

VNNOX One-Stop Cloud Platform

V7.23.0 NS180100084



iCare User Manual

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1 Overview

With LED display being widely used in various industries such as advertisement, stage, traffic, sports, etc., the business scope of LED display services has been expanded rapidly from original city business to business throughout the country, even international business. LED displays distributed from place to place may have unexpected problems. As a result, how to manage and monitor large quantities of displays uniformly and guarantee normal operation have become pressing problems to be solved in this industry.

For these problems, NovaStar has launched the iCare system globally, an optimized and most practical cloud monitoring and management solution. Based on broadband Internet, iCare can provide a centralized monitoring solution for the multi-screen management system of LED display.

The iCare server is the core of system. It is deployed in Internet Data Center (IDC) and managed through B/S mode. User can log in the website and register an account to acquire access to the system. Each user can register multiple displays without limitation so as to realize monitoring by specified persons, duty distribution, and knowing the operation status of each display at any time.

2 Features

- **Centralized Management**
Based on a broadband Internet architecture, it supports standard HTTPS (HTTP+SSL) and FTPS (FTP+SSL) servers. With stable and high-speed data transmission, it allows to centralize the management and monitoring of data.
- **Comprehensive Monitoring**
To monitor the working conditions of sending cards, receiving cards, monitoring cards and multifunction cards of the LED display control system.
To detect environmental parameters such as temperature, humidity, smoke of cabinet.
To monitor cabinet supply voltage and fan revolving speed of LED display.
- **Automatic Alarm**
Monitoring server can automatically collect working condition parameters of all display connected to the system. All monitoring parameters are scanned by the given parameters. It will send e-mails to alarm if the alarm conditions are met.
- **Remote Monitoring and Control**
Users can use their accounts to log in the monitoring server, search and view monitoring data through browser and snapshot on site. Working condition and actual situation on site of LED display can be gotten timely and accurately.
- **Multi-Device Access**
Supported devices: PC, mobile phones with Android V4.0 or above, iPhone, iPad, etc.
Supported systems: synchronous M3 and asynchronous Pluto series control system of NovaStar.
- **Intuitive and Efficient**
To intuitively report status, alarm, error and location of LED display.
- **Information Sharing**
Information of LED display can be shared with other users.
- **Display handover**
LED display managed by one user can be handed over to another user.

3 Applications

This software is applied to the field of LED display management system.

The centralized play& control system based on this software is widely applied in various fields like industry, traffic, commercials, information release, sport events, etc.

XI'AN NOVASTAR TECH CO., LTD.

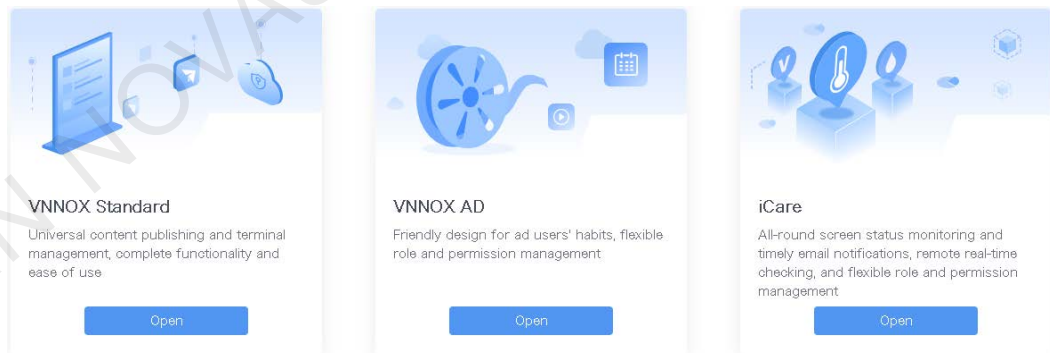
4 Operating Instructions

4.1 Login

The iCare server has adopted B/S architecture. After users log into iCare, they can register the screens to be monitored (support for synchronous and asynchronous LED displays of NovaStar) at their accounts. In this way, users can log into the account to monitor those screens remotely and manage the screen information uniformly at any time.

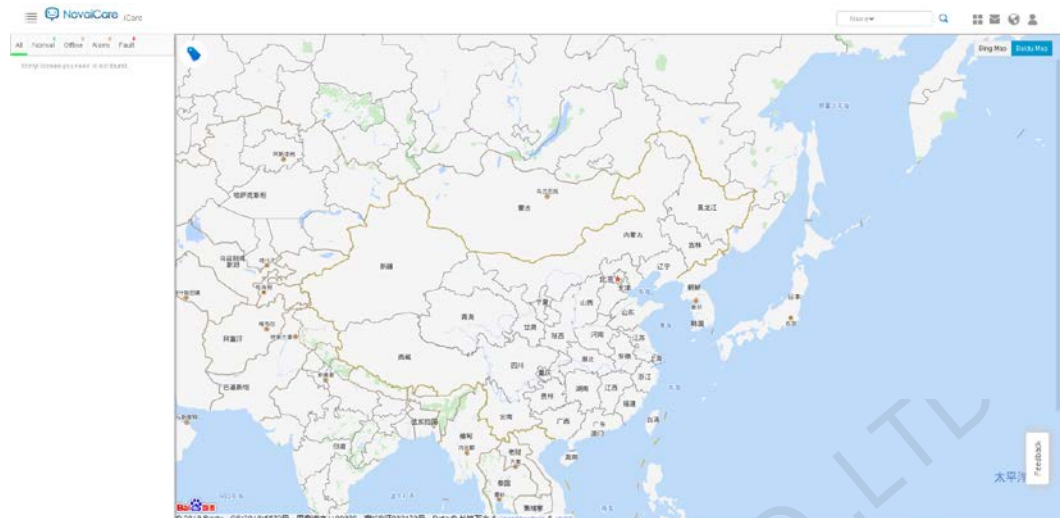
- Step 1 Visit www.en.vnnox.com and click **Login** at the top right of the page.
- Step 2 Select the server node and click **OK**.
- Step 3 Enter the account name and password, and click **Log In**. The service login page is displayed.

Figure 4-1 Service login page



- Step 4 Click the **Open** button of iCare.

Figure 4-2 iCare



4.2 Monitoring Information

iCare uses map for precise locating and recording the number of faults. Different colors are used to indicate current status of LED screens. Gray indicates the screen is offline, red indicates it has errors, yellow indicates it has alarms and green indicates it works normally.

Click on the screen to view its real-time monitoring information.

Figure 4-3 Screen information

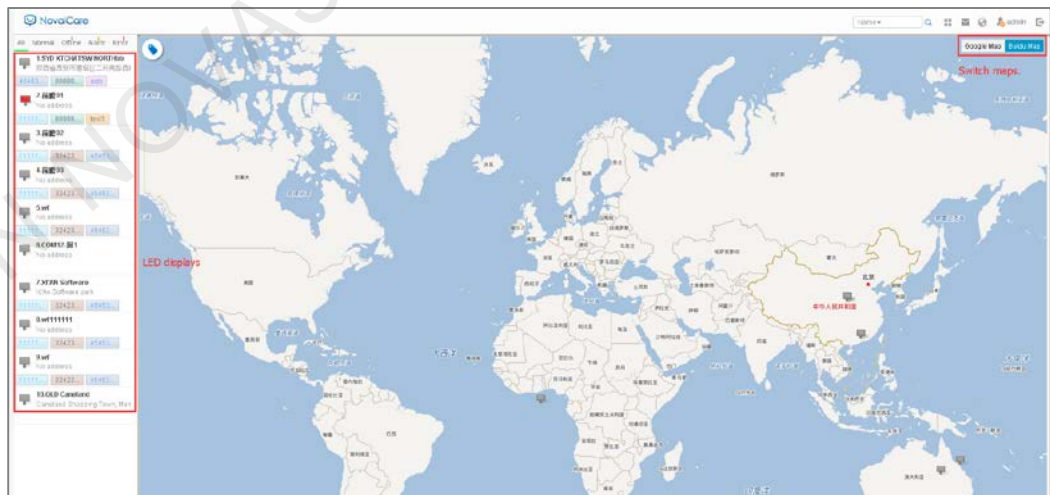
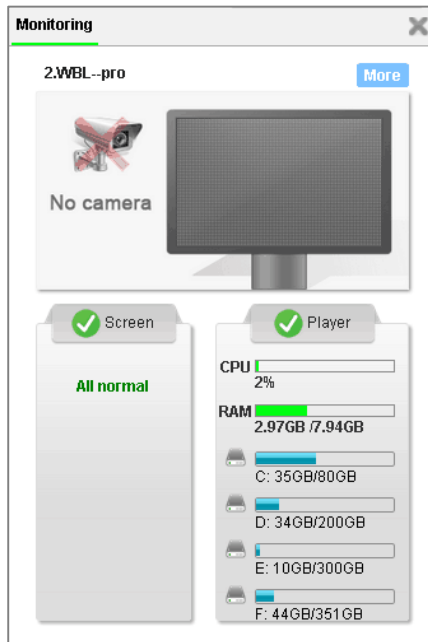


Figure 4-4 Real-time monitoring information




Then click **More** to view its basic information, monitoring picture, error alarm details, brightness, real-time status and individual LED detection results.


4.3 Search

In the search box at the top right of homepage, type a device name or an address to search for screens.


4.4 Main Menu

Move mouse to  at the top right to show the main menu and submenus.

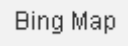
4.5 Update Log

Click  at the top right to check system update logs.

4.6 Language Settings

Click  at the top right to set the system language.

4.7 Map Switch

The system uses Baidu Map by default. Users can click on  to switch to Bing map.

4.8 Personal Settings


Choose  > **Personal Settings** to set your account information.

- **Basic Information:** View the roles of the user and set your nickname and email language.
- **Security:** Change the bound phone number and email, and the password.
- **Workgroup:** View the workgroup that the user belongs to.


4.9 Feedback

- Step 1 At the bottom right of the homepage, click **Feedback** to enter the page where you can give your feedback.
- Step 2 Select the type of your feedback, enter your feedback and contact information. You can upload attachments if necessary.
- Step 3 Click **Submit**.

4.10 System Switching

Click  at the top left to switch between VNNOX homepage, VNNOX Standard, VNNOX AD and iCare.

4.11 Logout

Choose  > **Log Out** to log out of the system.

5 Corporate Management

Choose  > **Corporate Management** > **SMTP Server** to enter email service configuration page.

- **Send Test Email:** Test whether emails can be sent normally after email service is configured.
- **Restore Defaults:** Clear current email service configuration.

You are advised to use SSL which can increase the security for sending emails.

6 Screen Management

6.1 Screen List

Select  > **Screen Management** > **Screen List** to enter the screen list page.


Filter

If there are too many screens, you can use the filter function on the left of the page to quickly find out the screens you want. When you are selecting the filter criteria, the screen list shows the filter results in real time.


Search

In the search box, type a screen name or an address and click **Search** to search for screens.

Real-Time Picture of Screen

Click  at the top right of the page. The real-time picture(s) captured by the enabled camera(s) supported by the current screen will be shown as tiled.


List Configuration

Click  at the top right of the page. In the dialog box that appears, configure the parameters displayed in the list.

List configuration ×

More than H m if the status update time is not be updated, use to mark it.

List View

Click  at the top right of the page. In the dialog box that appears, select the items to be shown in the screen list.

Screen Configuration

Click a screen name to enter its configuration page.

Batch Settings

Select a screen and click **Configuration**, or select multiple screens and click **Batch Settings** to enter the batch configuration page.

6.1.1 Basic Information

Click the name of the target screen to enter its **Basic Information** page which includes **Screen Information** and **Monitoring Notification** tabs.

Screen Information

Set the basic information of a screen, such as name, address, time zone, etc.

Figure 6-1 Screen information

Basic Information | Monitoring Picture | Error Alarm Details | Brightness | Real Time Status | Individual LED Detection

Screen Information | Monitoring Notification

* Name: test screen 2

Address: [Copy Icon]

Time zone: UTC+08:00 Beijing, Chongqing, Hong Kong, Urumqi, Irkutsk (RTZ 7), Kuala Lumpur, S...

Daylight saving time: Disabled

The settings will be applied on all screens registered on your terminal: test screen 2

Tag: q1

Size(width*height): 64*32

Device type: M3

Administrator: nova_wd

Submit

Monitoring Notification

Set email notification and SMS notification.

Figure 6-2 Monitoring notification

Basic Information | Monitoring Picture | Error Alarm Details | Brightness | Real Time Status | Individual LED Detection

Screen Information | Monitoring Notification

Email: Support up to 3 email addresses, separated by comma. Do not support QQ email

SMS: China 86 | Send SMS only when faults occur

Notification Language: English

Working Cycle: Everyday

Working Time: 06:00 ~ 22:00
Outside this period, fault/alarm/brightness adjustment failure/online/offline notifications would not be sent

Submit

6.1.2 Monitoring Picture

Click a screen name to enter the **Monitoring Picture** page.

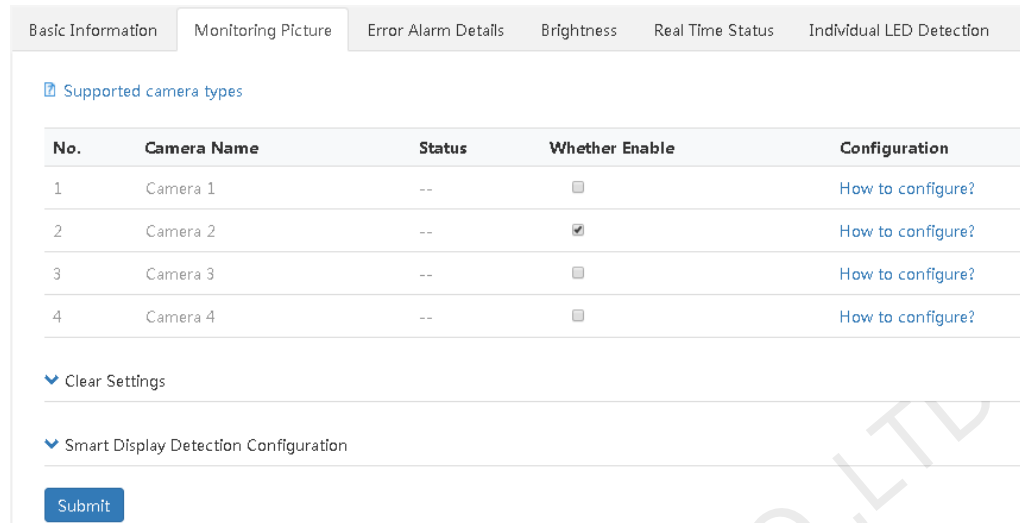
- Select the **Latest** tab to view the real-time monitoring pictures captured by different cameras.
- Select the **Captured Pictures** tab to view the number and size of captured pictures. Click a date link to tile the captured pictures by time period.
- Select the **Detection History** tab to check the smart display detection result.

Multi-Camera Function Configuration

- Each screen can support the configuration of up to 4 cameras.
- After the configuration, you can go to section [6.2 Monitoring](#) to view the picture(s) captured by the enabled camera(s).

Step 1 Click **Configuration** at the top right of the page to enter the **Monitoring Picture** configuration page.

Figure 6-3 Monitoring picture configuration



Step 2 (Optional) Click **Supported camera types** to check the types of cameras supported by iCare.

Figure 6-4 Supported camera types

Brand	Model
Mobotix	MX-T25-D016
Hikvision	DS-2CD2610var-p1ctf

Step 3 Check the box under **Whether Enable** to enable the camera function.

Step 4 Click **How to configure?** on the right side of the target camera. Then, follow the instructions to quickly configure the camera parameters.

Step 5 After camera configuration, click **View Result** to check the configuration result.

Clear Settings

Step 1 On the bottom left of the page, click **Clear Settings**.

Step 2 Set the period of clearing cached pictures. The quantity and size of current pictures can be previewed.

Smart Display Detection Configuration

Note: Only one camera is supported during detection configuration.

Step 1 Enable one or multiple cameras and click **Smart Display Detection Configuration** in the bottom-left corner.


Note: Disabling cameras will also disable the smart display detection function at the same time.

Step 2 Enable the smart display detection function.

Step 3 Select a camera.

The latest picture taken by the camera is displayed on the page.

Step 4 Mark out the screen on the picture. The range you marked out should not exceed the screen and the images of surrounding objects or watermark cannot be included in the range.

- Click  to select the theme color.
- Click on the picture to select different points to mark out the LED display range.

Step 5 Click **Submit**.

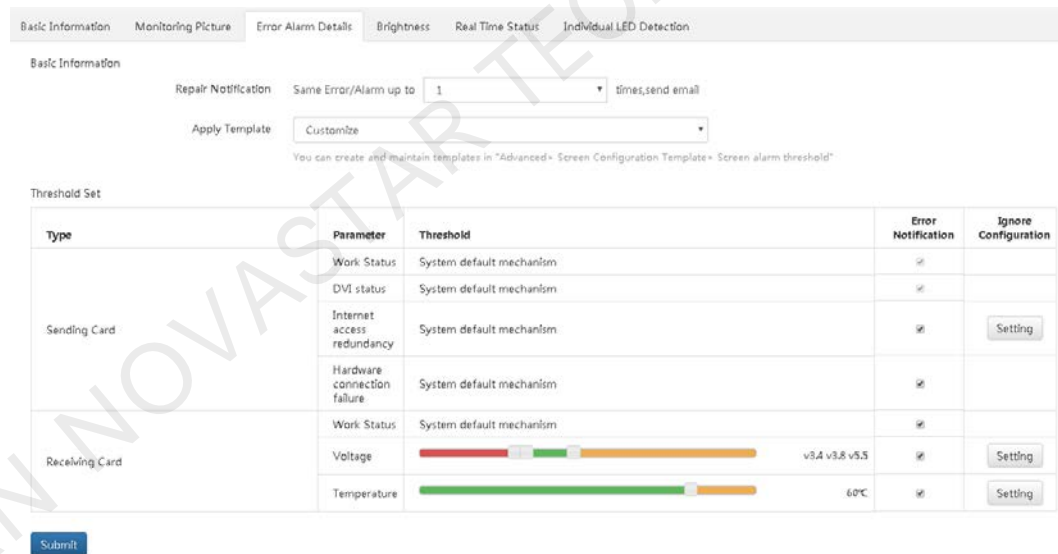
6.1.3 Error Alarm Details



Basic Information

Step 1 Click a screen name and then select the **Error Alarm Details** page to view the alarm history and notification emails about the screen.

Step 2 At the top right of the page, click **Configuration** to enter the threshold configuration page, as shown in [Figure 6-5](#).

Figure 6-5 Threshold configuration



Type	Parameter	Threshold	Error Notification	Ignore Configuration
Sending Card	Work Status	System default mechanism	<input checked="" type="checkbox"/>	
	DVI status	System default mechanism	<input checked="" type="checkbox"/>	
	Internet access redundancy	System default mechanism	<input checked="" type="checkbox"/>	<input type="button" value="Setting"/>
	Hardware connection failure	System default mechanism	<input checked="" type="checkbox"/>	
Receiving Card	Work Status	System default mechanism	<input checked="" type="checkbox"/>	
	Voltage	 v3.4 v3.6 v5.5	<input checked="" type="checkbox"/>	<input type="button" value="Setting"/>
	Temperature	 60°C	<input checked="" type="checkbox"/>	<input type="button" value="Setting"/>

- **Repair Notification:** Send an email to notify users if the number of times that same error/alarm happens reach the specified times.
- **Apply Template:** Apply alarm threshold templates. Choose **Advanced > Threshold Template** to create and maintain templates.

Threshold Configuration

- When the terminal does not connect to smart module and monitoring card

Figure 6-6 Not connected to smart module and monitoring card

Threshold Set

Type	Parameter	Threshold	Error Notification	Ignore Configuration
Sending Card	Work Status	System default mechanism	<input checked="" type="checkbox"/>	
	DVI status	System default mechanism	<input checked="" type="checkbox"/>	
	Internet access redundancy	System default mechanism	<input checked="" type="checkbox"/>	<input type="button" value="Setting"/>
	Hardware connection failure	System default mechanism	<input checked="" type="checkbox"/>	
Receiving Card	Work Status	System default mechanism	<input checked="" type="checkbox"/>	
	Voltage	v3.4 v3.8 v5.5	<input checked="" type="checkbox"/>	<input type="button" value="Setting"/>
	Temperature	60°C	<input checked="" type="checkbox"/>	<input type="button" value="Setting"/>

- When the terminal connects to smart module





Figure 6-7 Connected to smart module

Threshold Set

Type	Parameter	Threshold	Email Notification	Ignore Configuration
Sending Card	Work Status	System default mechanism	<input checked="" type="checkbox"/>	
	DVI Status	System default mechanism	<input checked="" type="checkbox"/>	
	Internet access redundancy	System default mechanism	<input checked="" type="checkbox"/>	<input type="button" value="Setting"/>
	Hardware connection failure	System default mechanism	<input checked="" type="checkbox"/>	
Receiving Card	Work Status	System default mechanism	<input checked="" type="checkbox"/>	
	Voltage	v1.0 v1.0 v2.3	<input checked="" type="checkbox"/>	<input type="button" value="Setting"/>
	Temperature	69°C	<input checked="" type="checkbox"/>	<input type="button" value="Setting"/>
SmartModule	Work Status	System default mechanism	<input checked="" type="checkbox"/>	<input type="button" value="Setting"/>
	Voltage	v3.4 v3.8 v5.0	<input checked="" type="checkbox"/>	<input type="button" value="Setting"/>
	Temperature	60°C	<input checked="" type="checkbox"/>	<input type="button" value="Setting"/>
	Flat Cable	System default mechanism	<input checked="" type="checkbox"/>	<input type="button" value="Setting"/>

- When the terminal connects to monitoring card

Figure 6-8 Connected to monitoring card

Type	Parameter	Threshold	Error Notification	Ignore Configuration
Sending Card	Work Status	System default mechanism	<input checked="" type="checkbox"/>	
	DVI status	System default mechanism	<input checked="" type="checkbox"/>	
	Internet access redundancy	System default mechanism	<input checked="" type="checkbox"/>	<input type="button" value="Setting"/>
	Hardware connection failure	System default mechanism	<input checked="" type="checkbox"/>	
Receiving Card	Work Status	System default mechanism	<input checked="" type="checkbox"/>	
	Voltage	 v3.4 v3.8 v5.5	<input checked="" type="checkbox"/>	<input type="button" value="Setting"/>
	Temperature	 60°C	<input checked="" type="checkbox"/>	<input type="button" value="Setting"/>
Monitoring Card	Work Status	System default mechanism	<input checked="" type="checkbox"/>	<input type="button" value="Setting"/>
	Voltage	 v3.4 v3.8 v5.5	<input checked="" type="checkbox"/>	<input type="button" value="Setting"/>
	Smoke	System default mechanism	<input checked="" type="checkbox"/>	<input type="button" value="Setting"/>
	Door	System default mechanism	<input checked="" type="checkbox"/>	<input type="button" value="Setting"/>
	Fan Speed	 1000r/min	<input checked="" type="checkbox"/>	<input type="button" value="Setting"/>
	Flat Cable	System default mechanism	<input checked="" type="checkbox"/>	<input type="button" value="Setting"/>

Parameter description:

- **Type:** It includes sending card, receiving card, monitoring card, smart module.
- **Parameter:** It refers to parameter of monitoring data type and mainly includes: "Working status", "DVI status", "Internet access redundancy", "Hardware connection status", "Temperature", "Voltage", "Flat cable", etc.
- **Threshold:** It is parameter value range during normal operation and shown in horizontal bar graph. Threshold options with "System default mechanism" cannot be adjusted.
- **Error Notification:** When this parameter is selected, the system will send error and alarm notifications to users.

Temperature  60°C

It will give an alarm and send an email when temperature is higher than 60°C.

Voltage  v3.4 v3.8 v5.5

An error will occur and the system will send an email when the voltage is lower than 3.4V. The system will give an alarm and send an email when the voltage is higher than 5.5V.

- **Ignore Configuration:** Click **Setting** to complete **Ignore Configuration Settings**.

Ignore configuration settings ×

Whether to enable ▼

Ignore configuration table

Name	Sending Card	Net	Receiving Card

6.1.4 Brightness

Step 1 Click a screen name and select the **Brightness** page to view the display brightness, environment brightness, light sensor status, and brightness template name.

Figure 6-9 Brightness page — **Current**

The screenshot shows the 'Brightness' page with the following data:

- Display Brightness: 102(40.0%)
- Environment Brightness: 200 Lux
- Light Sensor Status: Normal
- Template name: Customize

Location	Value(Lux)
Sender(sequence:00)-PortOfSender(sequence:01)-LightSensor(sequence:00)	200

- **Display Brightness:** Shows the current brightness of the display.
- **Environment Brightness:** Shows the brightness detected by the light sensor. When multiple light sensors are connected, this parameter shows the average brightness. If **Nonsupported** is shown, it indicates that no light sensor is connected to the display.
- **Light Sensor Status:** Shows the current status of the light sensor. This parameter is shown when a light sensor is connected.
- **Template name:** Shows the name of the currently used brightness template. When **Customize** is shown, it indicates that no brightness template is used.

Step 2 Click the **Log** tab to view the logs of brightness adjustment. If you want to export the logs, click **Export to Excel**.

Figure 6-10 Brightness page — **Log**

The screenshot shows the 'Log' page with the following data:

No.	Time	Result	Target Brightness	Adjustment Type
1	2018-05-04 15:19:08	Success	102(40.0%)	Environment Brightness
2	2018-05-04 11:46:35	Success	76(29.9%)	Specific Brightness
3	2018-05-04 10:41:27	Success	0(0.0%)	Environment Brightness
4	2018-05-04 10:36:24	Success	7(2.8%)	Environment Brightness
5	2018-05-04 10:31:19	Success	25(9.9%)	Environment Brightness

Step 3 Click the **Mail** tab and view the time to send light sensor error/alarm emails, recipients, and email types.

Figure 6-11 Brightness page — Mail

No.	Time	Receiver	Type
1	2018-05-04 15:14:47	nova_hemy@126.com	Light sensor
2	2018-05-04 11:14:49	nova_hemy@126.com	Light sensor
3	2018-05-04 10:46:14	nova_hemy@126.com	Light sensor
4	2018-05-04 10:45:14	nova_hemy@126.com	Light sensor
5	2018-05-03 16:45:35	nova_hemy@126.com	Light sensor

Meanings of the values of **Type**:

- **Brightness**: Brightness adjustment failure emails
- **Light sensor**: Light sensor error or alarm emails

Step 4 At the top right of the page, click **Configuration** to set the parameters related to brightness.

Figure 6-12 Brightness settings

The screenshot shows the 'Brightness' configuration page with the following settings:

- Brightness Control Failure Email Notice**:
- Light Sensor Repair Notification**: Same Error/Alarm up to: times, send email
- Brightness Range Threshold**: A slider set to 55468Lux. Below the slider, it says: "When the difference between the maximum reading and the minimum reading is greater than the threshold, alarm email will be sent."
- Apply Template**:

Additional options shown below the main settings:

- Automatic Brightness Adjustment
- Environment Brightness Map

A **Submit** button is located at the bottom left of the configuration area.

- **Brightness Control Failure Email Notice**: Allows to decide whether to send notification emails when the brightness control fails.
- **Light Sensor Repair Notification**: This parameter is shown when the display supports light sensors. When the number of the times of a same error or alarm continuously occurs reach the value you set, the system will send a notification email.
- **Brightness Range Threshold**: This parameter is shown when the display supports light sensors and multiple light sensors are connected to the display. When the difference between the maximum and minimum readings of the light sensors is greater than the threshold you set, the system will send a notification email.

- **Automatic Brightness Adjustment:** Allows to configure the rules for automatic brightness adjustment.

Automatic Brightness Adjustment

Time	Type	Brightness(%)	Gamma	Enable	
16:00	Environment brightness	--	--	<input checked="" type="checkbox"/>	
17:00	Environment brightness	--	2.8	<input checked="" type="checkbox"/>	

+ New

Meanings of the values of **Type**:

- **Specific brightness:** The brightness of the display changes based on the specified value.
- **Environment brightness:** The brightness of the display changes based on the configuration in the environment brightness mapping table.
- **Environment Brightness Map:** Allows to configure the relationship between display brightness and environment brightness.

Environment Brightness Map

Light sensor failure setting

5%

When the reading environment brightness fails, the brightness is adjusted to that value.

Environment Brightness(Lux)	Display Brightness(%)	
<input type="text" value="20"/>	<input type="text" value="40"/>	Delete
<input type="text" value="1218"/>	<input type="text" value="44"/>	Delete
<input type="text" value="2416"/>	<input type="text" value="46"/>	Delete
<input type="text" value="3614"/>	<input type="text" value="52"/>	Delete
<input type="text" value="4812"/>	<input type="text" value="56"/>	Delete
<input type="text" value="6010"/>	<input type="text" value="60"/>	Delete
<input type="text" value="7208"/>	<input type="text" value="64"/>	Delete
<input type="text" value="8406"/>	<input type="text" value="68"/>	Delete
<input type="text" value="9604"/>	<input type="text" value="72"/>	Delete
<input type="text" value="10802"/>	<input type="text" value="76"/>	Delete
<input type="text" value="12000"/>	<input type="text" value="80"/>	Delete

+ New

Quick Subsection

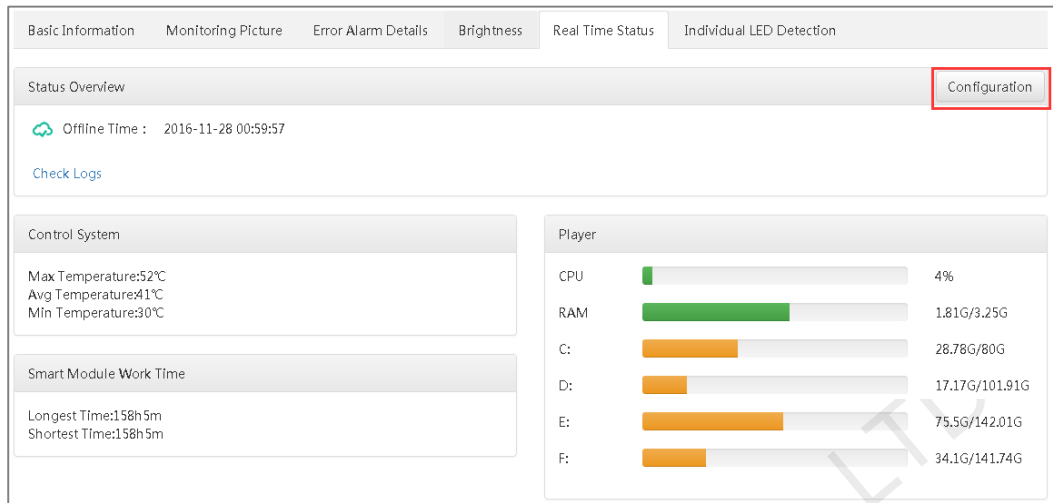
- **Light sensor failure setting:** When this parameter is selected, if the system fails to read the environment brightness, the brightness of the display will be adjusted to the value you set here.
- **Quick Subsection:** Allows to quickly configure the environment brightness mapping table.

6.1.5 Real Time Status

Step 1 Click a screen name and select the **Real Time Status** page.

The **Real Time Status** tab page displays the status of online/offline, real-time temperature of the control system, and the storage space usage details about the player. When a smart module is connected to the terminal, the **Real Time Status** tab page also displays the record of the smart module's working hours.

Figure 6-13 Real time status



Step 2 Click **Check Logs** to view the status in history and the email details.

Step 3 At the top right of the page, click **Configuration** to set a time period after which a notification email would be sent if the screen goes offline.

6.1.6 Individual LED Detection

If this function is configured in both NovaLCT and iCare, users can check the result of individual LED detection.

Step 1 Click a screen name and select the **Individual LED Detection** page.

Step 2 At the top right of the page, click **Configuration** to set the template and period individual LED detection.

Figure 6-14 Configuration of individual LED detection

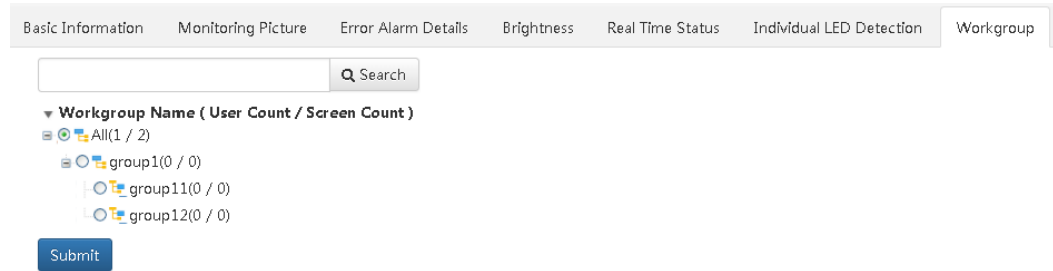
- **Apply Template:** Apply individual LED detection templates. Choose **Advanced > Individual LED Detection Template** to create and maintain templates.
- **Template Data:** Set the period of individual LED detection.

6.1.7 Workgroup

Step 1 Select a screen and click **Configuration** at the top left of the page.

Step 2 Click the **Workgroup** page to set the workgroup that the current screen belongs to.

Figure 6-15 Workgroup



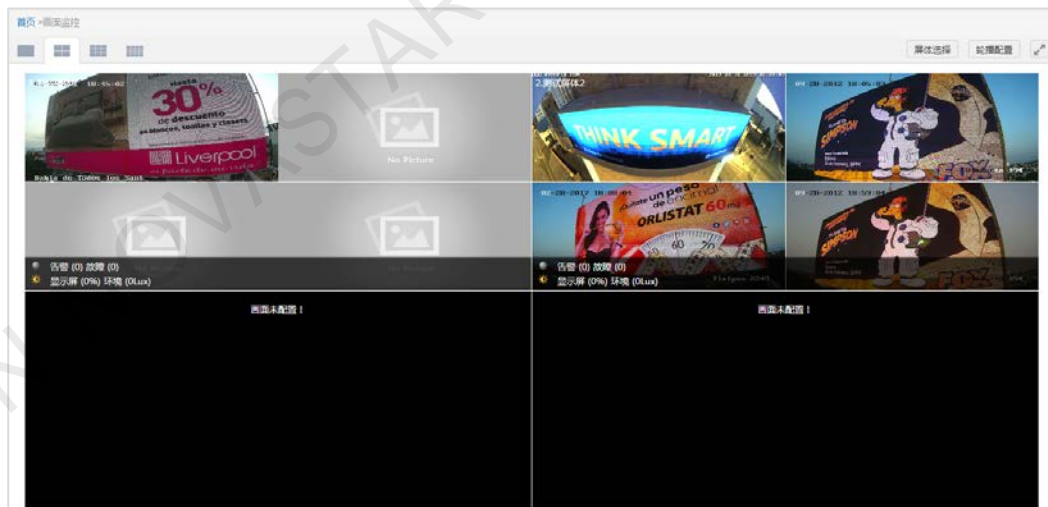
6.2 Monitoring


Step 1 Choose  > **Screen Management** > **Monitoring** to access the monitoring page.

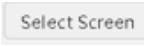
One grid shows a LED display's real-time picture(s) captured by the enabled camera(s) (16 LED displays can be monitored simultaneously at most, while each LED display can support a maximum of 4 enabled cameras).

Note: For 1-grid, 4-grid and 9-grid, each grid can be further split into 4 sub-grids, each of which displays the picture captured by one camera. 16-grid does not support splitting.

Figure 6-16 Monitoring



Step 2 Click  to set the grid, which can be divided into four types: 1 grid, 4-grid, 9-grid, and 16-grid.

Step 3 Click  on the upper-right corner of the page to select the screen to be monitored.

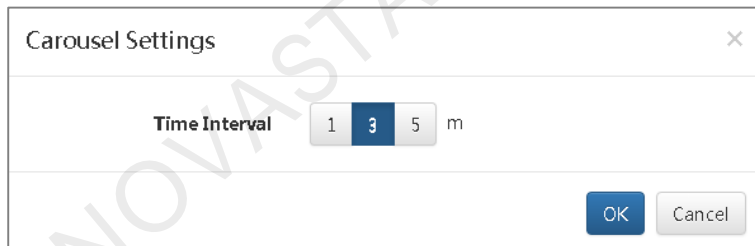
In the selected screen(s) area, drag the screen name to change the order. Thus the screen order in the Monitoring page changes accordingly.

Figure 6-17 Select screen



Step 4 Click **Carousel Settings** on the top right corner to choose time interval.

Figure 6-18 Carousel settings



7 Reports

7.1 Periodic Inspection Reports


Choose  > **Report** > **Periodic Inspection Report** to access the periodic inspection report setting page, as shown in the figure below.

Figure 7-1 Periodic inspection report-Latest status

Latest		History		Configuration		
Date : 2016-12-30						
Time : 09:00						
Screen Number : 9						
No.	Screen Name	Current brightness	Environment brightness	Address	Status Update Time(UTC)	Status
1	前舱03	0 (0%)	Unsupport			Offline
2	前舱02	0 (0%)	Unsupport			Offline
3	前舱01	255 (100%)	Unsupport		2016-12-05 09:28	Offline
4	Xi'AN Software	0 (0%)	Unsupport	Xi'An Software park		Offline
5	wf111111	Failure	Failure		2016-10-31 02:01	Offline
6	wf	153 (60%)	Unsupport		2016-09-12 01:52	Offline
7	wf	0 (0%)	Unsupport			Offline
8	SYD XTCHATSW NORTHbb	0 (0%)	Unsupport	陕西省西安市雁塔区二环南路西段		Offline
9	COM12-屏1	Failure	Unsupport		2016-10-14 03:05	Offline
Total 9 , No.1/1						10 for each of pages

Figure 7-2 Periodic inspection report-History status

Latest		History		Configuration
No.	Time	Screen Number		
1	2016-12-30 09:00	9		
2	2016-12-30 00:32	9		
3	2016-12-29 09:00	9		
4	2016-12-29 00:32	9		
5	2016-12-28 09:00	9		
6	2016-12-28 00:32	9		
7	2016-12-27 09:00	9		
8	2016-12-27 00:32	9		
9	2016-12-26 09:00	9		
10	2016-12-26 00:32	9		

Total 129 , No.1/13

10 for each of pages 1 2 3 4 5 ... 13 >>

7.1.1 Basic Information Configuration

Click **Configure** to access the page of configuration which includes “Basic Information” and “Associated screen settings”. Click **Edit** on the page of basic information to edit basic information, as shown in the figure below.

Figure 7-3 Periodic inspection report-Basic information

*Report Cycle:

*Report Time (UTC): +

*Report Email:
Support up to 3 email addresses, separated by comma. Do not support QQ email.

*Email Language:

- Report Period: Report the current status of LED display according to the period selected. If it defaults to “Never”, it means that the LED display won’t be monitored.
- Report Time (UTC): Refers to the specific time to report the status of LED display. Click on the icon + to add one time. It defaults to 9:00 am.
- Report Email: The number of email addresses can be one or more, but 3 at most. If the user registered via email, here will show the email address used during registration, otherwise, it is empty.
- Email Language: The language of the content of emails.

Note:

- When “Everyday” is selected as “Report Period”, click on the input box of “Report Time (UTC)”, then the dropdown menu will show a time picker and you can select a proper time.

- When “Every week” is selected as “Report Period”, “Report Date (UTC)” will be added under “Report Period”. Click "Report Time (UTC)" to select a date in the drop-down menu.
- When “Every month” is selected as “Report Period”, “Report Date (UTC)” will be added under “Report Period”. Click on the input box of “Report Date (UTC)” and a time picker will pop up. Then you can select a specific data.
- When “Never” is selected as “Report Period”, the input boxes of “Report Time (UTC)” and “Report Email” cannot be edited.

7.1.2 Associated screen settings

Click **Associated screen settings** to select the screen(s) which will be associated by the device.

Figure 7-4 Periodic inspection report-Associated screen settings



Association Screen (the number of screens associated): Set the screens to be monitored. The screens of the user are shown in the table.

7.2 Custom Reports

Choose **Report > Client Custom Report** to access the client custom report setting page.

Note: Only enterprise users are able to access.

Figure 7-5 Client custom report

No.	Client Name	Report Name	Screen Number	Report Generated Time (UTC)
1	1430_6_cus	1430_6	10	2017-01-11 06:31:51
2	1430_6_cus	1430_6	10	2017-01-11 06:31:49
3	1430_6_cus	1430_6	10	2017-01-11 06:31:47
4	1430_6_cus	1430_6	10	2017-01-11 06:31:45
5	1430_6_cus	1430_6	10	2017-01-11 06:31:43
6	1430_6_cus	1430_6	10	2017-01-11 06:31:41
7	1430_6_cus	1430_6	10	2017-01-11 06:31:39
8	1430_6_cus	1430_6	10	2017-01-11 06:31:37
9	1430_6_cus	1430_6	10	2017-01-11 06:31:35
10	1430_6_cus	1430_6	10	2017-01-11 06:31:33

Click **Configuration** on the top right corner to “Add”, “Edit”, “Delete” reports.

Figure 7-6 Configuration

No.	Report Name	Client Name	Send Period	Next Send Time(UTC)	Screen Number
1	1430_6	1430_6_cus	Everyday	2017-01-11 06:30:00	10
2	1430_6	1430_6_cus	Everyday	2017-01-11 06:30:00	10
3	1430_6	1430_6_cus	Everyday	2017-01-11 06:30:00	10
4	1430_6	1430_6_cus	Everyday	2017-01-11 06:30:00	10
5	1430_6	1430_6_cus	Everyday	2017-01-11 06:30:00	10
6	1430_6	1430_6_cus	Everyday	2017-01-11 06:30:00	10
7	1430_6	1430_6_cus	Everyday	2017-01-11 06:30:00	10
8	1430_6	1430_6_cus	Everyday	2017-01-11 06:30:00	10
9	1430_6	1430_6_cus	Everyday	2017-01-11 06:30:00	10
10	1430_6	1430_6_cus	Everyday	2017-01-11 06:30:00	10

7.2.1 Creating Reports

Basic Information

- Step 1 On the **Configuration** page of **Client Custom Report**, click **Add** to enter the **Add** page.
- Step 2 Edit the basic information about the new client custom report.
- Step 3 Click **Submit** to go to the editing page.
- Step 4 Click **Edit** to edit the basic information.

Figure 7-7 Basic information

Home > Client Custom Report > Configuration > Add

Report Name: 1 ~ 60 characters

Report Period: Every month

Report Date(UTC): 1

Report Time(UTC): 09:00

Client Name: 1 ~ 60 characters

Report Email:
Separate by comma,supports up to three email

Email Language: Chinese

Submit

Associated screen settings

- Step 1 Click the **Associated screen settings** tab.
- Step 2 Click **Edit** and select a screen to associate (multiple screens can be associated at the same time).
- Step 3 Click **Submit**.

Figure 7-8 Associated screen settings

The screenshot shows a web interface with two tabs: 'Basic Information' and 'Associated screen settings'. The 'Associated screen settings' tab is active, displaying a table with the following columns: Screen Name, Size (Width*Height), Device Type, Tag, and Address. There are 9 rows of data, each with a checkbox on the left. At the bottom of the table are 'Submit' and 'Cancel' buttons.

Screen Name	Size (Width*Height)	Device Type	Tag	Address
<input checked="" type="checkbox"/> American	128*128	M3	nova	ул. Большая Черкизовская, 103/105, Москва, Россия, 107553
<input type="checkbox"/> 测试屏能不能注册	140*140	M3	nova	Бутырская ул., вл88Г, Москва, Россия, 127015
<input type="checkbox"/> 1111	32*32	M3	nova	
<input checked="" type="checkbox"/> COM11-屏1	128*192	M3	nova	
<input checked="" type="checkbox"/> WBL--pro	256*256	M3	nova	
<input checked="" type="checkbox"/> PPSD100-I-123	32*32	Pluto	nova	
<input checked="" type="checkbox"/> COM4-屏11111	128*128	M3		
<input checked="" type="checkbox"/> Old5	128*128	M3		
<input checked="" type="checkbox"/> 测试屏能不能注册333	128*128	M3		

7.2.2 Edit Reports

Basic Information

- Step 1 On the **Client Custom Report** list page, click **Configuration** at the top right to enter the **Configuration** page of **Client Custom Report**.
- Step 2 Select a report.
- Step 3 Click **Edit** at the top right to enter the **Basic Information** page. Then, click **Edit** to edit such information as report name, report date, report period, client name and so on.

Figure 7-9 Basic Information

The screenshot shows a web interface with a breadcrumb trail: Home > Client Custom Report > Configuration > Edit. There are two tabs: 'Basic Information' and 'Associated screen settings'. The 'Basic Information' tab is active, displaying a form with the following fields:

- Report Name: 1430_6
- Report Period: Everyday
- Report Time(UTC): 06:30
- Client Name: 1430_6_cus
- Report Email: nova_yubin@126.com
- Email Language: Chinese

At the bottom of the form is an 'Edit' button.

Associated Screen Settings

- Step 1 Click the **Associated screen settings** tab.
- Step 2 Click **Edit** and select a screen to associate (multiple screens can be associated at the same time).
- Step 3 Click **Submit**.

7.2.3 Deleting Reports

- Step 1 On the **Client Custom Report** list page, click **Configuration** at the top right to enter the **Configuration** page of **Client Custom Report**.
- Step 2 Select one or multiple reports.
- Step 3 Click **Delete** at the top right to delete the selected reports.

Note:

- When “Everyday” is selected as “Report Period”, click on the input box of “Report Time (UTC)”, then the dropdown menu will show a time picker and you can select a proper time.
- When “Every week” is selected as “Report Period”, “Report Date (UTC)” will be added under “Report Period”. Click "Report Time (UTC)" to select a date in the drop-down menu.
- When “Every month” is selected as “Report Period”, “Report Date (UTC)” will be added under “Report Period”. Click on the input box of “Report Date (UTC)” and a time picker will pop up. Then you can select a specific data.
- When “Never” is selected as “Report Period”, the input boxes of “Report Time (UTC)” and “Report Email” cannot be edited.

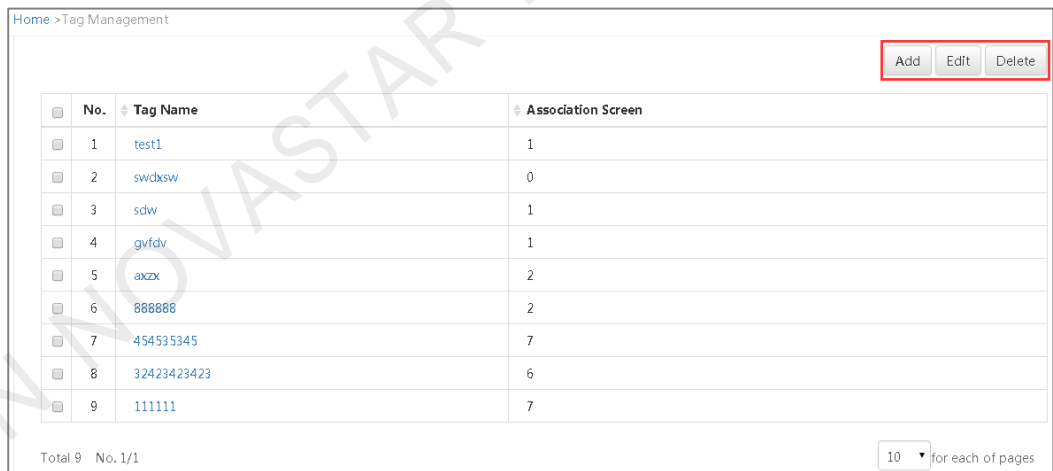
8 Advanced Settings

8.1 Tag Management

Choose  > **Advanced** > **Tag Management** to access the tag management page, as shown in figure below.

Add tags to screens, which can show the features of screens more initiatively. Tags can be customized such as stadiums, LED advertisement displays, etc.

Figure 8-1 Tag management

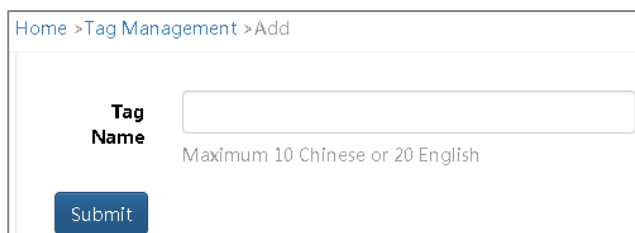


No.	Tag Name	Association Screen
1	test1	1
2	swdxsw	0
3	sdw	1
4	gvfdv	1
5	axzx	2
6	888888	2
7	454535345	7
8	32423423423	6
9	111111	7

8.1.1 Add

Click **Add** on the page of Tag management to add tags.

Figure 8-2 Add tags



Home > Tag Management > Add

Tag Name

Maximum 10 Chinese or 20 English

Click **Submit** and the page of **Edit** will appear.

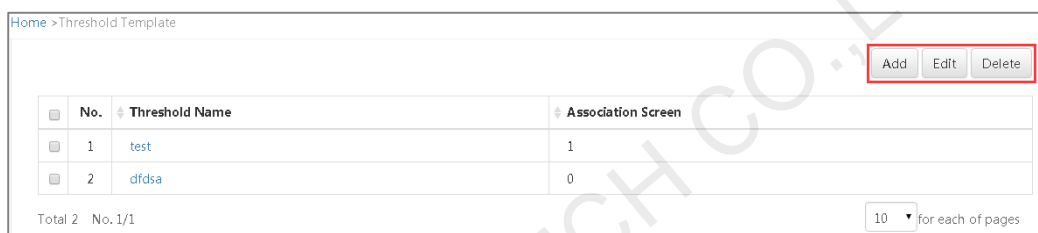
8.1.2 Edit

Select a screen to be edited on the page of Tag Management and click **Edit** to the name of its tag and associate screens to the tag. Click **Submit** upon completion.

8.2 Threshold Templates

Choose  > **Advanced** > **Threshold Template** to access the threshold template page, as shown in figure below.

Figure 8-3 Threshold template



No.	Threshold Name	Association Screen
1	test	1
2	dfdsa	0

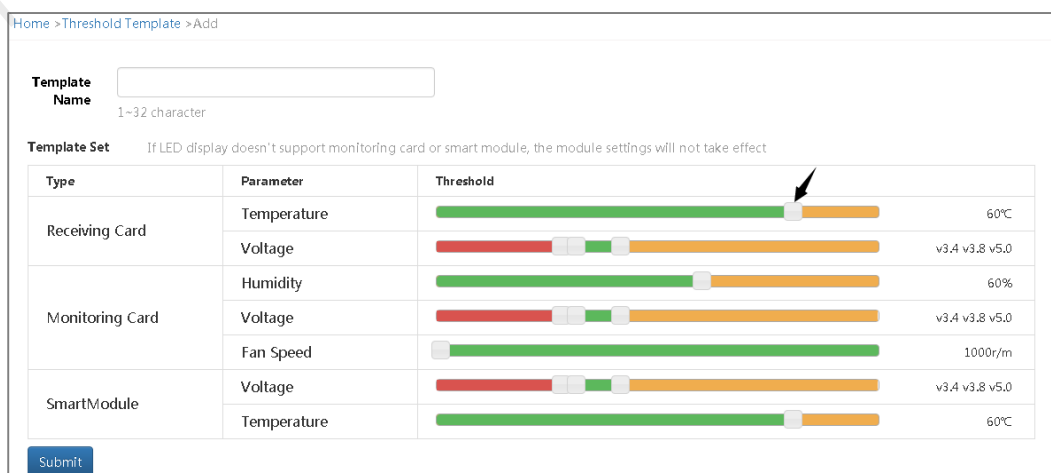
Total 2 No. 1/1

10 for each of pages

8.2.1 Add

- Step 1 On the **Threshold Template** page, click **Add** to pop up the **Add Template** dialog box. Then, edit **Template Name** in the box.
- Step 2 Click **Submit** to go to the **Edit** page of the new threshold template.
- Step 3 Click **Edit** to edit the new threshold template information.
- Step 4 Edit the name of the new template.
- Step 5 Click and drag the slider to set the threshold parameters of the receiving card, monitoring card or smart module.


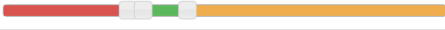


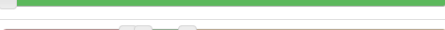

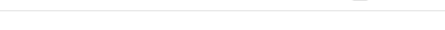
Figure 8-4 Add template



Home > Threshold Template > Add

Template Name (1-32 character)

Template Set If LED display doesn't support monitoring card or smart module, the module settings will not take effect

Type	Parameter	Threshold
Receiving Card	Temperature	 60°C
	Voltage	 v3.4 v3.8 v5.0
Monitoring Card	Humidity	 60%
	Voltage	 v3.4 v3.8 v5.0
SmartModule	Fan Speed	 1000r/m
	Voltage	 v3.4 v3.8 v5.0
	Temperature	 60°C

Submit

Current status denotes:

- It will give an alarm when the temperature is higher than 60°C.
- The screen will be faulty when the voltage is lower than 3.4V. It will give an alarm when the voltage is between 3.4V and 3.8 or higher than 5.0V.
- It will give an alarm when the fan speed is lower than 1000 r/m.

8.2.2 Edit

Select a template to be edited and click **Edit** for parameter settings and associated screen settings.

8.3 Brightness Templates


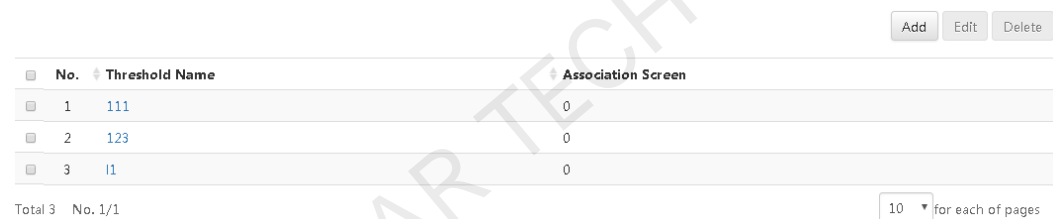
Choose  > **Advanced** > **Brightness Template** to access the brightness template page, as shown in figure below.

Figure 8-5 Brightness template



No.	Threshold Name	Association Screen
1	111	0
2	123	0
3	l1	0

Total 3 No. 1/1

10 for each of pages

8.3.1 Add



At the top right of the page, click **Add** to add a brightness template.

8.3.2 Edit

Select a brightness template and click **Edit**, or click a template name. Then, click **Edit** on the editing page.

Template Name

Automatic Brightness Adjustment

Time	Type	Brightness(%)	Enable
09:00	Specific brightness	20	<input checked="" type="checkbox"/>  


+ New

Environment Brightness Map

Light sensor failure setting 0%

When the reading environment brightness fails, the brightness is adjusted to that value.

Environment Brightness(Lux)	Display Brightness(%)

+ New  Quick Subsection

- **Automatic Brightness Adjustment:** Allows to configure the rules for automatic brightness adjustment.
Meanings of the values of **Type**:
 - **Specific brightness:** The brightness of the display changes based on the specified value.
 - **Environment brightness:** The brightness of the display changes based on the configuration in the environment brightness mapping table.
- **Environment Brightness Map:** Allows to configure the relationship between display brightness and ambient brightness.
 - **Light sensor failure setting:** When this parameter is selected, if the system fails to read the environment brightness, the brightness of the display will be adjusted to the value you set here.
 - **Quick Subsection:** Allows to quickly configure the environment brightness mapping table.

8.4 Individual LED Detection Templates


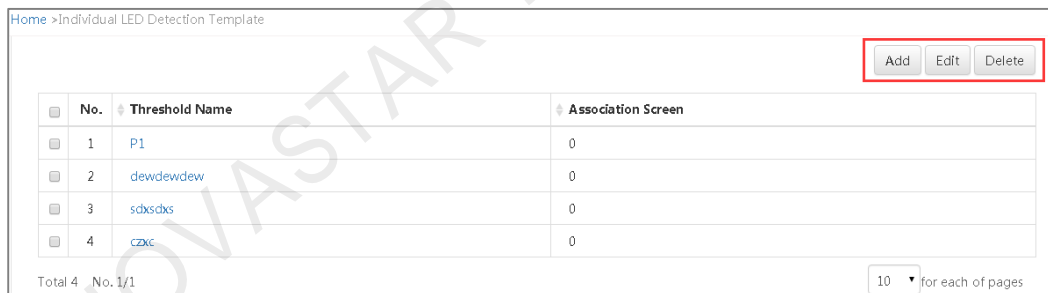
Choose  > **Advanced** > **Individual LED Detection Template** to access the individual LED detection template page, as shown in figure below.

Figure 8-6 Individual LED Detection Templates



<input type="checkbox"/>	No.	Threshold Name	Association Screen
<input type="checkbox"/>	1	P1	0
<input type="checkbox"/>	2	dewdewdew	0
<input type="checkbox"/>	3	sdxsdxs	0
<input type="checkbox"/>	4	czxc	0

8.4.1 Add

Step 1 Click **Add** to go to the **Add Template** dialog box and edit **Template Name**.

Step 2 Click **Submit** to go to the **Edit** page of the new individual LED detection template.

8.4.2 Edit

Select the template to be edited and click **Edit** for template parameter settings.

Figure 8-7 Edit templates

* Template Name: S1

Template Data

Individual LED Detection Period: Monthly

Inspection Date: 01

Inspection Time: 09:00

Maintenance Notice: Bad Rate ≥ 5 % , Notification Service

Submit Cancel

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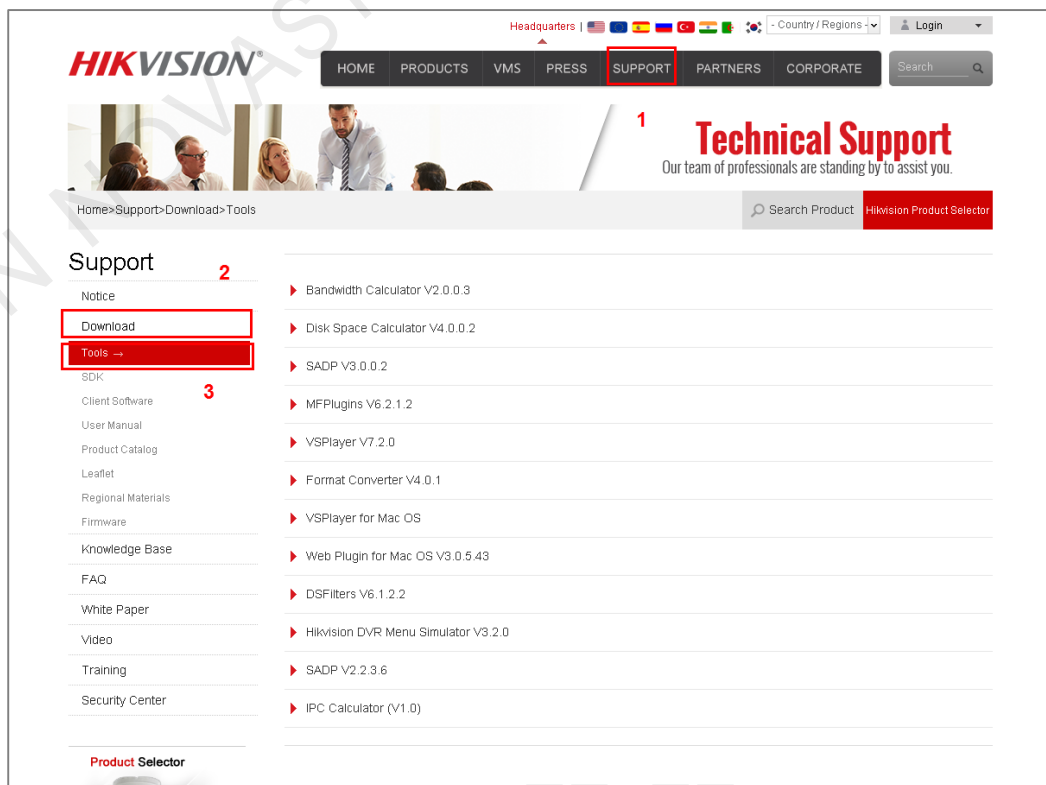
9 IPC Configuration

9.1 Before You Begin

Following preparations need to be done before connecting IP Camera:

- PC x 1
- IP Camera x 1
- Download network search software of camera units and install it on your computer. HIKVISION camera network search software is SADP_ version. Please visit HIKVISION official website at <http://overseas.hikvision.com/en/> to download SADP software. The specific download operation of the software is shown as follows.

Figure 9-1 Downloading network search software of camera unit

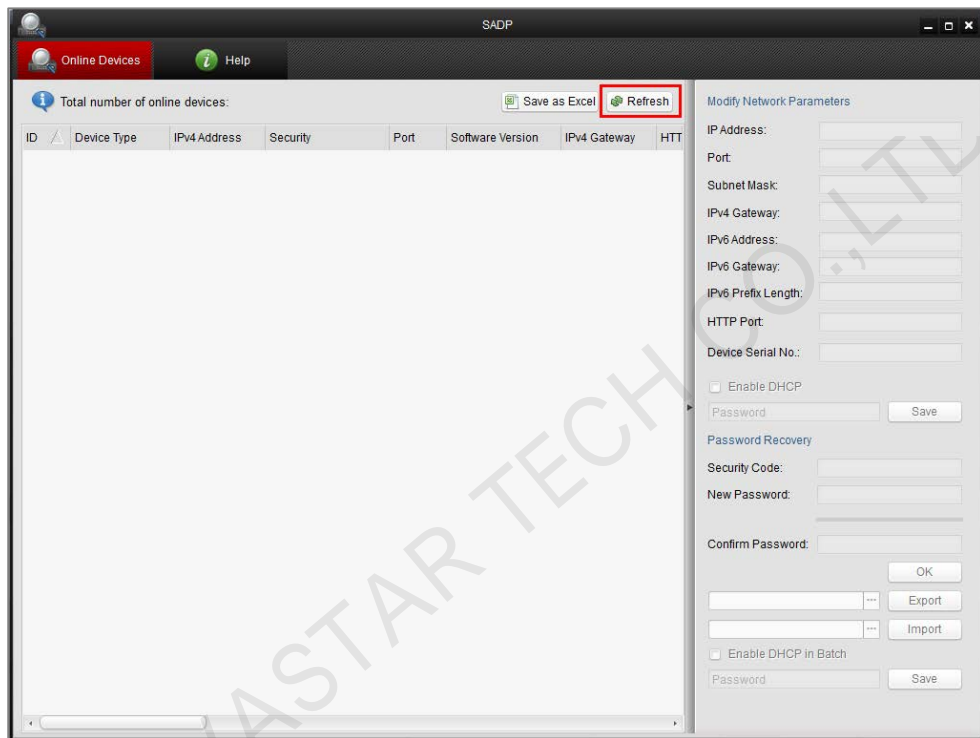


Note: PC and IP Camera need to be connected in the same network segment!

9.2 Network Parameter Configuration

Step 1 After installing the equipment network search software, open it and click **Refresh**.

Figure 9-2 Window of the network search software of camera unit

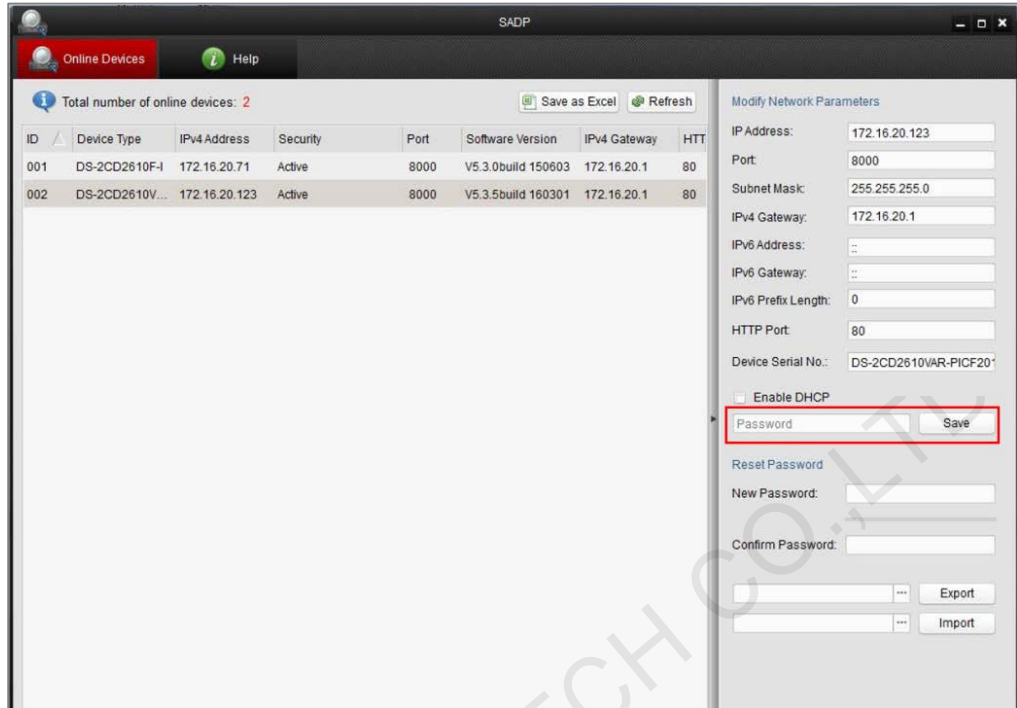


Step 2 Click and select the camera to be configured. Set network parameter configuration of the camera on the right side. It defaults to no administrator password. If it is required to set password, please enter password in "Password" box at the lower right position of the page.

Tip:

The configuration process is similar to that of the IP address of PC, and static IP and automatic access can be set. Please note when setting static IP: Camera IP and IP of PC must be in the same network segment and do not conflict with the IP of other LAN network equipment. In addition, please confirm that PC can access the public network normally.

Figure 9-3 Configuring network parameters



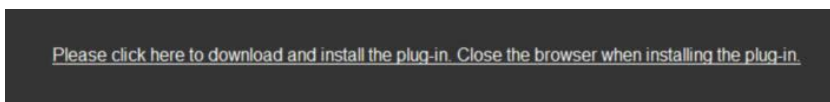
9.3 Time Settings

Step 1 Input IP address of camera in the address bar of the browser (360 browser or IE11 are recommended) and press **Enter** key for confirmation (or double click the IP address of corresponding device in the device list of above figure). Enter device login interface with the user name of “admin” and empty password by default. Users can set the login password after logging in and the login password is same as that of administrator.

Figure 9-4 Login page

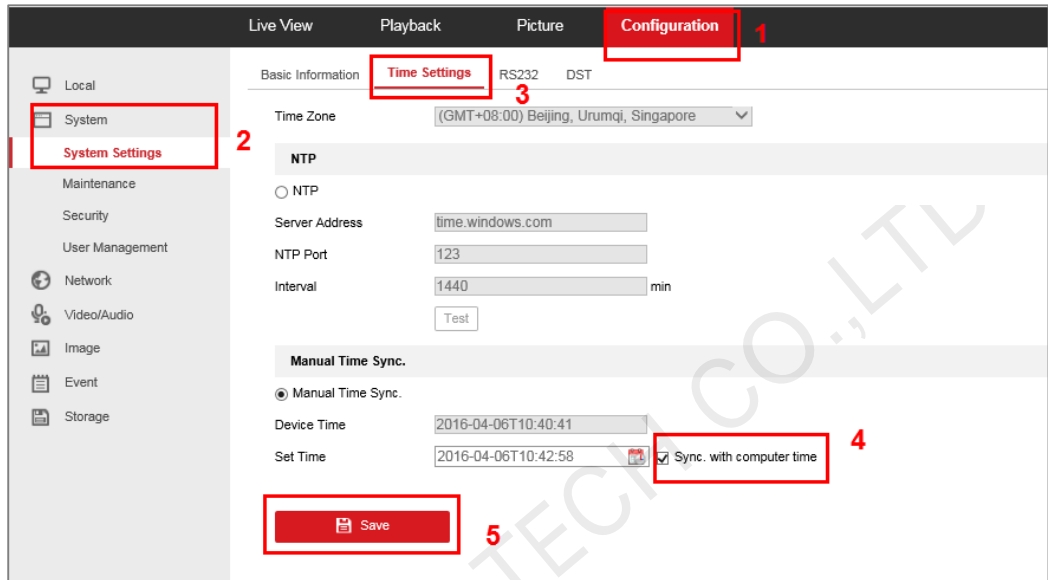


Step 2 Download plug-in after logging in as per the prompt.



- Step 3 Click and download the plug-in. Refresh the page after finishing installation. Select “**All sites operation**” as per the prompt.
- Step 4 Enter the device interface and select **Configuration>System>System Settings>Time Settings**. Check “Sync. with computer time” and click “Save”.

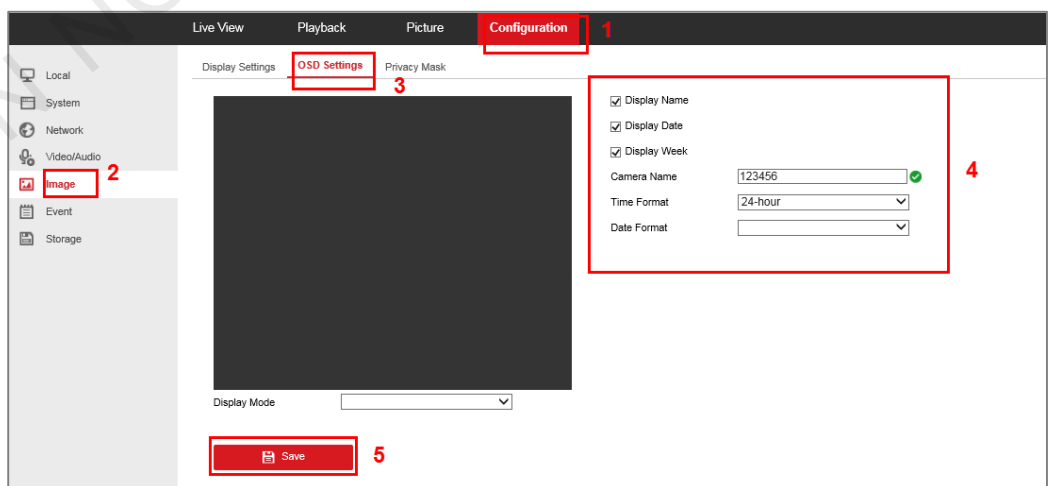
Figure 9-5 Time settings



9.4 Image Display Settings

- Step 1 Select **Configuration > Image > OSD Settings** and set the parameters as required. Click “**Save**” after the settings.

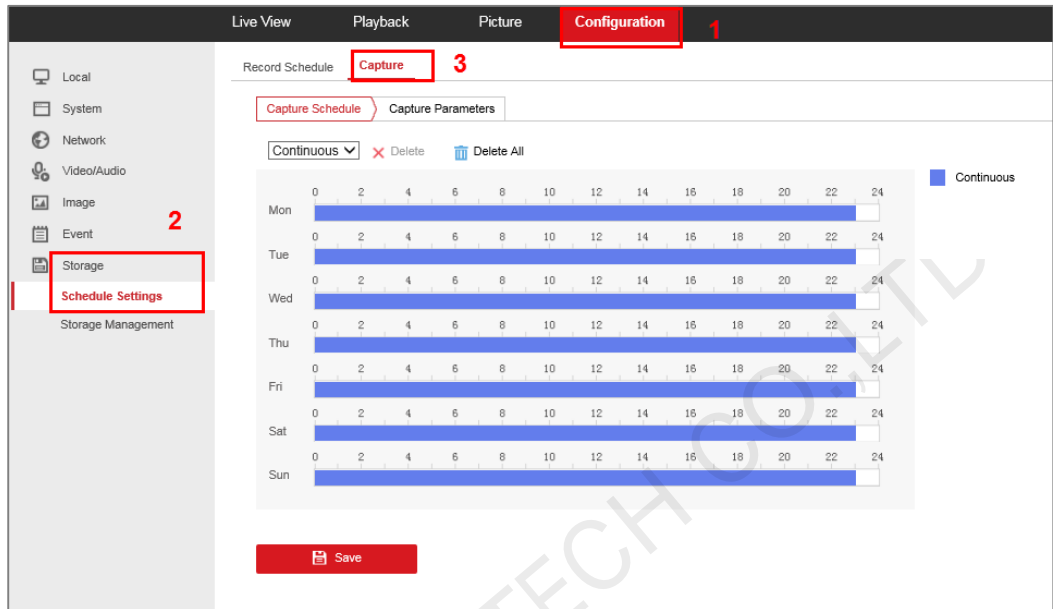
Figure 9-6 OSD settings



- Step 2 Configure snapshot interval, which is recommended to be set as five minutes or longer (It will occupy bandwidth and affect transmission if the interval is too short).

Step 3 The time range of snapshot on everyday can be set. Set the start and end time of snapshot first (if the time of everyday is same, you can copy.). Click “OK” after the setting is completed.

Figure 9-7 Schedule settings



Step 4 At last, click the “Save” button.

Note:

Do not check **Enable Event-Triggered Snapshot** in the bottom of the configuration page, for fear of influencing the effect timing snapshot.

9.5 FTP Uploading Parameter Settings

Step 1 Enter Configuration > Network > Advanced Settings > FTP.

Figure 9-8 FTP upload parameter settings

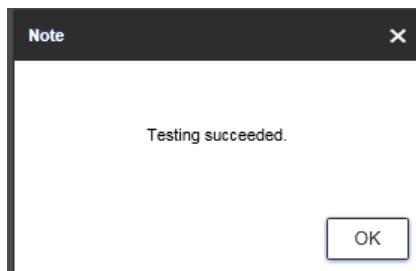
Server Address	<input type="text" value="v0.ftp.upyun.com"/>	Please enter server address, user name and password provided by system
User Name	<input type="text" value="xuzhurong/novatest-003"/>	
Password	<input type="password" value="*****"/>	
Confirm	<input type="password" value="*****"/>	
Directory Structure	<input type="text" value="Save in the child directory"/>	
Parent Directory	<input type="text" value="Custom"/> <input type="text" value="140117F000000748-00_30315300C"/>	Please fill in the storage directory provided by system
Child Directory	<input type="text" value="Use Camera Name"/>	
Picture Filing Interval	<input type="text" value="OFF"/> Day(s)	
Picture Name	<input type="text" value="Default"/>	
<input checked="" type="checkbox"/> Upload Picture		Enable this option
<input type="button" value="Test"/>		

Step 2 Input corresponding FTP information of LED display.

- **Parent Directory:** Select custom settings, input associated LED display snapshot storage path and the source of this information is shown in the following figure.
- **Child Directory:** Select **custom settings**. The format is only limited to the capital English letters and numbers, which shall not exceed 8-bit. Once the child directory is set well, it shall not be changed, otherwise, it will affect the display of images.
- **Upload Picture:** Checked.

Step 3 Click **Test** to test and click **OK** when the prompt box of “Testing succeeded.” appears.

Figure 9-9 Testing succeeded



Step 4 Click **Save** at the bottom-right corner.

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