Digital Signage

User's Manual



V1.0.1

Foreword

General

This manual introduces the functions and operations of the 3.0 digital signage (hereinafter referred to as the "Signage"). Read carefully before using the Signage, and keep the manual safe for future reference.

Safety Instructions

The following signal words might appear in the manual.

Signal Words	Meaning
DANGER	Indicates a high potential hazard which, if not avoided, will result in death or serious injury.
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.
TIPS	Provides methods to help you solve a problem or save time.
NOTE	Provides additional information as a supplement to the text.

Revision History

Version	Revision Content	Release Time
V1.0.1	Updated basic operations.	August 2022
V1.0.0	First release.	May 2021

Privacy Protection Notice

As the device user or data controller, you might collect the personal data of others such as their face, 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 Signage, hazard prevention, and prevention of property damage. Read carefully before using the Signage, and comply with the guidelines when using it.

Installation Requirements

 WARNING

- Improper use of the battery might result in a fire or explosion.
- Replace unwanted batteries with new batteries of the same type and model.
- Use the standard power adapter. We will assume no responsibility for any problems caused by the use of a nonstandard power adapter.
- Use the power cords that are recommended for the region and conform to the rated power specifications.



- This is a class A product. In a domestic environment this may cause radio interference in which case you may be required to take adequate measures.
- 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 on a stable surface to prevent it from falling.
- Install the Signage in a well-ventilated place, and do not block its ventilation.
- Use an adapter or cabinet power supply provided by the manufacturer.
- The power supply must conform to the requirements of ES1 in IEC 62368-1 standard and be no higher than PS2. Note that the power supply requirements are subject to the device label.
- The Signage is a class I electrical appliance. Make sure that the power supply of the Signage is connected to a power socket with protective earthing.
- The appliance coupler is a disconnection device. Keep it at a convenient angle when using it.

Operation Requirements



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

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1 Overview

The Signage is an innovative, intelligent cloud information terminal that features multimedia content release, advertisement and network access, and has LCD display and audio power amplifier. The Signage is applicable for use in government buildings, office parks, shopping malls, and more.

2 Structure

Figure 2-1 Ports

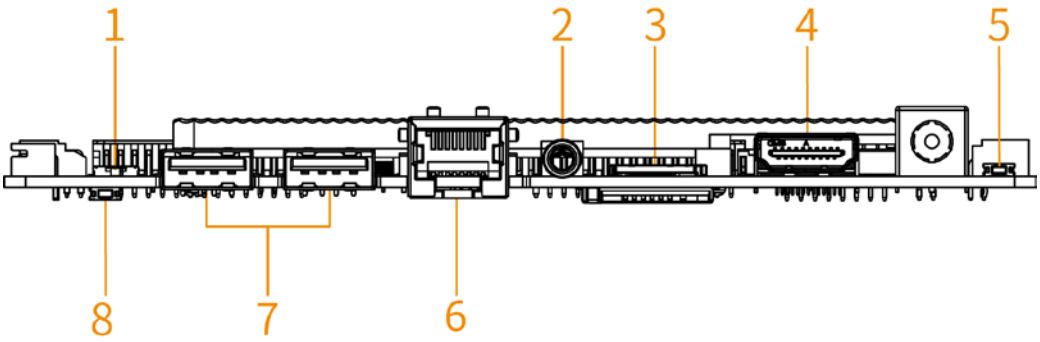


Table 2-1 Description of ports

No.	Name	Description
1	Reset button	Contact customer service to use the button to restore the Signage to its factory settings or reset the password.
2	Headphone jack	Connects to 3.5 mm headphones to receive audio from the Signage.
3	TF card slot	Insert a TF card. The TF card is used to force update the Android OS or provide media for projects. A force update is needed when the Android OS restarts repeatedly or the Signage cannot be started. ● You cannot use the TF card to store data on the Signage. ● Contact the technical support if your Signage needs a force update.
4	HDMI port	Connects to HDMI input source device.
5	ON/OFF	Turn the screen on/off.
6	Network port	Connects the Signage to the network through Ethernet cable.
7	USB 2.0 port	Connects to devices such as mouse or USB drive.
8	DIP switch	Switch the function (OTG/USB) of the USB port on the right side (two ports are designed). To use the port as a USB port, push the switch to the side of the network port.

3 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.

3.1 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.

3.2 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.

Step 1 Power on the Signage. The Signage starts.

Step 2 Select the language. Currently, only Chinese and English are supported.

Step 3 Click **Save and Next**, and then configure your password.

1) Enter your new password, and confirm it.

   📖

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

2) Click **Confirm**.

   Initialization starts.

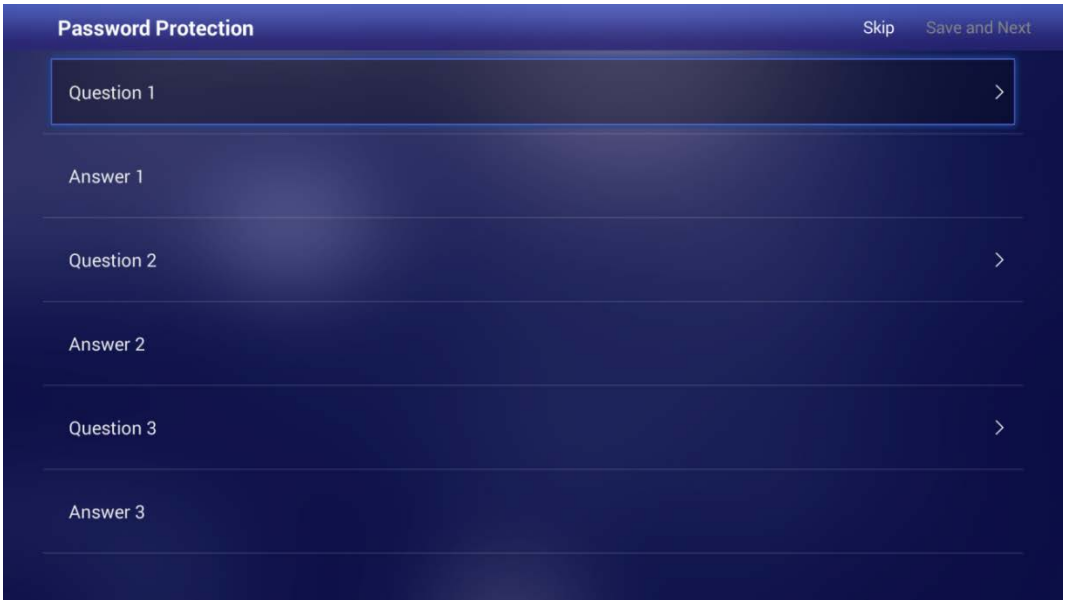
Figure 3-1 Device initialization (2)



Step 4 On the **Password Protection** interface, select questions, enter answers to the questions, and then click **Save and Next**.

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

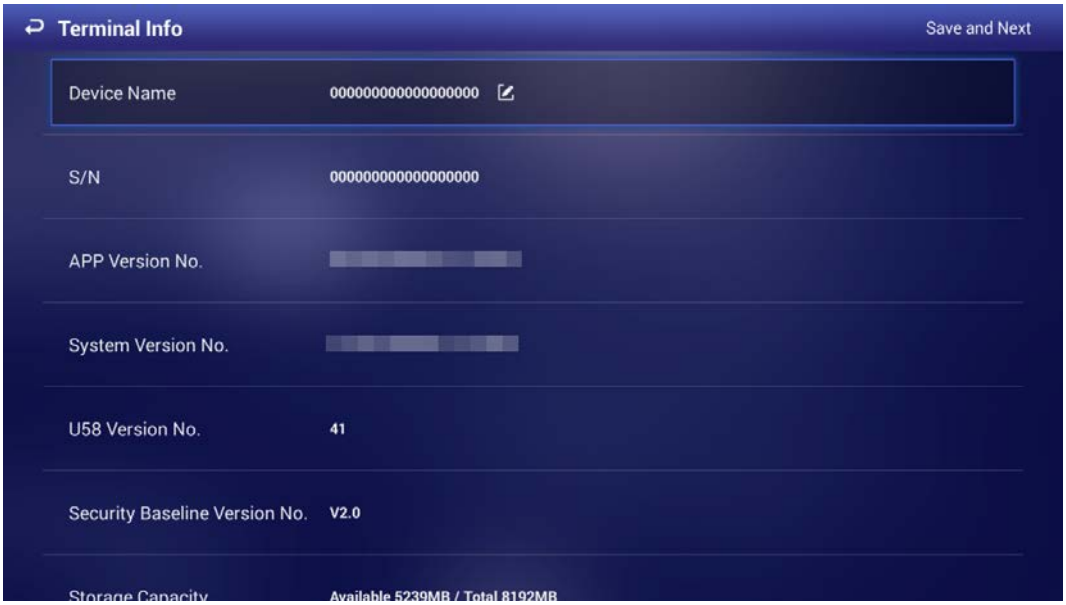
Figure 3-2 Password protection



Step 5 On the **Terminal Info** interface, configure device information.

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

Figure 3-3 Device information



Step 6 On the **Network Setting** interface, configure the network.

Click **Skip** to skip setting the network.

1) Select network type as needed and configure the network.

Figure 3-4 Network setting

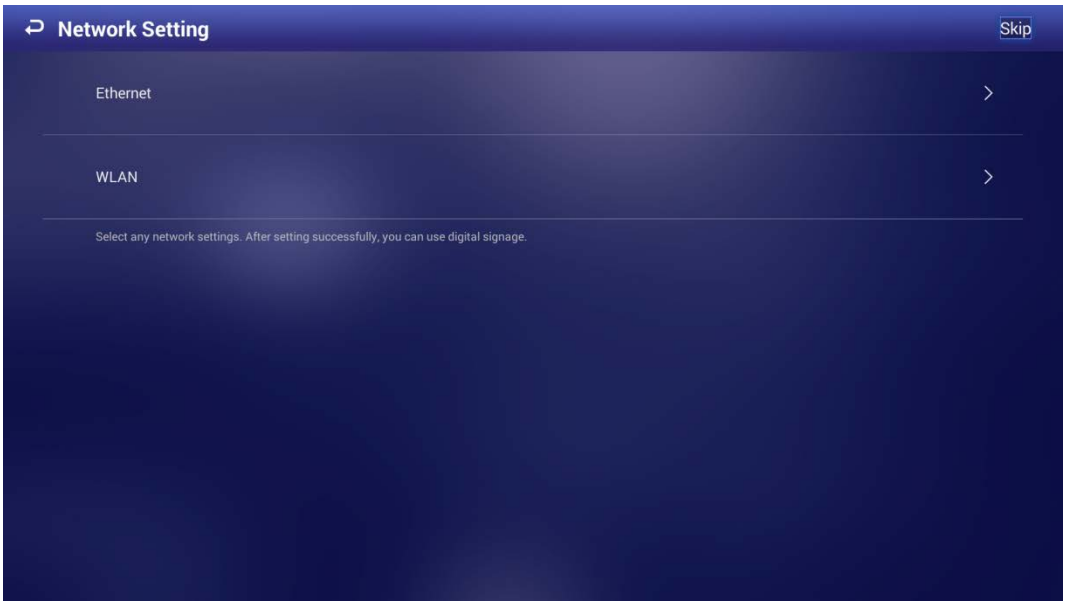


Table 3-1 Configure network

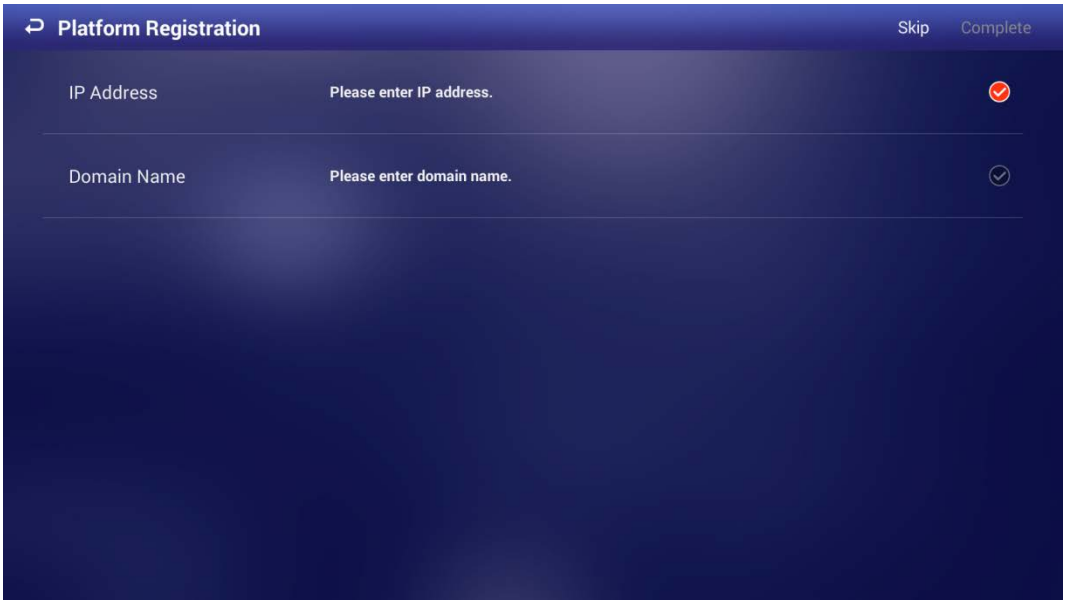
Network Type	Description
WLAN	Click  when Wi-Fi is available near the Signage. After enabling this function, you can connect the Signage to Wi-Fi in the following ways. ● Auto search: Click a Wi-Fi, enter its password, and then click **Connect**. ● Connect to Wi-Fi manually: Click , and then on the **Add network** interface, enter **Network SSID**, select a security option from **None**, **WEP**, **WPA/WPA2 PSK**, or **802.1x EAP**, and then click **Save**.
Ethernet	Connect your device to network by Ethernet. Two 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.

2) Click **Save and Next**.

Step 7 On the **Platform Registration** interface, register the Signage to the platform (MPS).

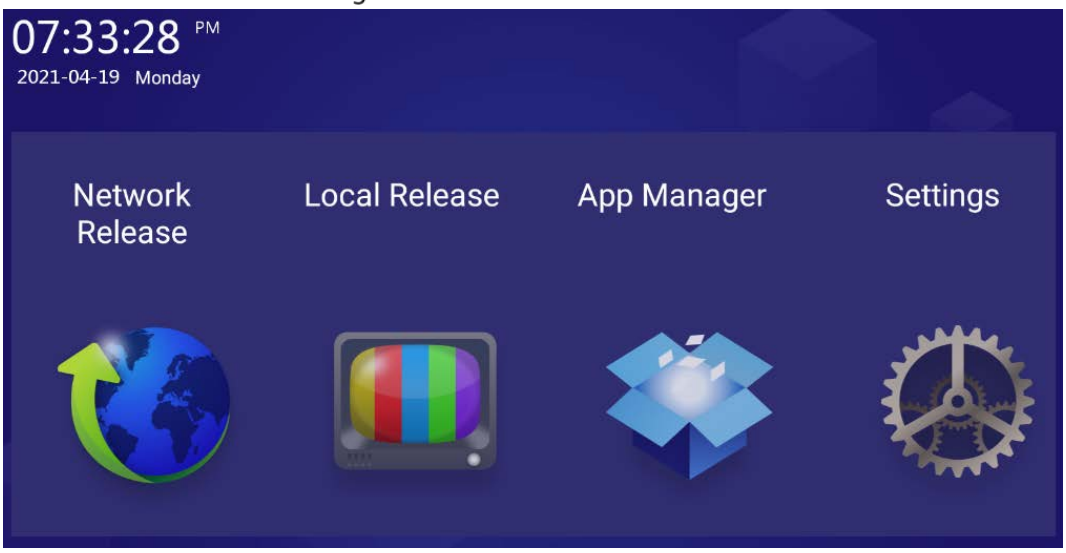
Click **Skip** to skip platform registration. Platform is required when multiple signages are used in a solution.

Figure 3-5 Platform registration



1) Enter the IP address or domain name of the platform (MPS).
2) Click **Complete**.

Figure 3-6 Main interface

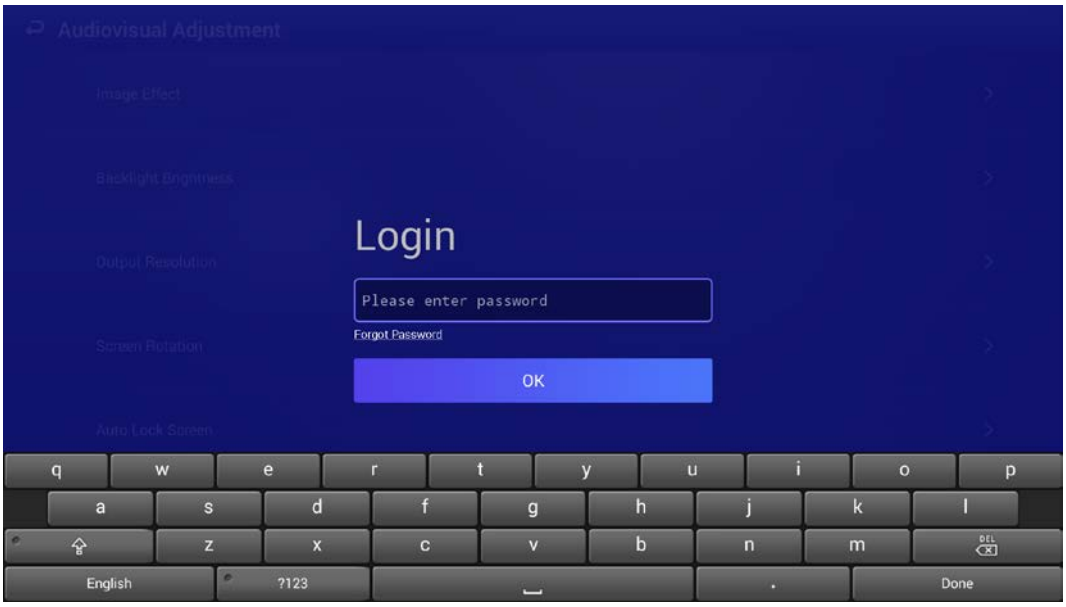


3.3 Login

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.

Step 1 Click any position on the screen.

Figure 3-7 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 interface 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**.

3.4 Resetting Password

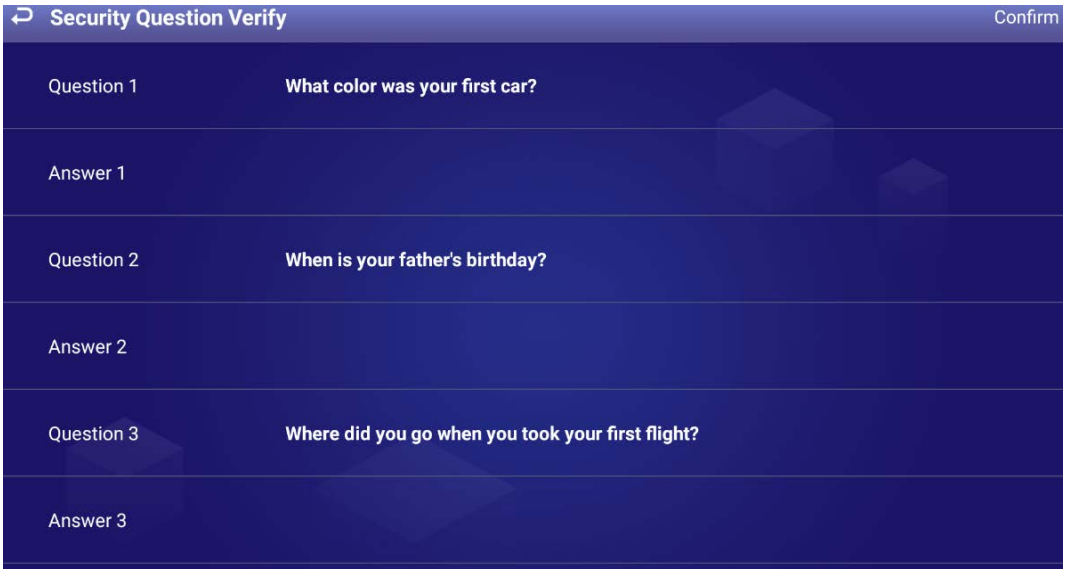
Reset the password when you forgot it.

Step 1 On the login interface (see Figure 3-7), 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 3-8 Verify security questions



3.5 Changing Password and Security Questions

We recommend updating the login password and security questions regularly to ensure device security.

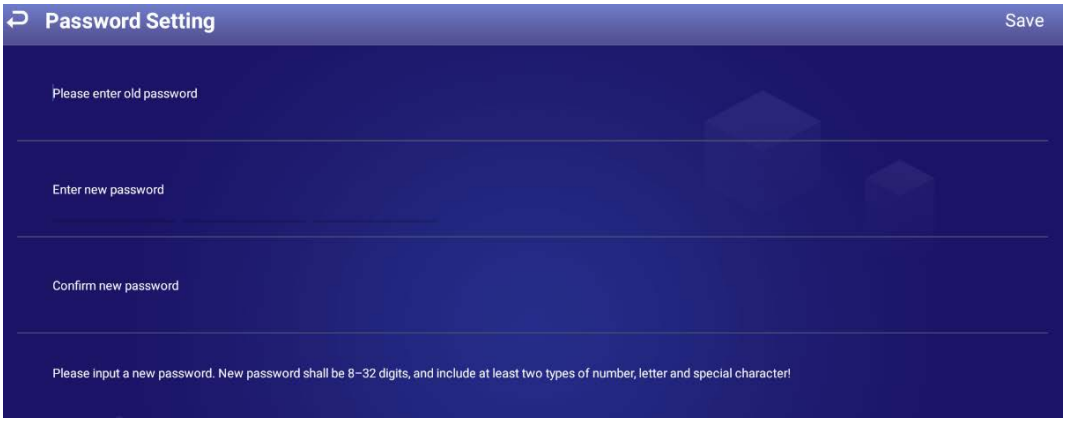
3.5.1 Changing Password

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

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

Step 3 Click **Save**.

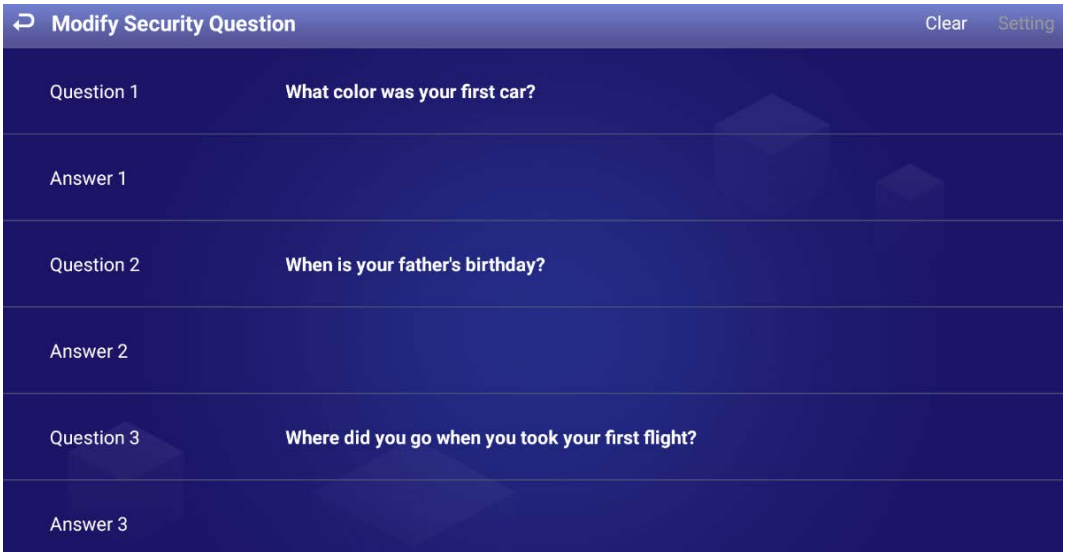
Figure 3-9 Password settings



3.5.2 Changing Security Questions

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

Figure 3-10 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**.

3.6 Quick Toolbar

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

Figure 3-11 Quick toolbar



Table 3-2 Description of quick toolbar

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

3.7 Releasing Project

You can release projects locally or through MPS.

- Releasing projects locally is ideal for scenarios with a single required Signage.
- If multiple Signages and media (pictures, videos) are involved, and network connection is available, we recommend releasing projects through MPS. This will facilitate central management of the Signage and media (pictures, videos).

You cannot release a project locally and through MPS at the same time. To release a project through MPS, stop playing local projects first.

3.7.1 Network Release

Release projects through the network. Register the Signage to MPS when you use network release for the first time.

3.7.1.1 Configuration Flow

Figure 3-12 Network release



Table 3-3 Configuration flow (network release)

Operation	Description
Log in	Log in and configure the Signage. For details, see "3.3 Login."

Operation	Description
Configure network	Connects the Signage to the network. For details, see "3.7.1.2 Configuring Network."
Register the Signage to MPS	After registering the Signage to MPS, you can release projects and operate the Signage through MPS. For details, see "3.7.1.3 Registering the Signage to MPS."
Release project through MPS	After adding meida and configuring project plans on MPS, the project can be played on the Signage. For details, see the user's manual of MPS.

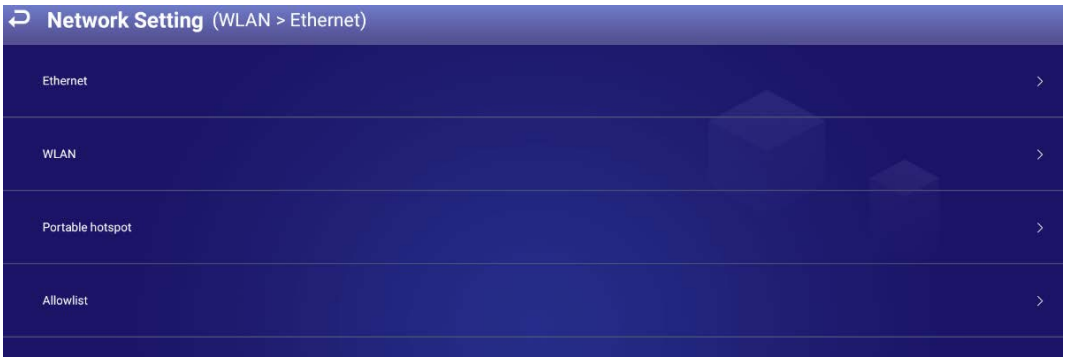
3.7.1.2 Configuring Network

3.7.1.2.1 Connecting the Signage to Network

Connect your Signage to the network by Ethernet or WLAN. Also, after connecting the Signage to the network, it can be used as a hotspot for other digital signage.

Step 1 On the main interface, select **Settings > Network Setting**.

Figure 3-13 Network setting



Step 2 Configure the network type that you want to use.

Table 3-4 Configure network

Network Type	Description
Ethernet	Connect your device to the network by Ethernet. Two 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** or **Netmask**, and enter the IP address, default gateway and net mask according to the network plan.
WLAN	Click  if Wi-Fi is available near the Signage. After turning on this function, you can connect your device to Wi-Fi in the following ways. ● Auto search: Click a Wi-Fi, enter its password, and then click **Connect**. ● Connecting to Wi-Fi manually: Click , and the **Add Network** interface is displayed. Enter **Network SSID**, select a security option, and then click **Save**.

Network Type	Description
Portable hotspot	On the main interface, select **Settings > Network Setting > Portable Hotspot**, and enable **Portable Hotspot**, then you can use your device as a hotspot for other devices. 1. Enter network SSID. 2. Select a security option, and then enter password. 3. Click **Save**.
Allowlist	See "3.7.1.2.2 Configuring Allowlist."

3.7.1.2.1 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 interface. This is to enhance data security.

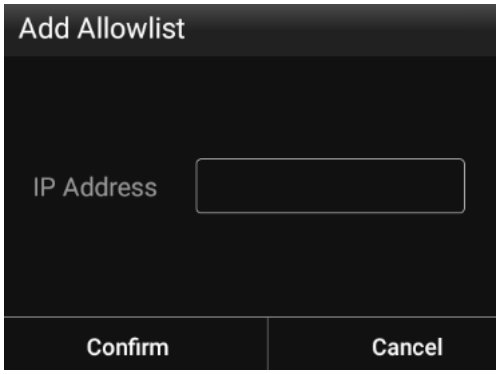
Step 1 On the main interface, select **Settings > Network Setting > Allowlist**.

Step 2 Click  to enable allowlist functions.  means enabled.

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

1) Click .

Figure 3-14 Add allowlist



2) Enter an IP address.

3) Click **Confirm**.

The IP address that you have added is displayed.

You can repeat 1)–3) to add multiple IP addresses to your allowlist.

3.7.1.3 Registering the Signage to MPS

Connect the Signage to MPS, and then you can release projects through the MPS and play the projects on the Signage.

Preparation

- The Signage and the MPS are connected to the same network. To connect the Signage and the MPS to the network, see "3.7.1.2.1 Connecting the Signage to Network."

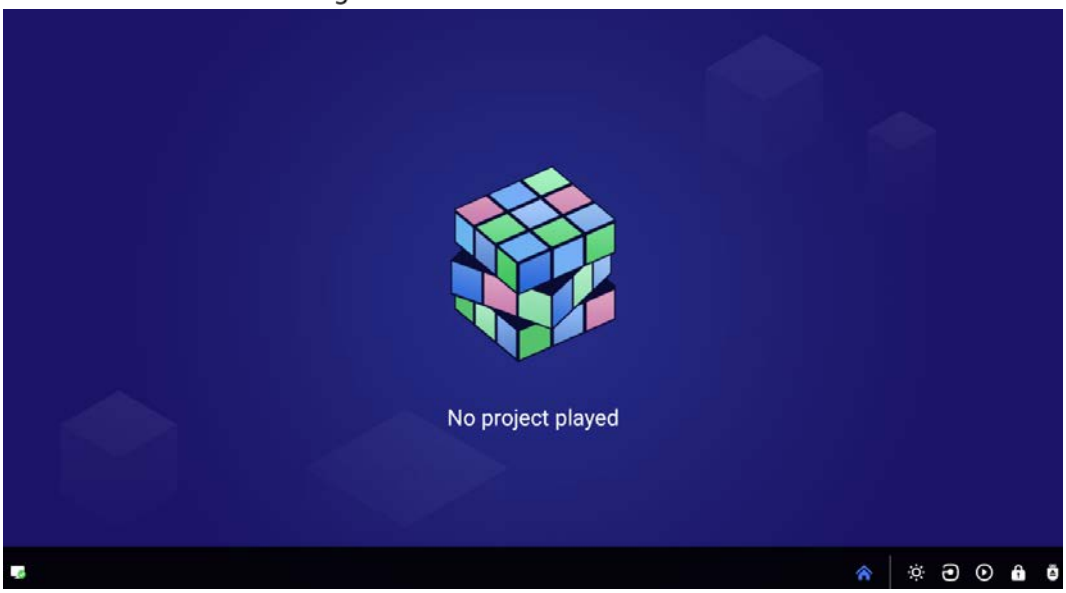
- If allowlist is enabled, make sure that the IP address of MPS is added to the allowlist. For allowlist configuration, see "3.7.1.2.2 Configuring Allowlist."

Procedure

For first-time use of network release, register the Signage to the MPS.

Step 1 On the main interface, click **Network Release**.

Figure 3-15 Network release

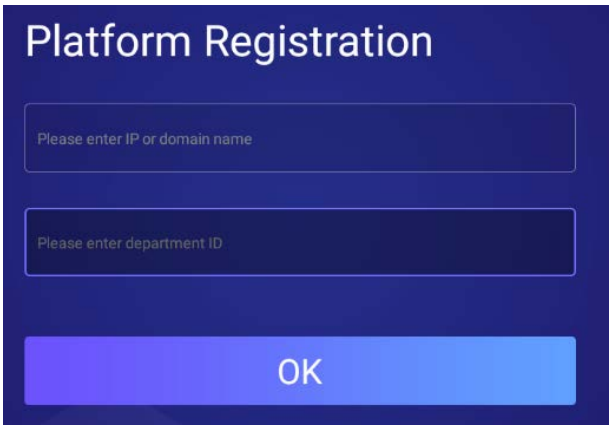


Move your mouse pointer to the bottom of the interface, and then a floating toolbar is displayed. You can:

- Click  to import a project from USB drive.
- Click  to go back to the main interface.
- View the status of registering to MPS.  means not registered.

Step 2 Click  on the lower-left corner.

Figure 3-16 Platform address



Step 3 Enter the IP address or domain name of the platform (MPS), and ID of the department that Signage is in. You can confirm the department ID on the web interface of MPS.

Step 4 Click **OK**.

After successful registration, the icon on the lower-right corner changes to .

3.7.1.4 Releasing Project

Manage Signages and release projects through the MPS. For details, see the user's manual of MPS.

3.7.2 Local Release

Add videos or pictures to projects, and release projects locally by using **General** or **Special** template.

- For **General** template, you can select from **Quick Play** and **Customized Play**.
- For **Special** templates, you can select from **Catering & Life**, **Special Offer & Promotion**, **Brand Publicity**, **Supermarket & Hotel**, **Info & News**, **Face Attendance**, **Stream Media**, and **Video Surveillance**.

3.7.2.1 Configuration Flow

Figure 3-17 Local release (general template)

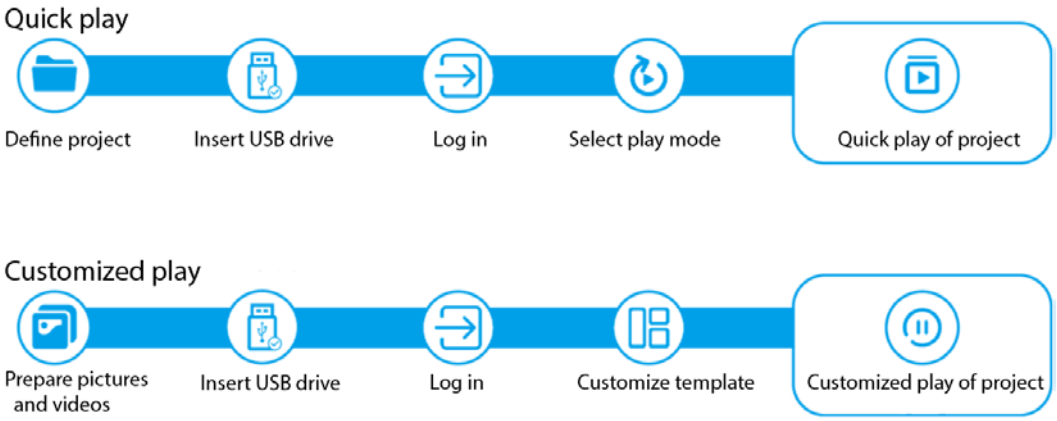


Table 3-5 Configuration flow (general template)

Release Mode	Procedure	Description
Quick play	Define project	1. Create a USBPLAY folder in the USB drive. 4. Name the media (pictures, videos) to be played in the play order to create a custom project. 5. Move the custom project to the USBPLAY folder.
	Insert the USB drive	Insert the USB drive with the defined project into the USB port of the Signage.
	Log in	Log in and configure the Signage. For details, see "3.3 Login."
	Select play mode	Select project play mode. For details, see "3.7.2.2.1 Quick Play."
Customized play	Prepare pictures and videos	Save the media (pictures, videos) to be played to the USB drive.

Release Mode	Procedure	Description
	Insert the USB drive	Insert the USB drive with prepared media into the USB port of the Signage.
	Log in	Log in and configure the Signage. For details, see "3.3 Login."
	Customize template	Define the media (pictures, videos) to be played according to the template. For details, see "3.7.2.2.2 Custom Play."

Figure 3-18 Local release (special template)

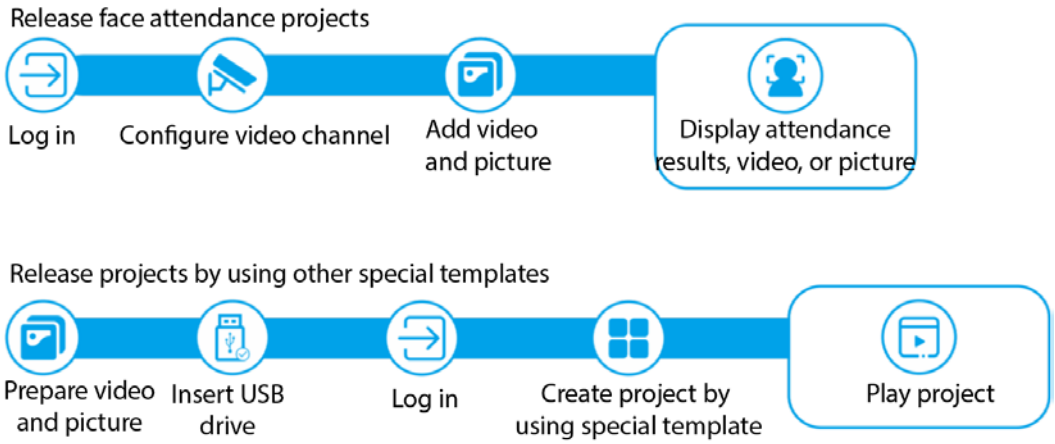


Table 3-6 Configuration flow (special template)

Release Mode	Procedure	Description
Release face attendance projects	Log in	Log in and configure the Signage. For details, see "3.3 Login."
	Configure video channel	Add video channels to the Signage. You can add channels from the camera, Smart PSS, DSS platform, or IVSS. For details, see "3.7.2.3.1 Configuring Face Attendance Template."
	Add video and picture	Add videos and pictures to the Signage. For details, see "3.7.2.3.1 Configuring Face Attendance Template."
Release projects by using other special templates	Prepare video and picture	Save the videos and pictures to be played to the USB drive.
	Insert the USB drive	Insert the USB drive with prepared media into the USB port of the Signage.
	Log in	Log in and configure the Signage. For details, see "3.3 Login."
	Create project by using special template	Add the media and then create projects according to special templates. For details, see "3.7.2.3.2 Configuring Other Special Templates."

3.7.2.2 Releasing Projects by General Templates

3.7.2.2.1 Quick Play

Use the given templates to quickly release projects.

Preparation

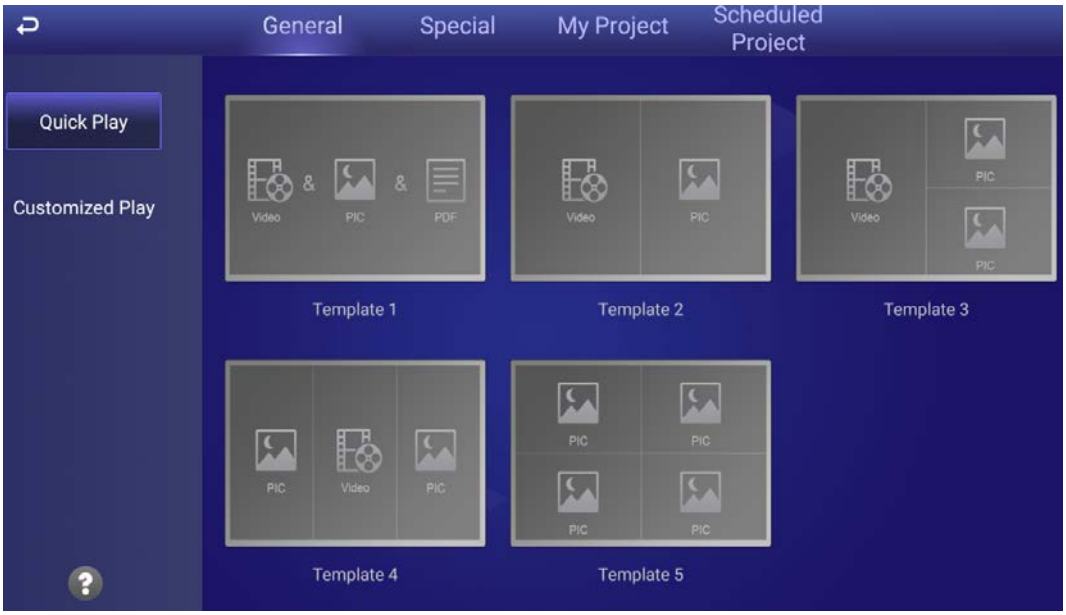
- The USBPLAY folder is created on the USB drive.

- 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 interface, select **Local Release > General > Quick Play**.

Figure 3-19 Quick play



Step 2 Select a template.

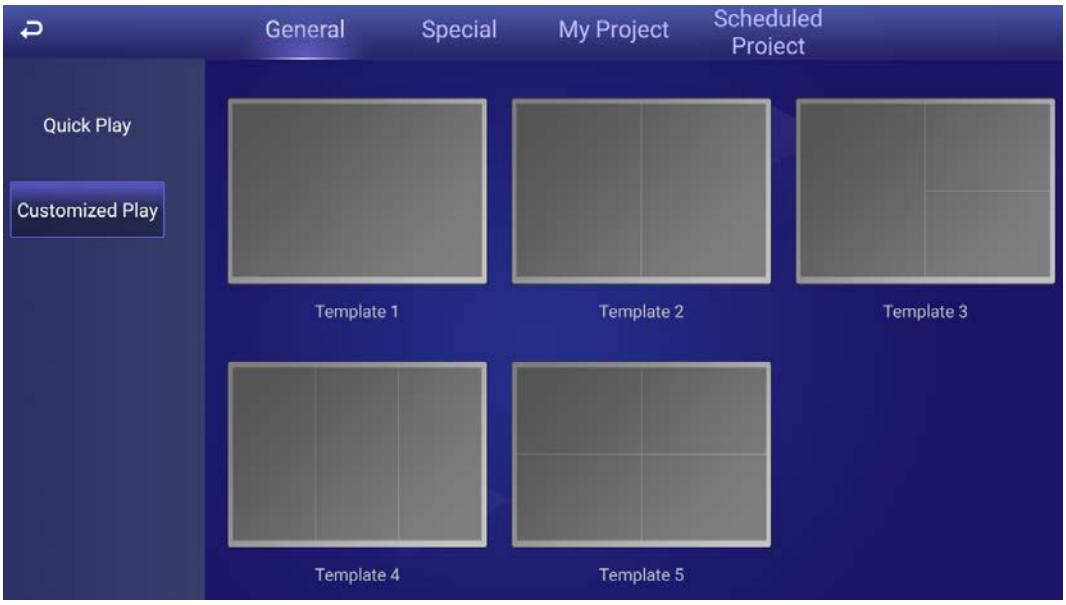
The system will display pictures and videos according to their layout in the template. A picture is displayed for 10 seconds by default and a video to the end.

3.7.2.2.2 Custom Play

Define your own templates to release information.

Step 1 On the main interface, select **Local Release > General > Customized Play**.

Figure 3-20 Customized play



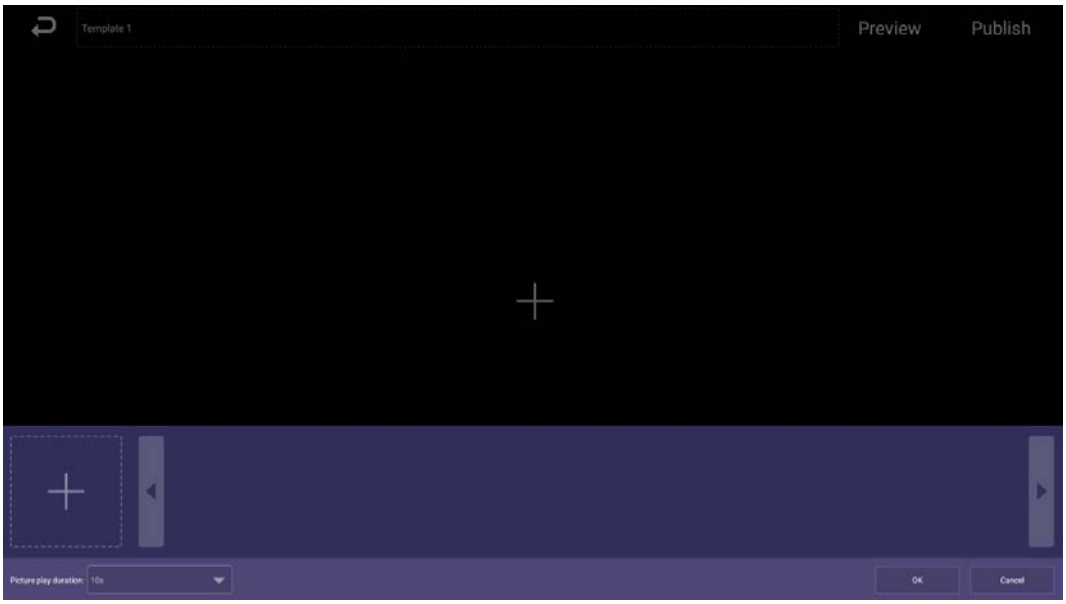
Step 2 Click a template that you want to define.

The template configuration interface is displayed.

Step 3 Define the template.

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

Figure 3-21 Interface of adding 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 2)–3) to upload multiple pictures or videos. After adding the media (pictures and videos), you can drag the media to sort them.

4) Click **OK**.
The system displays the media by their order.
If there are multiple regions in your template, to make the template effective, you need to repeat 1)–4) 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.

3.7.2.3 Releasing Projects by Special Templates

Special templates include **Catering & Life**, **Special Offer & Promotion**, **Brand Publicity**, **Supermarket & Hotel**, **Info & News**, **Face Attendance**, **Stream Media**, and **Video Surveillance**. Select template as needed.

- To configure face attendance template, see "3.7.2.3.1 Configuring Face Attendance Template."
- To configure other templates, see "3.7.2.3.2 Configuring Other Special Templates."

3.7.2.3.1 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.

Preparation

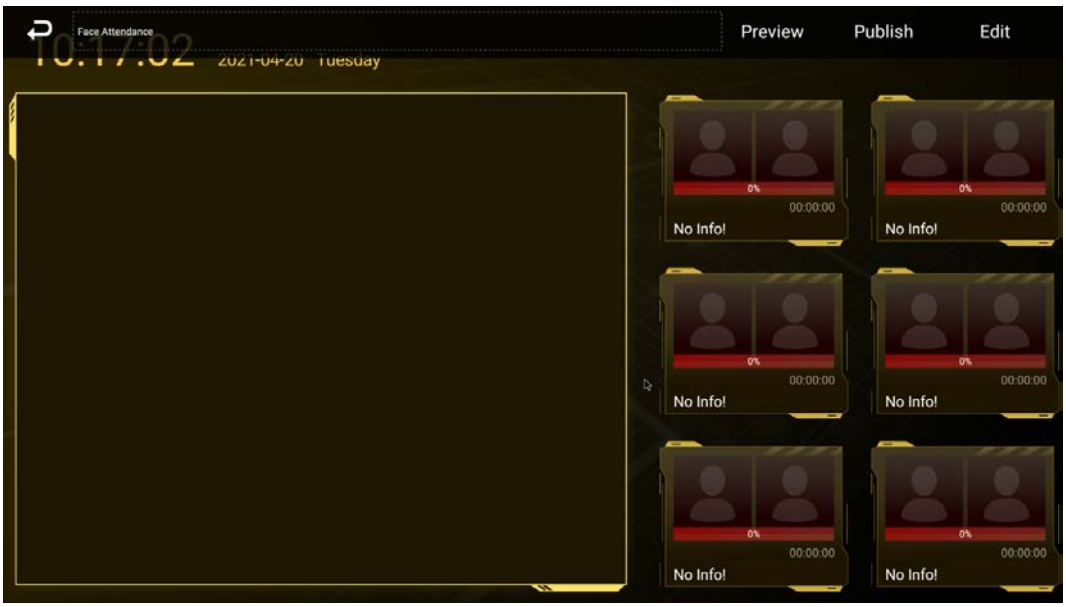
- When connecting your camera and the Signage through DSS or PSS protocol, make sure that a registration code is assigned to the Signage by the DSS platform or the Smart PSS client. When you have done this, your signage will successfully connect to the platform or client.
- The Signage, your camera, 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 interface, select **Local Release > Special**.

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

Figure 3-22 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 channel, and then configure other parameters.

Figure 3-23 Setting



1) Click **Add Channel**, and then configure channel parameters.

Figure 3-24 Add channel

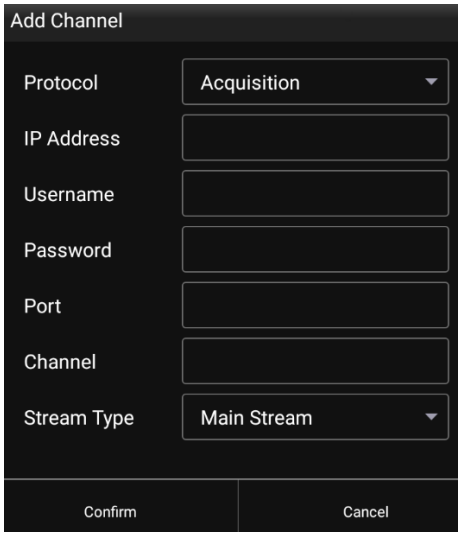


Table 3-7 Description of adding channel

Parameter	Description
Protocol	You can select from **Acquisition** (IP camera, IVSS (intelligent video surveillance server)), **DSS**, and **PSS** (SmartPSS), depending on the device connected.
IP Address	IP address of device (IP camera, IVSS), DSS, or PSS, depends on the **Protocol** that you select.
Username	Username and password for logging in to IP camera or IVSS. You need to enter the username and password when **Acquisition** is selected from **Protocol**.
Password	
Port	Port for logging in to IP camera, IVSS, DSS, or PSS. It is 37777 by default for IP camera and IVSS, and 8101 for DSS and PSS.
Channel	You need to enter channel No. when IP camera or IVSS is connected. ● Enter 1 when IP camera is connected. ● Enter the number of channels that you want to display when IVSS is connected.
Stream Type	● Main stream: Provides large bit stream and images with high resolution, but requires large bandwidth. ● Sub stream: Provides small bit stream and smooth image, and requires less bandwidth.

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

Table 3-8 Description of other parameters

Parameter	Description
Display Video Image	● **Screen split**: You can view the video image of the added channels by 1, 2, 3, or 4 splits. ● **Switching time(seconds)**: Switch to play video of another added channel after the defined time. ● **Channel selection**: Select the channel to be played in each screen split.

Parameter	Description
Play Media	Click  to add media (video or picture).  ● Select media, and then click  to delete it. ● Drag the media to sort them. ● Pictures are displayed for 10 seconds by default and videos to the end. ● Only one kind of media can be played at a time.
Display Comparison Results	Enable or disable voice broadcast and display face comparison results. ● Display successful comparison results: Click , and then select the item to be displayed when face comparison succeeds. ● Display failed comparison results: Click , and then select the item to be displayed when face comparison fails.
Display LOGO	Click  to add a picture, which will be the logo displayed on the upper-right corner when face attendance project is played.
Display Card Number	After registering the certificate number (such as ID No., passport No.) of person on the MPS, if **Display Card Number** is enabled, such information will be displayed next to the person name on the Signage.

Step 6 Operate the template that you have almost finished. On the upper-right corner of the current interface:

- Click **Preview** to preview the project to be played.
- Click **Publish** to play your project immediately.

3.7.2.3.2 Configuring Other Special Templates

The other special templates are similar in configurations. This sections uses supermarket & hotel template as an example.

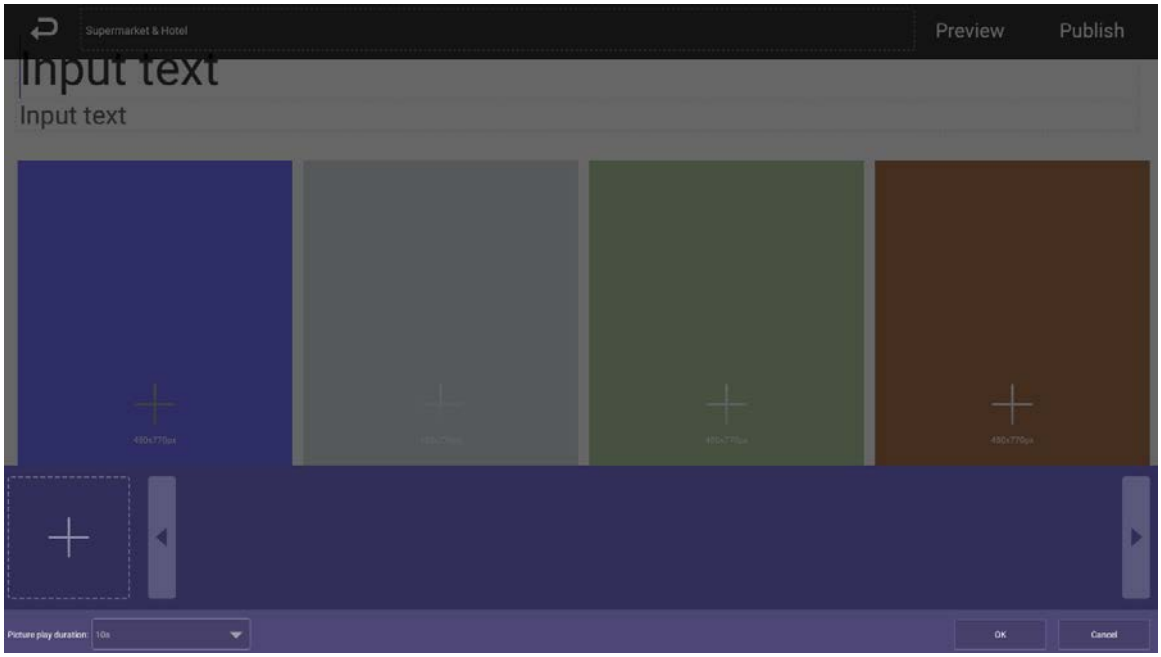
Step 1 On the main interface, select **Local Release > Special**.

Step 2 Click a template that you want to define.

Step 3 Configure the template.

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

Figure 3-25 Add media



2) Click .

3) Select a picture, and configure the picture play duration as needed.

- Pictures are displayed for 10 seconds by default and videos to the end.
- You can repeat 2)–3) to upload multiple pictures or videos. After adding the media (pictures, videos), you can drag the media to sort them.
- Click  to delete media.

4) Click **OK**.
The system displays the media by their order.
If there are multiple regions in your template, to make the template effective, you need to repeat 1)–4) to add projects to other regions.

Step 4 Operate the template that you have almost finished. On the upper-right corner of the current interface:

- Click **Preview** to preview the project to be played.
- Click **Publish** to play your project immediately.

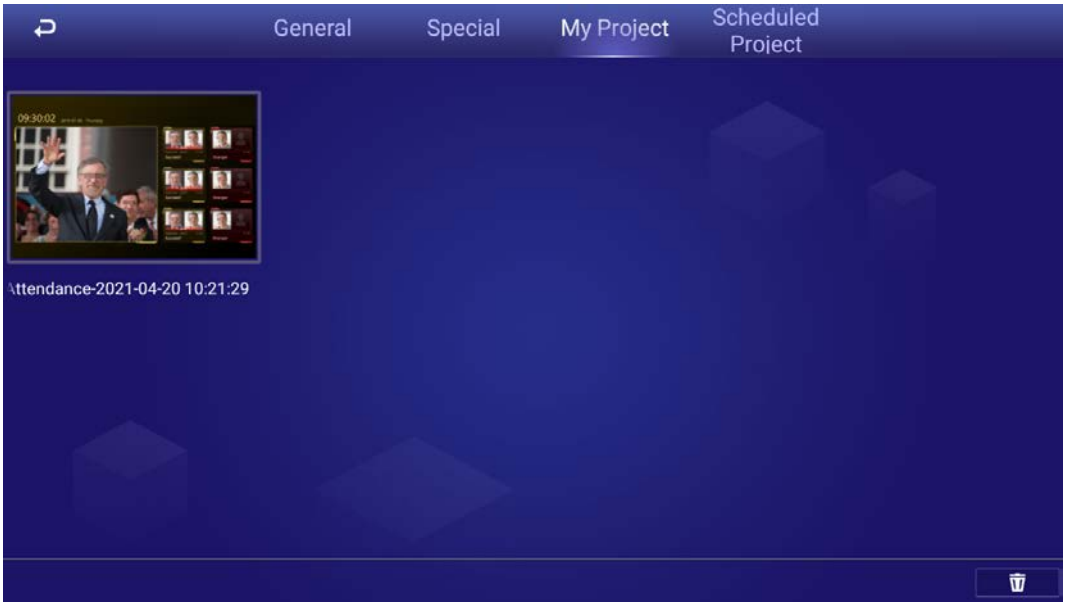
3.7.2.4 Managing My Project

On the main interface, 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 3-26 My project



3.7.2.5 Scheduled Project

Configure which and when projects will be played.

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

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

Figure 3-27 Add order play period



Step 3 Set time period, and then click .

Figure 3-28 Add order play period

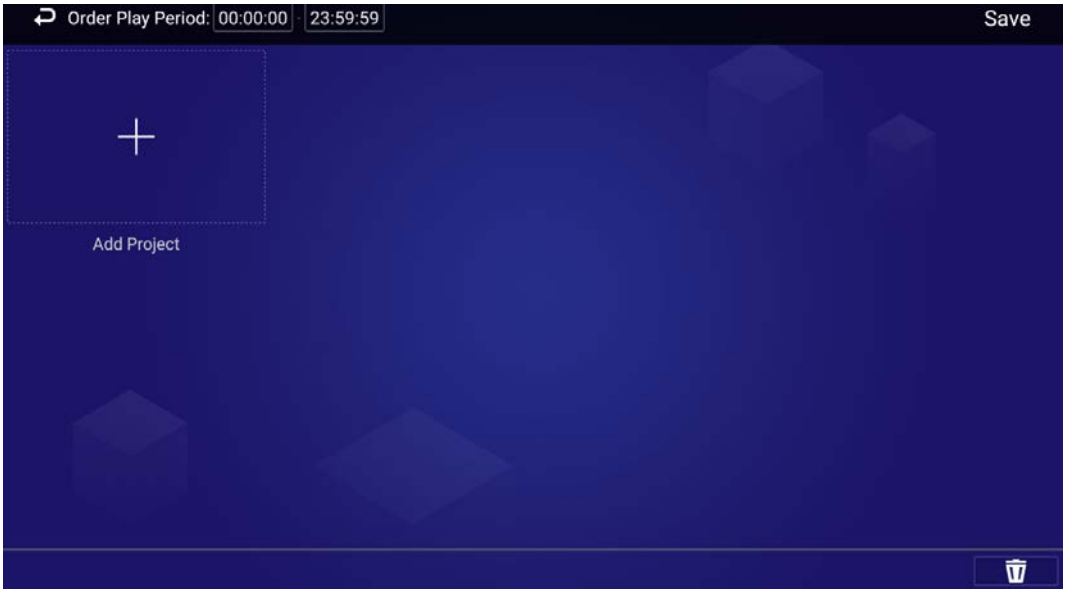


Step 4 Click , select a project, and then click **OK**.

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

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

Figure 3-29 Add project



Step 5 Click **Save**.

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

- Repeat Step 2–Step 5 to add multiple order play periods.
- Up to 30 periods can be added.

Step 6 Click **Save**.

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

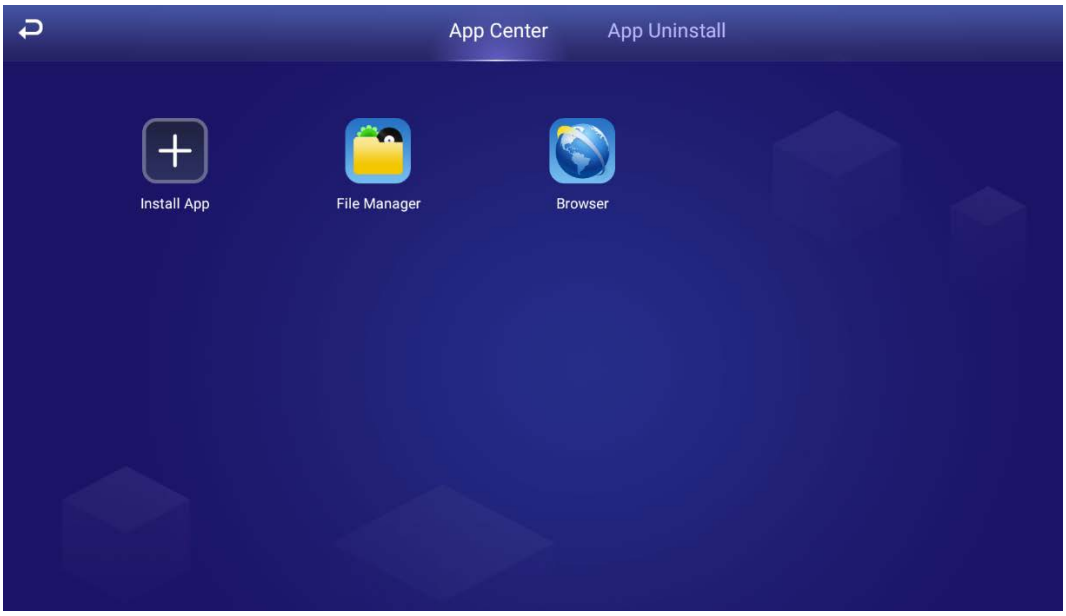
3.8 App Manager

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

You can:

- Click the **App Center** app to install new apps, view and manage different files, search for and download media (pictures, videos).
  - ◇ Click **Install App** to install new apps. For details, see "3.8.1 Installing App."
  - ◇ Click **File Manager** to view and manage different files. For details, see "3.8.2 File Manager."
  - ◇ Connect the Signage to network, and then click **Browser** to search for and download media (pictures, videos).
- Click the **App Uninstall** tab to uninstall the app from the Signage.

Figure 3-30 App center



3.8.1 Installing App

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

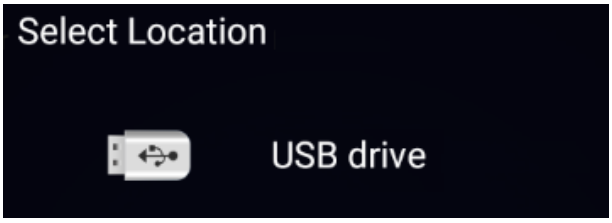
Preparation

Insert the USB drive with the installation package (.apk) into the Signage.

Procedure

Step 1 On the main interface, select **App Manager > App Center > Install App**.

Figure 3-31 Select location



Step 2 Click the USB where the installation file is installed.

The system will automatically find an app file for you.

Figure 3-32 Install an app



Step 3 Click the installation file.

The system prompts **Allow install xxx.apk application?**.

Step 4 Click **OK**.

The installation starts. Follow the onscreen instructions to finish the installation.

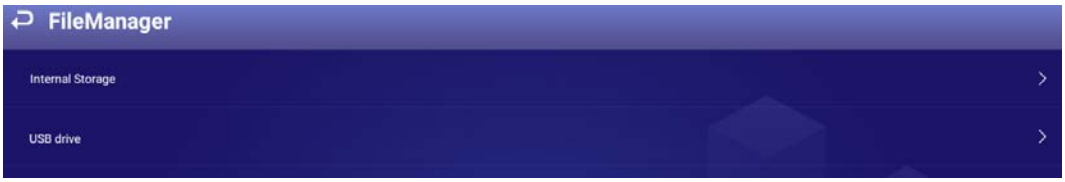
You can use and view the app you have installed in **App Center**.

3.8.2 File Manager

View and manage different types of files.

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

Figure 3-33 File manager

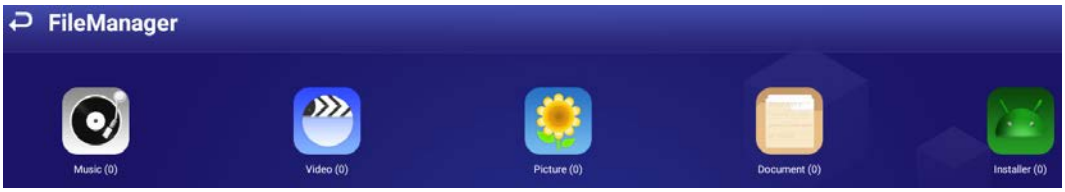


Step 2 Select a storage path, for example, internal storage.

Files are displayed in different types.

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

Figure 3-34 Different types of files



4 System Settings

4.1 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.

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

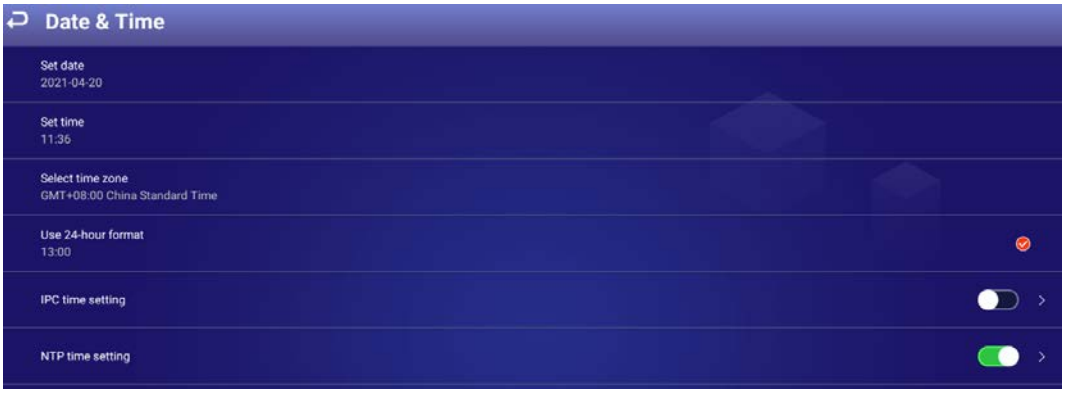
Step 2 Set date, time, and time zone. You can also enable the 24-hour format.

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 IPC will be synchronized with that of the Signage within the defined renewal cycle.

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 4-1 Date & time



4.2 Selecting Input Source

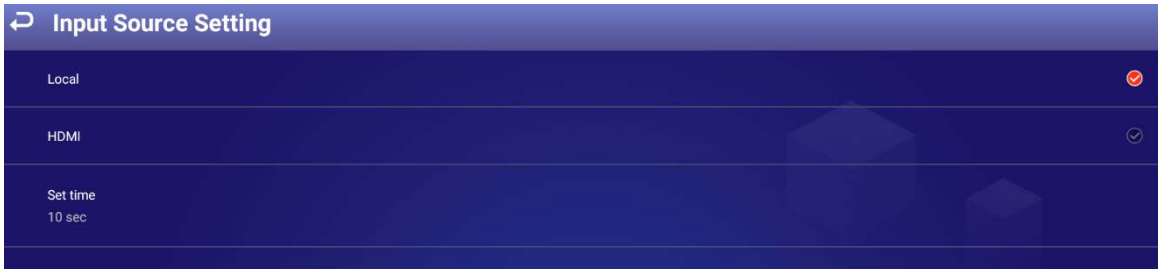
Input sources include **Local** (default) and **HDMI**.

- **Local**: Play projects from your USB drive or through MPS.
- **HDMI**: Play projects from the HDMI input source, for example, your PC.

Different devices support different input sources.

Step 1 On the main interface, select **Settings > Input Source Setting**.

Figure 4-2 Input source



Step 2 Select input source.

- **Local**: Displays videos or pictures released locally or through MPS.
- **HDMI**: Displays images from HDMI input source.

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.

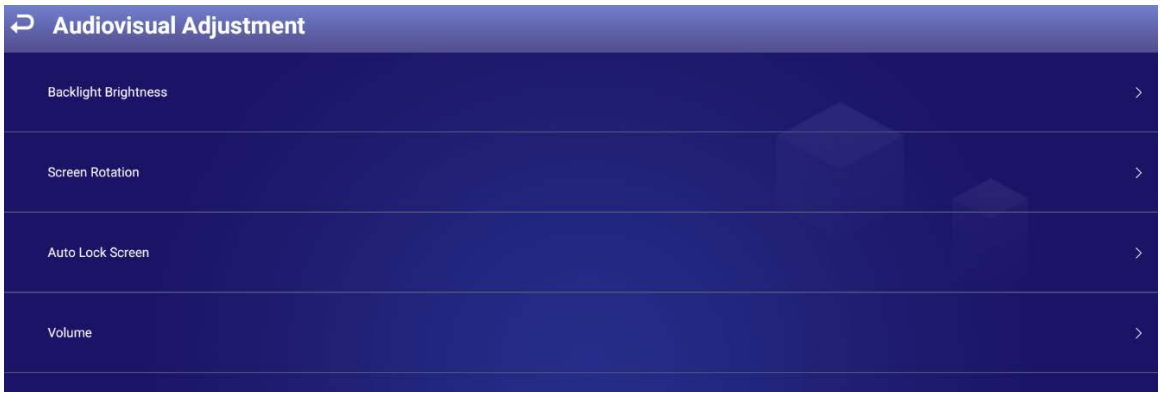
4.3 Configuring Visual & Audio Parameters

Adjust display effect of screen and device volume.

If it prompts **This operation may cause power increase. Do you want to continue?**, click **Confirm** to continue.

Step 1 On the main interface, select **Settings > Audiovisual Adjustment**.

Figure 4-3 Audiovisual adjustment



Step 2 Configure visual & audio parameters.

Table 4-1 Visual & audio adjustment

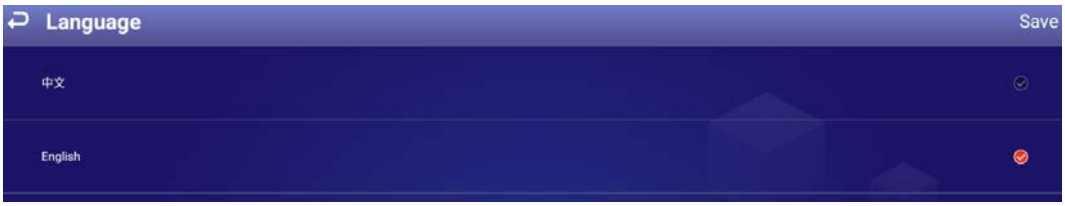
Item	Description
Backlight Brightness	Adjust the screen's background brightness manually or automatically. Auto background brightness adjustment is available on select models. ● Auto: Enable **Auto**, and the background brightness will be adjusted according to the surrounding lighting conditions. ● Manual: Disable **Auto**, and then you need to drag the brightness bar to adjust the background brightness manually. ● Click to restore to default value.
Screen Rotation	Rotate your screen with angles available on the Signage.

Item	Description
Auto Lock Screen	When your device is not playing any projects, you can set a device idle time (the time when you do not operate the device), beyond which your device will be locked. You can select locking your device after **1min**, **3min**, **10min**, or select **Never** to keep your device unlocked.
Volume	Adjust the volume of playing projects. Click **Volume**, and then drag the volume bar to adjust the volume. 0 represents muted. Click  to restore to default value.

4.4 System Language

Select the display language from **Settings > Language**. Currently, only Chinese and English are available.

Figure 4-4 Language



5 Maintenance and Update

5.1 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.

5.2 Restoring Factory Defaults

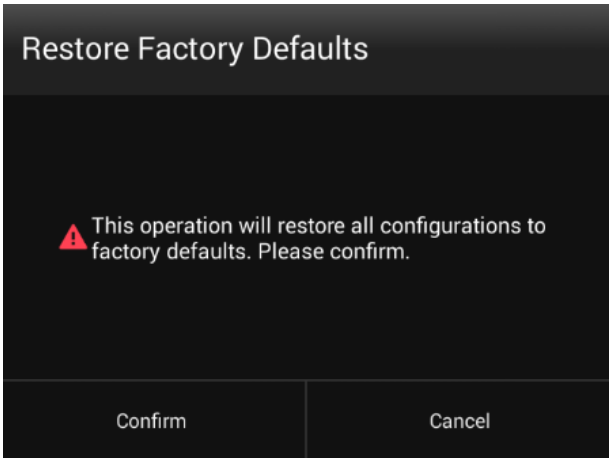
Restore your device to factory settings to handle problems such as storage insufficiency and system error. Be cautious because this might cause data loss.

Step 1 On the main interface, select **Settings > Maintenance and Upgrade > Restore Factory Defaults**.

Step 2 Click **Confirm**.

After restoring factory defaults, the Signage will restart.

Figure 5-1 Restoring factory defaults



5.3 Upgrading System

Update system software.

Preparation

Insert a USB drive with the update package into your Signage. Contact our customer service to get an update package.

Procedure

Step 1 On the main interface, select **Settings > Maintenance and Upgrade > System Upgrade**.

Step 2 Select an update package to start update.

After being updated, your device restarts.

Figure 5-2 System update



5.4 Configuring Auto Maintenance Time

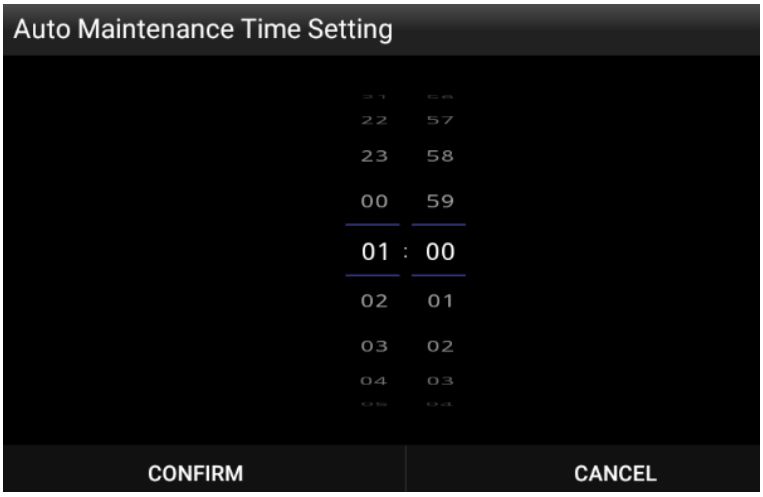
By default, the Signage auto restarts at 1:00 a.m. each day. You can also set the time that the system auto restarts, and click **Save**. The system auto restarts at the specified time.

Step 1 On the main interface, select **Settings > Maintenance and Upgrade > Auto Maintenance Time Setting**.

Step 2 Drag your mouse up and down to select a time.

Step 3 Click any position out of the **Auto Maintenance Time Setting** interface to finish configuration.

Figure 5-3 Configure auto maintenance time



5.5 Turning Screen On/Off at Fixed Time

Step 1 On the main interface, select **Settings > Maintenance and Upgrade > Timing Screen Turn On**.

Step 2 Click  to enable turning screen on by week or customized time.  means enabled.

Custom settings come first when **Custom** and **Week** are enabled at the same time.

Step 3 Click  to configure the specific date and time. The screen will stay on for the defined period.

Step 4 Click **Save**.

5.6 Turning the Signage On/Off at Fixed Time

Step 1 On the main interface, select **Settings > Maintenance and Upgrade > Timing Device Turn On**.

Step 2 Click  to enable turning the Signage on by week or customized time.  means enabled.

Custom settings come first when **Custom** and **Week** are enabled at the same time.

Step 3 Click  to configure the specific date and time. The Signage will stay on for the defined period.

Step 4 Click **Save**.

5.7 Restarting Device

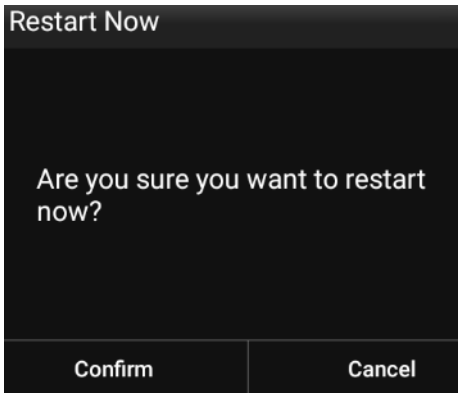
Manually restart your device to solve problems such as system crash.

Step 1 On the main interface, select **Settings > Maintenance and Upgrade > Restart Now**.

Step 2 Click **Confirm**.

The Signage starts restarting.

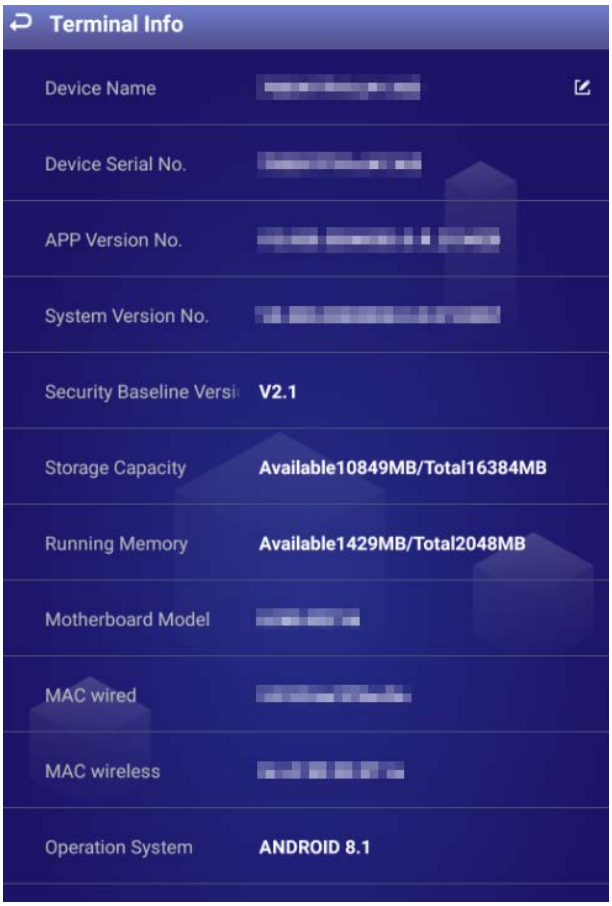
Figure 5-4 Restart now



5.8 Viewing Device Information

On the main interface, select **Settings > Terminal Info**, and then you can view device information such as device name, S/N, and app version.

Figure 5-5 Device information



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 1-1 Buttons description

Operation Item	Buttons Needed
Turn on/off device	Press .
Turn on/off device screen	Hold for three seconds.
Adjust volume	• Volume up: Press and press right arrow button. • Volume down: Press and press 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** interface is displayed. 2. Operate arrow keys and move pointer to password box, and type password. 3. Move pointer to **Done** on virtual keyboard. 4. Move pointer to **OK** and 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 Cybersecurity Recommendations

Mandatory actions to be taken for basic device network security:

1. **Use Strong 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; character types include 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 overlapped characters, such as 111, aaa, etc.

2. **Update Firmware and Client Software in Time**

   - According to the standard procedure in Tech-industry, we recommend to keep your device (such as NVR, DVR, IP camera, etc.) firmware up-to-date to ensure the system is equipped with the latest security patches and fixes. When the device is connected to the public network, it is recommended to enable the "auto-check for updates" function to obtain timely information of firmware updates released by the manufacturer.
   - We suggest that you download and use the latest version of client software.

"Nice to have" recommendations to improve your device network security:

1. **Physical Protection**

   We suggest that you perform physical protection to device, especially storage devices. For example, place the device in a special computer room and cabinet, and implement well-done access control permission and key management to prevent unauthorized personnel from carrying out physical contacts such as damaging hardware, unauthorized connection of removable device (such as USB flash disk, serial port), etc.

2. **Change Passwords Regularly**

   We suggest that you change passwords regularly to reduce the risk of being guessed or cracked.

3. **Set and Update Passwords Reset Information Timely**

   The device supports password reset function. Please set up related information for password reset in time, including the end user's mailbox and password protection questions. If the information changes, please modify it in time. When setting password protection questions, it is suggested not to use those that can be easily guessed.

4. **Enable Account Lock**

   The account lock feature is enabled by default, and we recommend you to keep it on to guarantee the account security. If an attacker attempts to log in with the wrong password several times, the corresponding account and the source IP address will be locked.

5. **Change Default HTTP and Other Service Ports**

   We suggest you to change default HTTP and other service ports into any set of numbers between 1024–65535, reducing the risk of outsiders being able to guess which ports you are using.

6. **Enable HTTPS**

   We suggest you to enable HTTPS, so that you visit Web service through a secure communication channel.

7. **MAC Address Binding**

   We recommend you to bind the IP and MAC address of the gateway to the device, thus reducing

the risk of ARP spoofing.

8. **Assign Accounts and Privileges Reasonably**

   According to business and management requirements, reasonably add users and assign a minimum set of permissions to them.

9. **Disable Unnecessary Services and Choose Secure Modes**

   If not needed, it is recommended to turn off some services such as SNMP, SMTP, UPnP, etc., to reduce risks.

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

   - SNMP: Choose SNMP v3, and set up strong encryption passwords and authentication passwords.
   - SMTP: Choose TLS to access mailbox server.
   - FTP: Choose SFTP, and set up strong passwords.
   - AP hotspot: Choose WPA2-PSK encryption mode, and set up strong passwords.

10. **Audio and Video Encrypted Transmission**

    If your audio and video data contents are very important or sensitive, we recommend that you use encrypted transmission function, to reduce the risk of audio and video data being stolen during transmission.

    Reminder: encrypted transmission will cause some loss in transmission efficiency.

11. **Secure Auditing**

    - Check online users: we suggest that you check online users regularly to see if the device is logged in without authorization.
    - Check device log: By viewing the logs, you can know the IP addresses that were used to log in to your devices and their key operations.

12. **Network Log**

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

13. **Construct a Safe Network Environment**

    In order to better ensure the safety of device and reduce potential cyber risks, we recommend:

    - Disable the port mapping function of the router to avoid direct access to the intranet devices from external network.
    - The network should be partitioned and isolated according to the actual network needs. If there are no communication requirements between two sub networks, it is suggested to use VLAN, network GAP and other technologies to partition the network, so as to achieve the network isolation effect.
    - Establish the 802.1x access authentication system to reduce the risk of unauthorized access to private networks.
    - Enable IP/MAC address filtering function to limit the range of hosts allowed to access the device.