# Digital Signage

## User's Manual



V1.0.0

# Foreword

## General

This manual introduces the functions and operations of the Digital Signage (hereinafter referred to as the "Signage"). Read carefully before using the Signage, and keep the manual safe for future reference.

## Safety Instructions

| Signal Words | Meaning |
|---|---|
| WARNING | Indicates a medium or low potential hazard which, if not avoided, could result in slight or moderate injury. |
| CAUTION | Indicates a potential risk which, if not avoided, could result in property damage, data loss, reductions in performance, or unpredictable results. |
| NOTE | Provides additional information as a supplement to the text. |

## Revision History

| Version | Revision Content | Release Time |
|---|---|---|
| V1.0.0 | First release. | January 2025 |

## Privacy Protection Notice

As the device user or data controller, you might collect the personal data of others such as their face, audio, fingerprints, and license plate number. You need to be in compliance with your local privacy protection laws and regulations to protect the legitimate rights and interests of other people by implementing measures which include but are not limited: Providing clear and visible identification to inform people of the existence of the surveillance area and provide required contact information.

## About the Manual

- The manual is for reference only. Slight differences might be found between the manual and the product.
- We are not liable for losses incurred due to operating the product in ways that are not in compliance with the manual.
- The manual will be updated according to the latest laws and regulations of related jurisdictions. For detailed information, see the paper user's manual, use our CD-ROM, scan the QR code or visit our official website. The manual is for reference only. Slight differences might be found between the electronic version and the paper version.
- All designs and software are subject to change without prior written notice. Product updates might result in some differences appearing between the actual product and the manual. Please contact customer service for the latest program and supplementary documentation.

- There might be errors in the print or deviations in the description of the functions, operations and technical data. If there is any doubt or dispute, we reserve the right of final explanation.
- Upgrade the reader software or try other mainstream reader software if the manual (in PDF format) cannot be opened.
- All trademarks, registered trademarks and company names in the manual are properties of their respective owners.
- Please visit our website, contact the supplier or customer service if any problems occur while using the device.
- If there is any uncertainty or controversy, we reserve the right of final explanation.

# Important Safeguards and Warnings

This section introduces content covering the proper handling of the device, hazard prevention, and prevention of property damage. Read carefully before using the device, and comply with the guidelines when using it.

## Transportation Requirements



Transport the device under allowed humidity and temperature conditions.

## Storage Requirements



Store the device under allowed humidity and temperature conditions.

## Installation Requirements



Stability Hazard

Possible result: The device might fall down and cause serious personal injury.

Preventive measures (including but not limited to):

- Only use cabinets and brackets specified for the device.
- Only use furniture and structures that can safely support the device.
- Do not place the device on the edge of the furniture or structure that is supporting it.
- Always educate children about the dangers of climbing furniture to reach the device and its controller.
- Carefully arrange the cables connected to the device to avoid people tripping over them and pulling on them.
- Make sure that the device is installed on a stable surface.
- Do not put the device on tall furniture, such as cabinets and bookcases, without first ensuring that the supporting structure is stable enough to bare the device.
- Do not place the device on fabric and other similar material.
- Do not place items, such as toys and remote controls, that may entice children to climb on top of the device or furniture on which the device is placed.



- Do not connect the power adapter to the device while the adapter is powered on.
- Strictly comply with the local electrical safety code and standards. Make sure that the ambient voltage is stable and meets the power supply requirements of the device.
- Please follow the electrical requirements to power the device.
    - Following are the requirements for selecting a power adapter.

    - The power supply must conform to the requirements of IEC 60950-1 and IEC 62368-1 standards.
    - The voltage must meet the SELV (Safety Extra Low Voltage) requirements and not exceed ES-1 standards.
    - When the power of the device does not exceed 100 W, the power supply must meet LPS requirements and be no higher than PS2.
  - We recommend using the power adapter provided with the device.
  - When selecting the power adapter, the power supply requirements (such as rated voltage) are subject to the device label.
  - Please place the Signage in areas with the altitude below 5000 meters, or it would have performance issues.



- Do not place the Signage in a place exposed to sunlight or near heat sources.
- Keep the Signage away from dampness, dust, and soot.
- Install the Signage in a well-ventilated place, and do not block its ventilation.
- The device is a class I electrical appliance. Make sure that the power supply of the device is connected to a power socket with protective earthing.
- When installing the device, make sure that the power plug can be easily reached to cut off the power.

## Operation Requirements



- The device or remote control contains button batteries. Do not swallow the batteries due to the risk of chemical burns.

  Possible result: The swallowed button battery can cause serious internal burns and death within 2 hours.

  Preventive measures (including but not limited to):

  - Keep new and used batteries out of reach of children.
  - If the battery compartment is not securely closed, stop using the product immediately and keep out of reach of children.
  - Seek immediate medical attention if a battery is believed to be swallowed or inserted inside any part of the body.
- Battery Pack Precautions

  Preventive measures (including but not limited to):

  - Do not transport, store or use the batteries in high altitudes with low pressure and environments with extremely high and low temperatures.
  - Do not dispose the batteries in fire or a hot oven, or mechanically crush or cut the batteries to avoid an explosion.
  - Do not leave the batteries in environments with extremely high temperatures to avoid explosions and leakage of flammable liquid or gas.
  - Do not leave the batteries in environments with extremely low air pressure to avoid explosions and leakage of flammable liquid or gas.



- In a domestic environment this may cause radio interference in which case you may be required to take adequate measures.

- Ground the device to protective ground before you power it on.



- Use the device under allowed humidity (10%–85% (RH)) and temperature (0 °C to 40 °C, or 32 °F to 104 °F).
- Check whether the power supply is correct before use.
- Operate the device within the rated range of power input and output.
- Do not drop or splash liquid onto the device, and make sure that there is no object filled with liquid on the device to prevent liquid from flowing into it.
- Do not disassemble the device without professional instruction.

## Maintenance Requirements




Replacing unwanted batteries with the wrong type of new batteries might result in explosion.

Preventive measures (including but not limited to):

- Replace unwanted batteries with new batteries of the same type and model to avoid the risk of fire and explosion.
- Dispose of the old batteries as instructed.



The appliance coupler is a disconnection device. Keep it at a convenient angle when using it.

# Table of Contents


Foreword ..... I
Important Safeguards and Warnings ..... III
1 Overview ..... 1
2 Basic Operations ..... 2
2.1 Starting and Shutting Down ..... 2
2.2 Initializing the Signage ..... 2
2.3 Login ..... 6
2.4 Quick Toolbar ..... 7
2.5 Common Configuration Summary ..... 7
3 Project Release ..... 9
3.1 Network Release ..... 9
3.1.1 Configuration Flow ..... 9
3.1.2 Connecting the Signage to Network ..... 9
3.1.3 Registering the Signage to the Platform ..... 9
3.2 Local Release ..... 10
3.2.1 Configuration Flow ..... 11
3.2.2 Releasing Projects by General Templates ..... 11
3.2.3 Releasing Projects by Industry Templates ..... 13
3.2.4 Managing My Project ..... 21
3.2.5 Scheduled Project ..... 22
4 App Manager ..... 24
4.1 App Installation and Uninstallation ..... 24
4.2 File Manager ..... 24
4.3 Run the App at Start Up ..... 25
5 System Settings ..... 26
5.1 Viewing Device Information ..... 26
5.2 Network Settings ..... 26
5.3 Security Settings ..... 27
5.3.1 Configuring Screen Lock Time ..... 27
5.3.2 Configuring Allowlist ..... 28
5.3.3 Changing Password ..... 28
5.3.4 Changing Security Questions ..... 29
5.3.5 Configuring Password Validity Period ..... 29
5.3.6 Resetting Password ..... 30
5.4 Configuring Visual & Audio Parameters ..... 30
5.5 Selecting System Language ..... 32
5.6 Setting Date & Time ..... 32

**5.7 Selecting Input Source..... 33**
**5.8 Maintenance and Update.....34**
**Appendix 1 Remote Control.....37**
**Appendix 2 Security Recommendation..... 39**

# 1 Overview

This series of products adopt an industrial design with a sturdy body made of high-strength materials. It is an intelligent display terminal that integrates multimedia information and advertisement release, audio & video access, and network access. It enjoys simple and elegant appearance and uses grade-A LCD panel that ensures long-lasting and high-definition display.

# 2 Basic Operations

The remote control supports limited operations: You can use the remote control to turn on or off the screen, turn on, turn off, or restart the Signage, adjust the volume and go back to the home page. We recommend you connect a mouse to operate the Signage. This chapter uses connecting a mouse for device operations as an example.

Wireless mouse is not supported to control the Signage.

## 2.1 Starting and Shutting Down

- Before starting the Signage, check whether the input voltage matches rated voltage of the Signage.
- To ensure stable operation and long service life of the Signage and external devices connected to the Signage, follow national standards and provide a power supply with stable voltage and low ripple interference.

### Starting the Signage

Plug in the power cable of the Signage. The Signage starts.

### Shutting down the Signage

Unplug the power cable. The Signage shuts down.

## 2.2 Initializing the Signage

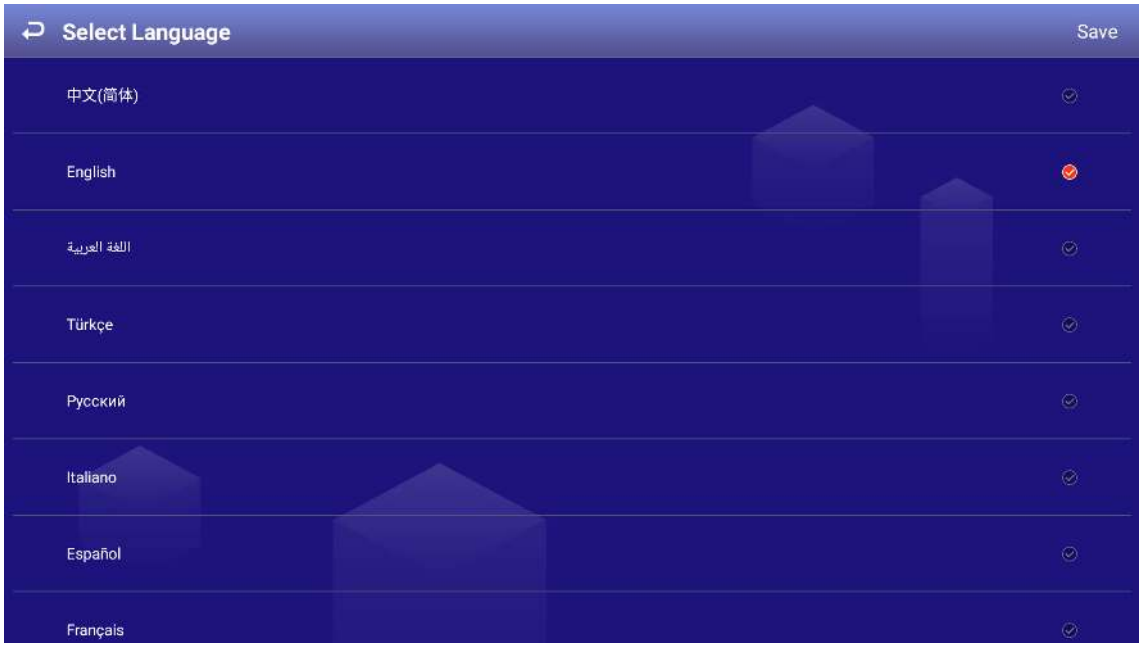
For first-time use or after restoring the system to factory settings, you need to initialize the Signage. After that, you can start configuring and operating your device.

### Procedure

Step 1 Power on the Signage. The Signage starts.

Step 2 Select the language and then click **Save and Next**.

Figure 2-1 Select system language

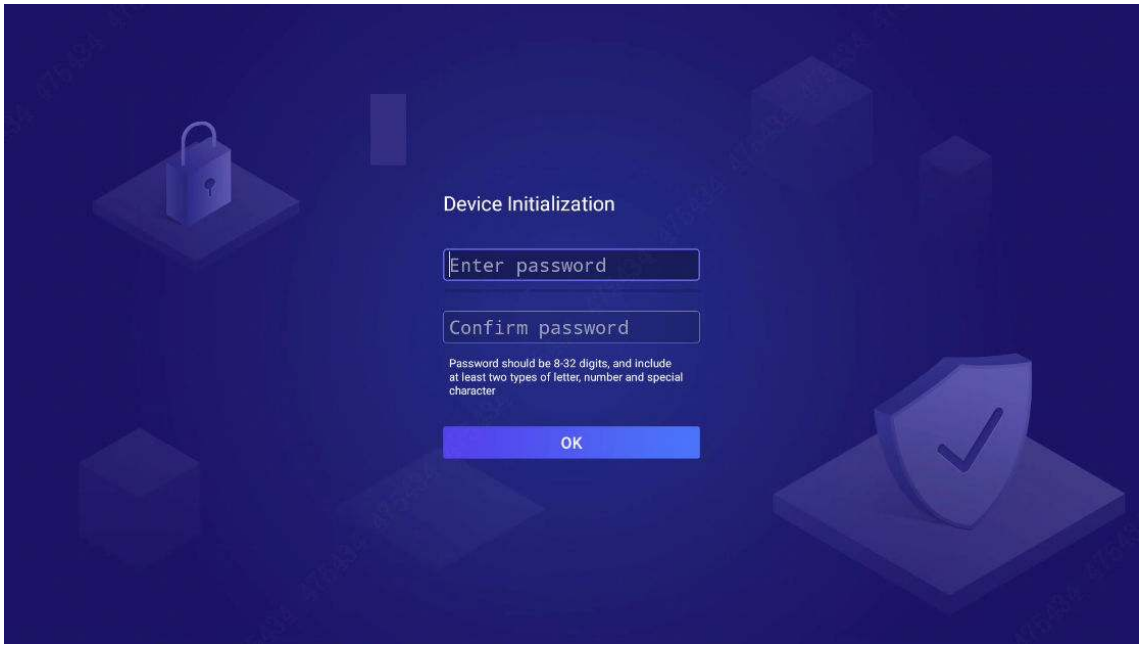



Step 3 Read the software license agreement, and then click **Next**.

Step 4 Configure your password.

1. Enter your new password, and then confirm it.

Figure 2-2 Device initialization




The password must be 8–32 characters and contain at least 2 types from letters, numbers, and special characters.

2. Click **Confirm**.

   Initialization starts.

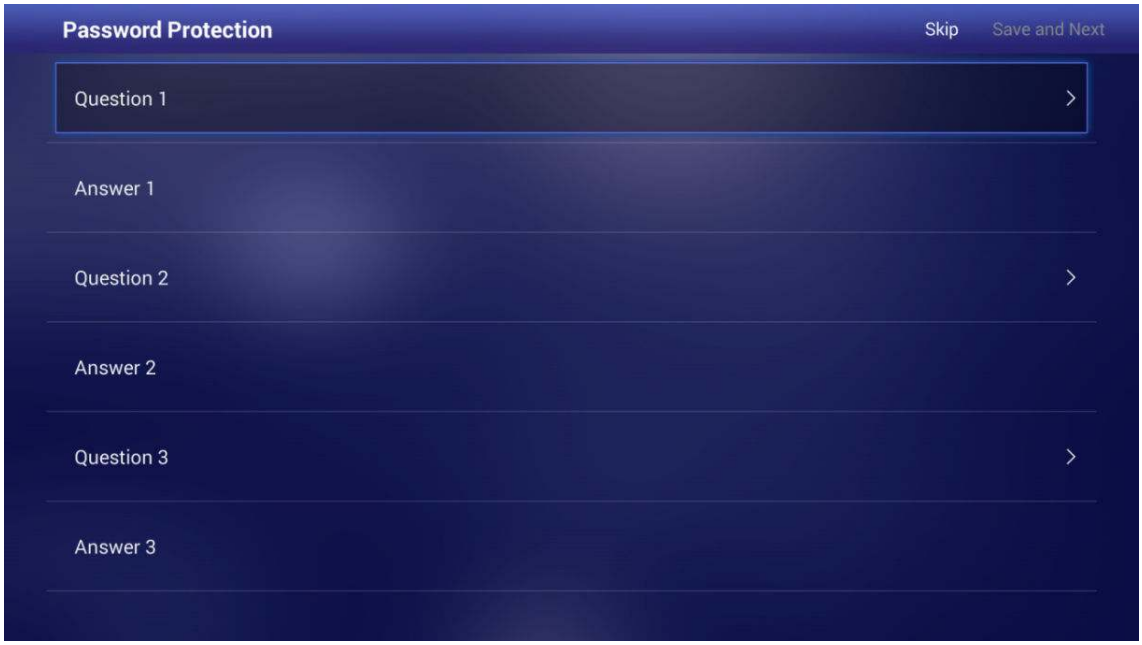
Figure 2-3 Device initialization




Step 5 On the **Password Protection** page, select questions, enter answers to the questions, and then click **Save and Next**.

Click **Skip** to skip setting security questions.

Figure 2-4 Password protection




Step 6 On the **Terminal Info** page, configure device information.

1. Click to set the name that identifies the Signage.
2. Click **Save and Next**.

Step 7 On the **Network Setting** page, configure the network, and then click **Save and Next**.

The Signage supports wired and wireless networks (WLAN). You can also directly click **Skip** to skip setting the network.

- Connect your device to network by Ethernet. 2 methods are available to plan your device IP.

- DHCP: When there is a DHCP server on the network, after selecting the DHCP option, the Signage automatically obtains IP address from the DHCP server.
- Static IP: After selecting **Static IP**, respectively click **IP Address**, **Gateway** and **Netmask**, and enter the IP address, default gateway and net mask according to your network plan.

- Wireless Network: Select an available wireless network nearby to connect.

It's only available for signages with the wireless feature.

Figure 2-5 Network setting

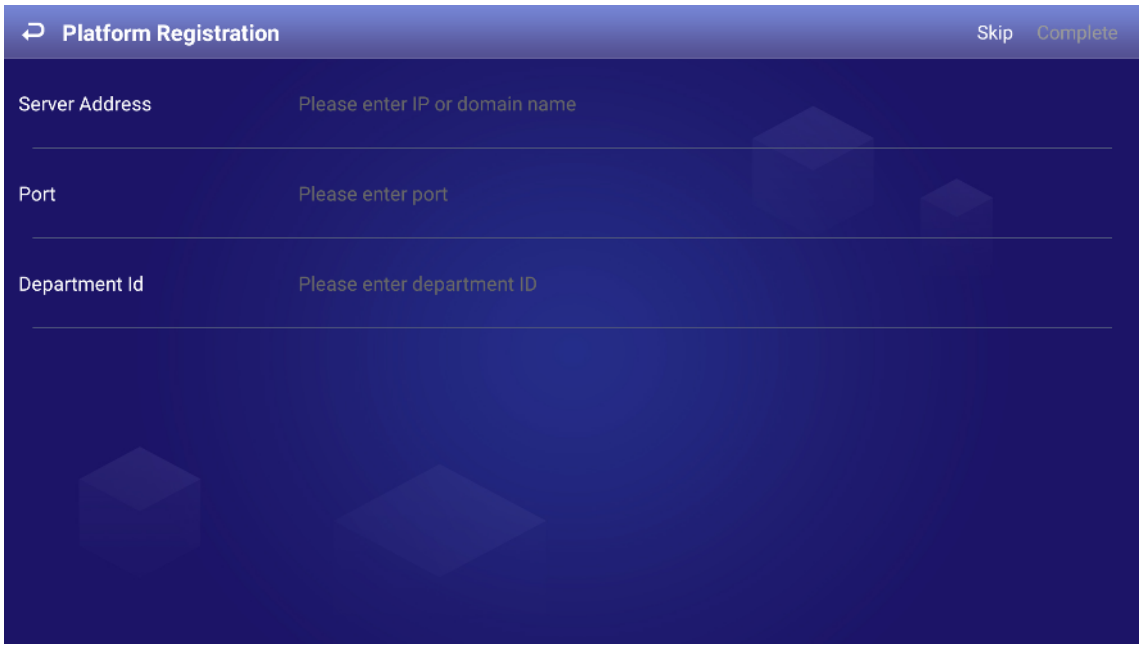



Step 8 On the **Platform Registration** page, register the Signage to the platform (MPS or ICC).

Click **Skip** to skip platform registration.

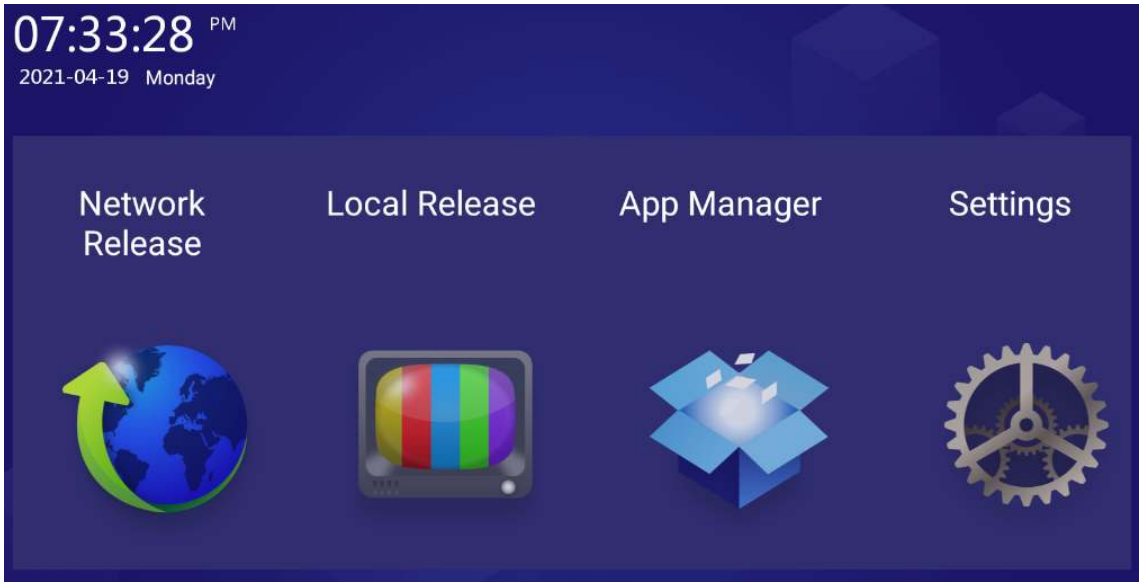
1. Enter the IP address or domain name, and the port of the platform (MPS or ICC) and the department ID.
   - Port: Ensure that the port setting matches the one configured on the platform. By default, the Windows messaging platform port is 8682, and the ICC messaging platform port is 9318.
   - Department Id: The ID of the department to which the terminal devices on the platform belong. After registration, only users associated with the department can manage the terminal devices.

Figure 2-6 Platform registration




2. Click **Complete**.

Figure 2-7 Main page



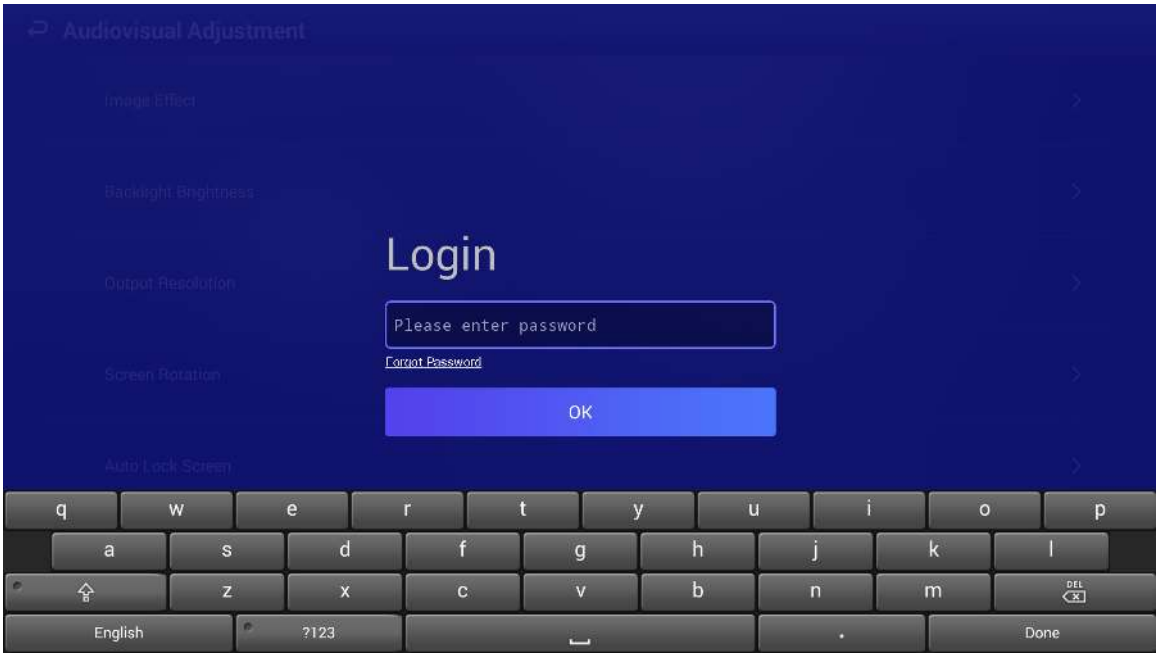

## 2.3 Login

You need to log in to the Signage for first-time use after initialization, or you lock the screen manually, or the screen is locked automatically after no operation is done for the defined time.

### Procedure

Step 1 Click any position on the screen.

Figure 2-8 Login




Step 2 Enter your password.

If you forgot your password, click **Forgot Password** to reset the password after answering the security questions.

Step 3 Click **OK**.

The main menu or the page before the system is locked is displayed.

- When the password is incorrectly entered, a note reminding you of the remaining tries will be displayed. You can try 5 times.
- After the password has been incorrectly entered for 5 times, the system displays **Account locked, restart or try 5 minutes later**.

## 2.4 Quick Toolbar

Move your mouse pointer to the bottom of the page, and the quick toolbar will be displayed. You can perform operations including: Adjust the backlight, select input source, lock your screen, disconnect the USB drive from the Signage, and more.

Figure 2-9 Quick toolbar



Table 2-1 Description of quick toolbar

| Icon | Description |
|---|---|
| | Displays whether the Signage is registered to the platform. This icon means not registered. |
| | Go to main page. |
| | Adjust the volume. |
| | Adjust the backlight. |
| | Select input source from **Local** and **HDMI**. Different devices support different input sources. |
| | Lock the Signage. |
| | Disconnect your USB drive from the Signage. |

## 2.5 Common Configuration Summary

Here is a summary of the frequently used configurations on the Signage.

Table 2-2 Common configuration summary

| Configuration | Quick Access |
|---|---|
| Manage passwords and security questions | See "5.3.3 Changing Password" & "5.3.4 Changing Security Questions". |
| Configure screen lock time | See "5.3.1 Configuring Screen Lock Time". |

| Configuration | Quick Access |
| --- | --- |
| Configure timed screen on/off | See Configure Auto Turn On/Off Display of "5.8 Maintenance and Update". |
| Configure timed power on/off | See Auto Turn On/Off Power of "5.8 Maintenance and Update". |
| Enable HDMI standby | See "5.7 Selecting Input Source". |
| Configure app auto-launch on startup | See."4.3 Run the App at Start Up" |
| Configure auto restart | See Configure Auto Restart of "5.8 Maintenance and Update". |
| Configure volume plan | See "5.4 Configuring Visual & Audio Parameters". |
| Configure brightness schedule | |

# 3 Project Release

You can release projects through network or with local files.

## 3.1 Network Release

If you want to release projects via the platform for the first time, the Signage must be registered in the accompanying media publishing system. For detailed operations of the media publishing system, refer to its user manual.

### 3.1.1 Configuration Flow

Complete the configuration flow to release projects via the network.

Figure 3-1 Configuration flow of network release

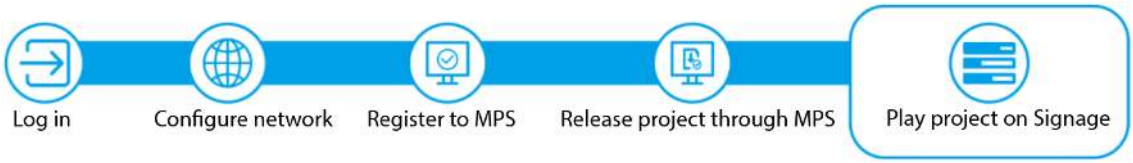



Table 3-1 Configuration flow (network release)

| Operation | Description |
|---|---|
| Log in | Log in and configure the Signage. |
| Configure network | Connects the Signage to the network. |
| Register the Signage to the platform | After registering the Signage to the platform, you can release projects and operate the Signage through the platform. |
| Release project through the platform | After adding media and configuring project plans on the platform, the project can be played on the Signage. For details, see the user's manual of the platform. |

### 3.1.2 Connecting the Signage to Network

Connect the Signage to a wired or wireless network.

For detailed operations, see"5.2 Network Settings"

### 3.1.3 Registering the Signage to the Platform

After being registered to the platform, the Signage can release projects issued by the platform.

#### Prerequisites

- The Signage and the platform are connected to the same network.
- The platform's IP address has been added on the Signage.

## Procedure

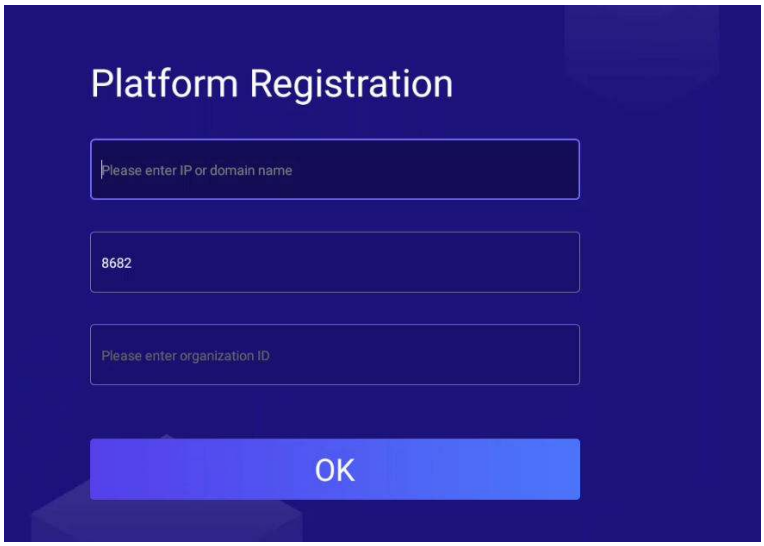
Step 1 Click  in the lower-left corner to set the platform server's IP address or domain name, port number, and organization ID.

The department ID is the terminal group ID on the platform. After registration, only users associated with the department can manage the terminal device.



The department ID on the Signage side can be left blank. When the Signage is manually moved to a group on the platform, the department ID will be automatically assigned to the Signage. Platform users can only manage devices associated with their own department.

Figure 3-2 Platform registration settings




Step 2 Click **OK**.

After successful registration, there would be  in the lower-left corner of the system.

Step 3 On the Signage's main interface, click **Network Release**.

Projects issued by the platform are available for being released.

# 3.2 Local Release

Add videos or pictures to projects, and release projects locally through **General Template** or **Industry Template**.

## 3.2.1 Configuration Flow

Figure 3-3 Local release (general template)

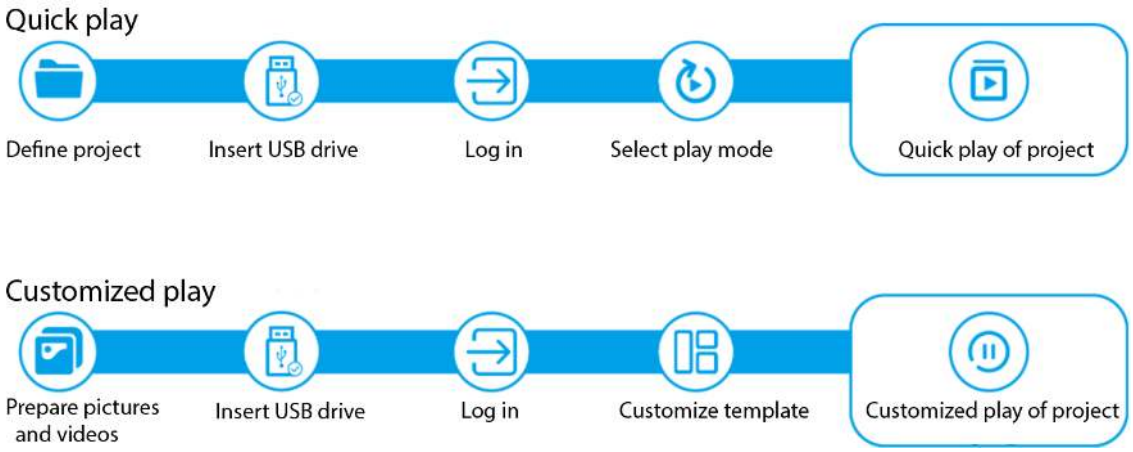
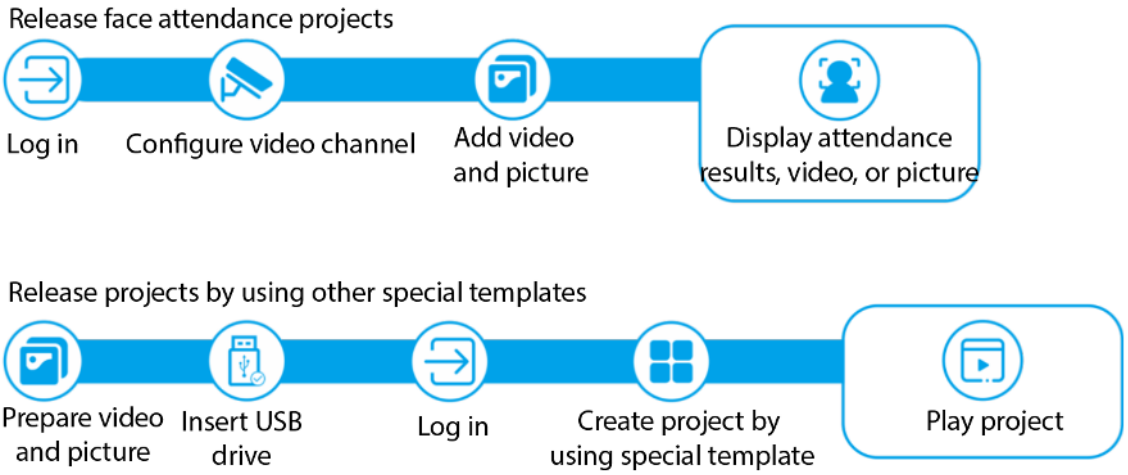



Figure 3-4 Local release (industry template)




## 3.2.2 Releasing Projects by General Templates

### 3.2.2.1 Quick Play

Use the given templates to quickly release projects.

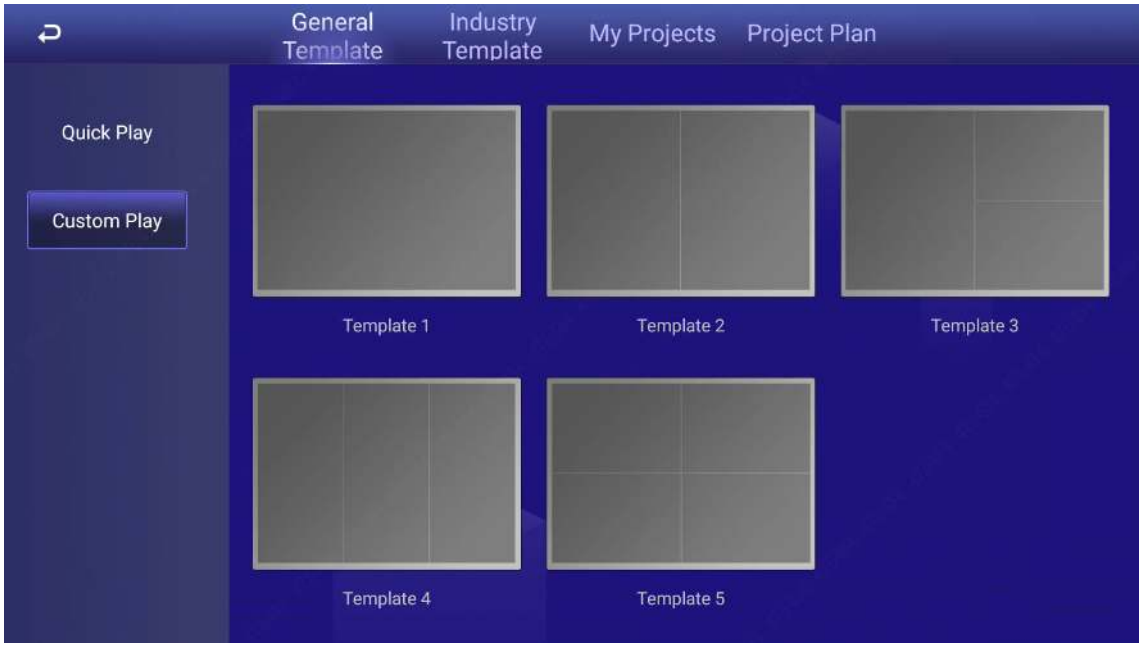
#### Prerequisites

- The USBPLAY folder is created on the USB drive.
- Insert the USB drive with media to be played into the Signage. Make sure that the pictures and videos are saved in the root directory of the USBPLAY folder.

#### Procedure

Step 1 On the main page, select **Local Release** > **General** > **Quick Play**.

Figure 3-5 Quick play




Step 2 Select a template.

The system will display pictures and videos according to their layout in the template. A picture is displayed for 10 seconds by default and a video to the end.

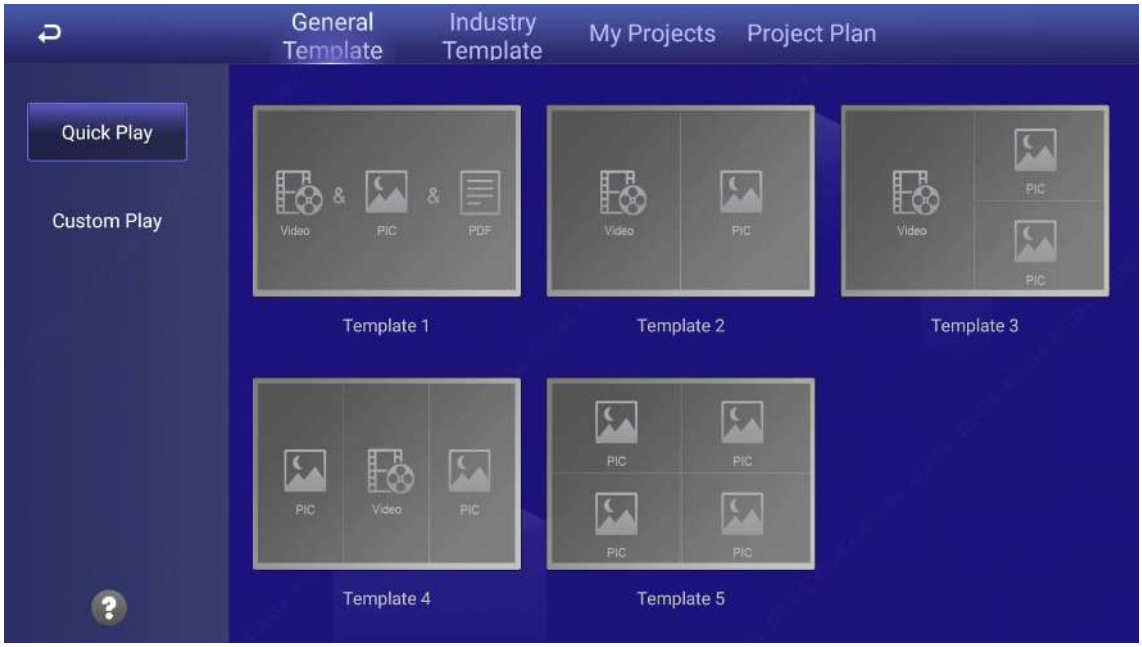
### 3.2.2.2 Custom Play

Define your own templates to release information.

## Procedure

Step 1 On the main page, select **Local Release** > **General** > **Custom Play**.

Figure 3-6 Customized play

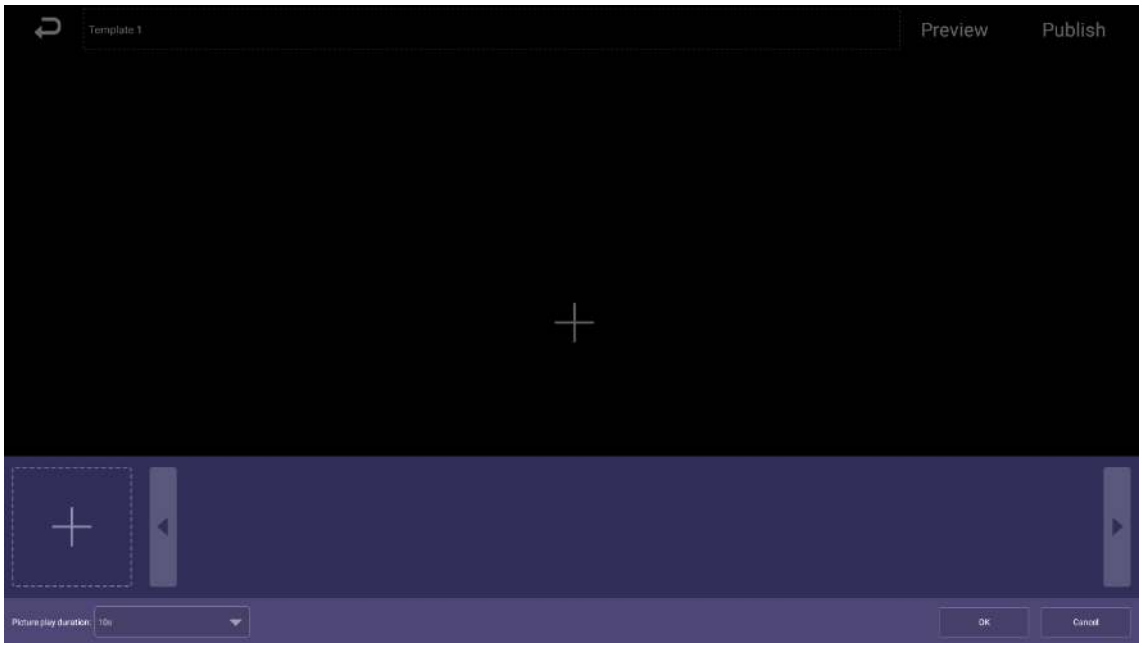



Step 2 Click a template that you want to define.

Step 3 Define the template.

1. Click  to configure this region's display sequence and content.

Figure 3-7 Add media




2. Click .
3. Select a picture or a video, and configure the picture play duration as needed.

   - Pictures are displayed for 10 seconds by default and videos to the end.
   - You can repeat the following steps to upload multiple pictures or videos. After adding the media (pictures and videos), you can drag the media to sort them.
   - Click  to delete the picture/video.

4. Click **OK**.

   If there are multiple regions in your template, to make the template effective, you need to add projects to other regions.

Step 4 (Optional) Click **Preview** to preview the project to be played.

Step 5 Click **Publish** to play your project immediately.

## 3.2.3 Releasing Projects by Industry Templates

Industry templates include face attendance template, surveillance templates and display templates. Select the template as needed.

### 3.2.3.1 Configuring Face Attendance Template

Add a camera channel to the Signage, and then the face information captured by the camera will be displayed, such as the similarity between the faces captured and faces saved in the database, and capture time.

## Prerequisites

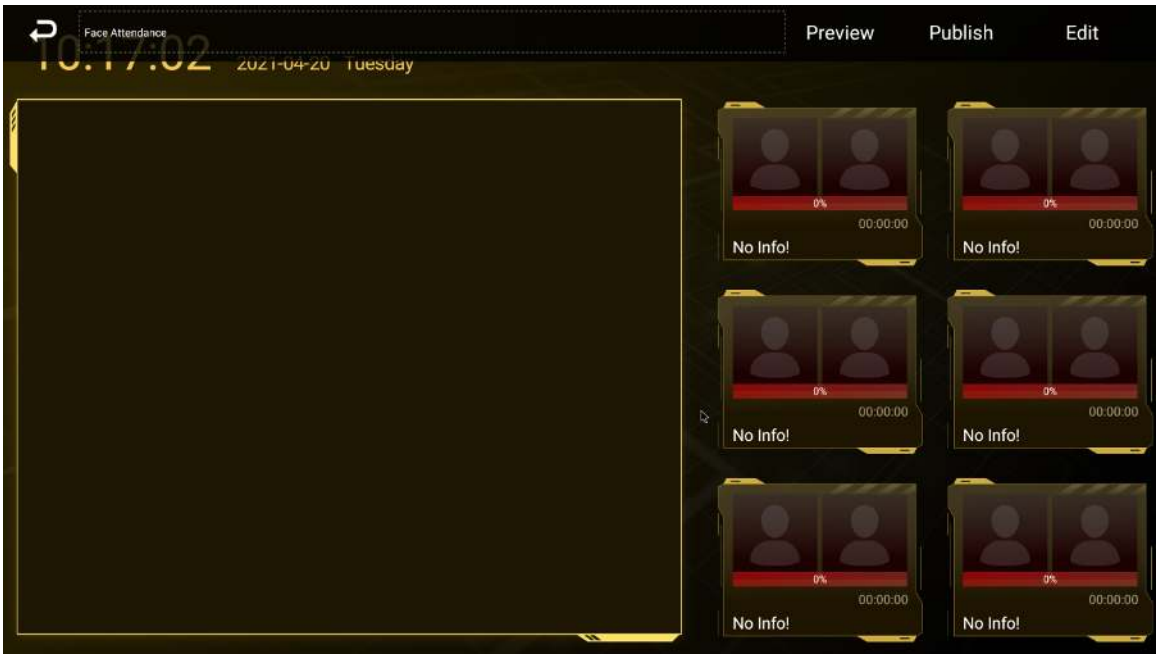
- The Signage, your camera, and the platform (for example DSS) are connected to the same LAN (Local Area Network).
- Your camera supports face detection and face comparison, and face database is configured.

## Procedure

Step 1 On the main page, select **Local Release** > **Industry Template**.

Step 2 Click the **Face Attendance** template.

Figure 3-8 Configure face attendance template

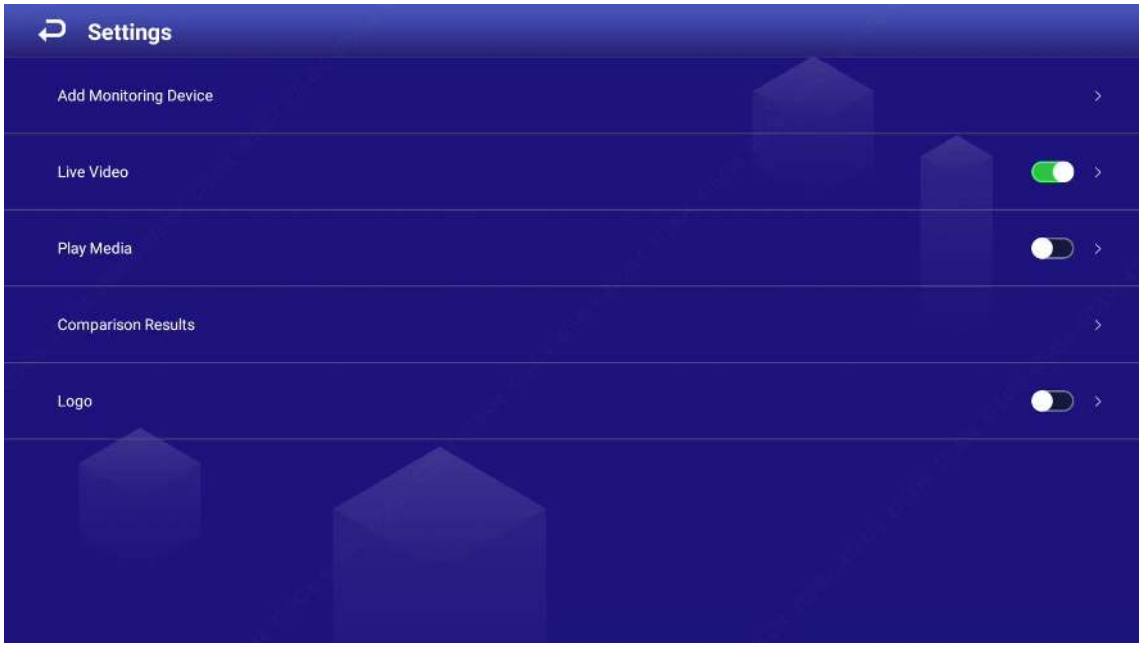



Step 3 Click **Edit** on the upper-right corner.

- You can add video channels, video recordings and pictures to the template.
- Only one kind of media can be played at the same time.

Step 4 Add a monitoring device, and then configure other parameters.

Figure 3-9 Setting




Click **Add**, and then configure the parameters of the monitoring device.

Figure 3-10 Add monitoring device




Table 3-2 Description of adding monitoring device

| Parameter | Description |
|---|---|
| IP Address | The IP address of the Signage, the platform, or the client.<br>If you select **Acquisition** as the protocol, enter the IP address of the IP camera or the IVSS. |

| Parameter | Description |
| --- | --- |
| Username | If you select **Acquisition** as the protocol, configure the username and password for logging into the camera or platform.<br>● When adding an IP camera, enter the username and password for logging into the camera.<br>● When adding an IVSS, enter the username and password for logging into the IVSS. |
| Password | |
| Port No. | Port for logging in to an IP camera or the platform.<br>If you select **Acquisition** as the protocol, enter the port number for logging into the IP camera, with the default number of 37777. |
| Channel No. | If you select **Acquisition** as the protocol, configure the remote channel number to connect.<br>● When adding an IP camera, set the channel number to 1.<br>● When adding an IVSS, set it to the channel number displayed on the IVSS. |
| Bit Rate | Select **Main Stream** , **Sub Stream1** or **Sub Stream2**. |

Step 5 Click **Confirm**, and then configure other parameters.

Table 3-3 Description of other parameters

| Parameter | Description |
| --- | --- |
| Display Video Image | ● **Screen s plit**: You can view the video image of the added channels by 1, 2, 3, or 4 splits.<br>● **Switching time (seconds)** : Switch to play video of another added channel after the defined time.<br>● **Channel selection** : Select the channel to be played in each screen split. |
| Play Media | Click  to add media (video or picture).<br><br>● Select media, and then click  to delete it.<br>● Drag the media to sort them.<br>● Pictures are displayed for 10 seconds by default and videos to the end.<br>● Only one kind of media can be played at a time. |

| Parameter | Description |
| --- | --- |
| Display Comparison Results | Enable or disable voice broadcast and display face comparison results.<br>• Voice broadcast: Click to enable voice broadcast. It supports setting the broadcast content as **Name+result** , **Result** or **None**.<br>• Broadcast now: After it is enabled, if the broadcasts overlap, the current broadcast will be directly overwritten and the next one will be announced immediately.<br>• Display successful comparison results: Click , and then select the item to be displayed when face comparison succeeds.<br>• Display failed comparison results: Click , and then select the item to be displayed when face comparison fails.<br>• Supports the broadcast of credential numbers and temperature. |
| Display LOGO | Click to add a picture.<br>The image uploaded must not exceed 430 pixels in width and 80 pixels in height. |

Step 6 Click **Preview** on the upper-right corner to preview the project to be played.

Step 7 Click **Publish** on the upper-right corner to play your project immediately.

### 3.2.3.2 Configuring Surveillance Templates

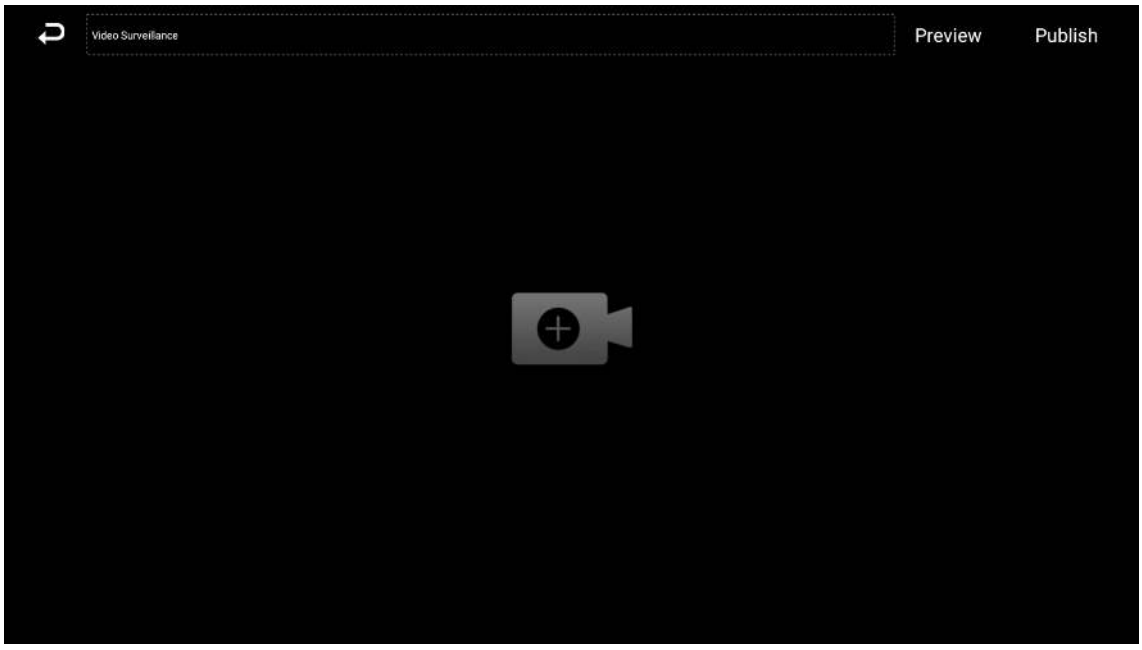
Surveillance templates include the advertising template, video surveillance template, and the people counting template. This section introduces the configuration of the video surveillance template as an example.

## Procedure

Step 1 On the main page, select **Local Release** > **Industry Template**.

Step 2 Click **Video Surveillance Template**.

Figure 3-11 Video Surveillance Template



Step 3 Click  to add a monitoring device.

Figure 3-12

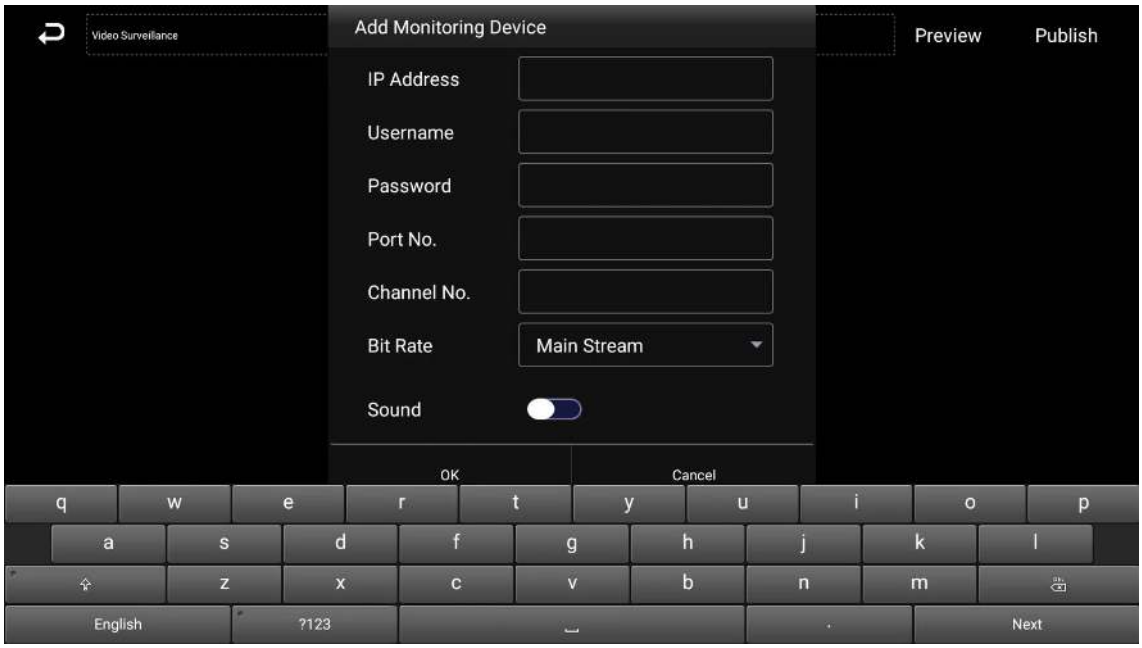



Table 3-4 Monitoring device parameters

| Parameter | Description |
|---|---|
| IP Address | The IP address of the monitoring device. |
| Username | The username and password for logging into the monitoring device or the associated platform. |
| Password | |
| Port No. | The port number for logging into the monitoring device or the associated platform. |
| Channel No. | The remote channel number connected to the monitoring device. |
| Bit Rate | Select **Main Stream** , **Sub Stream1** or **Sub Stream2**. |
| Sound | When enabled, it plays the real-time audio captured by the monitoring device.<br>This feature is not available for the people counting template. |
| People Counting | • Max Number: Set the maximum number of people to be counted. If this number is exceeded, the screen will alarm (red light on).<br>• Warning Number: Set the warning threshold for the number of people. If this number is exceeded, the screen will alert (yellow light on).<br>• Presumed Number: Set the default value for the number of people.<br>• Enter/Exit： When enabled, it counts the number of people entering and exiting separately.<br>This feature is only available for the people counting template. |

Step 4 Click **OK**.

Step 5 Click **Preview** to preview the project to be played.

Step 6 Click **Publish** to play your project immediately.

### 3.2.3.3 Configuring Display Templates

Different industries can use corresponding special templates to publish projects. This section uses the catering template as an example to introduce display templates.

Procedure

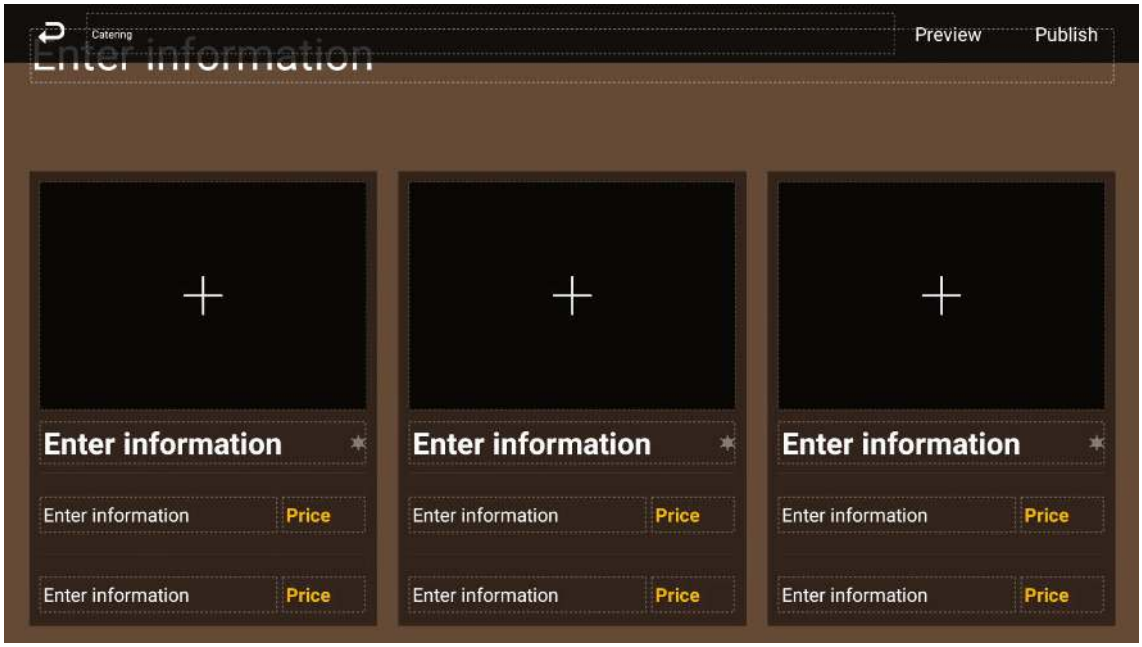
Step 1 On the main page, select **Local Release** > **special Template**。

Step 2 Click **Catering Template**.

1. Click , select the desired materials, and then set their play duration.

   Click **Enter Information**, and enter the content that you want to show.

Figure 3-13 special template




- The default image playback duration is 10 seconds.
- Multiple materials can be added, and their playing order can be adjusted by clicking and dragging the materials with the mouse.
- Hover the mouse on the material, and then click , to delete the material.

2. Click **OK**.

Step 3 Click **Preview** to preview the project to be played.

Step 4 Click **Publish** to play your project immediately.

### 3.2.3.4 Importing Templates from the Platform

Import templates created by the platform to quickly release projects. Supports to import the media at the same times.

## Prerequisites

Already exported the template from the platform. If you choose to export media at the same time when exporting a template, the exported file contains both the template and media.

## Procedure

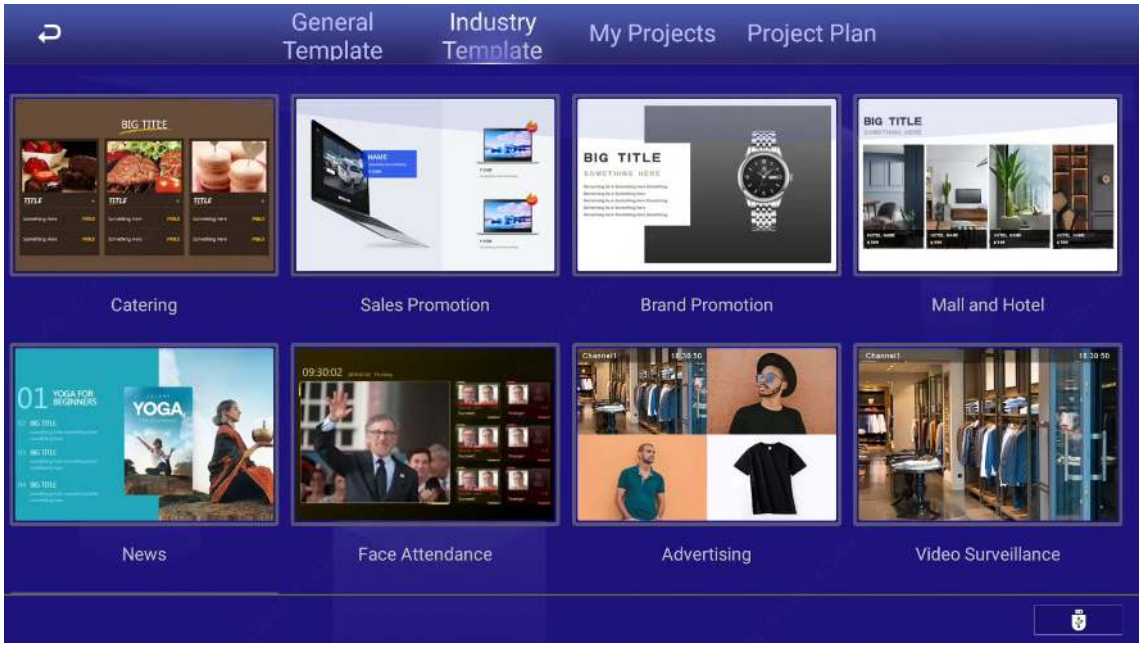
Step 1 Import the template created by the platform.

1. Create a new folder named **TEMPLATE** on the USB drive.
2. Copy the files exported from the platform to the **TEMPLATE** folder.
3. Select **Local Release** > **Industry Template**, and then click on the lower-right corner.
4. On the pop-up page, click **Confirm**. The signage starts to importing the platform.

Step 2 Click the imported template, and then edit it.

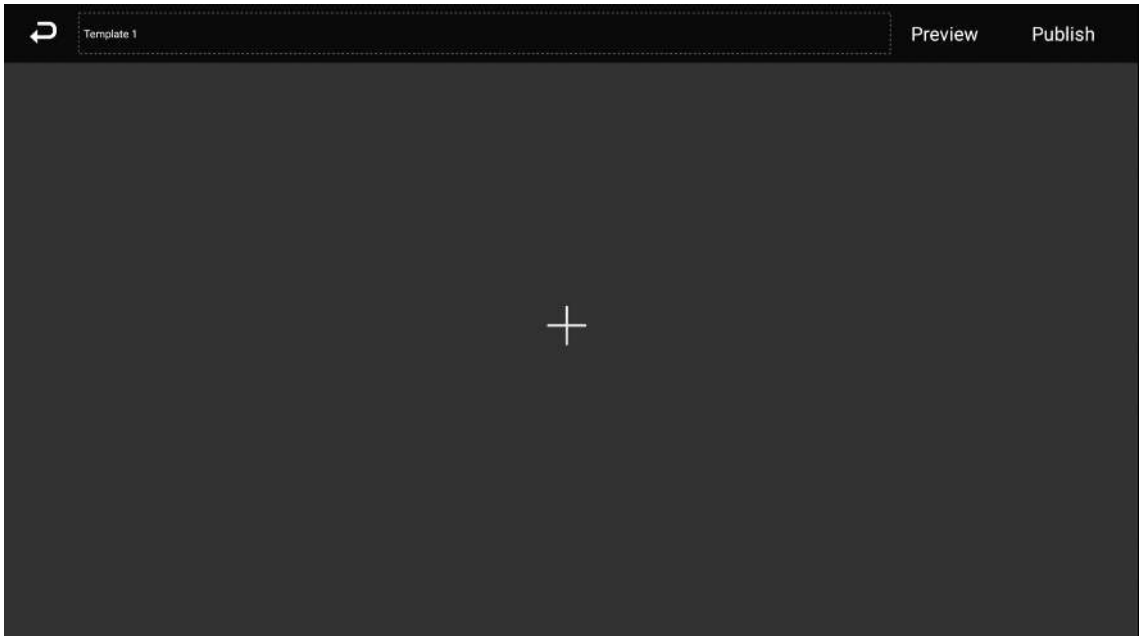
The imported template shows on the upper-right corner.

Figure 3-14 Templates imported from the platform




Supports to modify the name of the template. Click to add more media.

Figure 3-15 Edit the template




Step 3 Click **Preview** to preview the added media.

Step 4 Click **Publish**, the system displays the configured project.

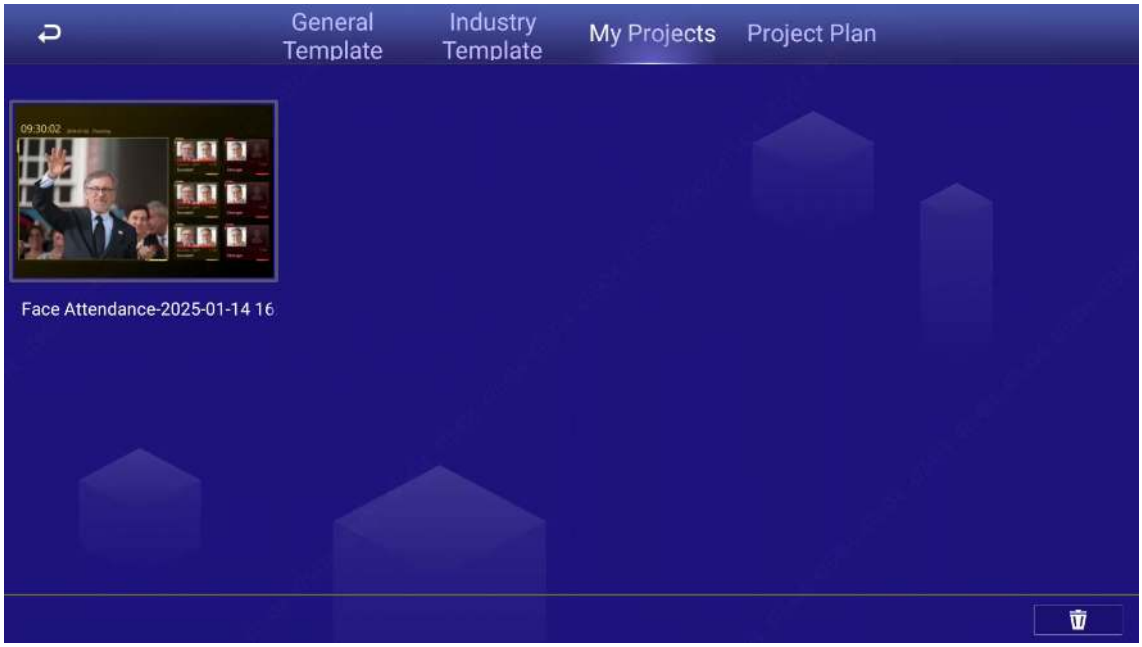
## 3.2.4 Managing My Project

On the main page, select **Local Release** > **My Project**, and then you can view projects that have been played and the templates you have saved.

You can also:

- View played projects and saved templates.
- Click a project to play it.
- Click , and then select a project to delete this project.

Figure 3-16 My project




# 3.2.5 Scheduled Project

## 3.2.5.1 Customizing Scheduled Project

Configure which and when projects will be played.

### Procedure

Step 1 On the main page, select **Local Release** > **Scheduled Project**.

Step 2 Click , and then on the page displayed, click **Add order play period**.

Figure 3-17 Add order play period




Step 3 Set time period, and then click .

Figure 3-18 Add order play period

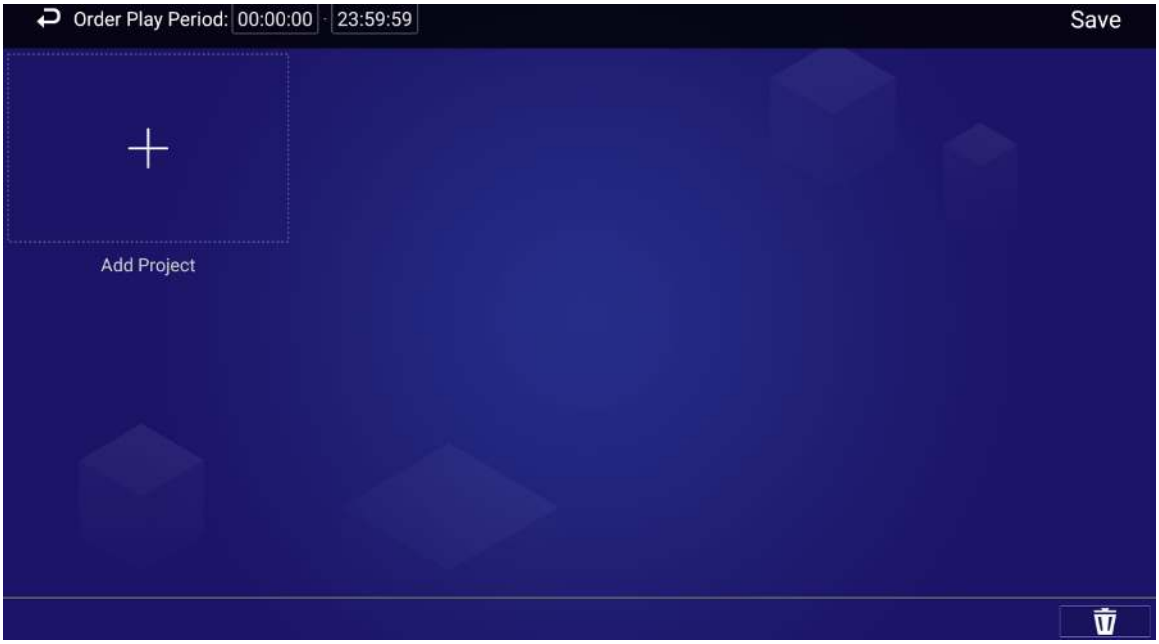



Step 4 Click , select a project, and then click **OK**.

The system goes back to the **Add Project** page.

Up to 30 projects can be added to each time period.

Figure 3-19 Add project




Step 5 Click **Save**.

The system goes back to the **Add order play period** page.

Up to 30 periods can be added.

Step 6 Click **Save**.

You can also click **Publish** to play the project immediately.

### 3.2.5.2 Importing Project from the Platform

#### Prerequisites

Already exported projects from the platform.

#### Procedure

Step 1 Create a new folder named **DAILYPLAN** on the USB drive.

Step 2 Copy the project exported from the platform to the **DAILYPLAN** folder.

Step 3 Insert the USB drive to the Signage, and then import the project.

Step 4 Click the imported project to check the information.

The imported project shows on the upper-right corner.

- If the imported project is expired, the project details cannot be viewed.
- If the current time is within the scheduled time, the Signage jumps to the network release page to display the specific project.
- If the current time is not in the scheduled time, the Signage jumps to the network release page, but no project will be displayed.

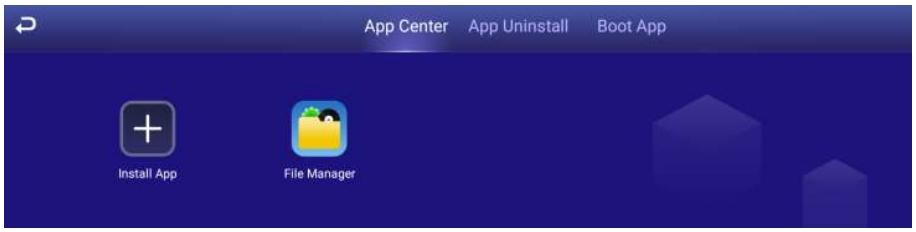
# 4 App Manager

On the main page, click **App Manager** , and then the **App Center** page is displayed.

You can:

- Click the **App Center** tab to install new apps, view and manage different files, search for and download media (pictures, videos).
  - ◇ Click **Install App** to install new apps.
  - ◇ Click **File Manager** to view and manage different files.
- Click the **App Uninstall** tab to uninstall the app from the Signage.
- Click the **Boot App** tab to set the application to start automatically when the Signage starts.

Figure 4-1 App center




## 4.1 App Installation and Uninstallation

Install an app to the Signage, and then you can manage and operate the app.

### Installation Procedure

1. Insert the USB drive with the installation package (.apk) into the Signage.
2. On the main page, select **App Manager** > **App Center** > **Install App**.
3. Click the USB where the installation file is installed.
4. Click the installation file.
5. Click **OK**.

### Uninstallation Procedure

1. Click **App Manager** > **Uninstall App**
2. Click the application that you want to uninstall.
3. Click **OK**.

## 4.2 File Manager

View and manage different types of files.

### Procedure

Step 1 On the main page, select **App Manager** > **App Center** > **File Manager**.

Figure 4-4 File manager

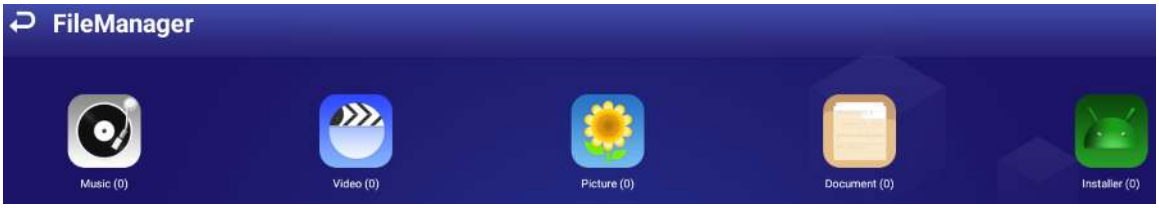



Step 2 Select a storage path, for example, internal storage.

Files are displayed in different types.

Click a file type to view and operate (such as delete) files.

Figure 4-5 Different types of files




## 4.3 Run the App at Start Up

On the main page, select **App Manager** > **Run at Start Up**, and then select the application that you want to run when the Signage starts up.

- By default, the app Digital Signage runs when the Signage starts up.
- Only one application can be selected to run at start up.

# 5 System Settings

## 5.1 Viewing Device Information

On the main page, select **Settings** > **Device Info**, and then you can view the related device information such as the name, SN number and App version number of the Signage.

## 5.2 Network Settings

On the main page, select **Settings** > **Network Settings**. You can configure **Wired** , **Wireless** or **Hotspot** modules.

- The connection priority is **Wireless** >**Wired**>**Hotspot**.
- Basically, the wireless configuration is only available for signages with the wireless feature. But if your signage does not support the feature, you can purchase an external Wi-Fi dongle for it to enjoy the wireless and hotpot features.

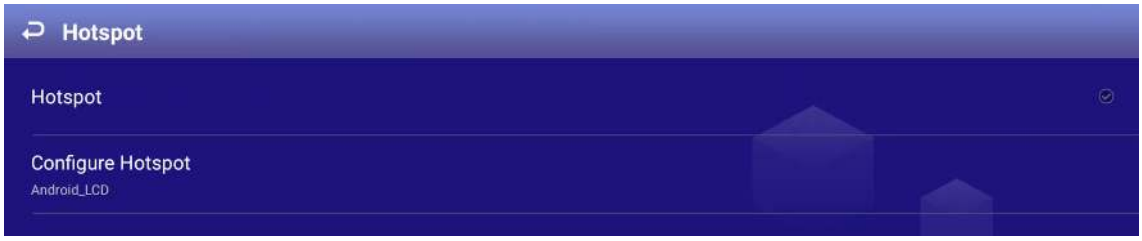
Figure 5-1 Network settings




- Wired Network: Connect the Signage to the network with an Ethernet cable, and set the IP address in one of the following two ways.
  - ◇ DHCP: When a DHCP server is found in the network, select **DHCP** and the Signage will automatically obtain the IP address from the DHCP server.
  - ◇ Static: Select **Static** , click **IP Address**, **Gateway** or **Subnet Mask**, and then enter the related information according to the network plan.
- Wireless Network: Click in the top right corner to enable the wireless network feature, and then select an available wireless network from the list to connect or click in the top right corner to manually add a wireless network.
- Hotspot:

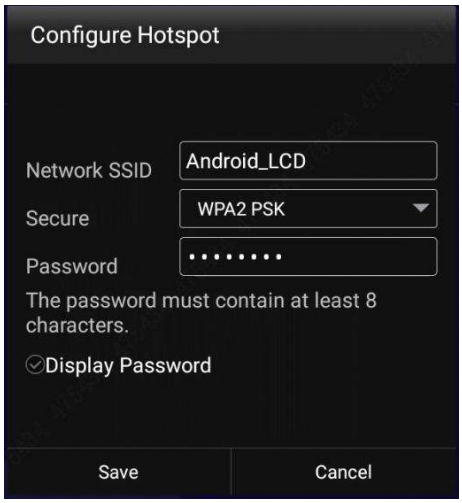
  1. Click to enable the hotspot feature.

Figure 5-2 Enable the hotspot feature




2. Click **Configure Hotspot** to configure the name, the password and other settings of the hotspot.

Figure 5-3 Configure the hotspot




3. Click **Save**.

# 5.3 Security Settings

We recommend regularly changing your login password and security questions to ensure the security of the Signage.

## 5.3.1 Configuring Screen Lock Time

### Procedure

Step 1 On the main page, select **Settings** > **Security Settings** > **Screen Lock Time**.

Step 2 Select the desired lock time of the screen.

- If no operations are performed on the Signage within the set time, the screen will lock automatically. When you operate the Signage again, you will need to log in first.
- If you select the lock time as **Never**, the screen will not lock automatically.

When selecting the lock time as **Never**, you can operate the Signage without logging in. Be aware of the security risks involved.

Step 3 Click **Save**.

## 5.3.2 Configuring Allowlist

Configure IP addresses that are allowed to access the Signage. Only IP addresses in the allowlist can be used to log in to the web page. This is to enhance data security.

### Procedure

Step 1 On the main page, select **Settings** > **Security Setting** > **Allowlist**.

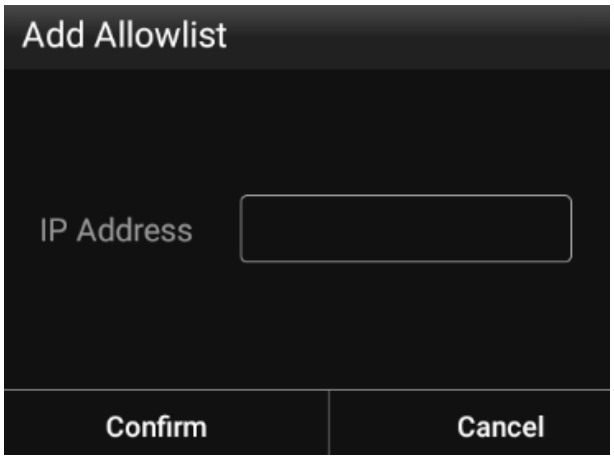
The entry path for the allowlist might vary between different versions. In some versions, select **Settings** > **Network Setting** > **Allowlist** to configure the allowlist.

Step 2 Click to enable allowlist functions. means enabled.

Step 3 Add the IP address of target device to your allowlist.

1. Click .

Figure 5-4 Add allowlist




2. Enter an IP address.
3. Click **Confirm**.

The IP address that you have added is displayed.

You can repeat the following steps to add multiple IP addresses to your allowlist.

## 5.3.3 Changing Password

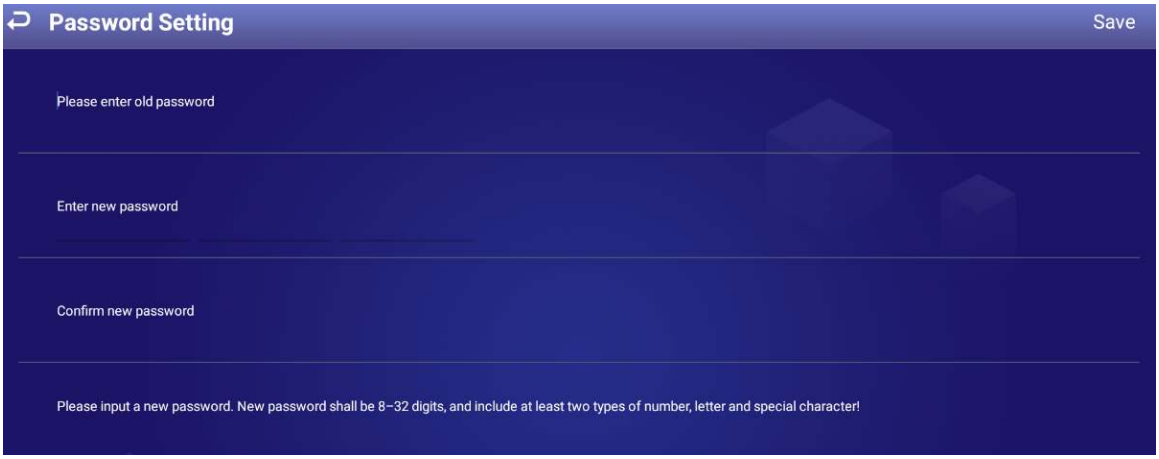
### Procedure

Step 1 On the main page, select **Settings** > **Password Setting** > **Password Setting**.

Step 2 Enter old password and new password, and then confirm your new password.

Step 3 Click **Save**.

Figure 5-5 Password settings

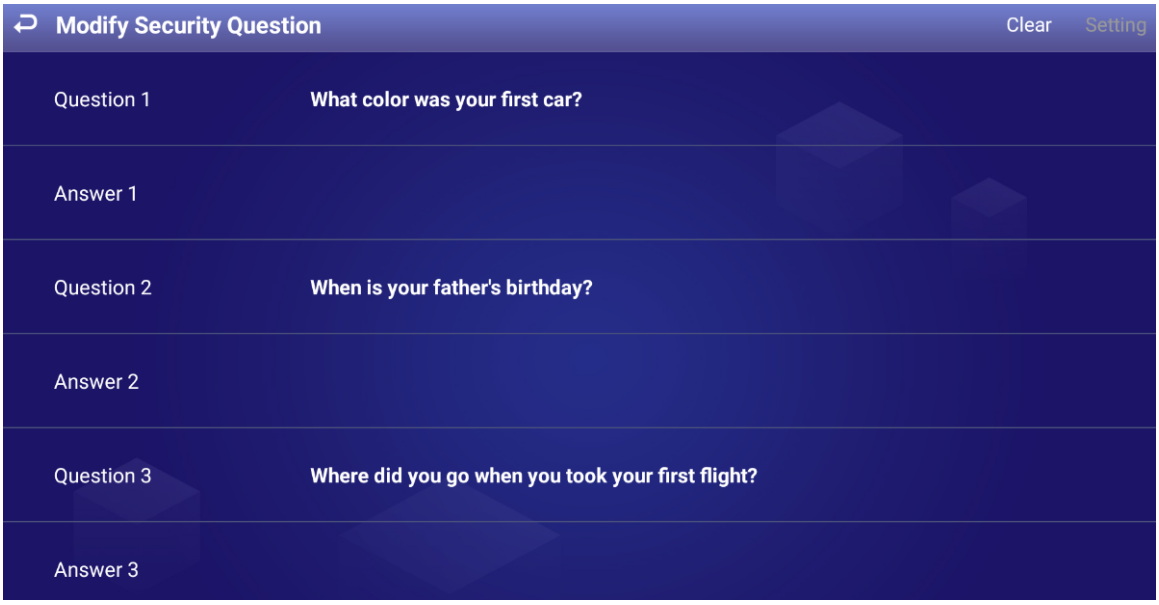



## 5.3.4 Changing Security Questions

### Procedure

Step 1 On the main page, select **Settings** > **Password Setting** > **Modify Security Question**.

Figure 5-6 Modify security question




Step 2 Change answers to the security questions.

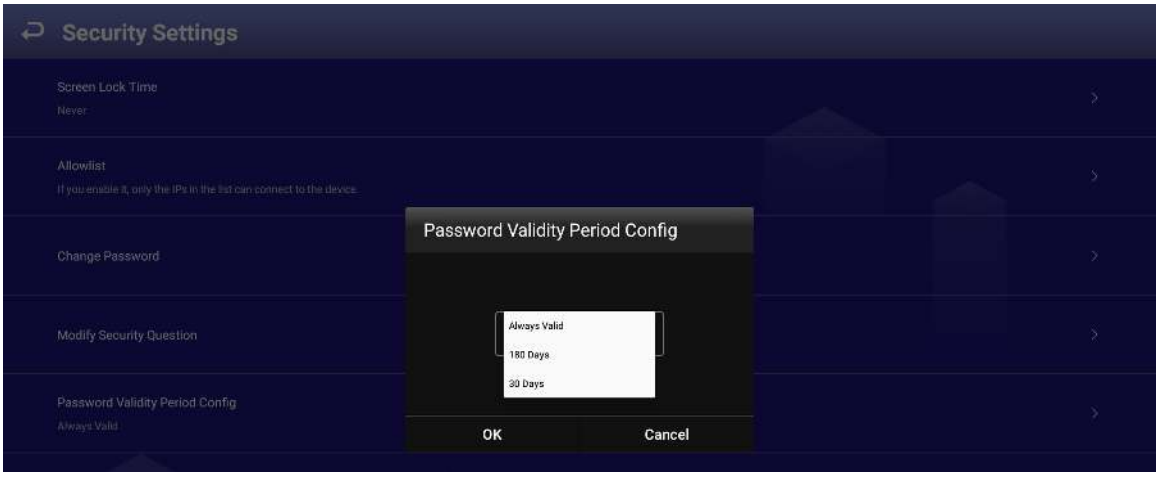
To change security questions, correctly answer the questions, and then click **Clear** to clear the answers first, and then set them again.

Step 3 Click **Setting**.

## 5.3.5 Configuring Password Validity Period

On the home page, select **Settings** > **Security Settings** > **Password Validity Period Config**, and then you can select **Always Valid** , **180 Days** or **30 Days** as the password validity period.

Figure 5-7 Password validity period Configuration




## 5.3.6 Resetting Password

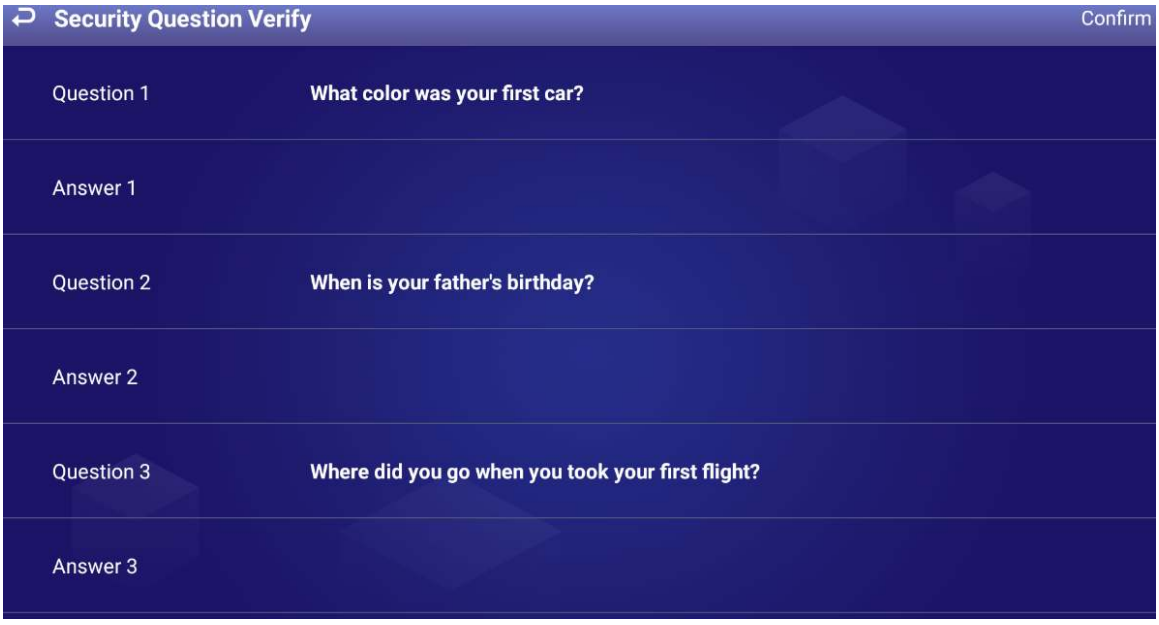
### Procedure

Step 1 On the login page, click **Forgot Password**.

Step 2 Enter answers to all the security questions.

Step 3 Click **Confirm**, enter the new password, and then confirm it.

Figure 5-8 Verify security questions




# 5.4 Configuring Visual & Audio Parameters

Adjust display effect of screen and device volume.

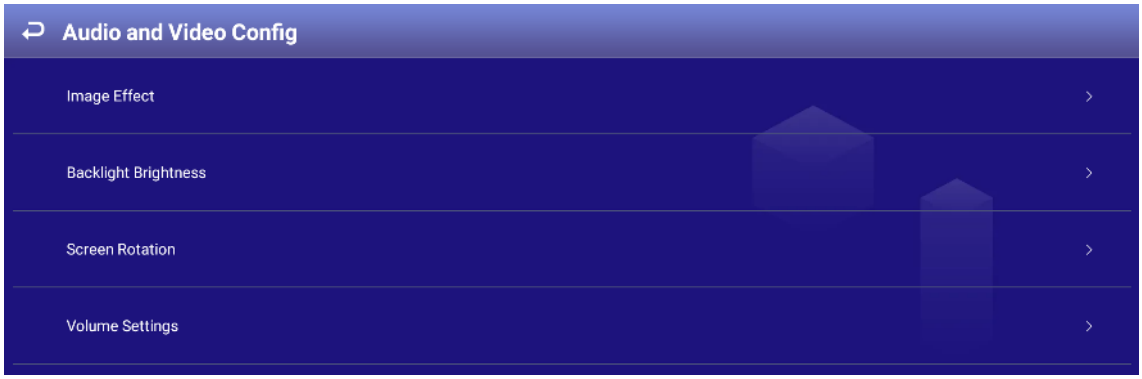
### Background Information

If it prompts **This operation may cause the power to increase. Continue?** , click **OK** to continue.

## Procedure

Step 1 On the main page, select **Settings** > **Audio and Video Config**.

Figure 5-9 Audio and video configuration




Step 2 Configure visual & audio parameters.

Table 5-1 Visual & audio adjustment

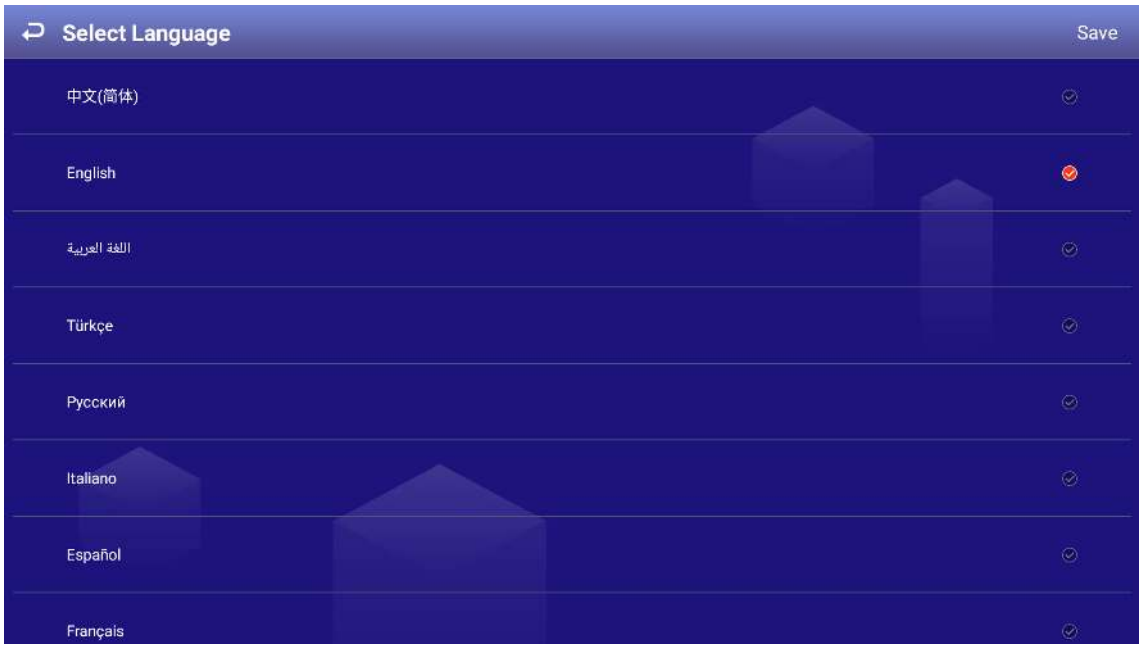
| Item | Description |
|---|---|
| Image Effect | Adjust the hue, constrast and saturation of images.<br><br>Click to restore the default values. |
| Backlight Brightness | Automatically or manually adjust the backlight brightness.<br>• Self-adaptation: When enabled, the system will automatically adjust the backlight based on the ambient brightness.<br>• Default brightness: Manually modify the brightness. Except when the brightness plan is on, the Signage's brightness will be set to the default brightness.<br>• Brightness Plan: When the feature is enabled, click to set the start and end times, and manually adjust the brightness during the period.<br><br>• Click to restore the default brightness.<br>• Only some devices support the self-adaptation feature. Please refer to the actual device specifications.<br>• 5 brightness plans are supported at most. |
| Screen Rotation | Rotate your screen with angles available on the Signage. |

| Item | Description |
| --- | --- |
| Volume Settings | Adjust the volume of project playing.<br>• Default Volume: Manually modify the volume. Except when the volume plan is on, the Signage's volume will be set to the default volume.<br>• Volume Plan: Enable it, and then click to set the start and end times, and manually adjust the volume during the period.<br>• Click to restore the default volume.<br>• 5 volume plans are supported at most. |

## 5.5 Selecting System Language

Select the display language from **Settings** > **Select Language**.

Figure 5-10 Select system language




## 5.6 Setting Date & Time

You can set time and date for the Signage. Remember to select a correct time zone based on where the Signage lies.

### Procedure

Step 1 On the main page, select **Settings** > **Date & Time**.

Step 2 Set date, time, and time zone. You can also enable the 24-hour format.

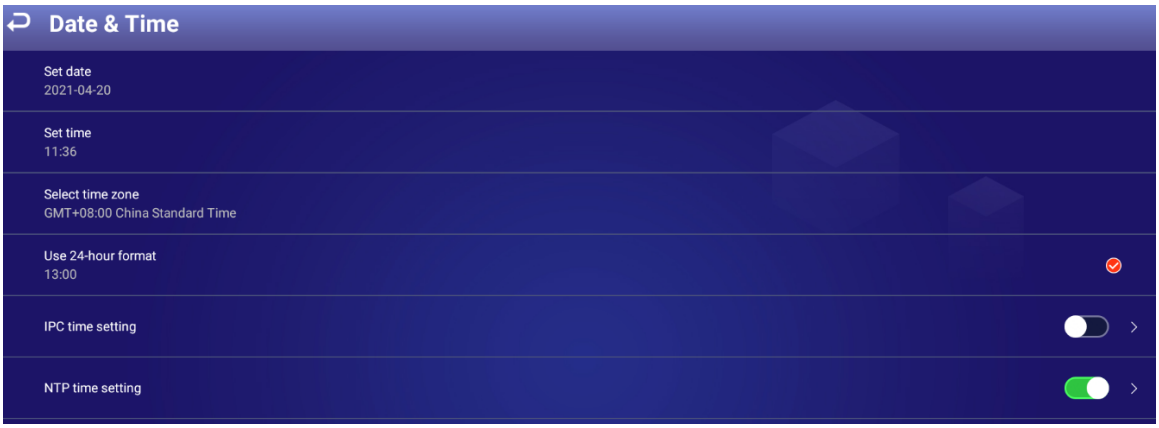
The operation takes effect immediately.

Step 3 Enable IPC time setting, configure the **Renewal cycle** (24 hours by default), and then click **Save**. The time of the IP camera will be synchronized with that of the Signage within the defined renewal cycle.

IPC time synchronization only takes effect when the Signage is connected to the IP camera.

Step 4 Enable NTP time setting, configure the **Renewal cycle** , and then click **Save**. The time of the Signage will be synchronized with that of the NTP server within the defined renewal cycle.

Figure 5-11 Date & time




# 5.7 Selecting Input Source

Input sources include **Local** (default) and **HDMI**.

## Background Information

**Local** : Play projects from your USB drive or through the platform.

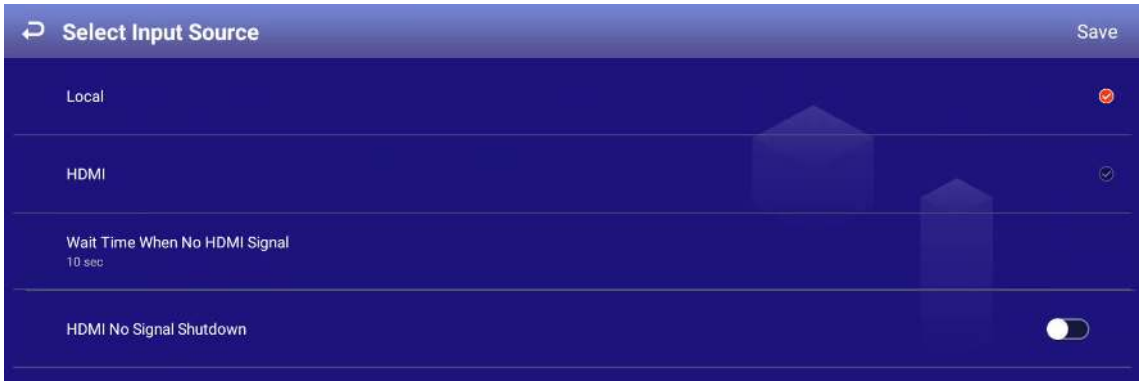
**HDMI** : Play projects from the HDMI input source, for example, your PC.

Different devices support different input sources.

## Procedure

Step 1 On the main page, select **Settings** > **Select Input Source**.

Figure 5-12 Select input source



The above figure is for reference only. **Select Input Source** page might vary depending on the software versions.

Step 2 Select input source from **Local** and **HDMI**.

Step 3 Configure HDMI waiting time.

If **HDMI** is selected, but there is no signal, the Signage displays **NO SIGNAL**. In this case, if the defined waiting time ends, the Signage will count down 10 seconds, and then display videos or pictures released locally.

Step 4 (Optional) Click to enable the HDMI standby function. When the system detects no HDMI signal, it will start a countdown, and the Signage will automatically shut down at the end of the countdown.

Only some devices support this feature.

# 5.8 Maintenance and Update

On the main page, select **Settings** > **Maintenance and Update**.

## Maintenance Requirements

To keep the Signage running normally, you need to:

- Change the user password every three months.
- Restart the Signage regularly.
- Update firmware regularly.

## Restore Factory Defaults

Be aware that this operation will restore all configurations of the Signage to the default settings before performing this operation.

1. Click **Restore Factory Defaults**.
2. Enter the device password for verification, and then click **OK**.

## Configure Auto Restart

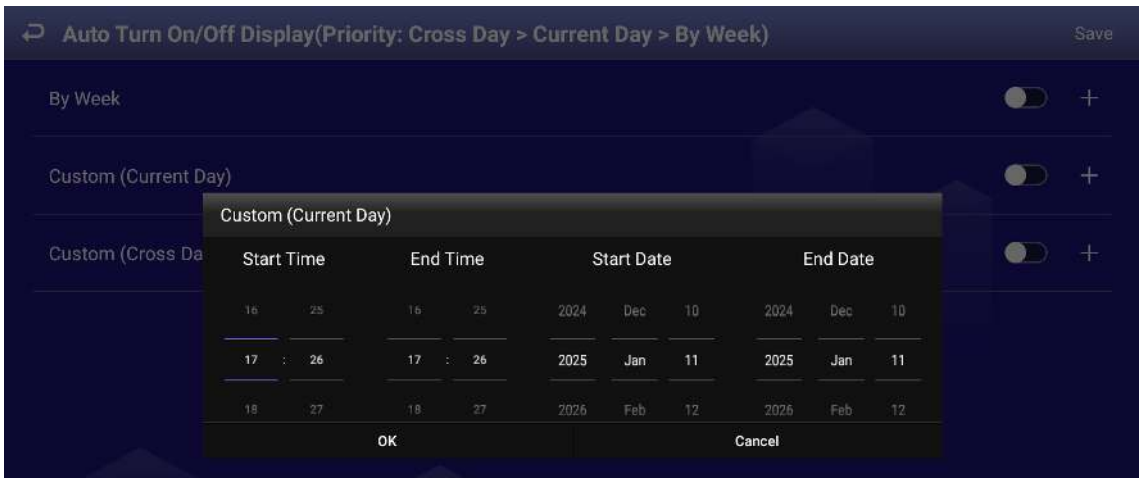
1. Click **Auto Restart**.
2. Set the scheduled reboot time and select the days during a week for the plan to take effect.

## Configure Auto Turn On/Off Display

1. On the main page, select **Settings** > **Maintenance and Upgrade** > **Auto Turn On/Off Display**.
2. Enable **By Week** , **Custom (Current day)** or **Custom (Cross day)** as needed.

3. Click + to configure the time.

Figure 5-13 Auto Turn On/Off Display




When **Custom (Current day)**, **Custom (Cross day)** and **Week** are enabled at the same time, the priority is Custom (Cross day) > Custom (Current day) > Week.

4. Click **OK**.

## Auto Turn On/Off Power

1. On the main page, select **Settings** > **Maintenance and Upgrade** > **Auto Turn On/Off Power**.
2. Enable **By Week** , **Custom (Current day)** or **Custom (Cross day)** as needed.

Figure 5-14 Auto Turn On/Off Power




3. Click + to configure the time.

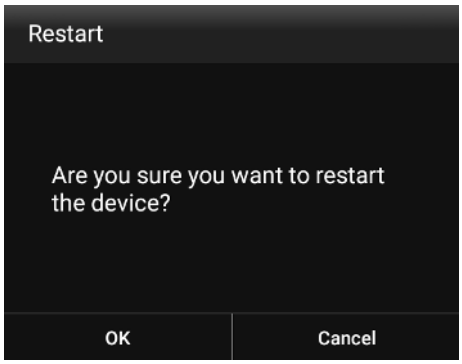
When **Custom (Current day)**, **Custom (Cross day)** and **Week** are enabled at the same time, the priority is Custom (Cross day) > Custom (Current day) > Week.

4. Click **OK**.

## Restart the Device

1. Click **Restart**.

Figure 5-15 Restart now




2. Click **OK**.

# Appendix 1 Remote Control

For Signage of specified models, you can use remote controls to operate them.

- The remote control supports limited operations: You can use the remote control to turn on or off the screen, turn on, turn off, or restart the Signage, adjust the volume and go back to the home page.
- Refer to the packing list to see whether the remote control comes with the Signage. If not, you need to purchase it separately.

Appendix Figure 1-1 Remote control appearance



Appendix Table 1-1Buttons description

| Operation Item | Buttons Needed |
|---|---|
| Power on/off device | Press . In the pop-up dialog box, select **Power off**. Press the button again to power on the device. |
| Screen on/off device | Press . In the pop-up dialog box, select **Screen off**. Press the button again to turn on the device screen. |
| Reboot | Press . In the pop-up dialog box, select **Reboot**. |
| Adjust volume | • Volume up: Press , and then press the right arrow button.<br>• Volume down: Press , and then press the left arrow button. |

| Operation Item | Buttons Needed |
| --- | --- |
| Log in | 1. When you find the screen is locked, you can use your remote control to type the password. Press  on your remote control. The **Login** page is displayed.<br>2. Operate arrow keys, move pointer to password box, and then type the password.<br>3. Move pointer to **Done** on virtual keyboard.<br>4. Move pointer to **OK**, and then press  on your remote control to log in to the device. |
| Return to the previous page | Press . |
| Return to the main menu | Press . |
| Bring up the frequently used tool bar | Press , and operate the left/right arrow keys to select a function you want. |

# Appendix 2 Security Recommendation

## Account Management

1. **Use complex passwords**

   Please refer to the following suggestions to set passwords:

   - The length should not be less than 8 characters;
   - Include at least two types of characters: upper and lower case letters, numbers and symbols;
   - Do not contain the account name or the account name in reverse order;
   - Do not use continuous characters, such as 123, abc, etc.;
   - Do not use repeating characters, such as 111, aaa, etc.
2. **Change passwords periodically**

   It is recommended to periodically change the device password to reduce the risk of being guessed or cracked.
3. **Allocate accounts and permissions appropriately**

   Appropriately add users based on service and management requirements and assign minimum permission sets to users.
4. **Enable account lockout function**

   The account lockout function is enabled by default. You are advised to keep it enabled to protect account security. After multiple failed password attempts, the corresponding account and source IP address will be locked.
5. **Set and update password reset information in a timely manner**

   The device supports password reset function. To reduce the risk of this function being used by threat actors, if there is any change in the information, please modify it in time. When setting security questions, it is recommended not to use easily guessed answers.

## Service Configuration

1. **Enable HTTPS**

   It is recommended that you enable HTTPS to access web services through secure channels.
2. **Encrypted transmission of audio and video**

   If your audio and video data contents are very important or sensitive, it is recommended to use encrypted transmission function in order to reduce the risk of your audio and video data being eavesdropped during transmission.
3. **Turn off non-essential services and use safe mode**

   If not needed, it is recommended to turn off some services such as SSH, SNMP, SMTP, UPnP, AP hotspot etc., to reduce the attack surfaces.

   If necessary, it is highly recommended to choose safe modes, including but not limited to the following services:

   - SNMP: Choose SNMP v3, and set up strong encryption and authentication passwords.
   - SMTP: Choose TLS to access mailbox server.
   - FTP: Choose SFTP, and set up complex passwords.
   - AP hotspot: Choose WPA2-PSK encryption mode, and set up complex passwords.
4. **Change HTTP and other default service ports**

   It is recommended that you change the default port of HTTP and other services to any port between 1024 and 65535 to reduce the risk of being guessed by threat actors.

## Network Configuration

1. **Enable Allow list**

   It is recommended that you turn on the allow list function, and only allow IP in the allow list to access the device. Therefore, please be sure to add your computer IP address and supporting device IP address to the allow list.
2. **MAC address binding**

   It is recommended that you bind the IP address of the gateway to the MAC address on the device to reduce the risk of ARP spoofing.
3. **Build a secure network environment**

   In order to better ensure the security of devices and reduce potential cyber risks, the following are recommended:

   - Disable the port mapping function of the router to avoid direct access to the intranet devices from external network;
   - According to the actual network needs, partition the network: if there is no communication demand between the two subnets, it is recommended to use VLAN, gateway and other methods to partition the network to achieve network isolation;
   - Stablish 802.1x access authentication system to reduce the risk of illegal terminal access to the private network.

## Security Auditing

1. **Check online users**

   It is recommended to check online users regularly to identify illegal users.
2. **Check device log**

   By viewing logs, you can learn about the IP addresses that attempt to log in to the device and key operations of the logged users.
3. **Configure network log**

   Due to the limited storage capacity of devices, the stored log is limited. If you need to save the log for a long time, it is recommended to enable the network log function to ensure that the critical logs are synchronized to the network log server for tracing.

## Software Security

1. **Update firmware in time**

   According to the industry standard operating specifications, the firmware of devices needs to be updated to the latest version in time in order to ensure that the device has the latest functions and security. If the device is connected to the public network, it is recommended to enable the online upgrade automatic detection function, so as to obtain the firmware update information released by the manufacturer in a timely manner.
2. **Update client software in time**

   It is recommended to download and use the latest client software.

## Physical Protection

It is recommended that you carry out physical protection for devices (especially storage devices), such as placing the device in a dedicated machine room and cabinet, and having access control

and key management in place to prevent unauthorized personnel from damaging hardware and other peripheral equipment (e.g. USB flash disk, serial port).