream to stack character information.

## [Channel Title]

- (1) Select the [Channel Title]] check box to overlay the channel name on the screen.
- (2) Enter a name in the input box on the right to set the channel name.
- (3) From the [Color] drop-down list, select the color you like for the superimposed content.
- (4) If you need to change the position of the superimposed character, select the [user defined position] check box, and click on the small screen with the mouse to specify a new position for the superimposed character.

#### [Date]

(1) Select the [Date] check box to overlay the date and time on the picture.



- (2) Select your preferred date format from the drop-down list on the right.
- (3) If you need to include the week in the displayed time and date, select the [Show Week] check box.
- (4) As required, the time can be displayed in 24-hour or 12-hour mode. Select the corresponding option from the 2 buttons below.
- (5) From the [Color] drop-down list, select the color you like for the superimposed content.
- (6) If you need to change the position of the superimposed character, select the [user defined position] check box, and click on the small screen with the mouse to specify a new position for the superimposed character.

#### [Additional]

- a) [Additional] at present, there are 5 areas for stacking.
- b) Input the text content to be superimposed from the input box below, including Chinese characters, English and common punctuation marks. You can stack multiple lines of content in one area as needed. Some models support peripheral mode. Click [insert] to add peripheral information.
- c) From the [color] drop-down list, select the color you like for the superimposed content.
- d) Select the [user defined location] check box and click on the small screen with the mouse to specify a new location for the superimposed characters.

# [OSD Size]

You can specify the size of the superimposed characters, select the preferred

character size (unit: pixel) in the [OSD Size] drop-down list, or select [Self-Adaptive] to let the system automatically adjust the character size.

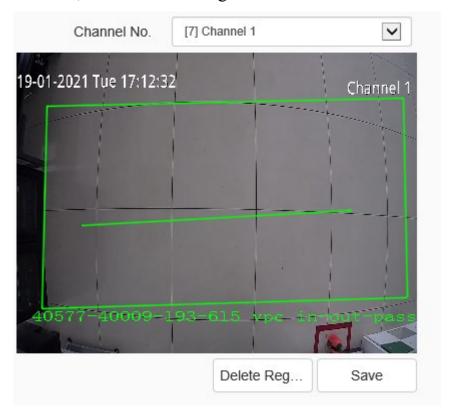
After all the above parameters are set, click [Save] to save and take effect; click [Cancel] to restore the last saved parameters.

#### Note:

Quantity of extra area information which can be additionally added in each channel is set on a case-by-case basis.

#### **OSD->Video Mask**

Select the "Configuration -> Audio Video Set - > OSD" tab to set the parameters of video mask interface, as shown in the figure below:



Video mask setting interface

According to the user's needs, the occlusion area is set on the video screen to protect the privacy

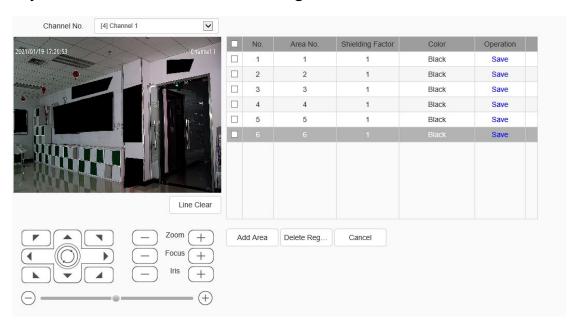


information and support multiple occlusion areas.

- a) Drag the mouse to draw the occluded area on the video screen, allowing to draw multiple occluded areas.
- b) If you need to delete the drawn area, click [Delete Region] to delete all the occluded areas, so as to draw again.
- c) Click [save] to save and take effect.

### **OSD- > Privacy Mask**

Select the "Configuration -> Audio Video Set - > OSD" tab to set the parameters of privacy mask interface, as shown in the figure below:



Privacy Mask setting interface

- a) Select the channel for which privacy mask needs to be set.
- b) Control the PTZ through the shortcut PTZ control panel, so as to switch to the screen to be masked.
- c) Drag the mouse to draw the occluded area on the video screen, allowing to draw multiple occluded areas.
- d) If you need to delete the drawn area, click [Delete Region] to delete all the occluded DS1099-041

areas, so as to draw again.

- e) The added area is displayed in the list on the right. The user may click "Delete area" to delete it.
- f) Click [save] to save and take effect.

### **NOTE:**

• A front-end IPC supporting this function is required to be added for this part.

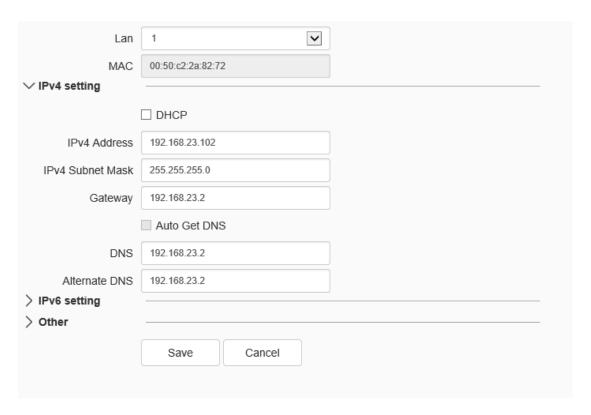
# 1.10Network

# **1.10.1.** Basic Set

### **Basic set -> TCP/IP**

Select the "Configuration -> Network - > Basic Set " tab to set the parameters of TCP/IP interface, as shown in the figure below:





TCP / IP setting interface

[DHCP]: Set whether the DHCP server automatically assigns IP to the device.

[IPv4 Address]: Set the IP address, subnet mask and gateway of the device.

[IPv6 Address]: This device supports IPv6. Users can see the IPv6 address and subnet mask of the device on the page. (Supported by some models)

[DNS]: Set the DNS server address.

[MAC]: Displays the physical address of the device.

[MTU]: Set the size of MTU, ranging from 500 to 1500, and the default is 1500. After setting, click Save to save the setting, and it will take effect after restarting the equipment. [HTTP Port]: Enter [HTTP port number] in the input box on the page, restart the device, and then modify the HTTP port number.

[RTSP Port]: Enter [RTSP port number] in the input box on the page, restart the device, and then modify the RTSP port number.

[HTTPS Port]: Enter [HTTPS port number] in the input box on the page, restart the device, and then modify the HTTPS port number.

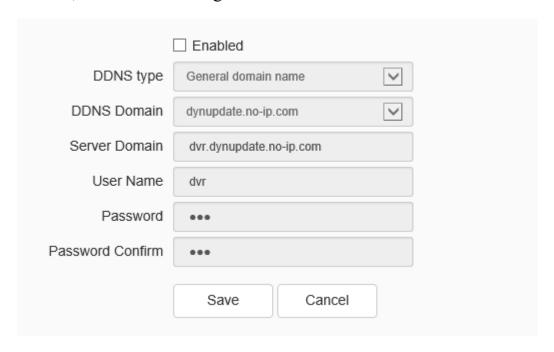
[RTSP Path]: Refer to the example path in the interface. Check enable intranet search to enable this function.

[Save]: save the current settings.

[Cancel]: Restores the last saved parameter.

#### **Basic Set - > DDNS**

Select the "Configuration -> Network - > Basic Set " tab to set the parameters of DDNS interface, as shown in the figure below:

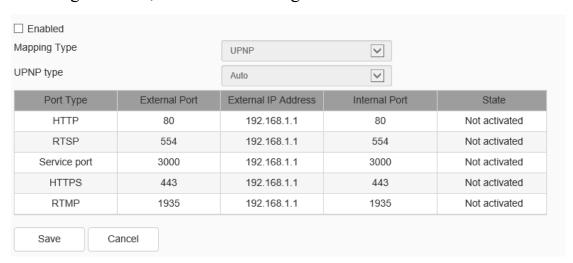


DDNS setting interface

After checking [Enabled] DDNS, select the [server address] to be set, modify equipment [Server Domain], set [DDNS Domain], [User Name], [Password] and [Password Confirm], and then click [Save] to set DDNS network server information. Click [Cancel] to restore the last saved parameter.

### **Basic Set- > Port Forwarding**

Select the "Configuration -> Network - > Basic Set " tab to set the parameters of port forwarding interface, as shown in the figure below:



Port forwarding setting interface

Only when port mapping is enabled, can the ports of network devices be opened normally. Port mapping methods include automatic and manual.

- a) When "Auto" mode is selected and UPnP is enabled, users do not need to do port mapping on the router, only need to turn on the UPnP function on the router.
- b) Select "Manual", the user needs to manually map the port on the router. In manual mode, the user can specify the external port to be mapped under the public IP. The user does not need to modify the port of the network device itself. If the router or gateway does not support the UPnP function, the user can fill in the current mapped external port status here.
- c) After the port mapping, the status column will show whether it is effective. At the same time, the external port under the currently mapped public IP will be displayed in the external port. If users need to access network devices through the public

network, they need to use the currently mapped external port to access.

[Save]: save the current settings.

[Cancel]: restores the last saved parameter.

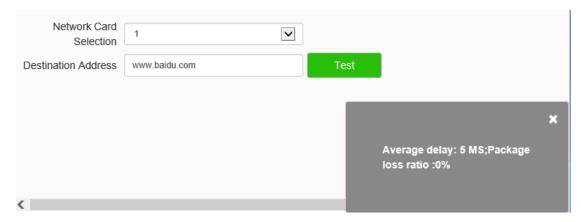
## **Basic Set->POE channel port mapping**

Select" Configuration > Network Settings > Basic settings" to enter the POE channel port mapping setting interface.

Select the channel number to be mapped, check [Enable] HTTP port mapping, then set [HTTP port] and [Mapping port]. Check [Enable] data port mapping, then set [Data port] and [Mapping port], and click [Save] to set port setting information. Click [Reset] to restore the last saved parameters.

#### **Basic Set->Network Detect**

Select the "Configuration -> Network - > Basic Set " tab to set the parameters of network detect interface, as shown in the figure below:



Network detect interface

Select the network adapter to be tested, input the destination address, and click the [Test] button to test the network condition. When the network is unblocked, the average



delay and packet loss rate can be checked. When the network is unclear, the message"

The destination address is unreachable" will be shown.

#### 1.10.2. Advanced Set

#### Advanced Set - >IP Filter

Select the "Configuration -> Network - > Advanced Set " tab to set the parameters of IP filter interface, as shown in the figure below:



IP Filter setting interface

IP firewall, also known as black-and-white list, is provided for users to manage access rights more flexibly.

[No Limit]: select the [No Limit] button to remove the restriction of the black and white list. All IP addresses can be accessed, not only the IP addresses in the list.

[Whitelist]: if you want to allow only a few trusted IPS to access the device, you can DS1099-041 60

select the [Whitelist] button, enter the trusted IP addresses one by one, click [Add] to add to the list, and then click [Save] to make the whitelist effective. At this time, only a number of IPS specified in the list can successfully log in to the device, and login requests from other IPS will be rejected, regardless of whether their user name and password are correct or not. Users can specify up to 16 trusted IP addresses in the white list.

Note: when adding the white list, please confirm whether to add the IP address of the current user.

[Blacklist]: if you want to block some IP addresses and prohibit them from accessing the equipment, you can select the button of [blacklist], input the IP addresses you want to block one by one, click [Add] to add them to the list, and then click [Save] to make the blacklist effective. At this time, the login request from any IP in the list will be rejected, regardless of whether its user name and password are correct or not.

Note: when adding the blacklist, please confirm whether the IP address of the current user is added.

[Delete]: if you need to delete some IPS from the list, just select the check box on the left of these IPS and click [delete]. Note that all IPS cannot be deleted when deleting the white list, otherwise the device will not be able to log in successfully.

Note: IP filtering can only be judged when a user is newly logged in, and cannot filter the logged in IP. It is strongly recommended to restart the device in time after each blacklist configuration to shield the illegal IP address.

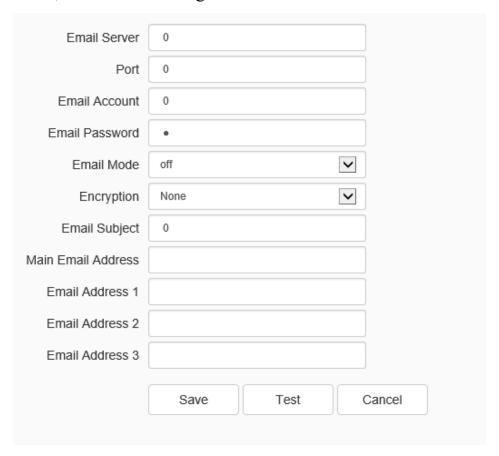
[Save]: save the current settings.

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[Cancel]: restores the last saved parameter.

#### Advanced Set - > Email

Select the "Configuration -> Network - > Advanced Set " tab to set the parameters of email interface, as shown in the figure below:



Mail setting interface

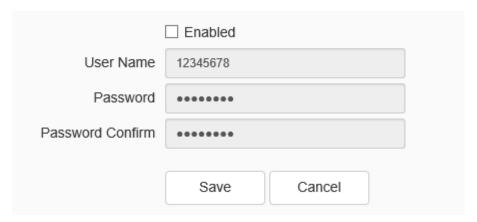
After the user enables mail, the alarm server will automatically send alarm mail to the mailbox address set by the user when an alarm occurs.

- a) The email server address input format is smtp.xx.com, where XX represents the email server and is the login email of the account, for example, smtp.163.com.
- b) The account and password are the user name and password of the login SMTP server mailbox.

- c) The encryption mode can be none, SSL or TLS.
- d) After setting the subject and CC email address, click[test] to test whether the mail server function is normal. Click [save] to save the current settings. Click [reset] to restore the last saved parameter.

#### **Advanced Set - > PPPoE**

Select the "Configuration -> Network - > Advanced Set " tab to set the parameters of PPPoE interface, as shown in the figure below:

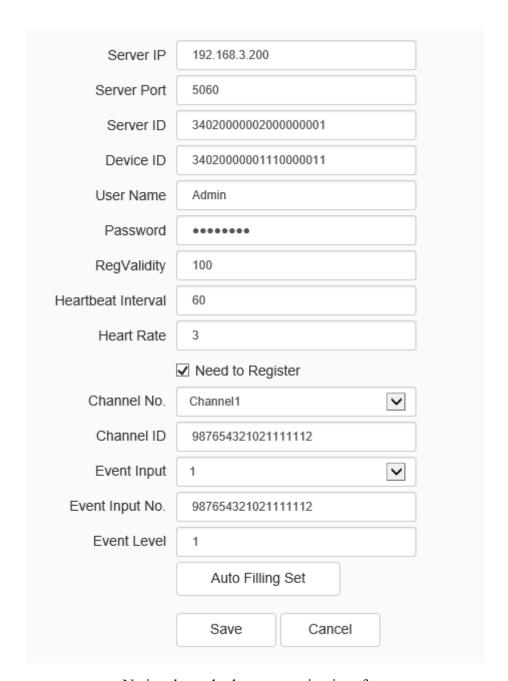


PPPoE setting interface

After enabling the [PPPoE] function, change the [User Name], [Password] and [Password Confirm], and [Save] to set the PPPoE network server information, which will take effect after restart; [Cancel] to restore the last saved parameters.

#### Advanced Set - > National standard access

Select the "Configuration -> Network - > Advanced Set " tab to set the parameters of national standard access interface, as shown in the figure below:



National standard access setting interface

It can be accessed to other platforms by setting corresponding parameters.

[Auto Filling Set]: click this button, the channel number and alarm input number will be increased and set from the current channel number.

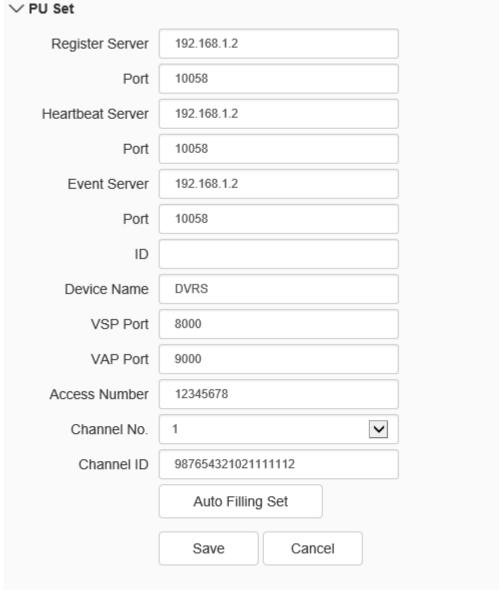
[Save]: save the current settings.

[Cancel]: restores the last saved parameter.

### **Advanced Set - > Access Platform**

Select the "Configuration -> Network - > Advanced Set " tab to set the parameters of access platform interface, as shown in the figure below:

m interface, as	snown in the figure below.
∨ Platform Ena	abled
	☐ GB28181
	✓ RTSP
	<b>☑</b> P2P
	✓ Onvif
	☐ GAT1400
Set	
Register Server	192.168.1.2
Port	10058
leartheat Server	192 168 1 2





Platform access setting interface

[Platform Enabled]

Support the enabling and shutting down of onvif, RTSP, P2P and CGI. After setting,

some devices will restart automatically and take effect.

Note: to replace the access platform, you need to first disable the enabled platform, and

then select a new platform and enable it.

[Auto Filling Set]: click this button, the channel number and alarm input number will be

increased and set from the current channel number.

[Save]: save the current settings.

[Cancel]: restores the last saved parameter.

[Pu setting]

This function allows the user to set the address and port of the [Registration center],

[Heartbeat server] and [Alarm server], as well as [Device ID], [Device name], [Access

number], [Channel selection], [Channel number], and the port numbers of VSP and VAP.

[Auto fill setting]: click this icon, the channel number and alarm input number will

be incremented and set from the current channel number.

[Save]: save the current settings.

[Reset]: restore the last saved parameters.

Advanced Set - > Register Center

Select the "Configuration -> Network - > Advanced Set " tab to set the parameters

of register center interface, as shown in the figure below:

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Register Center interface

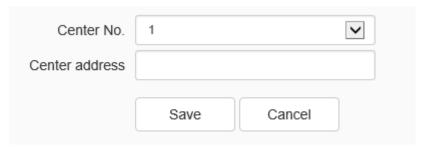
Set the information of [Server name], [Server], [Port], [User name] and [Password].

[Save]: save the current settings;

[Reset]: restore the last saved parameters.

### Advanced Set - > Continuous transmission center

Select the "Configuration -> Network - > Advanced Set " tab to set the parameters of continuous transmission center interface, as shown in the figure below:



Continuous transmission center interface

Set the [center number] and [center address] information of the continuous transmission center.



[Save]: save the current settings;

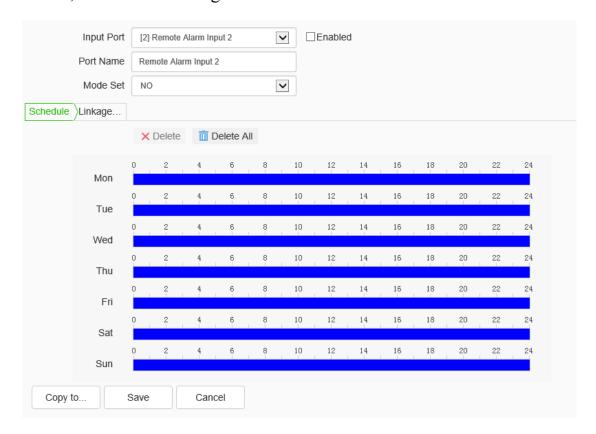
[Reset]: restore the last saved parameters.

## 1.11Event Schedule

# 1.11.1. Event Management

## **Event management - > Event Input**

a) Select the "Configuration -> Event Schedule - > Event Management " tab to set the parameters of event input interface, set the relevant parameters of port alarm detection, as shown in the figure below:



Event input setting interface

b) Select the input port, check the [Enable] check box to enable the port alarm detection

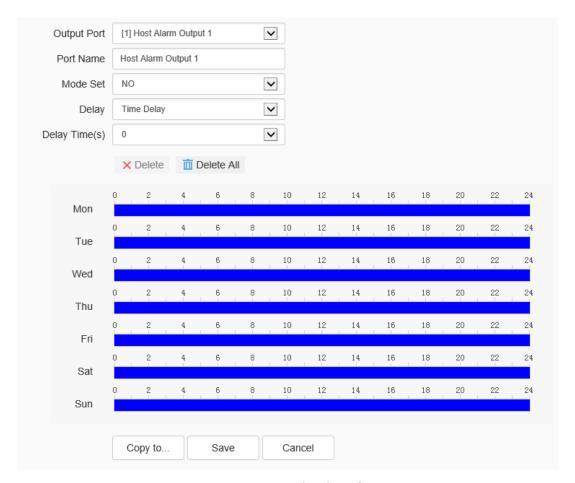
- function, and uncheck to turn off the port alarm detection function.
- c) [Mode Set] set normally open and normally closed, where [NO] refers to the alarm when the disconnected line is short circuited, and [NC] refers to the alarm when the connected line is disconnected.
- d) The user can set the [Schedule] as required, and only detect the alarm within the set date and time period.
- e) Set [Linkage Mode] to realize the alarm linkage after triggering the alarm, such as [Common link], [Alarm Output], [Link Snap], [1 PTZ linkage channel], etc.
- f) Click [Save] to save the corresponding parameter settings, and click [Copy to...] copy the parameters of the current port number to other port numbers. Click [Cancel]o restore the last saved parameter.

**Note:** alarm input and alarm linkage output are limited to products that support alarm input and alarm output functions.

# **Event Management - > Event Output**

Select the "Configuration -> Event Schedule - > Event Management " tab to set the parameters of event output interface, as shown in the figure below:





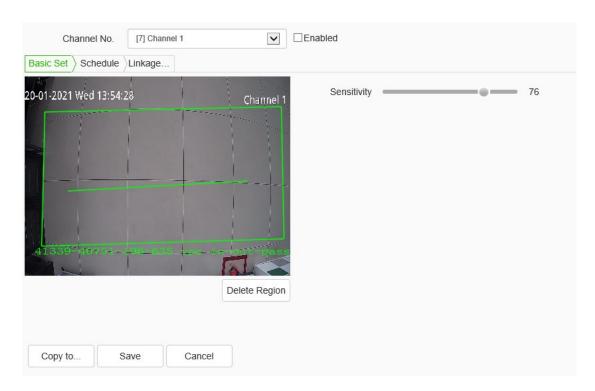
Event output setting interface

The user can select two modes to set: [NO] and [NC]. Select the output port, set the port alias, select the mode setting, and select the alarm elimination mode. You can set the delay time of the alarm state through [Delay Time(s)].

Click [Save] to save the corresponding parameter settings, and click [Copy To...] copy the parameters of the current port number to other port numbers. Click [Cancel] to restore the last saved parameter.

### **Event Management - > Motion**

Select the "Configuration -> Event Schedule - > Event Management " tab to set the parameters of motion interface, as shown in the figure below:



Motion setting interface

The user sets the mobile alarm area. When there is an object moving in the setting area, the video preview interface will prompt the video mobile alarm, and the corresponding alarm linkage will be carried out according to the setting.

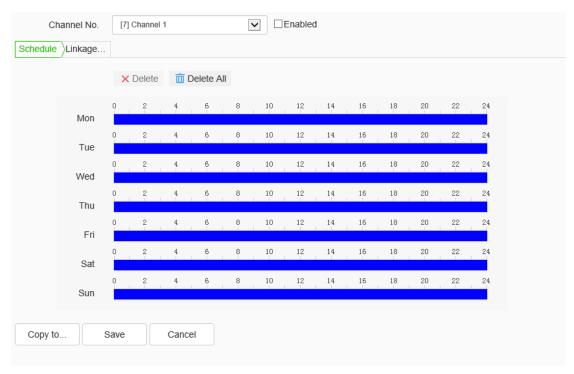
- a) The mobile alarm detection function is enabled by default. Drag the left mouse button in the video screen to draw the area to detect the mobile alarm. Click [Delete Region] to delete the mobile alarm detection area.
- b) Set the mobile alarm sensitivity, the higher the value, the more sensitive the mobile alarm detection.
- c) The user can set the [Schedule] as required, and only detect the alarm within the set date and time period.
- d) Set [Linkage Mode] to realize the alarm linkage after triggering the alarm, such as [Alarm Output], [Linkage Snap], etc.

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e) Click [Save] to save the corresponding parameter settings, and click [Copy To...] copy the parameters of the current port number to other port numbers. Click [Cancel] to restore the last saved parameter.

### **Event Management - > Mask**

Select the "Configuration -> Event Schedule - > Event Management " tab to set the parameters of mask interface, as shown in the figure below:



Mask setting interface

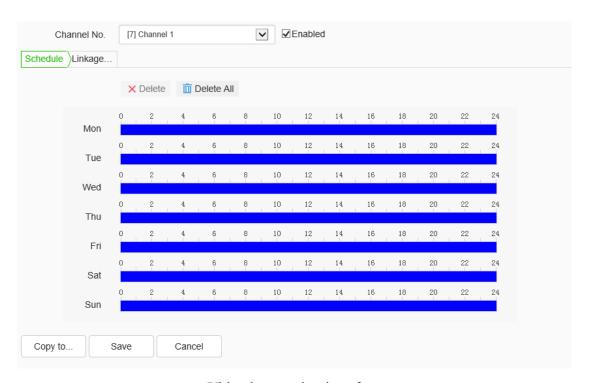
After the occlusion alarm is turned on, when the image in the video screen is blocked, the alarm situation will be detected according to the sensitivity.

- a) Check the [Enable] check box to turn on the video blocking alarm detection function, and uncheck to turn off the video blocking alarm detection function.
- b) Set the video occlusion alarm sensitivity, the higher the value, the more sensitive the

- video occlusion alarm detection.
- c) The user can set the [Schedule] as required, and only detect the alarm within the set date and time period.
- d) Set the [Linkage Mode] to realize the alarm linkage after triggering the alarm, such as [Alarm Output], [Link Snapshot], etc.
- e) Click [Save] to save the corresponding parameter settings, and click [Copy To...] copy the parameters of the current port number to other port numbers. Click [Cancel] to restore the last saved parameter.

## **Event Management - > Video loss**

Select the "Configuration -> Event Schedule - > Event Management " tab to set the parameters of video loss interface, as shown in the figure below:



Video loss setting interface

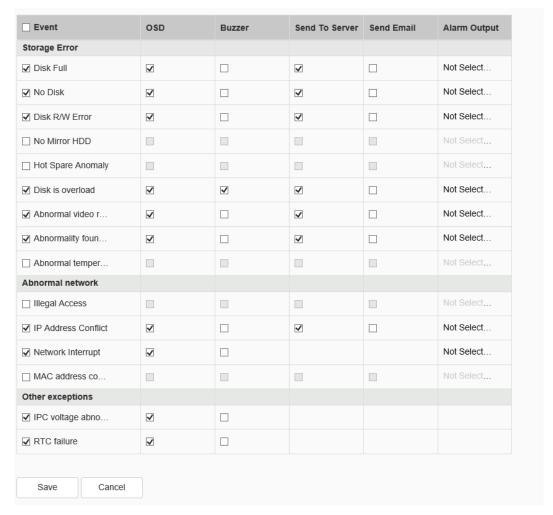


If the video loss alarm is turned on, the alarm will be detected when the image in the video screen is masked.

- a) Check the [Enable] check box to turn on the video loss alarm detection function. If you cancel the check box, the video loss alarm detection function will be turned off.
- b) The user may set the [Deployment time] according to the needs, and the alarm detecting will be carried out only in the set date and time period.
- c) Set the [Linkage type] to realize the alarm linkage after the alarm is activated, such as [Linkage output], [Linkage snapshot], [Linkage video], etc.
- d) Click [Save] to save the corresponding parameter settings, and click [Copy] to copy the parameters of the current port number to other port numbers. Click [Reset] to restore the last saved parameter.

## **Event Management - > Other Alarms**

Select the "Configuration -> Event Schedule - > Event Management " tab to set the parameters of other alarms interface, as shown in the figure below:



Other alarm setting interface

The device supports abnormal alarm. Exception types support "storage abnormality", "network abnormality", "other abnormality", etc. The linkage modes including [Screen display], [Sound prompt], [Upload center], [Send mail]can be set and the alarm output port number in [Linkage output] can be selected.

Storage abnormality include [Disk full], [Disk read / write error], [Video recording abnormality], etc.

Network abnormality include [IP address conflict] and [Network disconnected].

Other abnormalities include [IPC voltage abnormality], [RTC abnormality], etc.



# 1.11.2. Plan Management

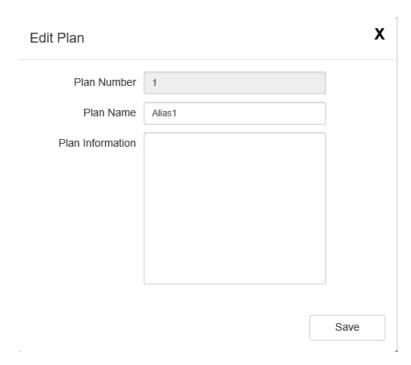
Select the "Configuration -> Event Schedule - > Plan Management " tab to set the parameters of plan management interface, as shown in the figure below:

When the alarm happens, the linkage will be displayed in the preview interface as per the preset linkage plan, and the personnel on duty could deal with it according to the plan prompt, such as calling the police, releasing a notice, or asking for help, etc.

Number	Plan Name	Plan Information	Operation
1	Alias1		Edit
2	Alias2		Edit
3	Alias3		Edit
4	Alias4		Edit
5	Alias5		Edit
6	Alias6		Edit
7	Alias7		Edit
8	Alias8		Edit
9	Alias9		Edit
10	Alias10		Edit
11	Alias11		Edit
12	Alias12		Edit
13	Alias13		Edit
14	Alias14		Edit
15	Alias15		Edit
16	Alias16		Edit

Plan management setting interface

Click the "Edit" icon to edit the name and content of the plan directly, as shown in the figure below.



Edit plan interface

Modify the plan name and plan information as needed, and click the "Save" icon to save the plan information.

## 1.11.3. Manual Alarm

Select the "Configuration -> Event Schedule - > Manual Alarm " tab to set the parameters of manual alarm interface, as shown in the figure below:

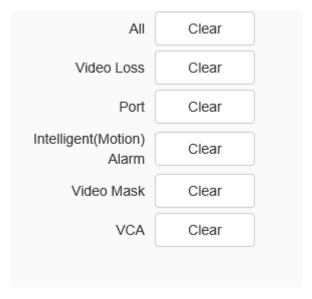
	Channel No.	Port	Port Name	Operation
	[2] Channel 1	1		Activate
	[4] Channel 1	1		Activate
	[4] Channel 1	2		Activate
	[5] Channel 2	1		Activate
	[5] Channel 2	2		Activate
	[7] Channel 1	1		Clear
	[8] Channel 2	1		Activate
	[9] Channel 1	1		Activate
A	Activate Clear			Refresh

Manual Alarm interface

Select an alarm output port, click the "Activate" or "Clear" icon to activate or clear it. The status bar of the alarm output port displays the current status of the port; check multiple alarm output ports, click "Activate" "Or" Clear "to activate or clear all the selected alarm output ports in the list. Click the "Refresh" icon to obtain the current properties and status of the alarm output port.

# 1.11.4. Clear alarm

Select the "Configuration -> Event Schedule - > Clear Alarm " tab to set the parameters of clear alarm interface, as shown in the figure below:



Clear alarm interface

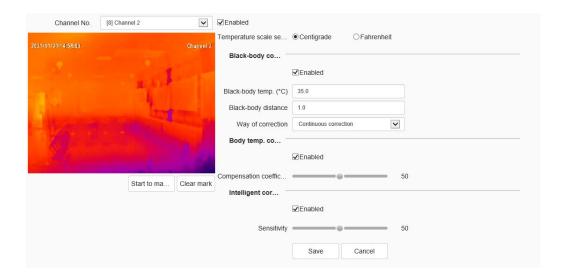
In the manual alarm elimination interface, select the alarm type to be eliminated, and provide six options for users to choose, such as "all", "port alarm", "motion detection", "video loss", "intelligent analysis" and "video covering". Click the corresponding icon to eliminate the alarm of that type.

# 1.12Human Body Temperature Measurement Setting

# 1.12.1. Human Body Temperature Measurement Setting

Select "Configuration -> Human Body Temperature Measurement Setting->
Human Body Temperature Measurement Setting" to enter the human body temperature measurement interface, as shown in the figure below:

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The user sets the temperature scale, black body correction, body temperature conversion, etc. for human body temperature measurement as required

- a) Select the channel to be configured.
- b) Check the [Enable] checkbox to enable the human body temperature measurement function, uncheck it to disable the human body temperature measurement function.
- c) Start marking the black body position and mark the black body position in the video screen for correction.
- d) Set the parameter information of [Temperature Scale Selection], [Black Body Correction], [Body Temperature Conversion], and [Smart Correction] as required.
- e) After the setting is complete, click the [Save] button to save the parameter settings and synchronize them to the front-end equipment. If you need to reset the parameter information, click the [Reset] button to restore the last saved parameters.

## **Notes:**

[Temperature scale selection]: The device supports two temperature scale methods, Celsius and Fahrenheit, and the system defaults to Celsius.

[Black-body correction]: The device supports temperature correction by comparing the temperature with the set constant temperature source (black body). The user can realize this function by setting the parameter information of [Blackbody Temperature], [Blackbody Distance], and [Correction Mode].

[Black-body temp.]: Set the blackbody temperature for easy temperature correction.

[Black-body distance]: The device supports temperature correction within a certain interval. Note: The black body is a constant temperature source, and the distance will cause heat radiation loss. The longer the distance, the greater the loss and the worse the correction effect.

[Way of correction]: The device supports manual correction and continuous correction for temperature calibration.

[Manual correction]: The user clicks the manual correction button to perform a temperature correction.

[Continuous correction]: The device will continuously corrected the temperature.

[Body temp. conversion]: The device supports the conversion of internal body temperature and body surface temperature. The user realizes this function by setting [Compensation Coefficient].

[Compensation coefficient]: The compensation coefficient ranges from 0 to 100, and the compensation coefficient can be set according to the actual environment.

[Intelligent correction]: The device supports big data temperature calibration. The user realizes this function by setting [Sensitivity].

[Sensitivity]: The sensitivity range is  $0\sim100$ , and the sensitivity range can be set

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according to the actual environment.

**Note:** After the setting is completed, click the [Save] button to make the parameter settings effective. If you need to reset the parameter information, click the [Reset] button to restore the last saved parameters.

# 1.12.2. Alarm On Unacceptable Body Temp.

Select "Configuration -> Human Body Temperature Measurement Setting-> Human Body Temperature Measurement Setting" to enter the "alarm on unacceptable body temp." interface, as shown in the figure below:



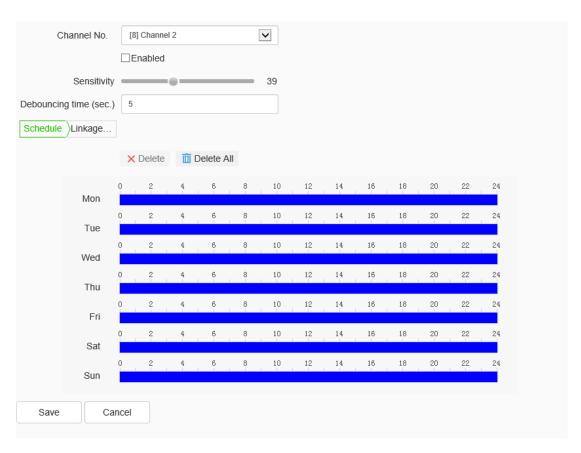
Alarm on unacceptable body temp.

- a) Select the channel to be configured, and tick [Enable] to enable the abnormal temperature alarm.
- b) In the [Basic Settings], set the [Upper Limit of Body Temperature]. After the upper limit of body temperature is exceeded, an alarm will be activated.
- c) In the [arming time], set the detection time period.
- d) In [Linkage Mode], set up sound linkage, front end white light linkage, front end sound linkage, linkage output, linkage capture, PTZ linkage, etc.

e) Click the [Save] button to save the parameter settings and synchronize to the frontend equipment. Click the [Reset] button to restore the last saved parameters.

# 1.12.3. Black Body Abnormity Alarm

Select "Configuration -> Human Body Temperature Measurement Setting-> Human Body Temperature Measurement Setting" to enter the "Black body abnormity alarm" interface, as shown in the figure below:



Black body abnormity alarm interface

- a) Select the channel to be configured, and tick [Enable] to enable the black body abnormal alarm.
- b) Set the detection sensitivity, the higher the sensitivity, the more sensitive.

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- c) Set the debounce time, in order to reduce false alarms caused by black body shaking, set the interval to alarm at this time, support 0-100 seconds.
- d) In the [arming time], set the detection time period.
- e) In [Linkage Mode], set up sound linkage, front end white light linkage, front end sound linkage, linkage output, linkage capture, PTZ linkage, etc.
- f) Click the [Save] button to save the parameter settings and synchronize to the frontend equipment. Click the [Reset] button to restore the last saved parameters.

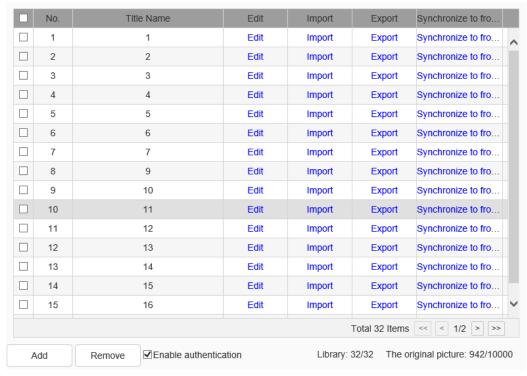
### 1.13VCA

# 1.13.1. Face Library

The function of face library management is used to manage face base image in groups. The table shows the existing face library. The operations including the import& export, sync to front end can bedone at WEB client. As well, the operations including query, import& export and deletion can be done to the base images in the face library.

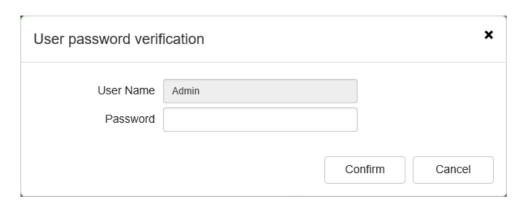
## Face library -> Management of face library

Select the "Configuration -> VCA - > Face Library " tab to set the parameters of managements of face library interface, as shown in the figure below:



Management of face library interface

Check "User password verification". Before operating the face library, ID verification is required, as shown in the figure below, input the correct user name and password to proceed to the next step. And only administrator is allowed to operate the face library.



User password verification interface

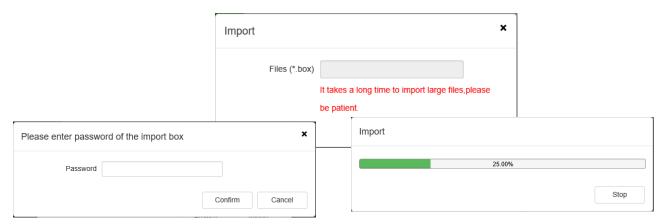
Click "Edit" to display a prompt box where you can modify the name and description of the face database, and after this, click the "OK" button to confirm your operations. As shown in the figure below.





Face library editing interface

In the face database list, click [Import] to import a box file containing the face database. Note that the format of the imported file is. Box, and the password of the box-format file is needed when importing. As shown in the figure below.



Import face library interface

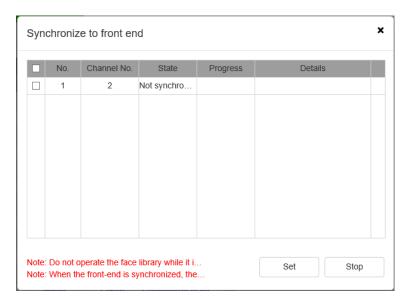
In the face database list, click [Export] to export a box file containing the face database. Set the password of the box-format file to import the file into the computer disk. As shown in the figure below.



Export face library interface

The face database in the NVR can be synchronized to the selected IPC channel.

The interface is shown in the figure below:



Synchronize to Front End interface

Click the "Create" button to display a prompt box, where you can add the name and description of the face database. And after this, click the "OK" button to confirm your operations. The interface is shown in the figure below:



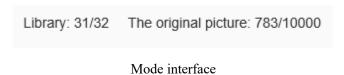
Adding face library interface

Select the face database to delete from the face database list, and click [Delete] to delete it. The interface is shown in the figure below:



Delete interface

Click the "Model All" button to model all the base images in the database. The interface is shown in the figure below:

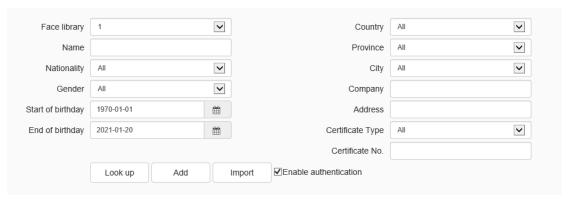


# Face library -> Face library management

Select the "Configuration -> VCA - > Face Library " tab to set the parameters of face library management interface, as shown in the figure below:

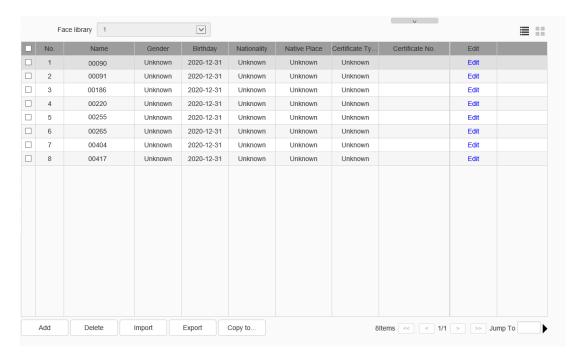
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Face library management interface

In the chart is the existing face library and the images are the underlays of the selected face library, as shown in the figure below.

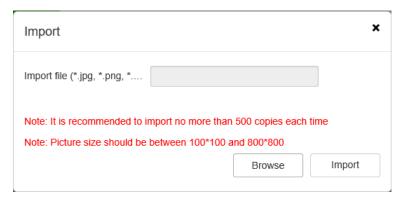


Face library interface

You can select images from mobile devices such as USB flash drive and then find the corresponding base images in the face database.

You can select images from mobile devices such as USB flash drive and add them to the face database. If a folder is selected, you can add the images in the folder meeting the criteria, as shown in the figure below.



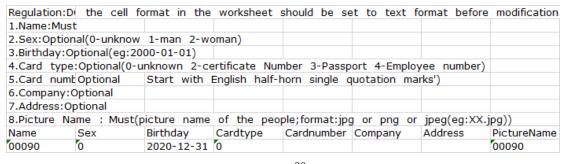


Management of face library-import interface

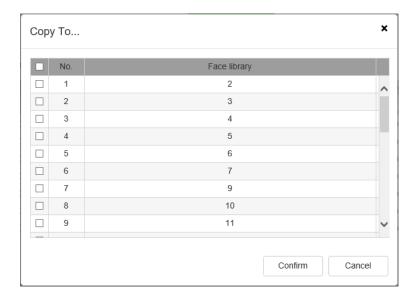
After the completion of the importing, a prompt box will pop up, as shown in the figure below:



After the completion of the query, click the "export" icon to export the pictures and their information. The picture information is shown as follows:



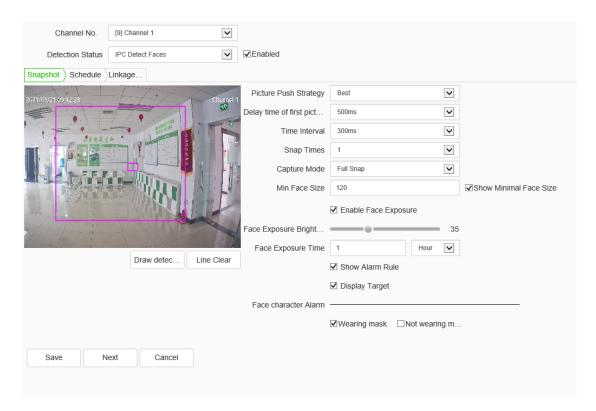
Click the "copy to ..." button to selected base image can be copied to other face databases. As shown in the figure below.



# 1.13.2. Face Configuration

# Face configuration->Face detection

1. Select "configuration->VCA->Face Configuration" to enter face detection interface, as shown in figure below:

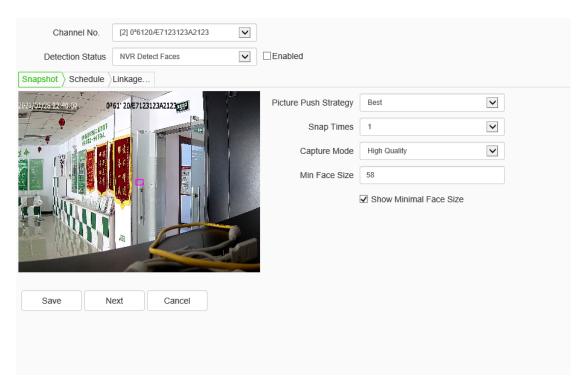


Face detection interface

2. Select the algorithm type of face detection, and choose to enable IPC detection /NVR detection.

IPC detection means that the snapshot camera is connected to the front-end for face detection and capture, and NVR detection refers to the face detection and capture by the NVR.

NVR detection is shown in the figure below:



Face detection interface

- 3.Set the snapshot parameters.
- a) Draw face detection area: The detection area can be set on the screen during IPC detection.

Push policy: including optimal policy and fastest policy. "Optimal Policy" is the clearest picture of a person captured from his entrance to departure. The "Fastest Policy" is to snap a picture immediately when detecting a face

Number of snapshots: The number of snapshots taken when a face is detected. 1, 2 or 3 can be set.

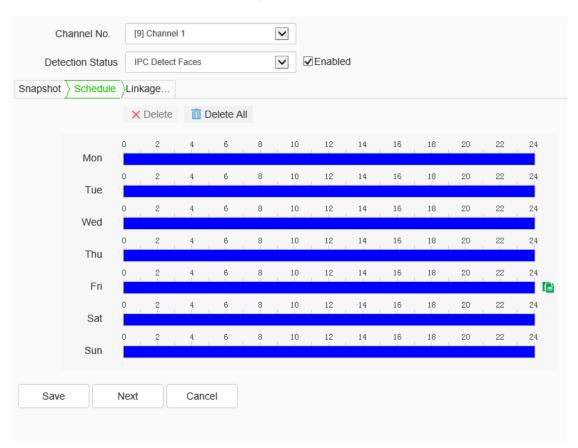
Snapshot mode: full snapshot mode, high quality mode and custom mode.

"Full snapshot mode" means that all images are sent to the push module by default without security boundary control and filtering by security boundary threshold.

"High quality mode" refers to filtering by security boundary threshold configured for the system by default and sending the filtered results into the push module.

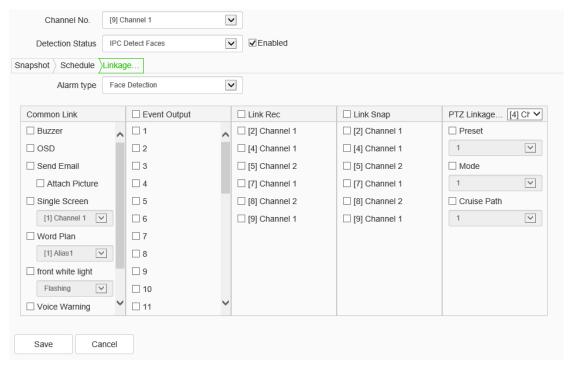
"Custom mode" refers to filtering by security boundary value set by the user, and sending the filtered results into the push module.

- b) Set the maximum and minimum face size to represent the percentage of the target width on the screen.
- c) Set the sensitivity. The larger the value is, the higher the sensitivity is. The increased detection rate will increase the error detection.
  - 4. Set the schedule, as shown in figure below.



Face detection-schedule interface

5. Set linkage mode. Set the local alarm linkages for NVR detection. Options include voice prompt, screen display, linkage video, linkage alarm output, linkage PTZ, linkage snapshot, etc. as shown in figure below:



Face detection -Linkage mode interface

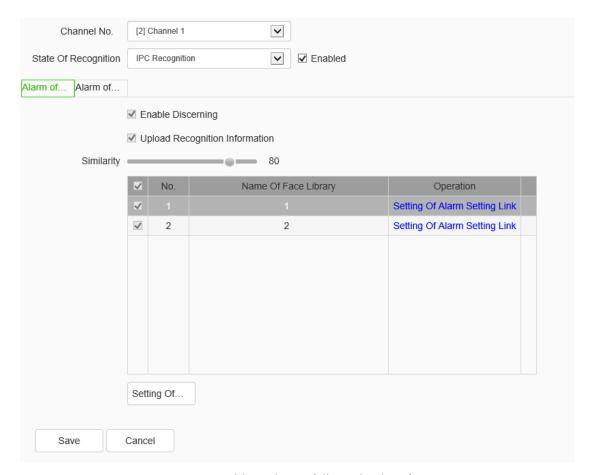
6. Click the [Save] button to save the settings. Click [Cancel] will cause the parameters to be restored.

## Face configuration->Face Recognition

- 1. Select "configuration->VCA->Face Configuration" to enter face recognition interface to realizes the functions of comparison alarm, stranger alarm, frequency alarm and detention alarm, etc.
- 2.Select the algorithm type for face recognition, and choose to enable IPC Recognition/NVR recognition.

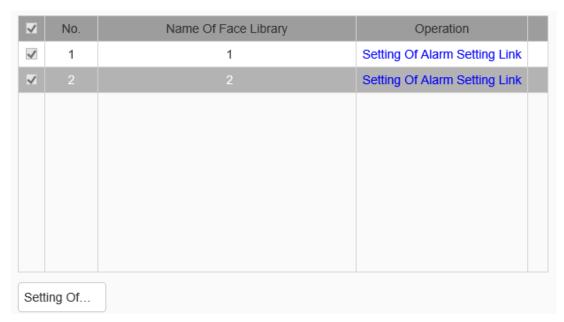
For IPC recognition, the front end is connected to the recognition camera, which is used to identify and compare the captured face, while NVR recognition refers to the recognition and comparison of the captured face.

3. Alarm of Discerning: Select the "Alarm of Discerning" tab to set the parameters of the alarm of Discerning, as shown in the figure below:



Face recognition-Alarm of discerning interface

- a) Enable discerning. Enable/disable the stay alarm function of the current channel.
- b) Upload recognition information. Enable/disable the upload recognition information.
- c) Similarity. Set the similarity. The larger the value is, the more similar it will be.
- d) In the face library table, select the face library, and click [Deployment linkage settings] to pop up the prompt box of the deployment linkage settings of the face database. If the face library is not selected, the status of [Deployment linkage settings] is gray, and the setting cannot be done, as shown in the following figure:



Comparison alarm-arming linkage setting page

e) Click the [Deployment linkage setting] icon to pop up the deployment linkage setting window. Alarm linkage sound prompt, screen display, linkage local voice broadcast, linkage alarm output, linkage video, linkage snapshot, linkage PTZ, etc can be set. As shown in the figure below:

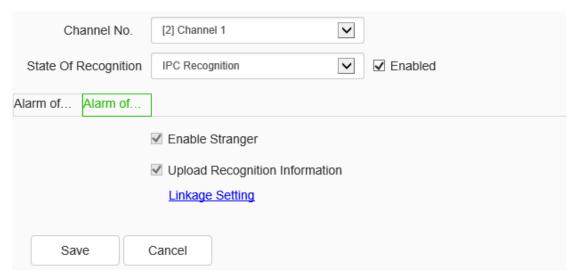


Deployment linkage settings - linkage mode page

- (6) Click the icon [OK] to save the data. The data is saved only for temporary, and the user need to return to the face recognition interface and click [Save] to enable it.
  - 4. Alarm of Stranger: Select the "Alarm of Stranger" tab to set the parameters of

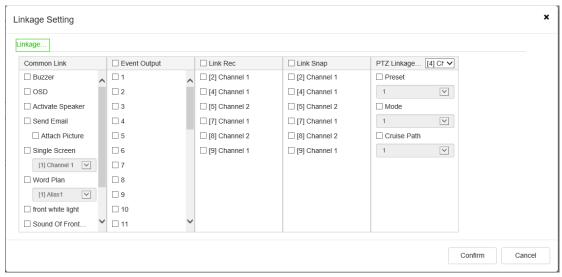


the alarm of stranger, as shown in the figure below:



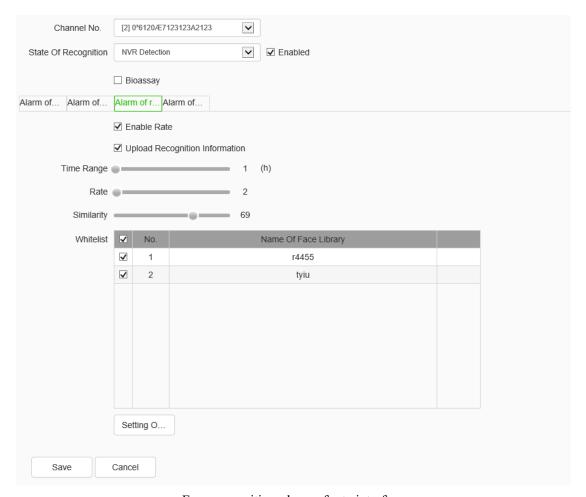
Face recognition-alarm of stranger interface

- a) Enable discerning. Enable/disable the stay alarm function of the current channel.
- b) Upload recognition information. Enable/disable the upload recognition information.
- c) Click Linkage Setting to set the arming linkage parameters of the stranger alarm.



Linkage setting interface

- d) Click the icon [OK] to save the data. The data is saved only for temporary, and the user need to return to the face recognition interface and click [Save] to enable it.
- 5. Alarm of Rate: Select the "Alarm of Rate" tab to set the parameters of the alarm of rate, as shown in the figure below:



Face recognition-alarm of rate interface

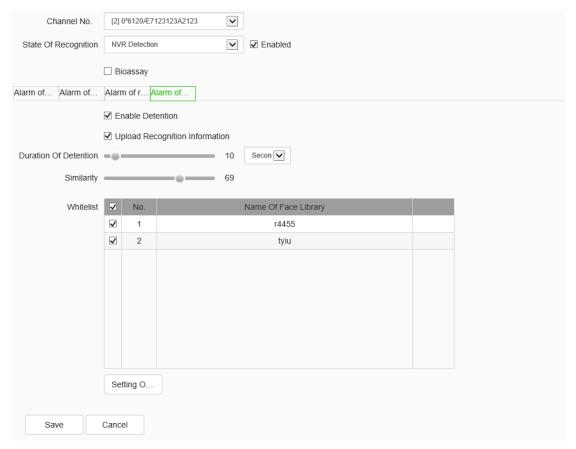
- a) Enable detention. Enable/disable the alarm of detention function of the current channel.
- b) Upload recognition information. Enable/disable the upload identification information.
- c) Similarity. Set the similarity. The larger the value is, the more similar it will be.
- d) Time range, the range of the time is from 1-24 hours.
- e) Stay time. Set the range of stay time from 1 to 99, in minutes and seconds.
- f) When the whitelist is checked, the alarm of detention will not be triggered.
- g) Click linkage setting to set the deployment linkage parameters of frequency alarm.

  The interface is in line with the comparison alarm.



h) Click the icon [OK] to save the data. The data is saved only for temporary, and the user need to return to the face recognition interface and click [Save] to enable it.

6.Alarm of detention: Select the "Alarm of detention" tab to set the parameters of detention alarm, as shown in the figure below:



Face recognition-Alarm of detention interface

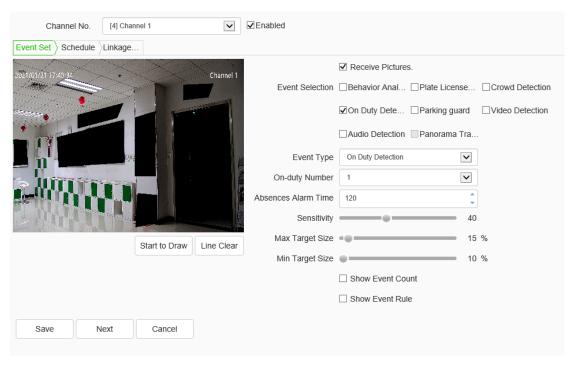
- a) Enable detention. Enable/disable the alarm of detention function of the current channel.
- b) Upload recognition information. Enable/disable the upload identification information.
- c) Similarity. Set the similarity. The larger the value is, the more similar it will be.
- d) Stay time. Set the range of stay time from 1 to 99, in minutes and seconds.
- e) When the whitelist is checked, the alarm of detention will not be triggered.

- f) Click "Setting of alarm setting link" to set the arming linkage parameters of the alarm of detention.
- g) Click the icon [OK] to save the data. The data is saved only for temporary, and the user need to return to the face recognition interface and click [Save] to enable it.

## 1.13.3. Create Rules

Select the "Configuration -> VCA - > create rules" tab to set the parameters of create rules interface, as shown in the figure below:

Among them, the event type of behavior analysis changes dynamically according to the algorithm supported by the front end.



Create rules interface

### **Create Rule->Event Set**

[Enable]: enables or disables the intelligent analysis function of the current channel.

Remarks: When the intelligent analysis is enabled, the tracking ball camera will



automatically scan horizontally for one cycle to correct the azimuth, so as to improve the tracking accuracy.

[Receive picture]: when this function is enabled, the picture shot by the front-end device will be received.

[Event set]: the device supports a variety of algorithms, such as behavior analysis, crowd aggregation, face detection, number of people statistics, and on duty detection, which are mutually exclusive. Only one of them can be enabled. Some devices support face detection, population statistics, on duty detection algorithm, video diagnosis, audio anomaly detection, etc.

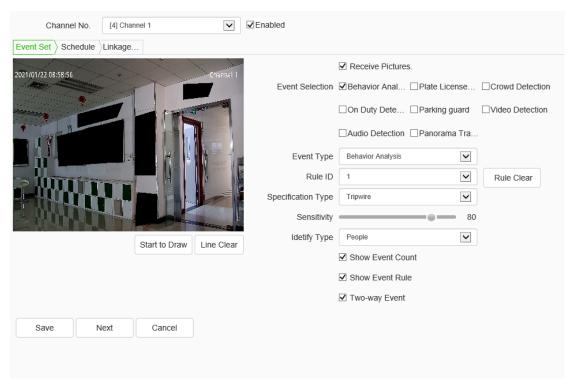
### **Description:**

- a) Different models support different algorithms. Please refer to the actual interface.
- b) Some algorithms are mutually exclusive with others. Other algorithms can be enabled simultaneously. Please refer to the actual interface.
- c) Select the corresponding algorithm in [event type] and set the parameters of the algorithm.

#### **Event Set -> Behavior Analysis**

[Behavior Analysis]: the algorithm includes 10 specific algorithms, including trip line, double trip line, perimeter, item left behind, item lost, wandering, running, parking, alert, heat map. Specifically, the front-end device algorithm has the priority.

### **Behavior Analysis -> Tripwire**

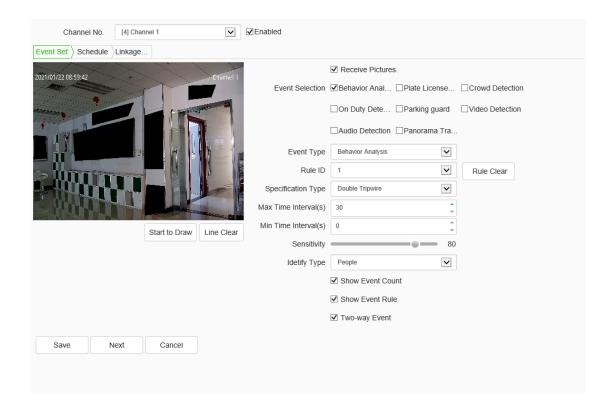


Tripwire setting interface

- a) Select the rule number, set the event as trip wire, and check [Enable] to enable the rule.
- b) Draw a rule line, and indicate the direction in which it is forbidden to cross with the arrows on the rule line.
- c) Set whether to display alarm statistics, display alarm rules, two-way alarm and display target.
- d) Click save after setting.

**Behavior Analysis -> Double Tripwire** 

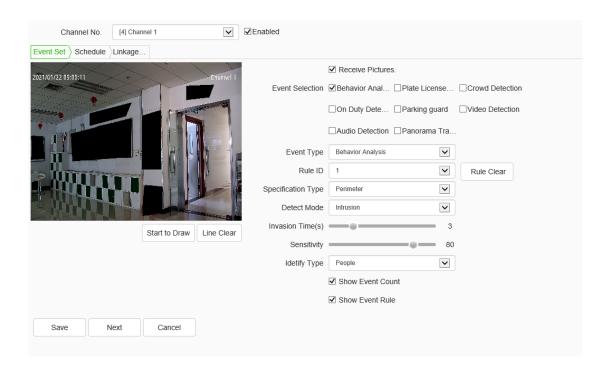




Double tripwire setting interface

- a) Select the rule number, set the event as double trip wire, and check [Enable] to enable the rule.
- b) Draw 2 rule lines, and indicate the direction in which it is forbidden to cross with the arrows on the rule line. The directions of the 2 rule lines should be the same. An alarm will be issued when crossing two lines continuously within the specified time.
- c) Set the maximum and minimum time intervals, which means the time range of crossing two rule lines consecutively.
- d) Set whether to display alarm statistics, display alarm rules, two-way alarm and display target.
- e) Click save after setting.

### **Behavior Analysis -> Perimeter**

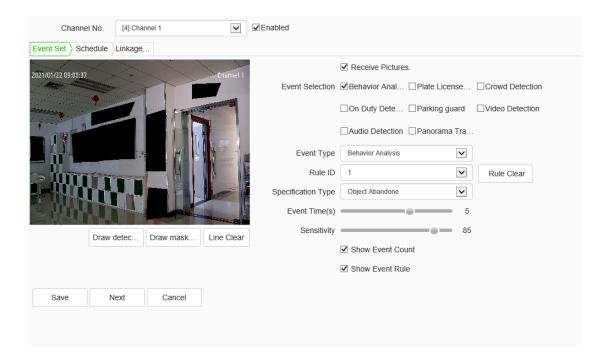


### Perimeter setting interface

- a) Select the rule number, set the event as the perimeter, and check [Enable] to enable the rule.
- b) Draw the perimeter detection area.
- c) Select the detection mode. In entry mode, an alarm will be triggered in the area where the target entered; in leaving mode, an alarm will be triggered in the area where the target left; in intrusion mode, an alarm will be triggered when the target is kept in the detection area for the time specified for intrusion.
- d) Set the intrusion time, which means that an alarm will be triggered when the target is kept in the detection area for the time specified.
- e) Click save after setting.

### **Behavior Analysis ->Object Abandone**

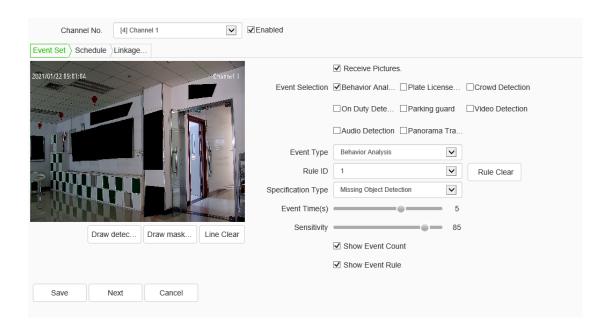




Object abandone setting interface

- a) Select the rule number, set the event as item left, and check [Enable] to enable the rule.
- b) Draw the item left detection area. When the item left and item lost are enabled simultaneously, the detection areas should not overlap.
- c) Set the alarm time: indicate that an alarm will be triggered when the target is kept in the left state in the picture for the time specified.
- d) Click save after setting.

### **Behavior Analysis -> Missing Objet Detection**

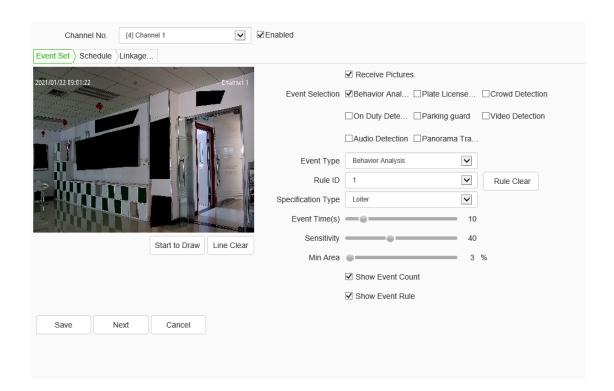


Missing objet detection setting interface

- a) Select the rule number, set the event as item lost, and check [Enable] to enable the rule.
- b) Draw the item left detection area. When the item lost and item left are enabled simultaneously, the detection areas should not overlap.
- c) Set the alarm time: indicate that an alarm will be triggered when the target is kept in the lost state in the picture for the time specified.
- d) Click save after setting.

### **Behavior Analysis -> Loiter**

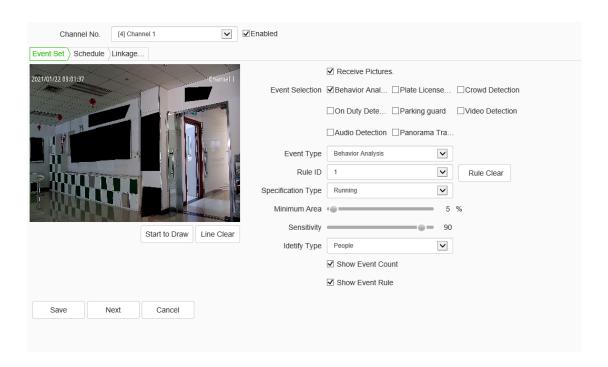




#### Loiter setting interface

- a) Select the rule number, set the event as wandering, and check [Enable] to enable the rule.
- b) Draw a wandering detection area.
- c) Set the alarm time: indicate that an alarm will be triggered when the target is kept in the wandering state in the picture for the time specified.
- d) Set the minimum area to indicate that the target's moving range (area percentage) in the detection area will trigger the alarm when the area is reached.
- e) Set the sensitivity. The larger the value is, the more sensitive it is.
- f) Click save after setting.

### Behavior Analysis -> Running



Running setting interface

- a) Select the rule number, set the event as running, and check [Enable] to enable the rule.
- b) Draw a running detection area.
- speed (area percentage / second) in the screen is greater than the speed, and then it enters the running state.
- d) Click save after setting.

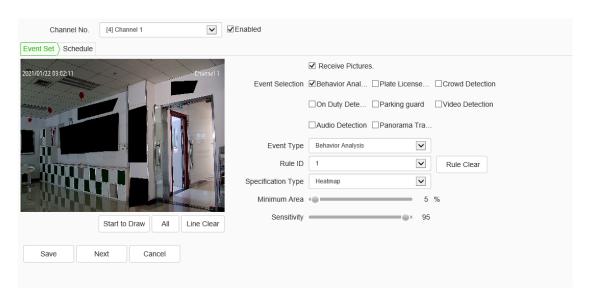
#### Behavior Analysis -> Parking

- a) Select the rule number, set the event as parking, and check [Enable] to enable the rule.
- b) Draw the parking detection area.
- c) Set the alarm time: indicate that an alarm will be triggered when the target is kept in the parking state in the picture for the time specified.



- d) Set the speed threshold to indicate that the target will enter the parking state when the moving speed (percentage / second) in the screen is less than the speed.
- e) Click save after setting.

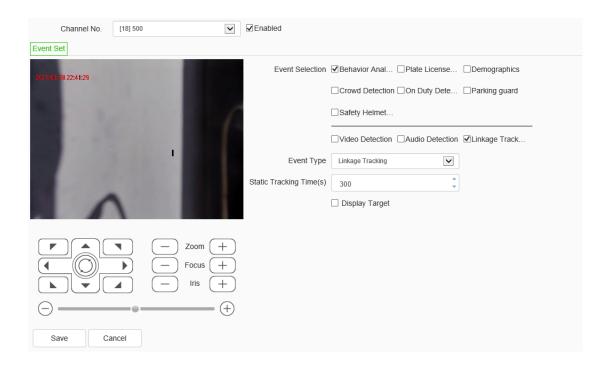
### **Behavior Analysis -> Heatmap**



Heatmap setting interface

- a) Select the rule number, set the event as the heat map, and select valid to enable the rule.
- b) Draw the detection area of heat map.
- c) Set the minimum moving distance per second, which means that the target's moving speed (area percentage / second) in the screen is greater than the speed, and then it enters the running state.
- d) Set whether to display alarm statistics, display alarm rules, two-way alarm and display target.
- e) Click save after setting.

#### Behavior Analysis ->Linkage tracking



Linkage tracking interface

- triggers the behavior analysis alarm, it will follow the tracking action. Select the behavior analysis and intelligent tracking in the algorithm configuration and then set the corresponding settings; the behavior analysis setting is the same as above and the intelligent tracking setting is as following.
- b) Set the longest tracking time (second): it indicates the duration of the dome camera for tracking the target and the default longest time is 300 seconds. When set to 0s, the dome camera keeps tracking until the target disappears.
- of the target in the screen by adjusting the ratio. During the tracking, the target will be tracked according to the ratio. Click tracking ratio setting to save the setting.
- d) Set whether to display the target or not.

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e) After clicking the save button, click the next step, and it will link to the alarm setting interface.

### **Behavior Analysis -> Plate License Recognition**

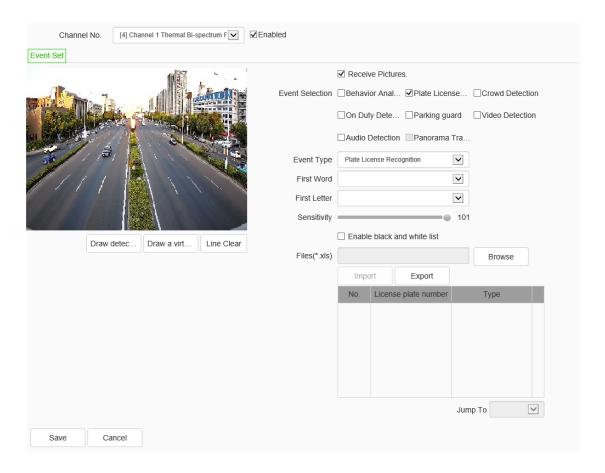
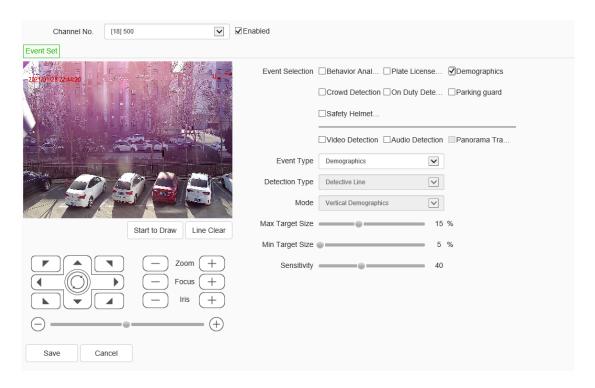


Plate license recognition setting interface

- a) Draw the recognition area; press the left mouse button and draw a rectangular area, which indicates the area where the target license plate may appear on the screen.
- b) Draw a virtual coil, which means to take a snapshot when the moving target is triggered.
- c) Set the first Chinese character and the first letter of priority recognition.
- d) Select the license plate size according to the actual needs.
- e) After clicking save, click next and it will link to the alarm setting interface.

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### **Event Set -> Demographics**



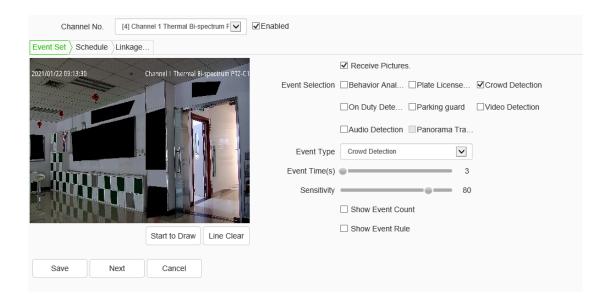
Demographics interface

- a) Draw People counting area, double click to finish.
- b) Draw counting line, it will detect in or out.
- c) Setup Max and Min target size, the size means target width compare to screen width.
- d) Setup sensitivity, the bigger value relate to higher sensitivity.

Note: Only vertical statistics are supported.

### **Event Set -> Crowed Detection**





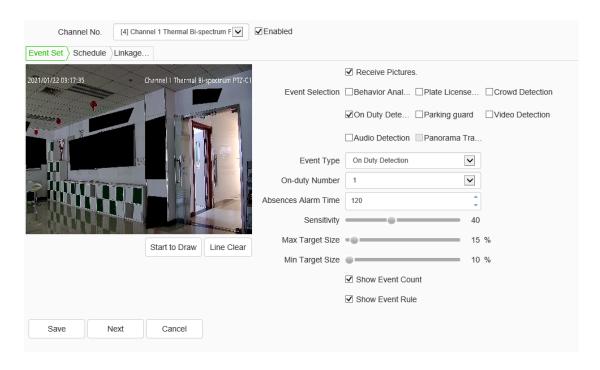
Crowed detection interface

- a) Draw the crowd gathering detection area.
- b) Set the alarm time, which indicates that the alarm will be triggered after the alarm status continues to reach this time specified.
- c) Click save after setting.

**Note:** The alarm will occur when the intensity of moving targets in the detection area exceeds the set value

Sensitivity represents the proportion of moving targets in the area of detection area.

### **Event Set -> On duty detection**

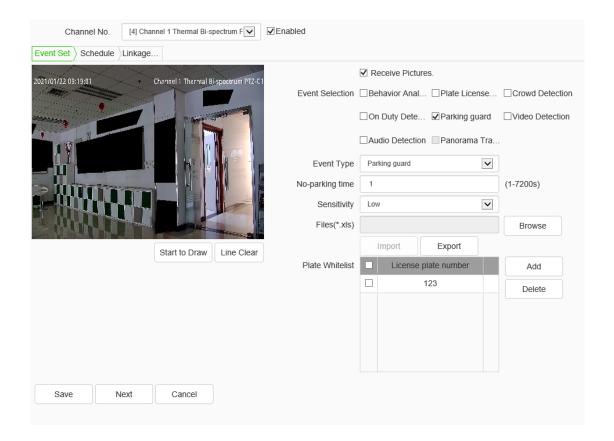


On duty detection interface

- a) Draw duty detection area.
- b) Setup the number of duty.
- c) Setup alarm time, alarm when the pertion keep leaving to this alarm time.
- d) Setup sensitivity, the bigger value relate to higher sensitivity.
- e) Setup Max and Min target size, the size means target width compare to screen width.

### **Event Set -> Parking Guard**

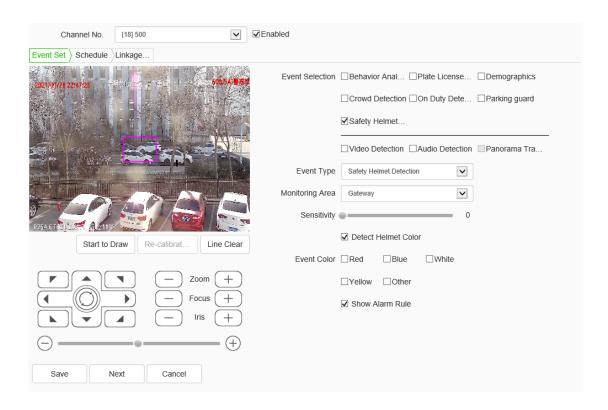




Parking guard interface

- left mouse button to set the drawing area, and right click to finish the area marking. In the drawing area, adjust the zoom and the position of the ball camera to adjust the license plate to about 1/10 of the width of the picture, and the more positive t the license plate angle is, the better picture effect would be.
- b) Set the no stop time, which means that if target kept in the no stopping area reached preset time, an alarm will be triggered.
- c) Set the sensitivity, which can be set to [Low], [Medium], and [High].
- d) Add whitelist license plates.
- e) After clicking save, click next and it will link to the alarm setting interface.

#### **Event Set -> Safety Helmet Detection**



Safety helmet detection interface

- a) Adjust to the appropriate monitoring scene.
- b) Click the "Draw Detection Area" button to draw the area, click the left mouse button to set the drawing area, and click the right mouse button to end the area drawing.
- c) Adjust the doubling and direction, draw the calibration frame in the middle of the picture, and make the calibration frame surround the head and shoulder part of the detection target.
- d) You can choose whether to detect the helmet color. If so, check the color of the helmet that needs alarm. When someone wears the helmet of that color, it will trigger the alarm.
- e) Check the display rule.
- f) Click next to set the deployment time and linkage mode.

Note: when the illumination is low, it will affect the recognition rate of the



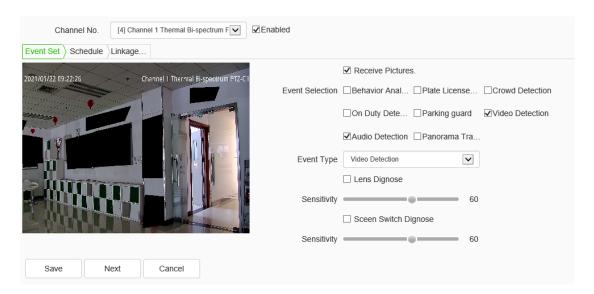
algorithm. Please keep the illumination of the application site. In black and white mode, the algorithm will be turned off automatically.

#### **Event Set -> Witness Protection**

Recommended Requirements scene: The camera is on the witness, the witness is in the middle of the screen, and the witness accounts for about 1/3 of the screen, it is recommended to build a good scene can look after configuration.

- a) Enable sound becomes witness, the witness can be changed voice sound change the sound range from 0 to 100 corresponding to the process of change from female to male voice.
- b) Enable witness occlusion, can the witness privacy masking, sensitivity setting face detection sensitivity, the greater the sensitivity value, the more sensitive face detection; Fuzzy set mosaic blue extent level, the greater the blur level, the greater the area of a single mosaic, the more blurred video.
- c) Setting the detection area to enable witnesses to be drawn up after occlusion detection area. The camera will detect human faces and occlusion witnesses regional drawing range in the detection area according to actual needs.
- d) Face calibration, close to the outer contour of the face frame calibration, after calibration camera face detection in the detection region, only obscured the mosaic face parts; If not face the calibration settings will not face detection, mosaic blocking the entire detection area.
- e) Clear the area, clear the detection zone drawn.
- f) Click save settings to take effect.

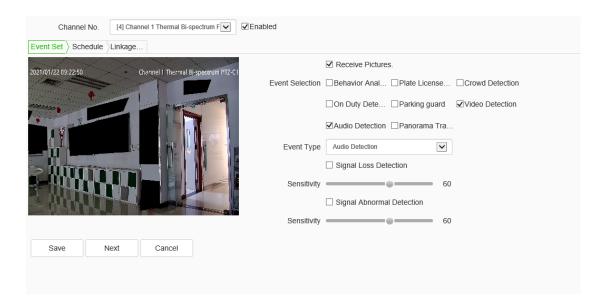
#### **Event Set -> Video Detection**



Video detection setting interface

- a) Set whether to enable virtual focus diagnosis and scene transformation diagnosis.
- b) Set the sensitivity. The larger the value is, the more sensitive it is.
- c) Click save after setting.

### **Event Set -> Audio Detection**

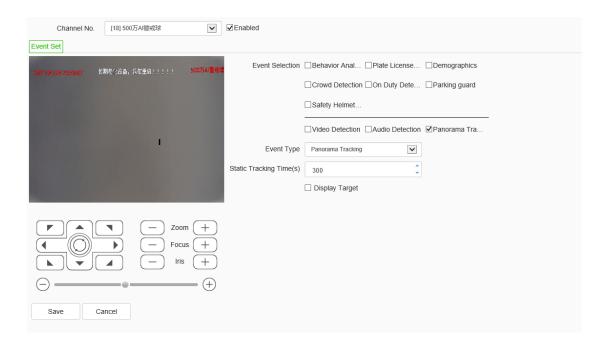


Audio detection setting interface



- a) Set whether to start the signal lost detection and signal abnormity detection.
- b) Set the sensitivity: the higher the value, the higher the sensitivity and the false detection will also increase.
- c) Set the sound intensity threshold: it means when the sound exceeds the set threshold, it is determined as the audio abnormity.
- d) The real time sound volume can display the set sound intensity threshold; when there's an audio signal, it also can display the audio amplitude.
- e) After clicking the save button, click the next step, and it will link to the alarm setting interface.

### **Event Set -> Panorama Tracking**



Panorama tracking setting interface

a) Set the longest tracking time (second): it indicates the duration of the dome camera for tracking the target and the default is 300 seconds. When set to 0s, the dome

- camera keeps tracking until the target disappears.
- b) Set the needed tracking rate manually and confirm a suitable rate of the target on the screen by adjusting the rate. When tracking, it will track the target as per this magnification; click the tracking rate setting button to save the setting.
- c) Set whether to display the target or not.
- d) After clicking to save, then click the next step to enter the cruise mode settings.

### Create Rule ->Schedule



Schedule setting interface

Set the effective time of the rule. By default, it is 24 hours a day. Click the blue bar to modify the deployment time,

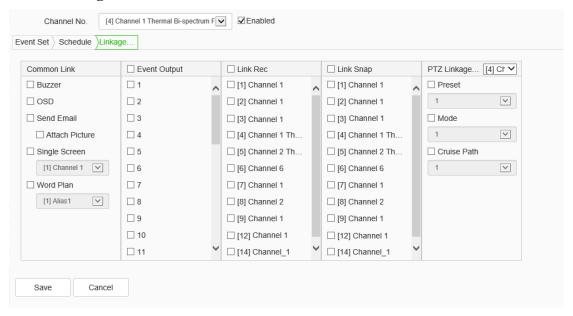
Click the green "Copy to "button on the right to select the day of the week and then click [Save].

Click [Next] to enter [Linkage Mode] setting.



Click [Cancel] to restore the last saved parameter.

### Create Rule >Linkage mode



Linkage mode setting interface

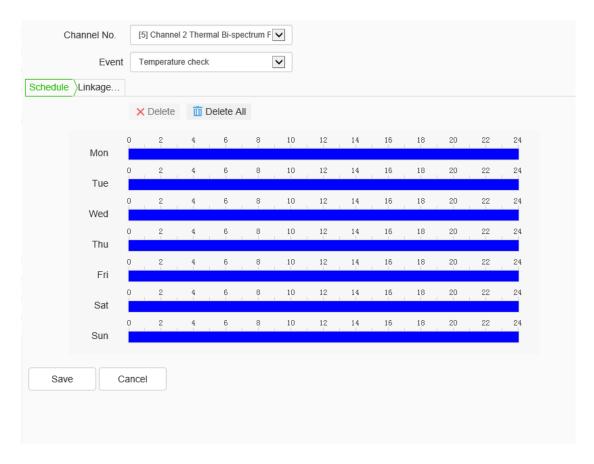
Set the alarm linkage function when the alarm occurs. For example: [Alarm Output], [Link Rec], [Linkage Snap], and etc.

Click [Save] to save the parameter settings.

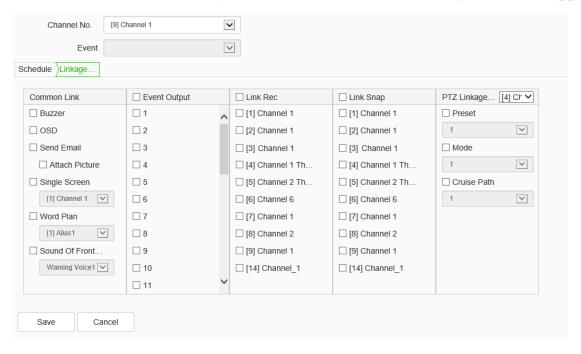
Click [Cancel] to restore the last saved parameter.

## 1.13.4. Coordinated Intelligence

1. Enter "Configuration-> VCA -> coordinated intelligence" to enter the page of coordinated intelligence, as shown in the figure below. 7 ★24 hours user-defined alarm period is supported.



2. Set the linkage setting. Local linkages such as linked sound reminder, screen display, send email, linked single image, linked video record, linked snapshot, etc. are supported. As well, front end linkages such as sound, laser, white light, etc. are supported.



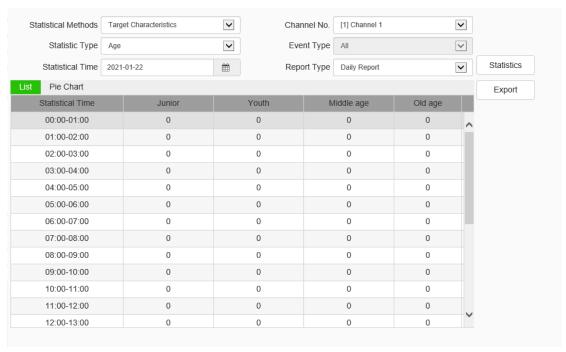


## **1.13.5. VCA Report**

### **VCA Report->Face Statistics**

Select "Configuration -> VCA->VCA Report" to enter the face statistics interface, as shown in the figure below:

### **Face statistics->Target Characteristics**



Face statistics-target characteristics setting interface

This interface is used for statistics and exporting face images. (If using statistical function, the camera should install micro SD card.)

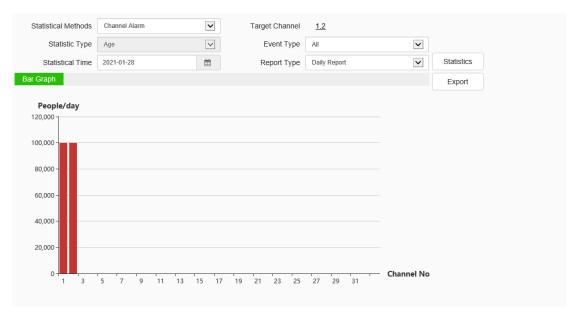
The equipment supports various statistical types including age, gender, number of people, wearing glasses, wearing masks, etc.

After setting up statistic parameters, click the [Statistics] button to start statistics. Point [list] and [pie chart] switch the statistics result. Point the [Export] button to export the statistics from the camera.

By setting the [Condition], click [Statistics] to display the statistics result in the

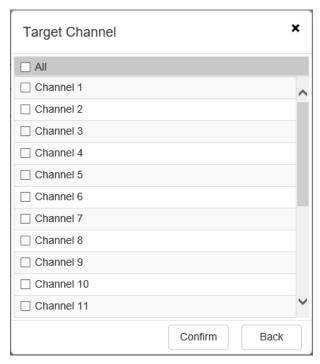
column [Result]. Click [Export] to save the statistical data (.xls) in the local. (Some models support this function).

#### **Face statistics->Channel Alarm**



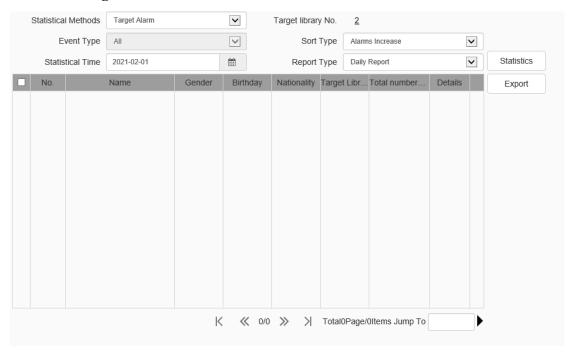
Face statistics->Channel Alarm setting interface

The device supports various event types including face detection, comparison alarm, stranger alarm, etc. After the target channel to be counted (as shown in the figure below) and the statistics information are set, click "Count" to form person-times report. Click "export "to export the statistical results from the device to the computer disk.



Channel alarm-target channel setting interface

### Face Statistics -> Target alarm



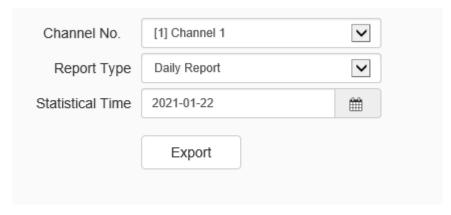
Target alarm setting interface

The device supports counting according to target alarm mode, and can sort the results by the increasing or decreasing of the number of alarms. Click" Count" to form the corresponding report. Click "export" to export the statistical results from the device

to the computer disk.

### **VCA Report->People Counting**

Select "Configuration -> VCA->VCA Report" to enter the people counting interface, as shown in the figure below:



People counting setting interface

This interface is used to export passenger flow statistics data. Click "export" to export the statistical results from the device to the computer disk.

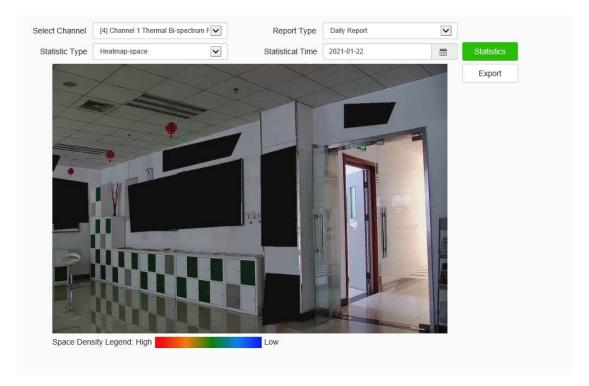
The export effect is shown in the figure below:

Date	Channel	In	Out
2020/1/22	7	7	2
2020/1/22	7	0	0
2020/1/22	7	3	4
2020/1/22	7	0	0
2020/1/22	7	0	0
2020/1/22	7	0	0

### **VCA Report -> Heat map statistics**

Select "Configuration -> VCA->VCA Report" to enter the heat map statistics interface, as shown in the figure below:



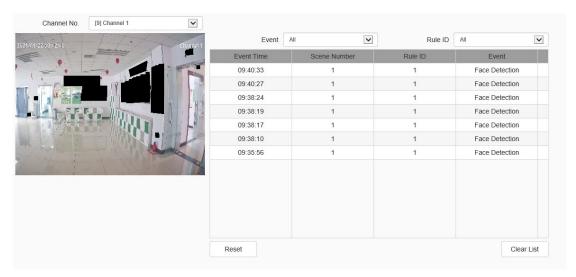


Heat map statistics interface

Select channel number, report type and counting time, and click" Count" to carry out the statistics by heat map by space or time, and display the map or line chart. Click" export" to export corresponding maps or reports.

## 1.13.6. Online VCA Log

Select "Configuration -> VCA->Online VCA Log" to enter the heat map statistics interface, as shown in the figure below:



Online VCA log setting interface

The device support the checking of real-time alarm information of all channels from WEB client. The relevant parameters are as follows:

[Event]: check certain or all VCA events alarm information.

[Scene NO.]: check alarm information about the related scene.

[Reset]: Reset the alarm times of the event, it will restart from 1 when alarm occurs.

[Clear List]: clear all alarm information from current list.

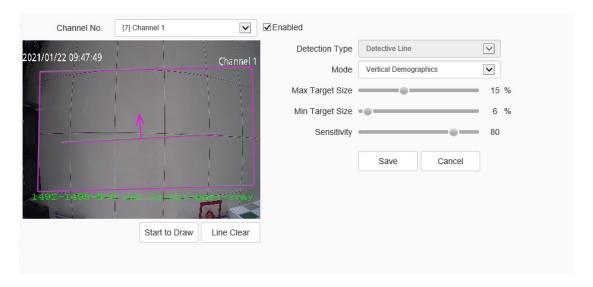
# 1.13.7. Passenger Flow

This function is mostly used in restaurants, supermarkets and other densely populated areas.

## Passenger Flow->Front-end Configuration

Select "Configuration -> VCA->Passenger Flow" to enter the front-end configuration interface, as shown in the figure below:





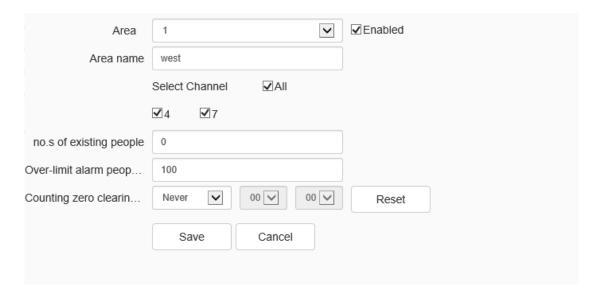
Click [Start to Draw] to outline the detection area and detection direction. Click [Clear Line] to clear the drawn lines on the page.

Set the detection type, max/min target size and sensitivity

Click [Save] button to save the data and synchronize to the front end. Click [Cancel] button to restore the last saved data.

### Passenger flow->Area configuration

Select "Configuration -> VCA->Passenger Flow" to enter the passenger flow interface, as shown in the figure below:



[Area]: Set the measurement area number and enable the area configuration algorithm.

[Every name]: Set the corresponding area name of each area and set the supported channel.

[Numbers of existing person]: Set the allowed numbers of person in the present area.

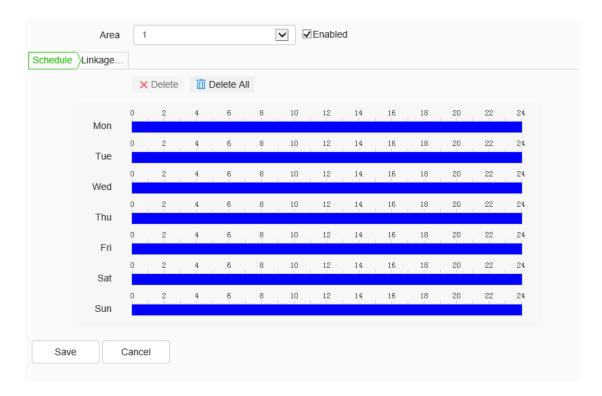
[Numbers of people on alarm]: This number includes the existing numbers of people. Alarm will be on once the number exceeds the set numbers of people.

[Count clearing time]: Set the count clearing time. Clear every day and never clear are both supported.

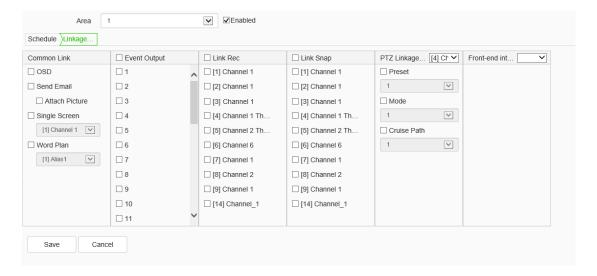
## Passenger flow->Over-limit alarm

Select "Configuration -> VCA->Passenger Flow" to enter the over-limit alarm interface, as shown in the figure below:



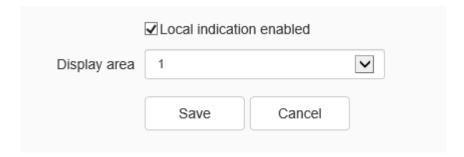


Select the linkage area to set the alarm time period and linkage method. The linkage methods support the front-end sound alarm and output port, as shown in the figure below:

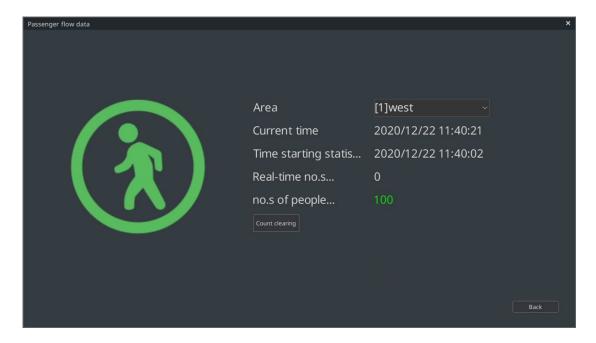


## Passenger flow->Indication configuration

Select "Configuration -> VCA->Passenger Flow" to enter the Indication configuration interface, as shown in the figure below:



Check the check box [Enable current display] to select the display area and click the "Save", the passenger flow statistics data will be displayed in the GUI interface, as shown in the figure below.



Switch [Display area] and click "Save" to update [Area] of passenger flow statistics in GUI interface.

# 1.14Advanced Intelligence

# 1.14.1. Intelligence Set

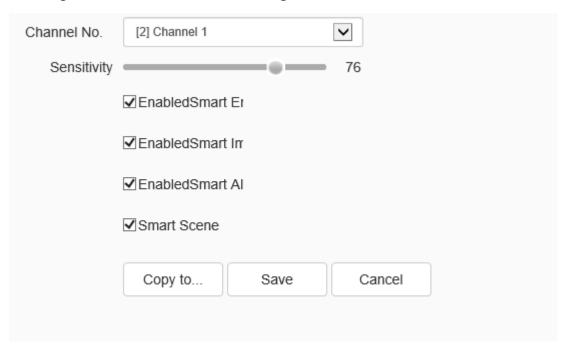
The device supports the operations of basic configuration and alarm parameter setting of "three intelligent" device from the WEB client.



## **Intelligence Set -> Basic Config**

In the basic configuration interface, the identification sensitivity of intelligent device can be set

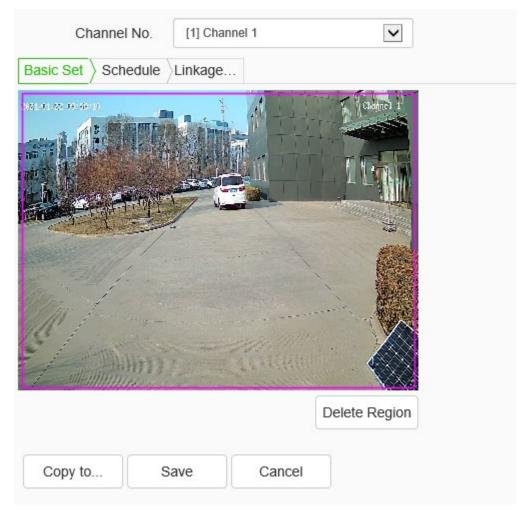
Enter "Configuration-> Advanced intelligence -> Intelligence set" to enter the page of basic config interface, as shown in the figure below.



Intelligence set -basic config interface

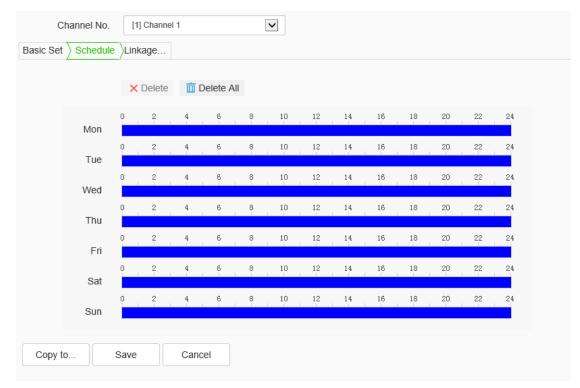
## Intelligence set ->intelligent alarm parameter

Enter "Configuration-> Advanced intelligence -> Intelligence set" to enter the page of intelligent alarm parameter interface, as shown in the figure below.



Intelligent alarm parameter interface

- 1. In the basic setting interface, manually draw the detection area. Click [Delete area] to clear the detection area drawn in the interface, and then draw again.
- 2. In the deployment time page, set the deployment time, and then the detection within that period can be carried out, as shown in the figure below. If the alarm is evoked, the [Linkage mode] will be triggered.



Schedule interface

3. On the linkage mode page, the user can set the linkage modes including [Common linkage], [Linkage output], [Linkage video] and [Linkage snapshot], etc, as shown in the figure below. When the alarm is evoked, the set linkage will be on.

Channel No. [1] Channel 1						
Basic Set Schedule Linkage						
Common Link	☐ Event Output		Link Rec	☐ Link Snap		
Buzzer	□1	^	[1] Channel 1	[1] Channel 1		
OSD	□ 2		☐ [2] Channel 1	☐ [2] Channel 1		
☐ Send Email	□ 3		☐ [3] Channel 1	☐ [3] Channel 1		
☐ Attach Picture	□ 4		☐ [4] Channel 1 Th	[4] Channel 1 Th		
☐ Single Screen	□ 5		[5] Channel 2 Th	☐ [5] Channel 2 Th		
[1] Channel 1	□ 6		[6] Channel 6	☐ [6] Channel 6		
☐ Word Plan	□ 7		☐ [7] Channel 1	☐ [7] Channel 1		
[1] Alias1	□ 8		☐ [8] Channel 2	☐ [8] Channel 2		
✓ Humanoid white I…	□ 9		☐ [9] Channel 1	☐ [9] Channel 1		
	□ 10		☐ [14] Channel_1	☐ [14] Channel_1		
	□ 11	~				
Copy to Save Cancel						

NOTE:

Support camera with dual light equipment and human-shape white light function

[Human-shape White Light]: In the night, the default color-black conversion of the dual light equipment is black and white mode. If any person is detected within the detecting area, white light will be on. If the person stays within the detecting area for a long time, the color-black conversion will turn into color mode, and the white light will still be on. When the person disappears from the detecting area, the color-black conversion turns into black and white mode, and the white light is off.

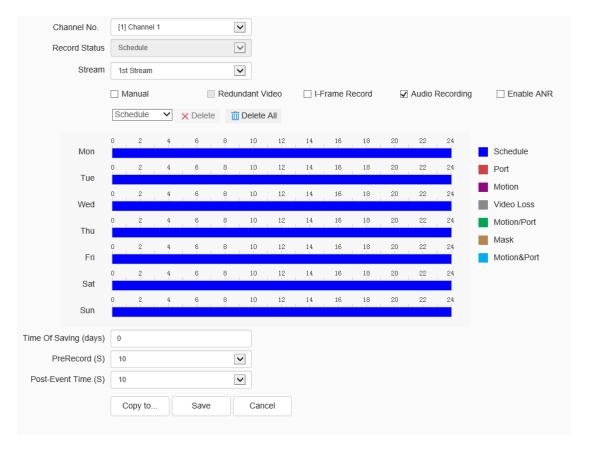
## 1.15 Storage

## 1.15.1. Schedule Recording

## **Schedule recording->schedule recording**

1.Select "Configuration -> Storage->Schedule Recording" to enter the schedule recording interface, the user can switch the drop-down box to select the target video type, set the deployment time and retention time (days), and select the pre-recording time and delay recording time, etc, as shown in the figure below:





Schedule recording setting interface

- 2. Select the channel to set.
- 3. Set the video stream type, including main code stream and sub code stream. Some models also support dual code stream video recording.
- 4. Select whether to "Audio Recording", whether to enable "Redundant Video", and whether to enable "I-frame Record", and so on.
- When there are redundant disks in the system and the "Redundant" function is enabled on the selected channel, recordings and captured image files will be saved in both the recording disk and redundant disk.
- If "I-frame Record" is enabled, the system will posturize video files, which can greatly save the hard disk space for the videos of non-key areas.

- When "Audio Recording" is not checked, only video data is saved in the video file.
- When" Enable ANR" is checked, if the IPC is offline, IPC will automatically start local video recording. When the IPC is online again, IPC will automatically upload the locally saved video to NVR.
- 5. Select video type. Options include "Schedule", "Port Alarm", "Motion", "Video Loss", "Video Mask", "Motion/Port", and "Motion& Port". You can check "Cancel" to delete the set video types.
- 6. Press and hold the left mouse button and drag over the time zone, and the selected time zone will be updated as the specified video type.

Set the maximum retention time of recorded videoin days. When the value is 0, there is no limit. The maximum retention time of the recorded video is 120.

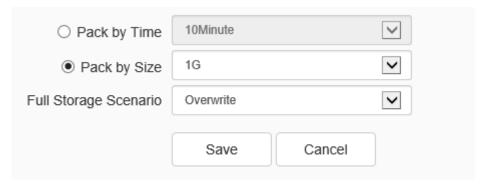
- 7. Set the pre-recording and delay time of alarm videos.
- PreRecord: Assuming that the pre-recording time set by the user is 5s, the system will automatically save the video information to the video file 5s before alarming.
- PostRecord: The delay time of video is applied to the alarm video. Assuming that the delay time set by the user is 5s, the system will automatically save the video information to the video file 5s after alarming ends.
- The combination of prerecord and postrecord: can facilitate the user to analyze the monitoring information before and after the occurrence of alarms.

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8. Click the [Save] button to save the settings. Click the [Copy to...] button to copy the setting to other ports. Click [cancel] will cause the parameters to be restored.

### Schedule Recording->Packaging Mode

Select "Configuration -> Storage->Schedule Recording" to enter the packaging mode interface, as shown in the figure below:



Packaging mode setting interface

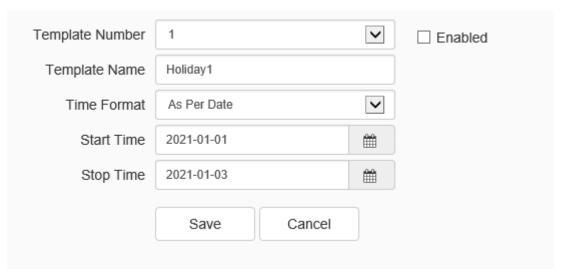
The device supports changing the video recording policy from the WEB client. In the edit box [Package by time] or [Package by size], select the condition to trigger [Saving policy]. When the remaining disk space reaches the set value, there are three [Save policies] as below:

- a) Stop recording: stop the recording and packaging operation.
- b) Overwrite: Delete the earliest video files to create space for the latest recording.
- c) Overwrite: Delete the earliest video files (except for Alarm Rec) to create space for the newest recording. (The log file will not be deleted)

Click the [Save] button to save the settings. Click [Cancel] will cause the parameters to be restored.

### **Schedule Recording->Holiday Schedule**

Select "Configuration -> Storage->Schedule Recording" to enter the holiday schedule interface, as shown in the figure below:



Holiday schedule setting interface

The device support modifying the holiday plan from WEB client. Select the template number and set the name, time format, and start and end times of the template.

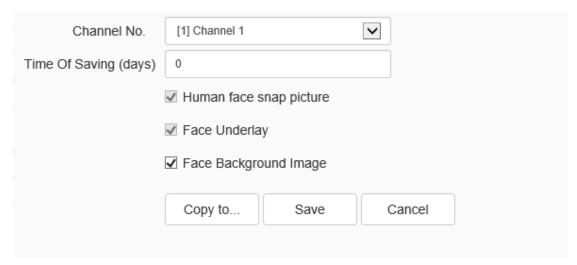
Click the [Save] button to save the settings. Click [Cancel] will cause the parameters to be restored.

# 1.15.2. Picture Setting

## **Picture setting ->Picture storage**

Select "Configuration -> Storage-> Picture setting" to enter the picture storage interface, as shown in the figure below:





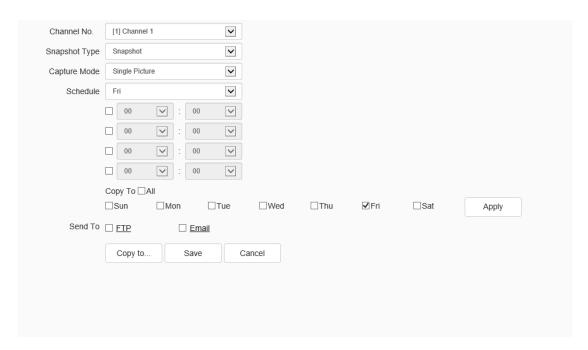
Picture storage interface

Select the channel that needs picture storage format settings. Set the storage period between 0 and 120 days. Select whether to enable shot face image, face base image and face background image

Click the [Save] button to save the settings. Click the [Copy to...] button to copy the setting to other ports. Click [cancel] will cause the parameters to be restored.

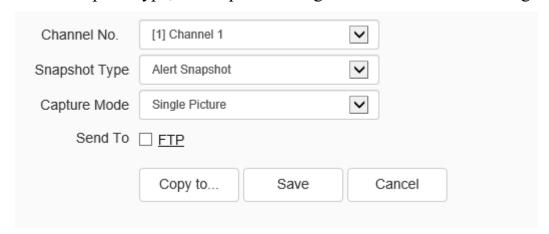
## **Picture setting->Snapshot**

Select "Configuration -> Storage-> Picture setting " to enter the snapshot interface, the device support setting the snapshot settings from WEB client. According to the snapshot type, the snapshots can be divided into common snapshot and alarm snapshot, as shown in the figure below:



Snapshot -snapshot setting interface

- a) Select the target channel number for the snapshot setting operation.
- b) Set snapshot type: "Snapshot" and "Alert Snapshot". When "Alert Snapshot" is selected for snapshot type, the snapshot setting interface is shown in the figure below.



Snapshot -alert snapshot setting interface

- c) Set snapshot mode: "Single Picture" and "Multiple Pictures".
- d) Set the snapshot interval in seconds. If" multiple shots" is set, the interval should be greater than 5 seconds.( the interval is between 5 and 9999)
- e) Choose whether to upload captured pictures via FTP. Click the "FTP" button to enter the FTP setting interface. For details about FTP settings, refer to the corresponding



section.

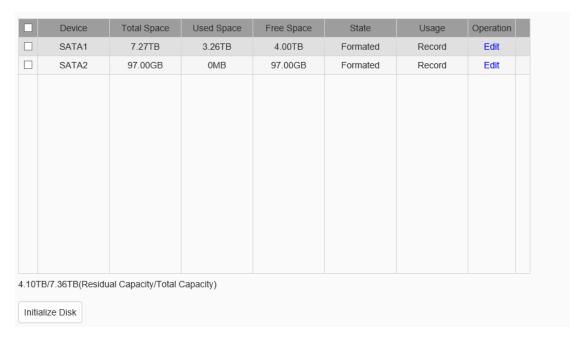
- f) Choose whether to upload the captured picturesvia SNMP. Click the "Email" button to enter the Email setting interface. For details about settings, refer to the corresponding section. On this interface, Email Setting is unavailable for alarm snapshot.
- g) The snapshot setting parameters of the current channel can be copied to the specified channel.
- h) Click "save" to save the configurations.

## 1.15.3. Disk Management

The device supports the disk manage in several aspects including the disk information, disk strategy, SMART, bad track detection and rebuild index, etc. The specific operation is subject to the NVR device.

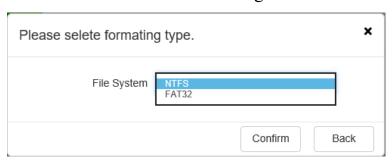
### **Disk Management->Disk Information**

1. Select "Configuration -> Storage->Disk Management" to enter the disk information interface, as shown in the figure below:



Disk information interface

2. Initialize disk: Initializes the selected disk, and an initialization format can be selected for the USB flash drive. As shown in the figure below:



Initialize disk interface

- 3. Edit: modify the use of the disk.
- 4 .The total remaining capacity and total capacity of the current hard disk and virtual disk can be shown in the interface.
- 5 .For other operations including disk repair, hot swap, etc., please completein the UI.

# Disk Management ->HDD Strategy

1 . Select "Configuration -> Storage ->Disk Management" to enter the HDD



Strategy interface. According to the mode, the strategies can be divided into disk group and quota.

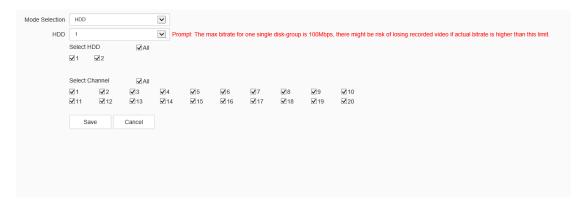
### 2 .Set HDD or quota:

HDD: Divides hard disks mounted on the NVR multiple disk packs. You can specify the disk pack where the video files are located for each channel.

Quota: Specifies the maximum disk space a channel's video files can use. Different channels can be configured with different video space.

### 3 .Set the HDD:

a) Select "HDD" under "Mode Selection".



HDD strategy-HDD setting interface

- b) Select HDD.
- c) Select HDD for a disk group. Sets which disks belong to the disk pack. Check "All" to select all available disks. A disk cannot be assigned to more than one disk pack at the same time.
- d) Select a channel for a disk group. Select which channels to record in the pack.
- e) Click the "Save" button to save the settings.

#### Note:

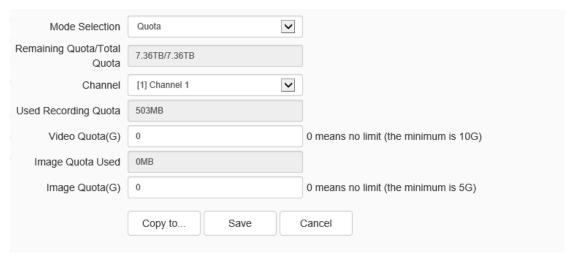
The storage bitrate of a single disk pack can be up to 100Mbps; otherwise there is

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a risk of video loss.

- 4 .Quota Configuration:
- a) Select "Quota" under "Mode Selection".

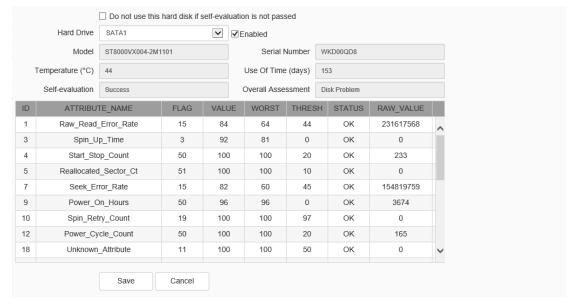


HDD strategy-Quota setting interface

- b) Select the channel to set. Select the channel where you want to set the quota from the "Channel" drop-down box.
- c) Set the video quota. Sets the maximum storage space that video files of the channel occupy, in GB. 0 indicates unlimited.
- d) Set the image quota. Sets the maximum storage space for the image files of the channel, in GB. 0 indicates unlimited.
- e) Save the settings. Click the "Apply" button to save your settings.

## Disk Management->S.M.A.R.T (Abnormality found in smart check)

1. Select "Configuration -> Storage->Disk Management" to enter the S.M.A.R.T. interface, as shown in the figure below:



S.M.A.R.T setting interface

- 2. Select the disk to detect and check "Enable" to enable the S.M.A.R.T detection function of the disk. S.M.A.R.T detection information is displayed in the corresponding interface.
- 3. When "Do not use the hard disk if self-evaluation is not passed", do not use the HDD if there is any problem with the self-assessment after the S.M.A.R.T test.

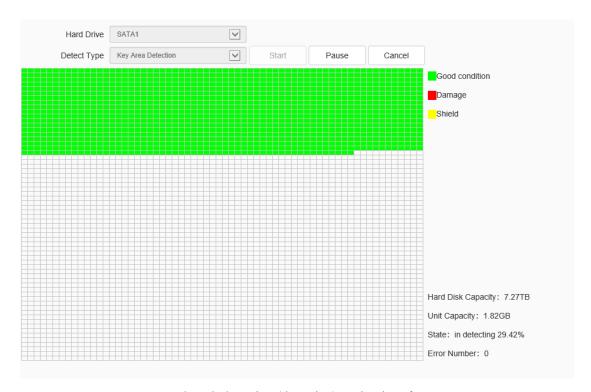
### **Disk Management->Bad Track Detection**

1. Select "Configuration -> Storage->Disk Management" to enter the bad track detection interface, as shown in the figure below:



Bad track detection setting interface

2. Select the hard disk and detection method and click the Detection button to enter the detection status.



Bad track detection (detecting) setting interface

3. Click Pause to suspend the bad track detection; Click Restore to resume the bad



track detection;

- 4. Click Cancel to cancel the bad track detection;
- 5. Click the Error Message button to check the bad track of the hard disk.

#### Note:

- The Error Message button is available only if the number of errors on the hard disk is greater than 0.
- When the number of errors on the hard disk is 100, bad trace detection stops.
  - "means the corresponding area of the hard disk is in good condition."
  - "means the corresponding area of the hard disk is damaged."
  - "means the corresponding area of the hard disk is shielded.

## Disk Management->Rebuild index

When HDD exception or video loss occurs, lost videos can be retrieved to the maximum extent by rebuilding the index.

1. Select "Configuration -> Storage->picture storage" to enter the picture storage interface, as shown in the figure below:

Reindex

Reindex interface

2. Click"Reindex" icon to pop up a prompt box, as shown in the figure below:



Reindex setting interface

3. Click"OK" to start the reindex operation, as shown in the figure below:



Reindex (in progress) setting interface

- 4. After the success of the reindex, a prompt box will pop up.
- 5. When rebuilding the index, users can exit the interface for other operations. But the operation of video playback cannot be carried out.

### 1.15.4. NFS

### **NFS->NFS**

Select "Configuration -> Storage->NFS" to enter the NFS interface, as shown in the figure below:





NFS-NFS setting interface

- a) [Disk number]: select the disk to set.
- b) [Status]: displays the status information of the current disk.
- c) [Use]: displays the use of the current disk.
- d) [IP address]: set the IP address of the NFS server.
- e) [Mapping path]: set the mapped disk path.
- f) [Disk space]: displays the available space and total size of the current network mapping storage
- g) [Save] : Save the settings

Note: To use this function, the device must install a Micro SD card and enable ANR in the NVR.

### NFS->FTP

Select "Configuration -> Storage->NFS" to enter the FTP interface, as shown in the figure below:



NFS-FTP setting interface

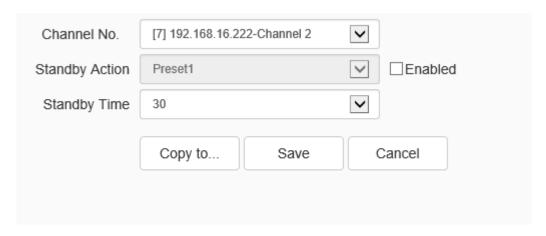
Enter the server address, port number, account and password of the FTP server.

Click the [Save] button to save the settings. Click [Cancel] will cause the parameters to be restored.

## 1.16Dome Set

# 1.16.1. Basic Config

When the ball camera is connected to the NVR device, the standby action of the ball camera can be set. Select "Configuration -> Dome Set->Basic Config" to enter the basic config interface, as shown in the figure below:



Basic config interface



Select the channel to be set and check the check box "Enable". Set the four standby action of the ball camera, namely, preset position, automatic scanning, automatic cruise, simulation path. Set the standby time of the ball camera.

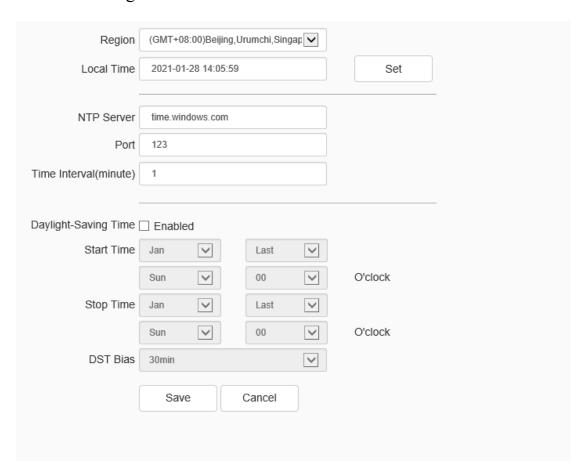
Click the [Save] button to save the settings. Click the [Copy to...] button to copy the setting to other ports. Click [cancel] will cause the parameters to be restored.

## **1.17 System**

# 1.17.1. System

### **System->Time**

1. Select "Configuration ->System->System" to enter the time interface, as shown initialize disk n the figure below:

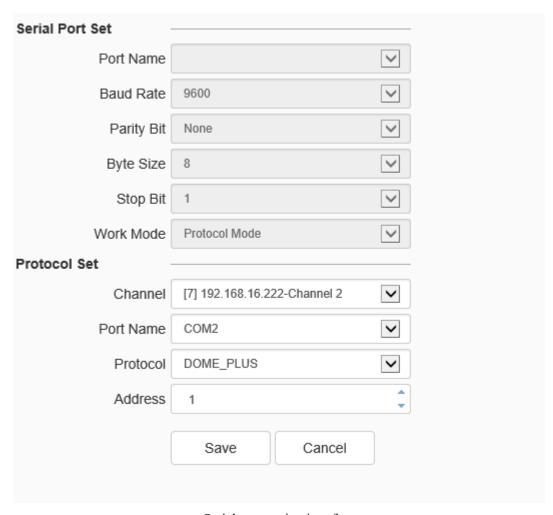


#### Time setting interface

- 2. The system time, time zone and NTP time proofreading parameters. Click the "Synchronize" button to synchronize the local server time.
  - 3. Set whether to enable DST. Set the time range and offset time of DST.
- 4. Click the [Save] button to save the settings. Click [cancel] will cause the parameters to be restored.

## **System->Serial Port**

1. Select "Configuration -> System-> System" to enter the serial port interface, It is divided into [serial port setting] and [protocol setting], as shown in the figure below:



Serial port setting interface

2. [Serial Port Set] requires the user to select [serial port number], [baud rate],



[check bit], [data bit], [stop bit] and [working mode].

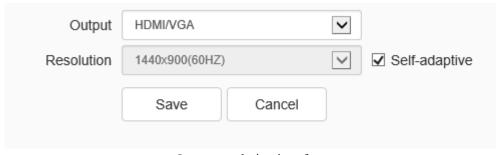
- 3. For [Protocol Set], you need to select [channel number], [serial port number], [protocol] and [address]. The value of [Address] range is from 1-255.
- 4. Click the [Save] button to save the settings. Click [cancel] will cause the parameters to be restored.

#### Note:

• The user can customize the serial port properties, and set the baud rate, data bit, stop bit and check bit of the serial port.

### **System->Output Resolution**

1. Select "Configuration -> System-> System" to enter the output resolution interface, and the resolution of the UI interface can be set. As shown in the figure below:



Output resolution interface

- 2. Set the output device and the resolution.
- 3. Click [Save] to save the currently set parameters. Click [Reset] to restore the last saved parameters.

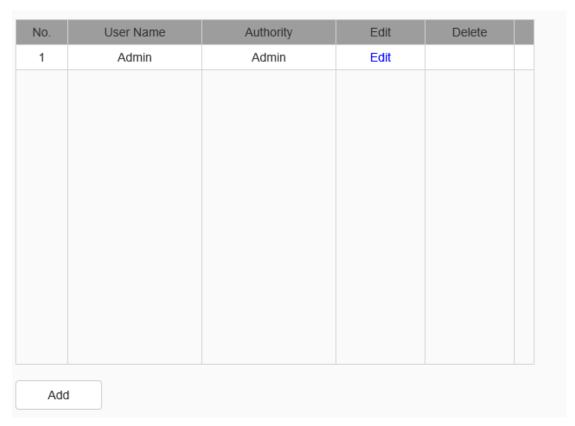
#### **Remarks:**

• When the resolution settings is saved at the WEB interface, the "Wizard settings" prompt box will synchronously pop up at the UI interface.

## 1.17.2. Users

## **Users->Users**

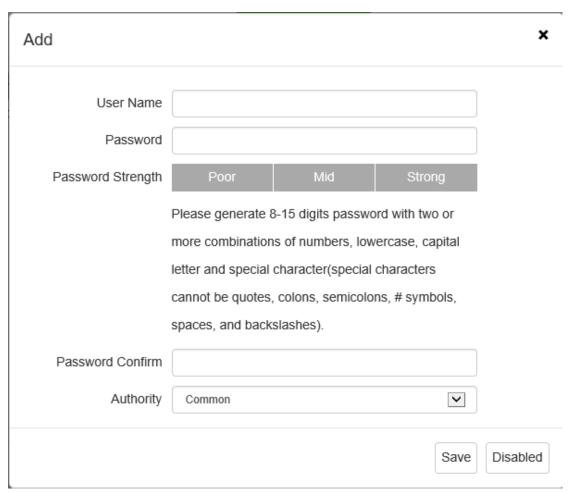
1. Select "Configuration -> System->Users" to enter the users interface, as shown in the figure below:



Users interface

2. Add User. Click "Add" button to enter the "Add User" interface, where you can set the user group, account, password, etc., as shown in the figure below:

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Add user setting interface

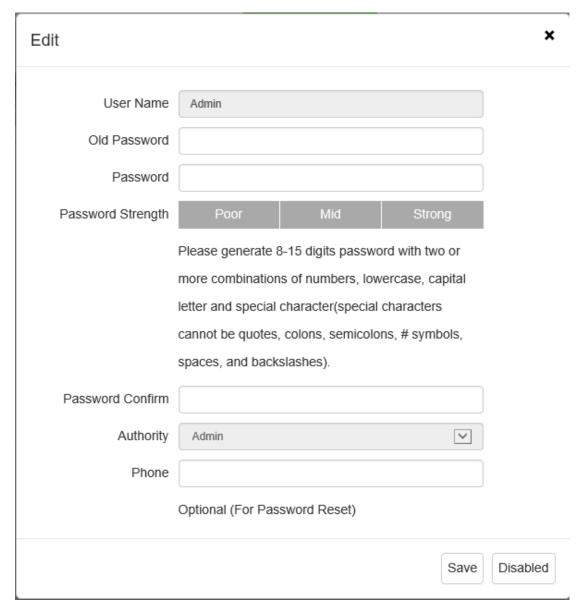
3.Delete User. In the user list, click the [delete] button to pop up the prompt box to click [save], as shown in the figure below:



Delete user prompt box

4. Edit User. In the user list, click [edit] and then pop up the prompt box to change the password. Enter the old password, the new password and the password confirm and

click the [modify] button, as shown in the figure below:



Edit user interface

#### Note

- After a user is successfully added, the information about the added user is displayed in the Basic Config -> User List.
- Up to 16 users can be added.
- There are three user groups in the system: "Default users", "Normal users", and "Administrator". The default permissions for each user group are as follows:



Default users: browse videos

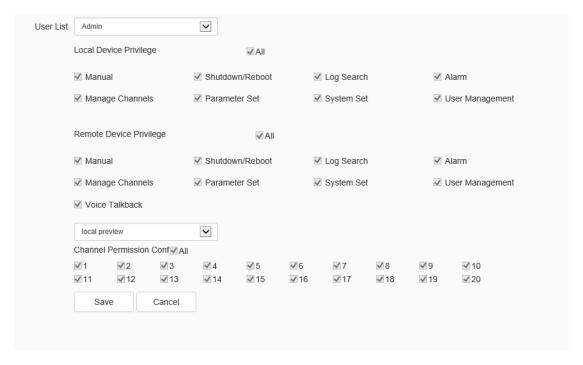
Normal users: browse videos

Administrator: browse videos + device control + parameter setting + user

management

### **Users->Permissions**

1. Select "Configuration -> System -> Users" to enter the permissions interface, to set the user's authority. As shown in the figure below:



Permissions setting interface

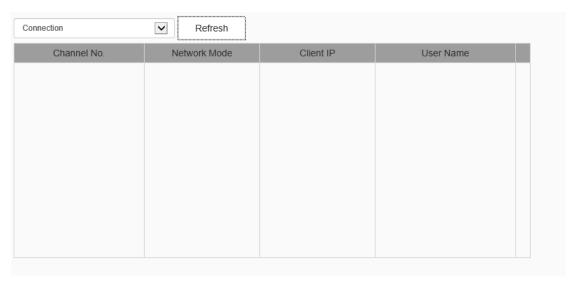
- 2. Descriptions of permissions:
- (1) Local permissions: i.e. local operation permissions, including manual alarm clearing, shutdown/restart, log search, alarm setting, channel management, parameter setting, system setting and user management.
- (2) Remote permissions: i.e. operation permission on a remote client, including manual

alarm clearing, shutdown/restart, voice intercom, log search, alarm setting, channel management, parameter setting, system setting and user management.

- (3) Channel permissions: Local preview, remote preview, local playback/snapshot browsing, remote playback/snapshot browsing, local PTZ control, and remote PTZ control.
- 3. If the current user does not have the authority to the local preview of a certain channel, the channel will not be checked. If the user has the authority to the local preview of a certain channel, the channel will be checked.

### **Users->Connection**

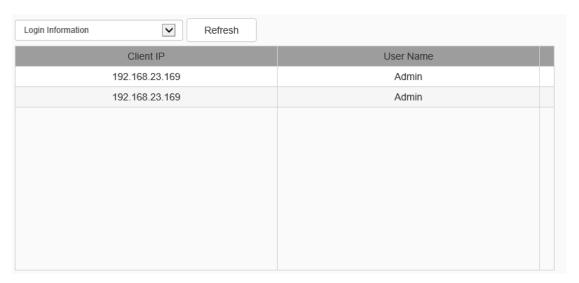
- 1. Select "Configuration -> System ->users" to enter the picture storage interface to view the connection information and login information of the device.
- 2. Displays a detailed list of connects/login information to the device, including channel type, network mode, client IP, and user name. Click [refresh] to update the list.



Connection setting interface

3. In the login information interface, the login information of the user name used

to log in will be displayed. As shown in the figure below, click [Refresh] to update the login information.

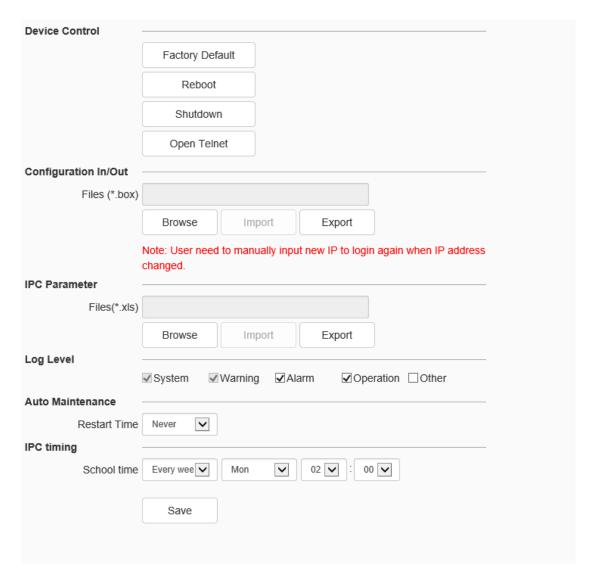


Login information setting interface

## 1.17.3. Maintenance

### **Maintenance** -> **Maintenance**

1. The device supports the NVR device controlling from WEB client, Enter "Configuration-> System -> Maintenance" to enter the page of maintenance, as shown in the figure below.



Maintenance interface

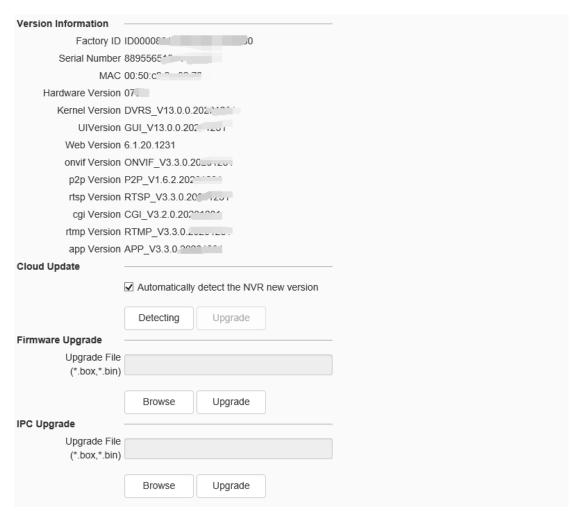
- 2. [Device Control]: Allows customers to perform [restore default], [simple restore], [restore factory], [restart equipment], [aperture correction], [lens reset], [disable / enable ABF], [Open Telnet] and other operations. Because the functions of different models are different, please refer to the actual interface.
- 3. Parameter import and export: the import and export settings of storage, alarm, preview, intelligent analysis, system settings and other parameter information are supported. When the IP address changes, the new IP should be input manually to log in again.



- 4. IPC parameters: support the import and export of front-end device information.
- 5. Log level: support log statistics for types including system, warning, alarm, operation and other types
- 6. [Auto maintenance]: Set the automatic reboot time of the dome camera to conduct automatic maintenance.
- 7. IPC time proofreading: set the time proofreading time by year, month, week or day.

## **Maintenance -> Upgrade**

1. The device supports the NVR device controlling from WEB client. Enter "Configuration-> System -> Maintenance" to enter the page of upgrade, it includes equipment information such as [factory ID], [MAC], [Hardware Version], [Kernel Version] and [Web Version]. As shown in the figure below.



Upgrade setting interface

#### **Upgrade - Firmware Upgrade**

[Firmware Upgrade]: the user can select a local legal. Box or. Bin file to upgrade the device remotely. The upgrade operation of the kernel program shall be conducted under the guidance of the company's technical personnel.

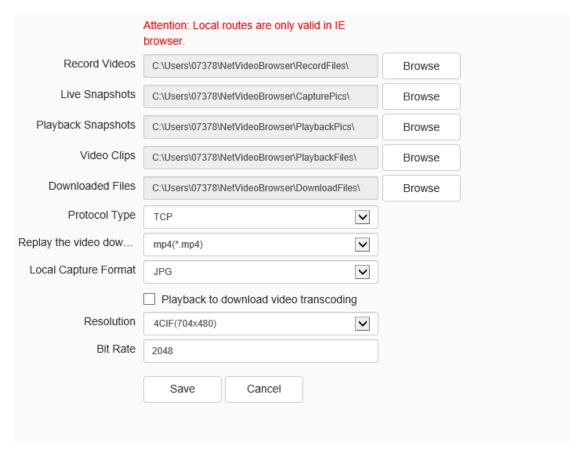
[Browse]: find the upgrade file in the pop-up window.

[Upgrade]: upgrade to the latest version through the network.

# 1.17.4. Local PC Setting

1. Enter "Configuration-> System -> Local PC Setting" to enter the page of maintenance, as shown in the figure below.





Local PC Setting interface

- 2. You can set the storage path of Video File / Preview Capture / Playback Capture/ Playback Clip / Playback Download / Smart Analysis Path / Face Capture / Traffic Capture.
- 3. User can choose the network connection protocol for the camera. (When [Protocol Type] is [UDP], only one connection is supported.)
- 4. In the pull-down list of [Local Capture Format], select the picture format of the local snapshot. Such as [JPG], [BMP], etc. If send pic to FTP or Email, please select JPG.
- 5. Click the [Save] button to save the settings. Click [Cancel] will cause the parameters to be restored.

Note:

• This setting will take effect only with IE browser, otherwise, the path information

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will not be displayed.

# 1.18Bayonet Management

Equipment of some models support bayonet management. In the bayonet setting interface, the user may set bayonet parameters according to the actual situation or preferences.

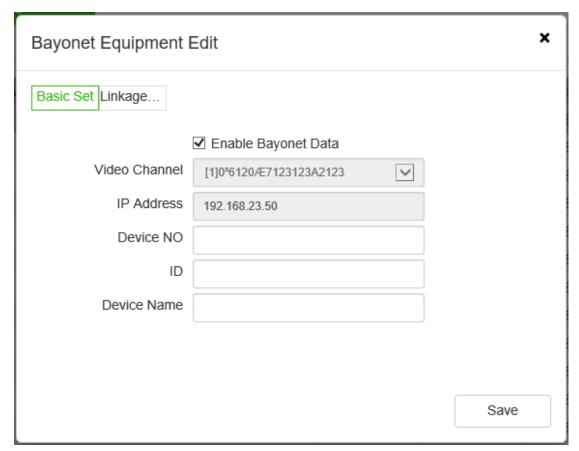
# 1.18.1. Bayonet Setting

The user may set the basic parameters and linkage operation of the bayonet equipment according to the need. Select Configuration >Bayonet management >Bayonet equipment to enter the bayonet device management interface, as shown in the figure below:



Bayonet setting interface

1. Select the video channel and click [Edit] to enter the bayonet equipment edit page.



Bayonet Equipment Edit page

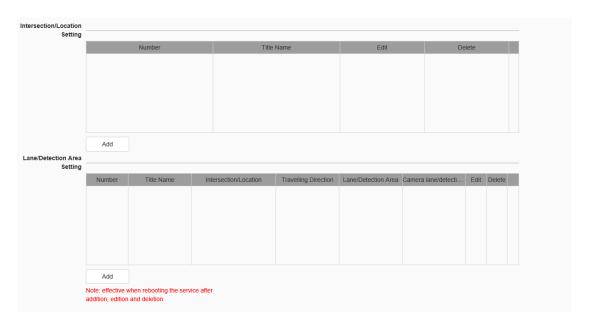
- 2. Check the check box [Enable bayonet data] to open the bayonet management function.
- 3. The user mayself define the [Equipment number], [Equipment ID] and [Equipment name] according to the needs.
- 4. Set [Linkage setting] to realize linkage operation, such as [linkage Video], [Single screen], etc., after event is triggered.
  - 5. Click [Save] to save the corresponding parameter settings.

#### Remarks:

• The setting information of the bayonet equipment will take effect after the service is restarted.

# 1.18.2. Lane Management

The user may set the intersection / location, lane / detection area according to the need. Select "Configuration-> Bayonet management-> Lane management" to enter the lane management interface, as shown in the figure below:



Lane management setting interface

### Lane management ->intersection / location setting



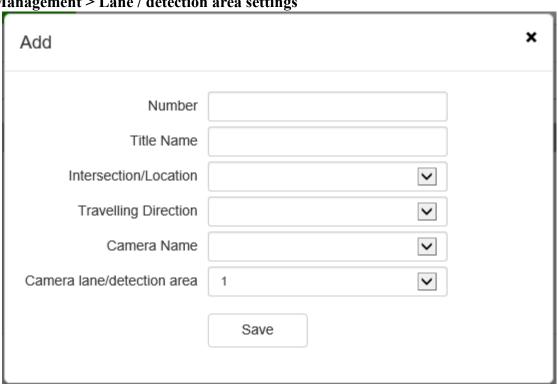
Intersection / location settings page

- 1. Click [Add] to add the intersection / location information. Note: enter at least 5 digits for the intersection / location number.
  - 2. Click [Edit] to edit the name parameter information of intersection / location.



3. Click [Delete] to delete the corresponding lane / detection area information, and the corresponding linkage operation will not be displayed.

Lane Management > Lane / detection area settings



Lane / detection area settings page

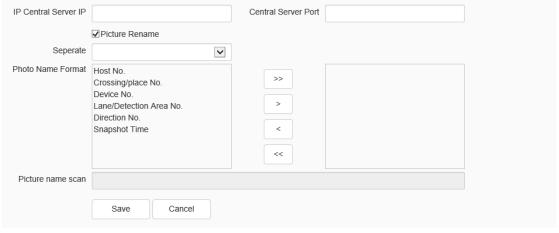
- 1. Click [Add] to enter the lane / detection area setting interface. The user may set relevant parameters such as [S.N.], [Name], [Intersection/location], [Driving direction], [Camera name], [Camera Lane / detection area] as needed.
- 2. Click [Edit] to edit the relevant parameters such as Intersection/location], [Driving direction], [Camera name], [Camera Lane / detection area].
- 3. Click [Delete] to delete the set parameters of the corresponding lane / detection area.

Parameter	Specification
S.N.	Set the serial number of lane / detection area.

Parameter	Specification
Name	Set the name of the lane / detection area.
Intersection / location	Select intersection / location information. Note: it can be
	added, deleted or edited from intersection / location
	settings.
Direction of travel	Choose the form direction of the vehicle, support a variety
	of driving directions from east to west, from west to East,
	from south to north, from north to south, into the city, out
	of the city, from southeast to northwest, from southwest to
	northeast, from northwest to Southeast, from northeast to
	southwest.
Camera name	Set up a snapshot camera. Note: it can be added, deleted
	or edited from the bayonet equipment.
Camera Lane / detection	Select camera lane / detection area. 128 lanes / areas are
area	supported. Lane / area selection is unique.

# 1.18.3. Upload Settings

The user may set the image uploading server and the image uploading name according to their needs. Select "Configuration >Bayonet management >Upload settings" to enter the upload settings management interface, as shown in the figure below:





## Upload setting interface

# The relevant parameter information are as below:

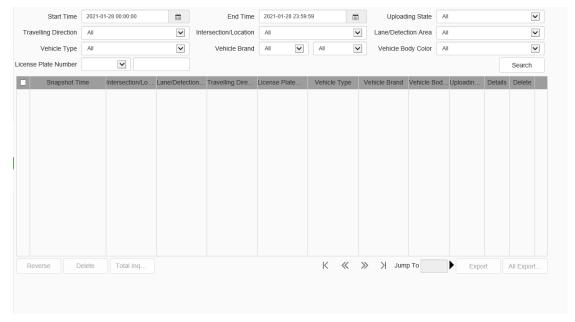
Parameter	Specification
Central server IP	An IP address is need to be input
Central server port	The port number is a number between 1024 and 65535.
Custom upload image name	Check to display the content of image name setting, otherwise, the content of image name setting will be hidden.
Separator	Default separator exists. Manual modification is not supported.
Image name format	Can be modified manually to set a new image name format.
Image name preview	Displays the content to the right of the image name format.
Save	Click the [Save] button to save the corresponding parameter settings.
Reset	Click [Reset] to restore the last saved parameters.

# The relevant icons are as below:

Icon	Specification
	All move right
	Move right
	Move left
	All move left
	Move up
	Move down

# 1.18.4. Data Query

Users can query vehicle information according to the need. After setting the query information, click the [query] button. The query results can be checked in the list. Select "Configuration ->Bayonet management ->Data query" to enter the data query management interface, as shown in the figure below:



Data query setting interface

The relevant parameter information is as below:

Parameter	Specification
Start time	Select the start time of the data query.
End time	Select the end time of the data query.
Upload status	Select the upload status of data. Three status are
	supported, namely, not uploaded, uploaded and all.
Direction of travel	Choose the form direction of the vehicle,. The supported
	options are: all, from east to west, from west to east, from
	south to north, from north to south, into the city, out of the
	city, from southeast to northwest, from southwest to
	northeast, from northwest to southeast, from northeast to



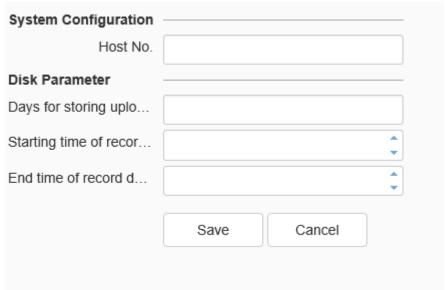
Parameter	Specification
	southwest.
Intersection / location	Select the intersection / location information for data
	query.
Lane / detection area	Select the lane / detection area for data query.
Vahiala tura	Select the vehicle type for data query. The supported types
Vehicle type	are: large bus, car and truck, and other various types.
Vehicle brand	Select the vehicle brand for data query, and multiple
venicle brand	brands and series are supported, such as Haval H1.
Valida hada adaa	Select the body color for data query, and multiple colors
Vehicle body color	are supported.
License plate	Select the license plate number for data query.
Overe	Click to enable to find the qualified data information
Query	according to the query conditions.
Details	Check the details.
Lussansa	Click to enable to check irrelevant information in the list
Inverse	as needed, and click to display the inverse information.
Delete	Click to enable to select the data information to be deleted
Delete	as needed.
T-4-1 1 6	Click to enable to query the quantity of all the data
Total number of queries	information.
	Click to enable, select the data information to be exported
Export	from the list as needed, and click to export the data in the
	device.
Export all	Click to enable to export the information of all the queried
	data.

# 1.18.5. System Parameters

The user may set the system parameters and snapshot quota according to the needs.

Select "Configuration-> Bayonet management->System parameters" to enter the system parameter setting interface, as shown in the figure below:

### System parameters -> System parameters

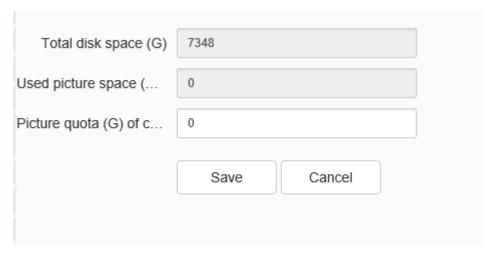


System parameter setting interface

Parameter	Specification
Host number	The user can self define the host number. Integers with
	3 digits or more are supported.
Upload record save	Cat the manuscript time of late carries in disle
number	Set the parameter time of data saving in disk.
Record deletion start time	Set the start time of data deletion in disk.
Record deletion end time	Set the end time of data deletion in disk.

System parameters -> Snapshot quota



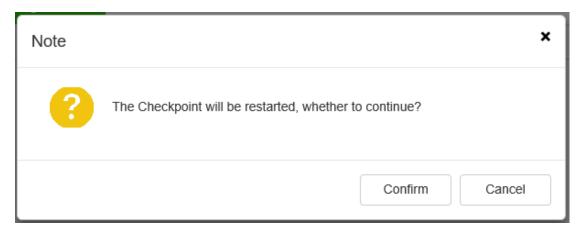


Snapshot quota setting interface

Parameter	Specification
Total disk space (G)	Displays the total disk space in the device.
Used space of bayonet picture (G)	Displays the space occupied by the bayonet equipment.
Bayonet picture quota (G)	Set the space size allowed to be occupied by the bayonet images, and delete the data after the set size is exceeded.

# 1.18.6. Running Management

The user may restart the service operation through this interface after the parameters of [Bayonet equipment] and [Lane management] is setas needed. Select "Configuration ->Bayonet management ->Running management" to enter the operation management interface, and click [Restart service] to restart the bayonet service.



Restart service prompt box

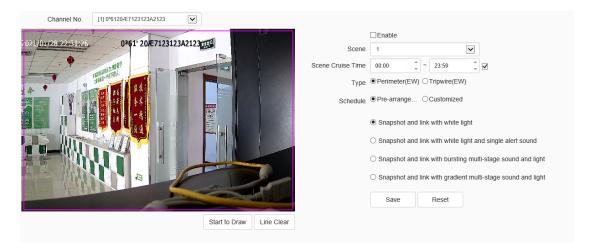
## 1.19EW

In the EW interface, the user can set alert parameters according to the actual situation or preference of the site. Click [Alert] on the menu bar above the interface to enter the front-end alert configuration interface.

## **EW-> Front-end Configuration**

In the front-end configuration interface, the alert scheme can be set. According to the alert template, the setting can be divided into preset plan setting and user-defined setting.

### Front-end Configuration -> pre-arranged planning



Pre-arranged planning setting interface

- a) Select the channel number, then enable effective alert algorithm.
- b) Select [Type], set perimeter alert or trip line alert, and set the effective time of alert scene.
- c) Adjust the scene and draw warning area or warning line. Perimeter alert default full screen is alert area. If you need to adjust, you need to clear the line and draw again.
- d) Select a preset alert plan.
- e) Click the "save" button to complete the algorithm setting and exit the alert setting interface to take effect.

### Front-end Configuration -> Customized



Customized setting interface

Step 1 check enable effective alert algorithm.

Step 2 select alert type: perimeter alert or trip line alert, and set the effective time of alert scene.

Step 3 adjust the scene and draw warning area or warning line.

Step 4 select custom alert template.

Step 5 set linkage item or advanced parameter. Among them, linkage items can be set with three levels of warning at most, and each level of warning effect can be set separately.

Step 6 click the "save" button to complete the algorithm setting and exit the alert setting interface to take effect.

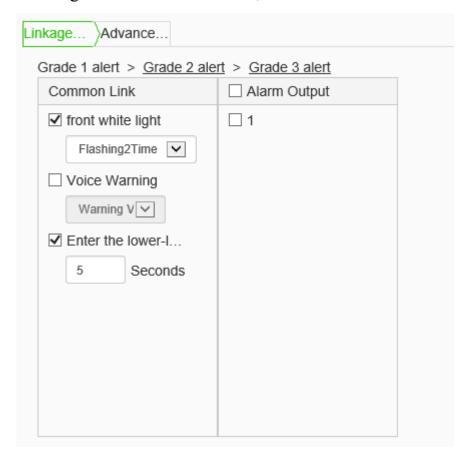
### **Description:**

- a) The device supports setting up multiple scenes. You can set up different scenes through the above steps.
- b) In the perimeter alert, the plan of "explosive multi-level acoustooptic alert" is: after the target intrudes into the alert area, the white light flashes strongly and the voice

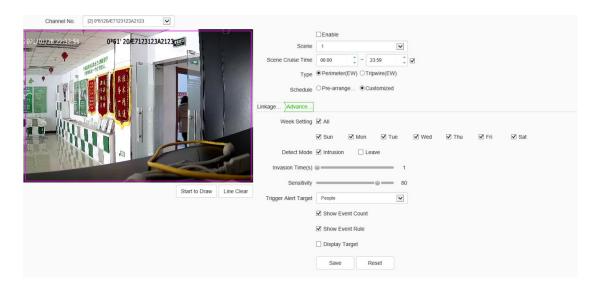


calls.

default, and the warning effect is enhanced step by step. When the retention time in the upper level is greater than the set value, it will enter the next level.



- d) In linkage setting, the constant light option of linkage white light indicates that the white light will be turned on in case of alarm, and will be turned off automatically after the alarm is cancelled.
- e) Advanced parameters in the user-defined template include: Defense week, detection mode, trigger alarm target, trigger sensitivity, maximum tracking time, display rule and target box setting, etc.



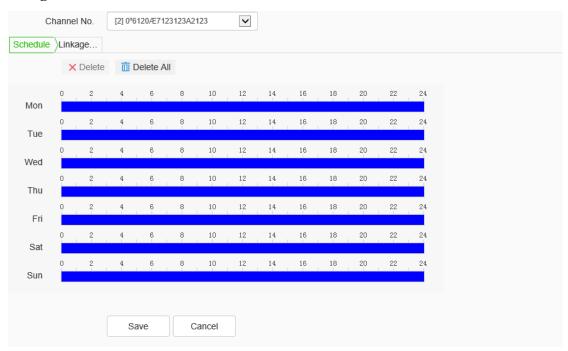
- f) The alert types are divided into perimeter alert and trip line alert, aiming at the intrusion area, departure area and cross-border behavior. The perimeter alert is the intrusion zone alert by default. Users can modify the detection mode in the advanced settings of the user-defined template.
- g) The warning detection target defaults to person and vehicle. Users can user-defined advanced settings according to specific needs.
- h) The longest tracking time takes effect when the linkage tracking, which means that when the time is reached, the tracking action will stop and return to the alert monitoring scene.
- i) The user-defined alert tone can be set in the following two ways: 1. Download audiomaker.exe software, record the warning tone according to the help document of the software, make an upgrade package, and then download it to the camera through the camera's web page upgrade mode. 2. Download the mobile client through the QR code button in the preview interface, and record and upload the warning tone for the devices connected to the Internet that support custom warning tone.

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#### **EW->Local Configuration**

In the local configuration interface, the deployment time and linkage mode can be set. The operation is as below:

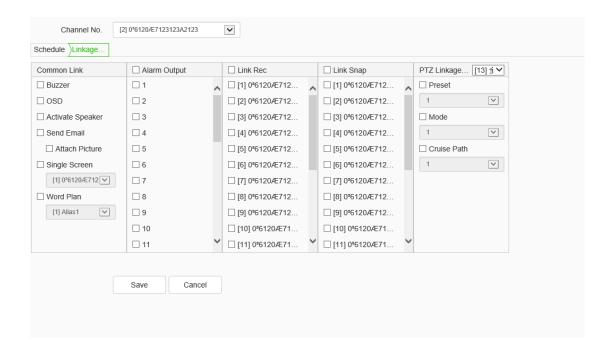
### **Local Configuration -> Schedule**



Set the effective time of the rule. By default, the alarm will be deployed 24 hours a day. Click the blue bar to modify the deployment time.

Click [Save] to save and enable the parameter settings. Click [Reset] to restore the last saved parameters.

### **Local Configuration -> Linkage Mode**



Set the alarm linkage function when an alarm happens. Such as: [Linkage output], [PTZ linkage channel], [Linkage Video], [Linkage snapshot], [Common linkage], etc.

Click [Save] to save and enable the parameter settings. Click [Reset] to restore the last saved parameters.

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