TV Liquidator
U.S. Distributor of LED Signs

ViPlex Express
Display Content Publishing Management System for PC
V2.0.2   NS120100947

Async Mode User Manual

www.tvliquidator.com

Contents

1 Software Introduction

ViPlex Express is a display content publishing management system for PC, which is installed on Windows operating system, it allows you to edit solutions and play the solutions on LCD or LED displays. In async mode, ViPlex Express is used to control multimedia players. This document introduces you the functions and operations in async mode.

Two Working Modes

ViPlex Express has two working modes, which you can switch to your desired mode based on the application scenario.

❖ **Studio Mode**

When a solution is being played in ViPlex Express, the solution is also played synchronously on the display. This mode is applicable to synchronous playback.

The playback window is on the extended display. You can use the screen monitoring function to view the playback on your primary monitor.

❖ **Async Mode**

ViPlex Express sends solutions to multimedia players. The solutions will be stored in the multimedia players and played according to their playback plans. This mode is applicable to the scenario when multimedia players load displays.

Professional Solution Editing

ViPlex Express is designed with a professional solution editing function allowing you to edit solutions with various contents and complex schedules as required.

❖ **Multiple pages**

A solution can be added with multiple pages, which are played in order, starting from top to bottom.

❖ **Flexible layout**

You can use a system template or customize a template when adding a page. In a template, you can set the number, coordinates, width and height of windows based on your needs.

❖ **A variety of media**

On a page, you can add general windows, cut-to-display window, Office documents, images, videos, GIF, text, colorful text, digital clocks, analog clocks, timers, weather, RSS, streaming media and web pages.

❖ **Multiple properties**

Every type of media has multiple properties which can satisfy your needs and present a variety of solutions.

❖ **Scheduling as you wish**

You can set a time period and cycle for each page to play. The schedules of a page can be batch applied to other pages. If the time periods of several pages overlap, the pages will be played in order starting from top to bottom

❖ **Quick preview**

Clicking the preview button allows you to preview the current page. The preview widow refreshes immediately when you move on to another page.

All-round Terminal Control

In async mode, ViPlex Express enables you to fully control multimedia players, such as brightness adjustment, time synchronization, font management, terminal upgrade, video source switching, screen status control, play log query, network configuration and RF management.

2 **Getting Started**

2.1 Preparing a PC

Minimum requirements:

- OS: Windows 7 SP1 64-bit

- CPU: i5

- RAM: 4 GB

- HDD: 60 GB

2.2 Installing Software

Prerequisites

- Framework 4.6.x is installed.

- The official version of Visual C++ 2017 runtime components are installed.

- The installation package of ViPlex Express is obtained.

Where to Obtain

Contact TV Liquidator representative at 424-204-9443
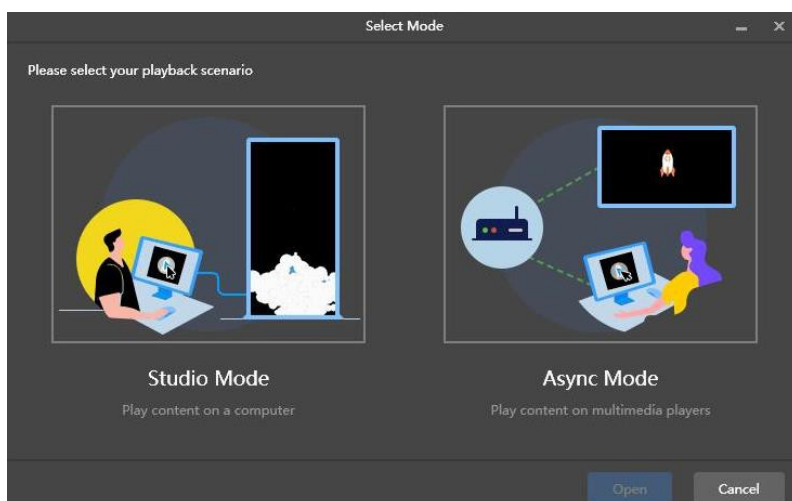
Operating Procedure

Double click the installer and install ViPlex Express according to the setup wizard.

2.3 Selecting Working Mode

First Installation

After ViPlex Express is first installed, a **Select Mode** dialog box appears when you open ViPlex Express. Select **Studio Mode** and click **Open**.

Figure 2-1 Selecting mode

Other Situations

If you have installed ViPlex Express or selected a working mode before, the dialog box shown in Figure 2-1 will not appear. If ViPlex Express is in studio mode by default after opened, switch to async mode by following the steps below:

In the top-right corner, choose ⚙ > **Working Mode** > **Async Mode** and click **OK**. ViPlex Express will be in async mode after restarted.

2.4 Connecting to Displays

Figure 2-2 and Figure 2-3 use the TB6 Taurus series multimedia player as an example to show the connection.

Figure 2-2 Ethernet cable

✤ **Ethernet cable**

The PC with ViPlex Express installed is connected to multimedia players via Ethernet cable.

The DHCP of multimedia players is enabled, the DHCP in the top-left corner of ViPlex Express is turned on. Select a local IP address and click **OK**. ViPlex Express will automatically connects to the Taurus. If the connection is not stable, set a static IP address for the PC.

Note: Before enabling the DHCP service, turn off the firewall of the PC or set ICMP echo reply policy.

✤ **Wi-Fi**

The PC with ViPlex Express installed is connected to multimedia players via Wi-Fi.

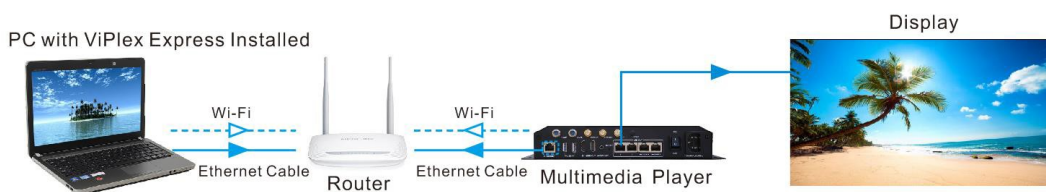When the multimedia player has built-in Wi-Fi AP, you can use this method without the need for configuration. For instance, when the multimedia player has built-in Wi-Fi AP, the default SSID is "AP+*Last 8 digits of the SN*" and the default password is "12345678".

Figure 2-3 LAN

❖ **Wired LAN**

The PC with ViPlex Express installed and multimedia players connected to the same wired LAN via Ethernet cable.

If this method is used, configuration is not required.

❖ **Wireless LAN**

The PC with ViPlex Express installed and multimedia players connected to the same wireless LAN via Wi-Fi.

This method is available when multimedia players support Wi-Fi Sta. The DHCP of multimedia players is enabled. Log in to multimedia players with ViPlex Express and connect to the Wi-Fi AP of the router on the network configuration page.

2.5 Logging in to Terminals

After you select async mode, the terminal management page of async mode will be displayed.
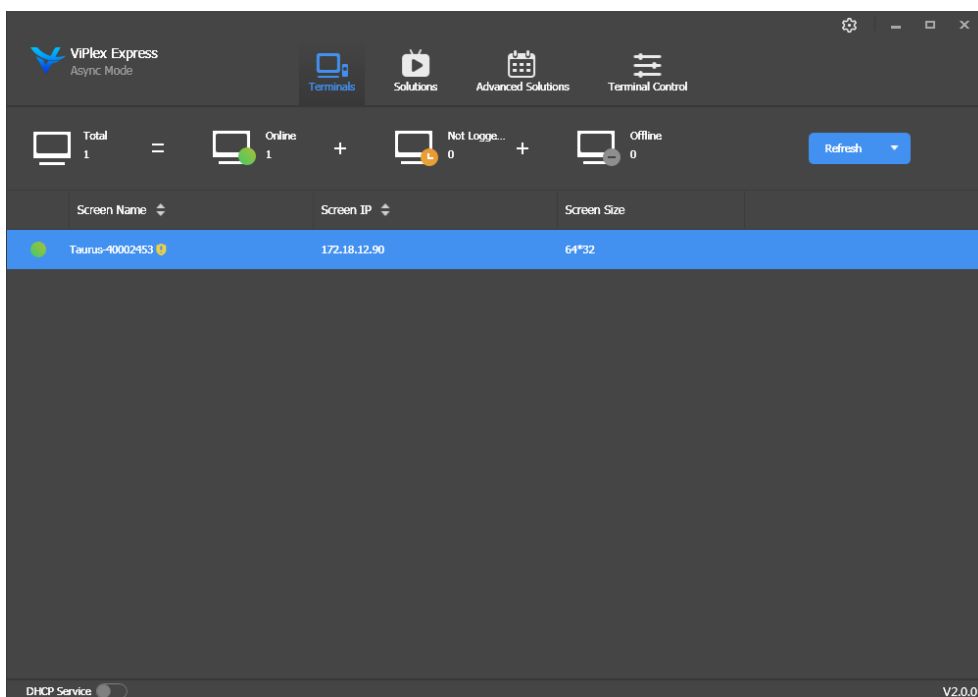
Required Information

Login username and password of the multimedia player. (If you do not have this information provided, please contact TV Liquidator Representative at 424-204-9443.)

Logging in to Terminals

Step 1 Click **Refresh** to refresh the screen list.

Figure 2-4 Terminal management

After detecting a terminal, ViPlex Express will try to log in to the terminal with the default account or the account used for last login.

If terminals and ViPlex Express are not on the same network segment, it can be pinged by following these steps:

Click next to **Refresh**, select **Specify IP** and enter an IP address or IP range to connect to terminals manually.

- : Denotes that the terminal is online, and you can log in to it. Go to Step 2.

- Denotes the terminal is offline and you cannot log in to it.

- Denotes you have successfully logged into the terminal.

Step 2   Click **Connect** next to screen information.

Step 3   Enter the password for the user and then click **OK**.

After successful login, ViPlex Express saves the account information automatically.

Related Operations

After successful login, if the password is verified as a weak password, will be displayed next to the terminal name. You are advised to change the password to a more complex one to enhance security.

Right click the screen information, and the related operations will be displayed:

- Log Out: Log out of the terminal.

- Rename: Rename the terminal.

- Change Password: Change the connection password of the Taurus Wi-Fi AP and the login password of the current connected user.

- Forget Password: Delete the password saved during last login.

- Download Operation Log: Download the operation logs of asynchronous terminals.

2.6 Creating Solutions

After updated, the solution data in async mode will be synchronized with that in studio mode.

2.6.1 Creating Common Solutions

For details, see 3.1 Creating Solutions.

2.6.2 Creating Advanced Solutions

For details, see 5.1 Creating Solutions.

2.7 Editing Solutions

2.7.1 Common Solutions

For details, see 4.1 Editing Solutions

2.7.2 Advanced Solutions

For details, see 5.2 Editing Solutions.

2.8 Previewing Solutions

On the top right of the page, click to preview the current page.

When the preview window is opened, you can also select and preview other pages. If the current page is modified,

click to refresh the preview window.

2.9 Publishing Solutions

2.9.1 Publishing Common Solutions

For details, see 3.5 Publishing Solutions.

2.9.2 Publishing Advanced Solutions

For details, see 5.7 Publishing Solutions.

2.10 Querying Play Logs

For details, see 6.11.1 Querying Play Logs.

3 Solution Management

Choose **Solutions** to enter solution management page.

Figure 3-1 Solution management
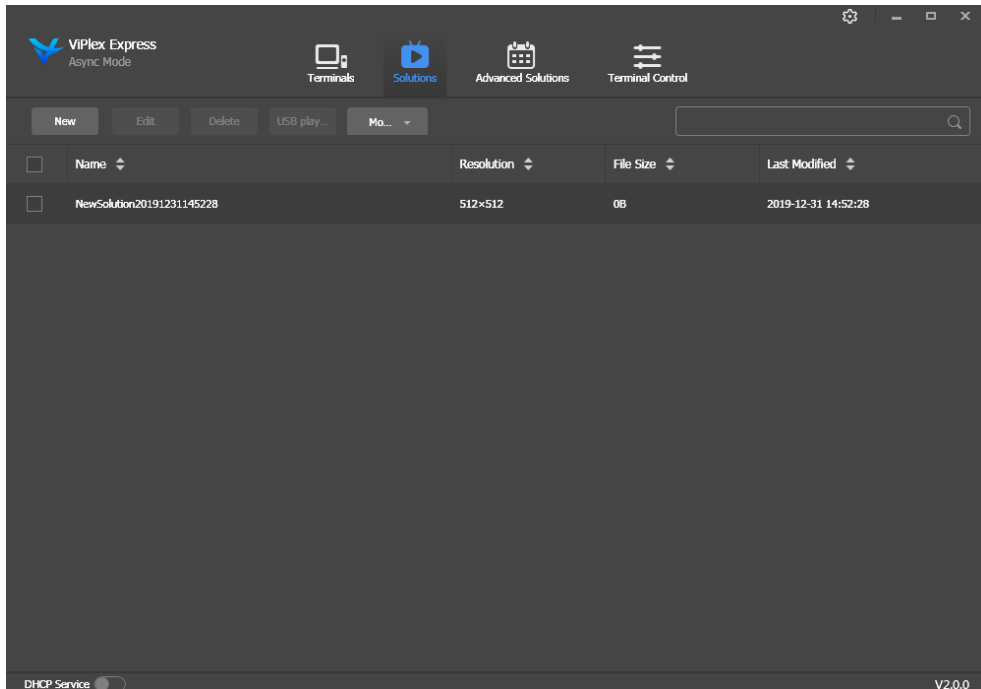
3.1 Creating Solutions

Get the screen size before creating solutions.

Step 1   Click **New**.

Figure 3-2 Solution information

Step 2   Set the solution name and resolution, and then click **OK**.

You can set the resolution by clicking **Specify Terminal** and the resolution will be the same as that of the selected terminal.

3.2 Importing Solutions

Step 1   Choose **More** > **Import**.

Figure 3-3 Importing solutions
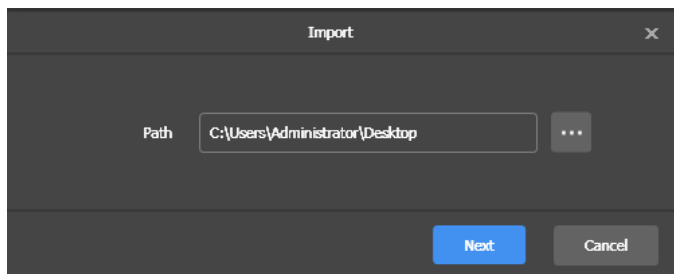
Step 2   Click [...] to select the file path.

Step 3   Click **Next**.

Step 4   When **Progress** shows 100%, click **Done**.

3.3 Exporting Solutions

Only the solutions that contain media can be exported.

Step 1   Select one or more solutions and choose **More** > **Export**.

Figure 3-4 Exporting solutions
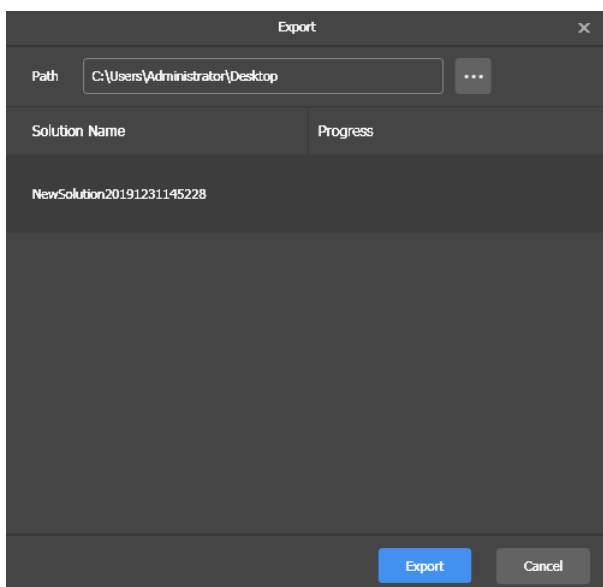
Step 2   Click [...] to choose a destination for the solutions to be exported.

Step 3   Click **Export**.

Note: ViPlex Express will automatically convert the formats of videos that are not supported by terminals while

exporting solutions.

Step 4   After solutions are exported successfully, close the dialog box.

3.4 USB Playback

Step 1   Navigate your mouse to a solution and click ![icon], or select one or more solutions and click **USB playback**.

Figure 3-5 USB Playback

Step 2   Select a playback method.

- **Plug and play**: The solution will be played as soon as the USB drive where solutions are stored is inserted into the terminal. The USB drive cannot be removed during playback.

- **Copy and play**: The terminal starts playing solutions after copying the solutions from the USB drive. The USB drive can be removed during playback.

Step 3   Click ![icon] to choose a destination for the solutions to be exported.

Step 4   Enter the login password of the terminal.

After the USB drive where solutions are stored is inserted into the terminal, the solutions can be played only when the password is correct.

Step 5   Select a solution and click **OK**.

Step 6   After solutions are exported successfully, click **Done**.

3.5 Publishing Solutions

- Only solutions containing media can be published.

- Only one solution can be sent to terminals each time.

- One solution can be sent to multiple terminals simultaneously.

On the solution editing page, click ![icon] at the top right to publish solutions. On the solution list page, follow the steps below to publish solutions.

Step 1   Navigate your mouse to a solution and click

Figure 3-6 Solution publishing

	Terminal Name	Screen Size	Terminal IP	Progress
☐	Taurus-40002453	64X32	172.18.12.90	

Solution Name :   NewSolution20191231145228

Refresh   Publish   Done

Step 2 Click **Refresh** to show the information of terminals which are logged in.

Step 3   Select one or more terminals and click **Publish**.

Note: ViPlex Express will automatically convert the video formats that are not supported by terminals.

Step 4   After the solution is successfully published, click **Done**.

3.6 Deleting Solutions

In the solution list, select solutions and click **Delete**.

4 Solution Editing

Choose **Solutions**. In the solution list, perform any of the following operations to enter solution editing page.

- Select a solution and click **Edit**.

- Click a solution name.

Figure 4-1 Solution editing page
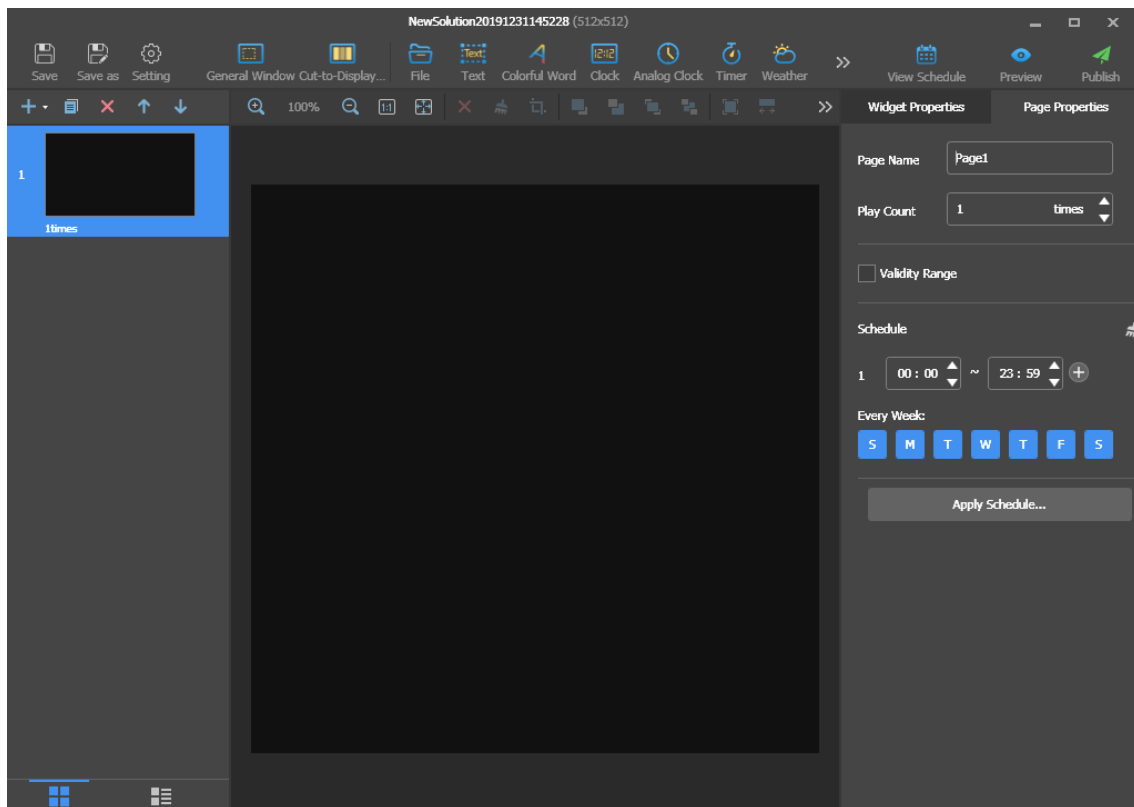
4.1 Editing Solutions

4.1.1 Adding Pages

Pages are played in order starting from top to bottom.

How to Add Pages

- Click [+] to add a blank page.

- Click [▾] next to [+] to open the **Page Template** dialog box. Select a custom template or system template and click **Apply**.
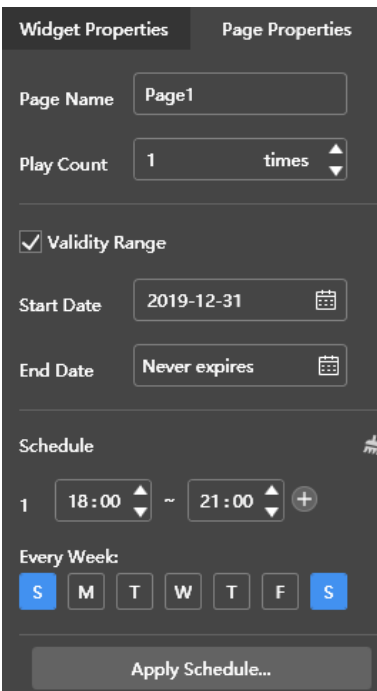
  For the detailed information of custom template, see 4.2 Customizing Templates.

Other Operations

- : Copy the selected page.

- : Delete the selected page.

- : Move a page up.

- : Move a page down.

Properties

Figure 4-2 Page properties

- **Page Name**: Name of the current page

- **Play Count**: Number of times that a page will be played

- **Validity Range**: Page validity. After this option is selected, **Start Date** and **End Date** are displayed. Expired pages will be skipped during solution playback.

- **Schedule**: Playback period and cycle of a page, If time periods in a playback plan overlap, pages will be played in order starting from top to bottom.

  For instance, the configuration in Figure 4-2 denotes that the current page is played during 18:00–21:00 every Saturday and Sunday.

  − : Add a schdeule.

  − : Delete a schedule. This button is displayed when there is more than one schedule.

– [icon]: Clear schedules. A default schedule is kept.

- **Apply Schedule**: Apply schedules to other pages. You can select multiple pages to batch apply the schedules.

4.1.2 Adding Media

Click a media icon to add the media and edit its properties.

The supported media types are listed in Table 4-1. The properties of each type of media contain **Area** where you can set the coordinates, width and height of media except cut-to-display window. See the description of other properties in the table below.

Table 4-1 Media types

Icon	Media description	Properties
[icon]	General window Background audio is supported. You can add other types of media to a general window. If multiple media items are added, they will be played in order starting from top to bottom.	• **Border**: Set the border style of a window. After you select a style, you can set the border width, scrolling speed and direction. • **Add audio widget**: Set background audio for the window. • **Window**: Add other types of media to the window. After you add other types of media to a general window, you can set the basic and playback properties of the media. For more details, see the property description of other types of media.
[icon]	Cut-to-display window Cut-to-display window allows for the display of extra-wide content. Please make sure that the solution resolution is consistent with the configured screen width and height and set **Actual Screen Width and Height** according to the actual configuration. The number of parts to cut is calculated according to the actual screen width and height and the configured screen width and height. LCD players do not support cut-to-display window.	• **Area**: Display the coordinates, width and height which cannot be modified and are consistent with the playback window size. • **Window**: Set the direction to cut the content. You can select horizontal or vertical. • **Actual Screen Width and Height**: Set the physical width and height of the screen which must be based on the actual situation. • **First row offset/First column offset**: Set the offset of the first row/column after cutting. You can add text, images, videos and colorful text to cut-to-display window. If multiple media items are added, they will be played in order from top to bottom. Videos in cut-to-display window cannot be played by multimedia players. After you add other types of media to cut-to-display window, you can set the basic and playback properties of the media. For more details, see the property description of other types of media.

Icon	Media description	Properties
	Office document, image, video and GIF. You can set background audio for images.	**Office document properties** - **Basic properties**: View media name and set the display mode. For a Word document, you can also set the layout. - **Playback properties**: Set page duration, entrance effect, effect duration and the total playback duration of the document. - **Operation**: View the previous or next page. **Layout** - **Automatic**: The text in a Word document is played after the pages of the Word document are adjusted according to the width and height of the Word document media. - **Original**: The text in the Word document is played by keeping the original page size and fitting the width and height of the playback window. - **Keep margins**: When **Original** is selected, **keep margins** can be selected to keep margins of the original Word document.
		Image properties - **Basic properties**: View media name and set the file path. - **Add audio widget**: Set background audio for the image. - **Playback properties**: Set playback duration, play count, entrance effect and effect duration.
		Videos properties - **Basic properties**: View media name and set file path and media volume. - **Playback properties**: View playback duration, and set play count.
		GIF Properties **Basic properties**: View media name and set the file path, playback duration and play count.
	Text Double click the media to open the **Text Edit** dialog box to edit the text and style. You can also edit text style in basic properties. Background audio is supported.	- **Basic properties**: View media name and set text style, kerning, line spacing, top/bottom offset and background color. The top/bottom offset refers to the offset from the Y coordinate. - **Add audio widget**: Set background audio for the text. - **Playback properties**: The properties you can set vary according to the playback method. Playback method can be scrolling, flip or static.
	Colorful text Edit text and text style in the basic properties of the media.	**Basic properties**: View media name and set text, text style, kerning, colorful text effect, head to tail, spacing between head and tail, scrolling direction, scrolling speed, playback duration and media background color.

Icon	Media description	Properties
	Digital clock	**Basic properties**: View media name and set time zone, content to display, date format, time format, items to display, text style and playback duration.
	Analog clock	**Basic properties**: View media name and set time zone, hour scale, minute scale, hour hand color, minute hand color, second hand color, text to be displayed on the clock, text style and playback duration and choose whether the date will be displayed. Hour scale is to set the display style of the hours on a dial plate and minute scale is to set the display style of the minutes on a dial plate.
	Timer Countdown and count-up timers are supported.	**Basic properties**: View media name and set timer, end date, end time, items to display, fixed text, display style, text style, playback duration and media background color.
	Weather	**Basic properties**: View media name and set city, items to display, temperature unit, temperature unit symbol, display style, text style, data refresh cycle and playback duration. Click **Customize** to change the label names. Weather data will be refreshed according to the refresh cycle you set.
	Environment monitoring media	• **Basic properties**: View media name and set the items to display. Click **Customize** to change the label names. • **Text**: Set text style. • **Playback properties**: Set playback method duration, refresh cycle and playback method.
	RSS	**Basic properties**: View media name and set the address, refresh cycle, playback method, page duration, entrance effect, effect duration, total playback duration, optional items and style, and text. RSS content will be refreshed according to the refresh cycle you set. Optional items include the title and publishing date and time.
	Streaming media	**Basic properties**: View media name and set the address and playback duration.
	Web page	• **Basic properties**: View media name and set the web address. The web address must be the same as the actual address For example, if the actual address is https://www.*xxx*.com, you cannot set the address to http://www.*xxx*.com. • **Playback properties**: Set playback duration.

4.1.3 Adjusting Media

After adding media, use the buttons above the editing area to adjust the media.

Table 4-2 Function button description

Icon	Description	Icon	Description
	Zoom in the editing area		Zoom out the editing area
	Show the editing area in the original size		Automatically fit the editing area to the software interface
	Deleted selected media		Clear all media
	Crop image		Bring layer forward
	Send layer backward		Bring layer to front
	Send layer to back		Fill the entire screen
	Fit the screen horizontally		Fit the screen vertically
	Align top		Center vertically
	Bottom align		Align left
	Center horizontally		Align right

4.2 Customizing Templates

Step 1   Click [icon] next to [+] to open the **Page Template** dialog box.

Figure 4-3 Page template
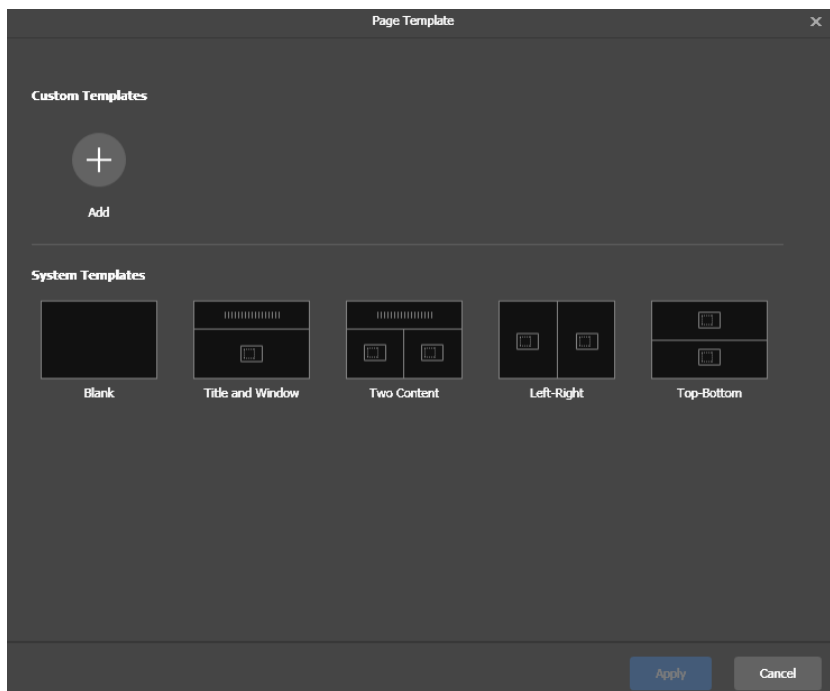
Step 2   Click [+] to open the template editing page.

Figure 4-4 Adding a custom template
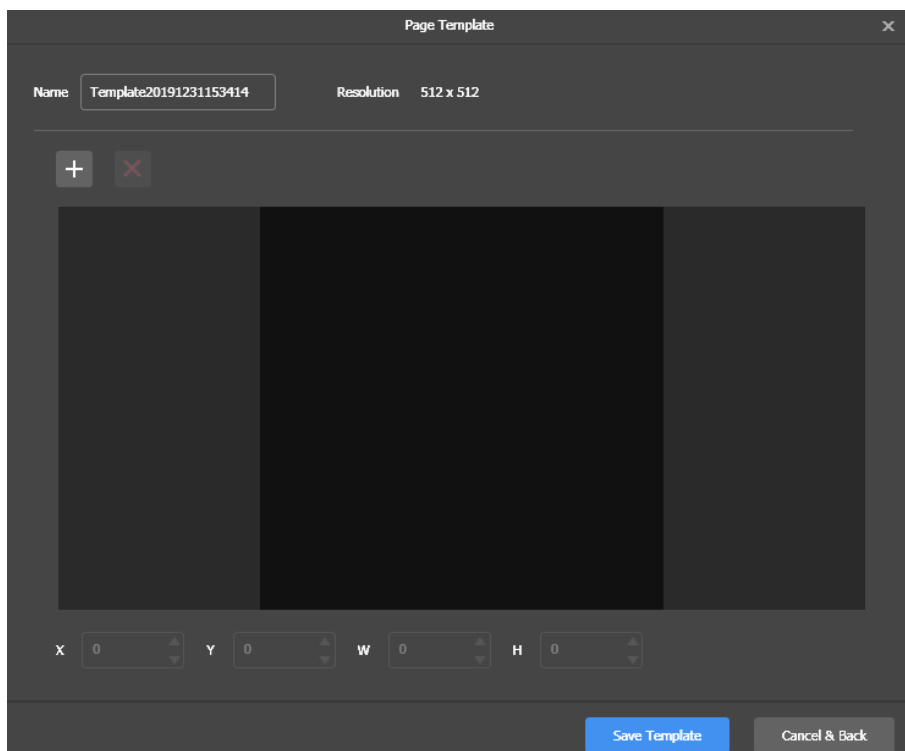
Step 3   Set the template name and click [+] to add one or more windows.

Step 4   Click a window and set its coordinates, width and height.

Step 5   After the settings are done, click **Save Template**.

4.3 Switching View

Click the buttons below the page list to switch the page list view.

- ⊞ : The list shows page thumbnails only.
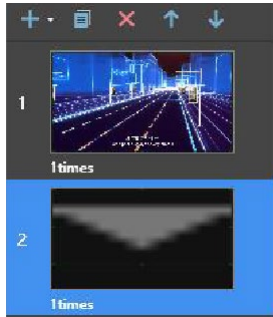
- ⊟ : The list shows page thumbnails and the names of media items in the selected page.
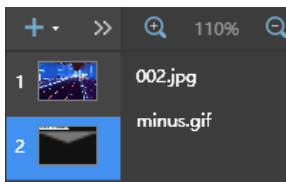
4.4 Previewing Solutions

On the top right of the page, click 👁 to preview the current page.

When the preview window is opened, you can also select and preview other pages. If the current page is modified,

click 👁 to refresh the preview window.

4.5 Viewing Schedule

On the top right of the page, click 📅 to view the solution schedule.

5 Advanced Solutions

An advanced solution is scheduled solutions. Choose **Advanced Solutions** to enter advanced solution management page.

Figure 5-1 Advanced solution management
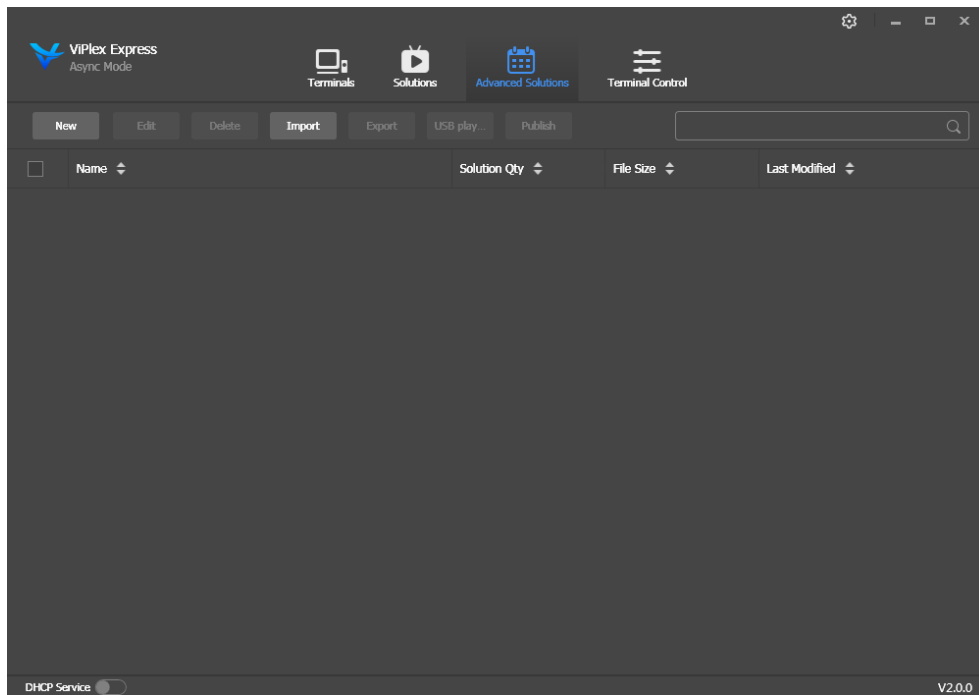
5.1 Creating Solutions

Step 1   Click **New**.

Step 2   Name the advanced solution.

Step 3   Click ➕.

Step 4   Select a common solution, and set the validity range, repeating method and playback duration.

Step 5   Click **Add**.

Step 6   Click **Cancel**.

Step 7 (Optional) Click the box next to **Non-Scheduled Content** to select a solution and click **OK**.

The non-schedule content will be played by default during the non-scheduled period.

Step 8   Click **Add**.

5.2 Editing Solutions

On the advanced solution list, perform any of the following operations to enter the solution editing page.

- Select a solution and click **Edit**.

- Click a solution name.

5.3 Deleting Solutions

In the advanced solution list, select a solution and click **Delete**.

5.4 Importing Solutions

Step 1   Click **Import**.

Step 2   In the pop-up dialog box, click [...] to select the file path.

Step 3   Click **Next**.

Step 4   When **Progress** shows 100%, click **Done**.

5.5 Exporting Solutions

Only the solutions that contain media can be exported.

Step 1   Select one or more solutions and click **Export**.

Step 2   In the dialog box that appears, click [...] to choose a destination for the solutions to be exported.

Step 3   Click **Export**.

Step 4   After solutions are exported successfully, close the dialog box.

5.6 USB Playback

Step 1   Click the corresponding [icon] of a solution, or select one or more solutions and click **USB playback**.

Step 2   Select a playback method.

- **Plug and play**: The solution will be played as soon as the USB drive where solutions are stored is inserted into the terminal. The USB drive cannot be removed during playback.

- **Copy and play**: The terminal starts playing solutions after copying the solutions from the USB drive. The USB drive can be removed during playback.

Step 3   Click [...] to choose a destination for the solutions to be exported.

Step 4   Enter the login password of the terminal.

After the USB drive where solutions are stored into the terminal, the solutions can be played only when the password is correct.

Step 5   Select a solution and click **OK**.

Step 6   After solutions are exported successfully, click **Done**.

5.7 Publishing Solutions

- Only solutions containing media can be published.

- Only one solution can be sent to terminals each time.

- One solution can be sent to multiple terminals simultaneously.

Step 1   Select a solution in the advanced solution list and click **Publish** or click next to the solution information.

Step 2   In the pop-up dialog box, click **Refresh** to show the information of terminals which are logged in.

Step 3 Select one or more terminals and click **Publish**.

Step 4   When **Progress** shows 100%, click **Done**.

6 Terminal Control

Choose **Terminal Control** to enter the terminal control page.

Figure 6-1 Terminal control
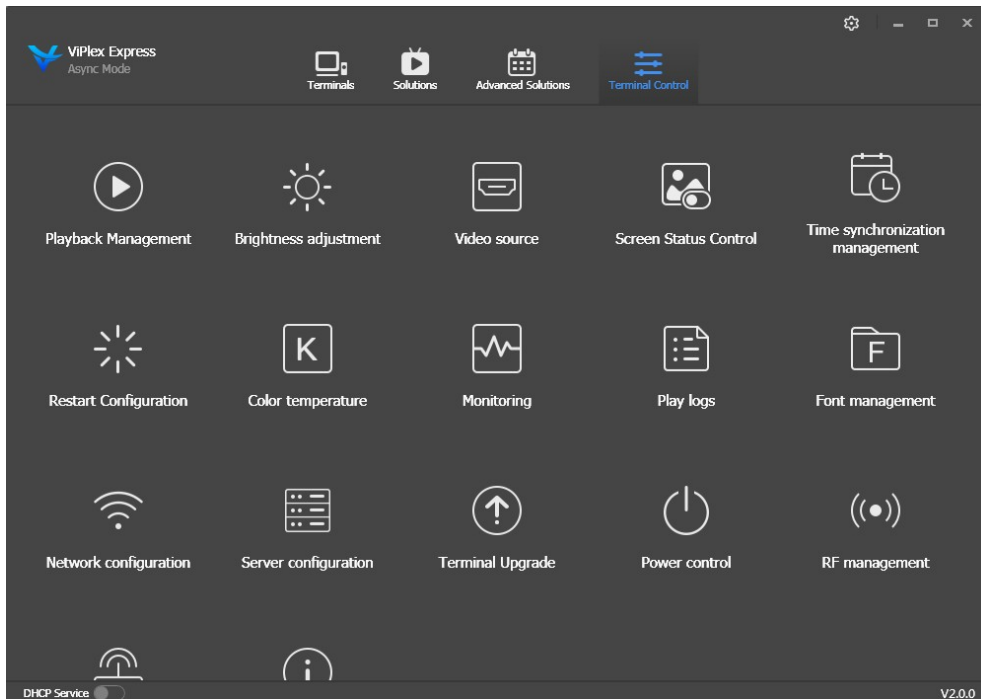
6.1 Function List

Function	Sub-Function	Taurus LED Players	Taurus LCD Players	VPlayer
Playback management	Enable synchronous playback	√	√	
	Adjust volume in real time	√	√	
	Manage terminal solutions	√	√	
	Set rotation playback	√	√	
Brightness adjustment	-	√		
Video source	-	√		
Screen status control	-	√		
Time synchronization management	-	√	√	
Restart configuration	-	√	√	
Color temperature	-	√		
Monitoring	-	√	√	

Function	Sub-Function	Taurus LED Players	Taurus LCD Players	VPlayer
			(Available memory usage and CPU usage are not available.)	
Play logs	Query play logs	√	√	
	Export play logs	√	√	
Font management	Add fonts	√	√	
	Delete fonts	√	√	
Network configuration	Configure wired network	√	√	
	Configure Wi-Fi AP	√	√	
	Configure Wi-Fi Sta	√		
	Configure mobile network	√	√	
	Configure network detection	√	√	
Server configuration	Bind to VNNOX Standard/AD	√	√	
	Bind to iCare	√		
Terminal upgrade	Online upgrade	√	√	√
	Local upgrade	√	√	√
Power control	Board power	√	√	
	Multifunction card power	√		
RF management	-	√		
Sensor	-	√		
Screen information	-	√	√	

6.2 General Function

Click the **Read back** button to read terminal information back to ViPlex Express and display it.

6.3 Playback Management

Manage the playback mode, volume and content of terminals.

6.3.1 Enabling Synchronous Play

Enabling or disabling the synchronous playing function will restart the terminal. Time synchronization management and RF management are also provided with synchronous playback switches.

Step 1 Select the target terminal in the terminal list.

Step 2 Select Enable next to Synchronous Playing.

Step 3 Click **Confirm** in the pop-up dialog box.

6.3.2 Volume in Real Time

Drag the slider or enter a value to adjust volume. Volume can be adjusted only when the Taurus is in async mode.

When the information related to RF synchronization is displayed, as shown in Figure 6-2, it indicates that volume synchronization is enabled on the current terminal. See relevant operations in 6.17 RF Management. RF synchronization requires you to specify a master device and slave devices. Users only need to set the volume of the master device. The slave devices will keep the same volume as the master device via RF signal.

Figure 6-2 RF synchronization-volume
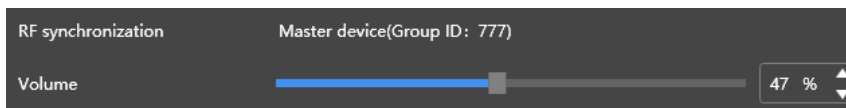
6.3.3 Managing Terminal Solutions

- Viewing screenshot: Click **View Screenshot** to view the real-time screenshot of the solution which is being played on the terminal.

- Playing a solution: Navigate the mouse to the thumbnail of the solution and click ▶.

- Stopping playing a solution: Navigate the mouse to the thumbnail of the solution and click ■.

- Deleting a solution: Select a solution in the solution thumbnail list and click **Delete**.

6.3.4 Setting Rotation Playback

Select a rotation angle from the drop-down box next to **Rotation Playback**. The rotation angle is an absolute angle.

6.4 Brightness Adjustment

Manually adjust the brightness or set rules of smart brightness adjustment.

When the information related to RF synchronization is displayed, as shown in Figure 6-3, it indicates that brightness synchronization is enabled on the current terminal. See relevant operations in 6.17 RF Management. RF synchronization requires you to specify a master device and slave devices. Users only need to set the brightness of the master device. The slave devices will keep the same brightness as the master device via RF signal.

Figure 6-3 RF synchronization-brightness
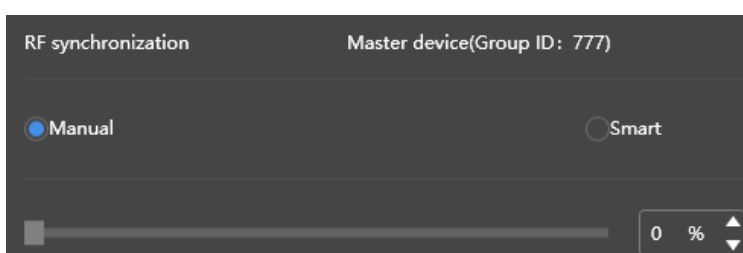
6.4.1 Manual Adjustment

Step 1   Select the target terminal in the terminal list.

Step 2   Choose **Manual** and drag the slider or enter a value to adjust screen brightness.

6.4.2 Smart Adjustment

- Timing brightness adjustment: During the time period that you set to enable smart adjustment; the screen brightness will be the fixed value that you manually set.

- Auto brightness adjustment: During the time period that you set to enable auto adjustment; the screen brightness will be automatically adjusted according to the auto brightness adjustment table.

The auto brightness adjustment table divides the ambient brightness into several subsections and sets corresponding screen brightness to each subsection. The screen brightness will be automatically adjusted according to the ambient brightness subsection where the current ambient brightness belongs to.

Step 1   Select the target terminal in the terminal list.

Step 2   Choose **Smart** to enter the smart adjustment page. Step

3   Perform the following operations based on actual needs.

- Creating a rule: Click . In the pop-up dialog box, choose **Timing** or **Auto**, and then set the corresponding brightness adjustment rules. At last, click **Add**.

- Modifying a rule: Select a rule and click . Then, modify the rule and click **OK**.

- Deleting rules: Select one or more rules and click . In the pop-up dialog box, click **Confirm**.

- Clearing rules: Click and then click **Confirm** in the pop-up dialog box.

- Enabling a rule: In the rule list, turn on the **Enable** switch next to a rule.

- Viewing the current brightness: Click .

Step 4   After configuration, click **Apply**.

6.5 Video Source

Control the video input mode, video source and output offset position.

6.5.1 Manual Switching

Immediately switch between the internal input source and HDMI input source.

Step 1   Select the target terminal in the terminal list.

Step 2   Choose **Manual** and configure parameters.

Step 3   Click **Apply**.

6.5.2 Scheduled Switching

Switch between the internal input source and HDMI input source at regular time.

Step 1   Select the target terminal in the terminal list.

Step 2   Choose **Timing**. Perform the following operations based on actual needs.

- Creating a rule: Click ![icon]. In the pop-up dialog box, choose **Internal** or **HDMI**, and then set the time and cycle to use the video source. At last, click **Add**.

- Modifying a rule: Select a rule and click ![icon]. Then, modify the time and cycle to use the video source. At last, click **OK**.

- Deleting rules: Select one or more rules and click ![icon]. In the pop-up dialog box, click **Confirm**.
- Clearing rules: Click ![icon] and then click **Confirm** in the pop-up dialog box.

- Enabling a rule: In the rule list, turn on the **Sure to enable** switch next to a rule.

- Parameter configuration: Set the position and size of the display window.

Step 3 After configuration, click **Apply**.

6.5.3 HDMI Preferred

The HDMI port is preferred for playing the video in the synchronous mode.

Step 1   Select the target terminal in the terminal list.

Step 2   Choose HDMI preferred.

Step 3   Set the position and size of the display window.

Step 4   After configuration, click **Apply**.

6.6 Screen Status Control

Set the current playing status of the screen.

6.6.1 Manual Control

Step 1   Select the target terminal in the terminal list.

Step 2   Choose **Manual** to enter the manual settings page.

Step 3   Click Blackout or Normal.

6.6.2 Timing Control

Step 1   Select the target terminal in the terminal list.

Step 2   Choose **Timing** to enter the timing settings page. Then, perform the following operations based on actual needs.

- Creating a rule: Click [+]. In the pop-up dialog box, choose **Blackout** or **Normal**, and then set the playing time and cycle of the screen. At last, click **Add**.

- Modifying a rule: Select a rule and click [✎]. Then, modify the playing time and cycle of the screen. At last, click **OK**.

- Deleting rules: Select one or more rules and click [✕]. In the pop-up dialog box, click **Confirm**.

- Clearing rules: Click [🧹] and then click **Confirm** in the pop-up dialog box.

- Enabling a rule: In the rule list, turn on the **Enable** switch next to a rule.
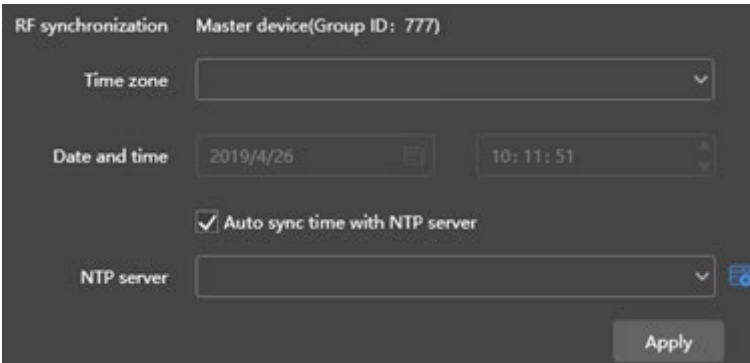
Step 3　After setting, click **Apply**.

6.7 Time Synchronization Management

Set rules for terminal time synchronization and enable or disable synchronous playback.

When the information related to RF synchronization is displayed, as shown in Figure 6-4, it indicates that RF time synchronization is enabled on the current terminal. See relevant operations in 6.17 RF Management. RF synchronization requires you to specify a master device and slave devices. Users only need to set the time synchronization rules for the master device. The slave devices will keep the same time as the master device via RF signal.

Figure 6-4 RF synchronization-time synchronization

Step 1　Select the target terminal in the terminal list.

Step 2　View the current time zone and time.

> If the current time zone observes daylight saving time and the current date is within the range of daylight-saving time, **Daylight Saving Time** will be displayed, otherwise it will not be displayed.

Step 3　Configure time synchronization rules.

- Manual time synchronization: Select a time zone from the drop-down box next to **Time zone**. The terminal will sync time according to the date and time of this time zone. Users are also allowed to adjust the current date and time as required.

- NTP time synchronization: Select **Auto sync time with NTP server** and then select an NTP server. The terminal will sync time according to the time of the NTP server. If the existing NTP servers cannot meet the requirements, click [icon] to customize a server.

Step 4   After setting, click **Apply**.

6.8 Restart Configuration

Restart terminals immediately and configure restart rules.

6.8.1 Restarting Immediately

Step 1   Select the target terminal in the terminal list.

Step 2   Click Restart promptly.

Step 3   Click **Confirm** in the pop-up dialog box to restart the terminal immediately.

6.8.2 Scheduled Restart

Step 1   Select the target terminal in the terminal list.

Step 2   Perform the following operations based on actual needs.

- Creating a rule: Click [icon]. Set the time and cycle to restart a terminal in the pop-up dialog box and then click **Add**.

- Modifying a rule: Select a rule and click [icon] to modify the time and cycle to restart a terminal and then click **OK**.

- Deleting rules: Select one or more rules and click [icon]. Then click **OK** in the pop-up dialog box.

- Clearing rules: Click [icon] and then click **OK** in the pop-up dialog box.

- Enabling a rule: In the rule list, turn on the **Sure to enable** switch next to a rule.

Step 3   After setting, click **Apply**.

6.9 Color Temperature

Set the screen display's color temperature, including neutral white, standard white and cool white.

Step 1   Select the target terminal in the terminal list.

Step 2   Select a color temperature type.

6.10 Monitoring

Step 1   Select the target terminal in the terminal list.

Step 2 Check the terminal hardware information listed below. If the terminal has an external storage device, you can also check the external storage information.

- Disk size

- Memory availability

- CPU usage

- Ambient brightness

Step 3   If you want to clean up the hard disk, click **Clear All Media** to delete all the media and solutions.

6.11 Play Logs

View and export play logs.

6.11.1 Querying Play Logs

Step 1   Select the target terminal in the terminal list.

Step 2   Choose the time range of the play log that you want to view and then click **Query**.

Step 3   In the paly log list, click a play log name to view the summary and detailed information of the log.

6.11.2 Exporting Play Logs

Step 1 Select the target terminal in the terminal list.

Step 2 In the play log list, select the target play log.

Step 3   Click **Export**.

Step 4 In the pop-up dialog box, choose the export path and format.

Step 5   Click **OK**.

6.12 Font Management

Manage the fonts used by the terminal.

6.12.1 Adding Fonts

Step 1   Select the target terminal in the terminal list.

Step 2   Click [+] next to **Name** to acquire local fonts on the PC.

Step 3   Select the target font in the pop-up dialog box.

Step 4   Click **OK**.

Step 5   Click **Update**. The update progress will be shown in the **Update result** column.

6.12.2 Deleting Fonts

Step 1   Select the target terminal in the terminal list.

Step 2   Click **Read back** at the bottom right to read back the fonts on the terminal.

Step 3   Click the link in the **Font** column of the target terminal. The **Font list in terminal** page is displayed.

Step 4 Select target fonts.

Step 5   Click **Delete**.

6.13 Network Configuration

Configure current network, including wired network, Wi-Fi AP, Wi-Fi Sta and mobile network.

6.13.1 Configuring Wired Network

It is required to set static IP address for terminals while connecting terminals via Ethernet cable. Set IP address based on actual needs while connecting terminals to the Internet via Ethernet cable.

Step 1   Select the target terminal in the terminal list.

Step 2   In the **Wired network configuration** area, perform the following operations based on actual needs.

- Select **Enable** next to **Dynamic DHCP** to get IP address automatically.

- Deselect **Enable** next to **Dynamic DHCP** and configure static IP address.

Step 3 Click **Apply**.

6.13.2 Configuring Wi-Fi AP

The default SSID of terminal Wi-Fi AP is provided by TV Liquidator representative.
(If you do not have one please contact 424-204-9443)

Step 1   Select the target terminal in the terminal list.

Step 2   In the Screen AP configuration area, turn on AP.

Step 3   Enter the SSID and password of terminal Wi-Fi AP.

Step 4   Click **Apply**.

6.13.3 Configuring Wi-Fi Sta

If the router is connected to the Internet, terminals can access Internet via the router after Wi-Fi Sta is configured.

Step 1   Select the target terminal in the terminal list.

Step 2   In the Wi-Fi configuration area, turn on Wi-Fi.

Step 3   Double click the Wi-Fi information of the router, enter password and then click **OK**.

6.13.4 Configuring Mobile Network

Terminals with 4G module can access Internet via mobile network. ViPlex Express automatically detects mobile network status and displays the detection result.

Step 1   Insert 4G card into the slot.

Step 2   Select the target terminal in the terminal list.

Step 3 On the Mobile network configuration page, turn on Mobile network.

Step 4   Click ▶ to expand the APN configuration page.

Step 5   Click **Add**.

Step 6 Enter parameters according to the APN information provided by the carrier and then click **OK**.

Step 7   Select the APN and click **Connect**.

6.13.5 Configuring Network Detection

Terminals ping the cloud platform and www.baidu.com to detect network connection status by default. Users can also configure required addresses to ping and enable or disable the addresses.

Step 1   Select the target terminal in the terminal list.

Step 2   In **Network Detection**, configure detection addresses.

- Click ![+] to add an address.

- Click ![modify] to modify an address.

- Click ![X] to delete an address.

Default configuration cannot be modified and deleted.
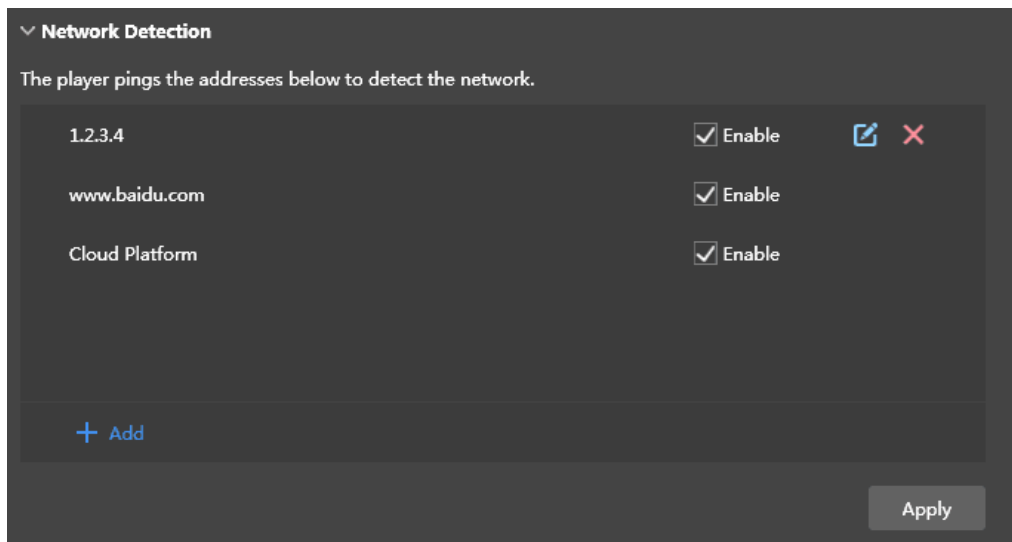
Step 3   Enable or disable detection addresses.

- Select **Enable** to detect terminal network by pinging the corresponding address.

- Deselect **Enable** to detect terminal network not by pinging the corresponding address.

Step 4 Click **Apply**.

6.14 Server Configuration

Connect to VNNOX Standard/AD. Authentication information is required during configuration.

How to check player authentication information:

Log in to VNNOX (www.vnnox.com) and choose ![icon] > **Player Authentication** on the homepage of cloud platform.

6.14.1 Binding to VNNOX Standard/AD

You can bind a terminal to VNNOX and create an asynchronous player.

Step 1   Select the target terminal from the terminal list.

Step 2 In **Bind to VNNOX Standard/AD**, select a server and enter the authentication username, authentication password and player name. The authentication information must be consistent with the information in VNNOX.

Step 3   Click **Bind**.

6.14.2 Binding to iCare

Terminals can be registered on iCare. Multiple terminals can be selected for batch operations.

Step 1   Select the target terminal from the terminal list.

Step 2 In **Bind to iCare**, select a server and enter the username.

Step 3   Click **Bind**.

6.15 Terminal Upgrade

- Taurus: Upgrade application and system software versions.

- VPlayer: Upgrade the version of VPlayer.

Note: Do not power off the terminal and computer during upgrade. The terminal will restart once.

6.15.1 Online Upgrade

Upgrade terminal versions online. Before you begin, please make sure that your PC can access the Internet.

Step 1   Select Online Upgrade.

The system decides whether a terminal needs to be upgraded.

- Yes. The current version information and ● More will be displayed, as shown in Figure 6-5. Go to Step 2.

- No. Only the current version information is displayed. No further operation is required.

Figure 6-5 Online upgrade
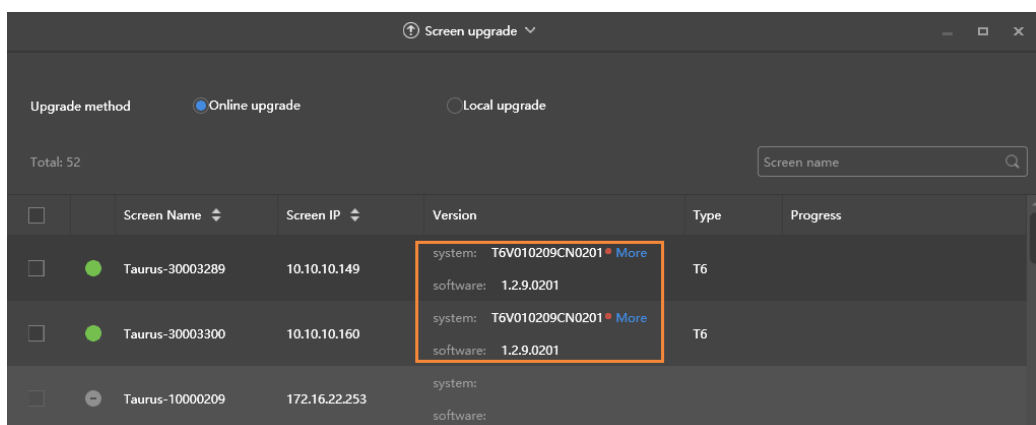
Step 2   Click **More** and view the related information of the new version.

Step 3   In the terminal information list, select one or more upgradable terminals and click **Upgrade**.

The upgrade progress is displayed.

6.15.2 Local Upgrade

Use local files to upgrade terminal versions.

Step 1   Select Local Upgrade.

Step 2   Select the upgrade package path.

Step 3   In the terminal information list, select one or more upgradable terminals and click **Upgrade**.

The upgrade progress is displayed.

6.16 Power Control

Configure board power, power on or off devices remotely, and set scheduled power control rules.

- Board power: Control power supplies with relays on terminals.

- Multi-function card power: Control power supplies with relays on multi-function cards.

When the power switch in ViPlex Express is turned on, the relay will be closed and the power supply is connected. When the power switch in ViPlex Express is turned off, the relay will be released, and the power supply is disconnected.

6.16.1 Board Power Configuration

After board power configuration is done, VNNOX can perform power control on the devices connected to the board power.

Step 1   Select the target terminal from the terminal list.

Step 2   Select the option to be controlled from the drop-down box. Currently, only screen power is supported.

Step 3   Click **Apply**.

6.16.2 Manual Control

Step 1 Select the target terminal from the terminal list.

Step 2 Select **Manual** to enter the manual setting page.

Step 3 Turn on or off the power switch.

An example of information of the multi-function card power supply is shown in Figure 6-6.

Figure 6-6 Multi-function card power
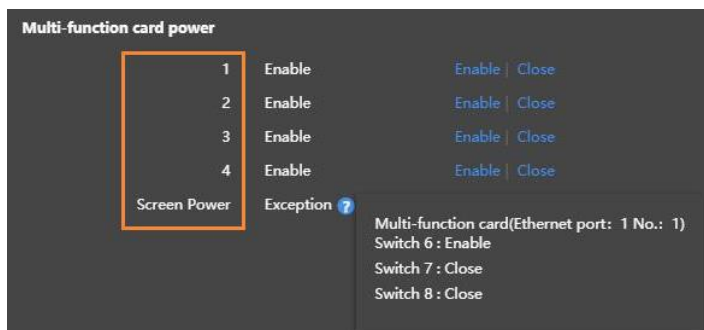
The labels in the orange box are defined. One or more relay switches can be associated with a label. When multiple relay switches are associated and each of them is turned on (or off), **Enable** (or **Close**) will be displayed, otherwise **Exception** is displayed, and the detailed information of each switch is provided.

6.16.3 Scheduled Control

Step 1   Select the target terminal from the terminal list.

Step 2   Select **Timing** to enter the scheduled setting page. Perform the following operations according to actual needs.

- Create a rule: Click ⊞. In the dialog box that appears, set the object, time and cycle to control and then click **OK**.

- Change a rule: Select a rule, click ⊡ to change the rule to control, and then click **OK**.

- Delete a rule: Select one or more rules and click ✕. In the dialog box that appears, click **OK**.

- Clear all rules: Click 🧹. In the dialog box that appears, click **OK**.

- Enable a rule: In the rule list, turn on **Sure to enable**.

Step 3   After the settings are done, click **Apply**.

6.17 RF Management

Set parameters related to RF synchronization and apply the parameters to time synchronization, brightness synchronization, volume synchronization and environment monitoring data synchronization and enable or disable synchronous playback. RF management is available for all the Taurus series products except the -4G models.

Before using RF synchronization, install an RF module. ViPlex Express can detect and display RF module status.

Step 1   Select the target terminal from the terminal list.

Step 2   Turn on RF synchronization.

Step 3   Set the current terminal as the master device or a slave device.

Step 4   Set a group ID.

Enter the group ID of the master device for a slave device, and this slave device and the master device will be grouped together.

Step 5   Select the options that require RF synchronization.

After RF synchronization is applied, the time, brightness, volume and environment monitoring data of the slave device will keep the same as the master device via RF signal.

Step 6   Click **Apply**.
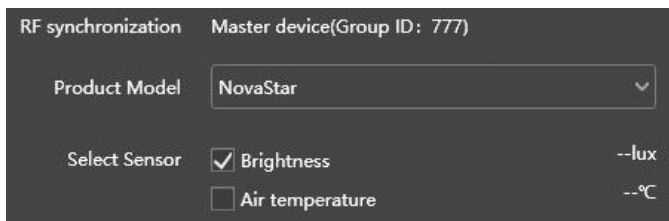
6.18 Sensor

Set sensor information so that the terminal can collect environment monitoring data by using sensors.

When the related information of RF synchronization is displayed, as shown in Figure 6-7, it indicates that environment monitoring data synchronization is enabled on the current terminal .For related operation, see 6.17 RF Management. RF synchronization requires users to specify a master device and slave devices. Users need to set the sensors of the master device only and the monitoring data of the slave devices will the same as the master device via RF signal.

Figure 6-7 RF synchronization- environment monitoring data

Step 1   Select the target terminal from the terminal list.

Step 2   Select a sensor manufacturer. Sensors products provided by TV Liquidator.

 Step 3   Select a sensor type.

Step 4   After the configuration is done, click **Apply**.

6.19 Screen Information

Information displayed here includes the terminal MAC address, terminal IP address, system software version, product model, application software version.

7 System Settings

At the top right of the page, click ⚙ and select the required menu.

Table 7-1 System settings

Menu	Description
Language	Set system language.
Working Mode	Select working mode including studio mode and async mode.
RF management	Manage the playback of all terminals except the reference device when the RF time synchronization mode is enabled. Before operation, enter the password "admin".
Custom server	Add, modify or delete custom servers. Users can choose customized servers on the pages of connecting to cloud publishing and monitoring services and the page of setting NTP synchronization.
Setting	- Set the location to save files, including ViPlex Express configuration files, data, temporary files, etc. - Enable or disable the automatic terminal reconnection function, and set the reconnection interval.
Check for Updates	Check for and install new updates of ViPlex Express.
Help	View the documentation related to the software.
About	Display the version of ViPlex Express

8 Audio and Video Decoder Specifications

8.1 Image

Type	Codec	Supported Image Size	Container	Remarks
JPEG	JFIF file format 1.02	48×48 pixels~8176×8176 pixels	JPG, JPEG	Not Support Non-interleaved Scan Software support SRGB JPEG Software support Adobe RGB JPEG
BMP	BMP	No Restriction	BMP	N/A
GIF	GIF	No Restriction	GIF	N/A
PNG	PNG	No Restriction	PNG	N/A
WEBP	WEBP	No Restriction	WEBP	N/A

8.2 Audio

Type	Codec	Channel	Bit rate	Sampling rate	File Format	Remarks
MPEG	MPEG1/2/2.5 Audio Layer1/2/3	2	8kbps~320Kbps, CBR and VBR	8KHZ~48K Hz	MP1, MP2, MP3	N/A
Windows Media Audio	WMA Version 4, 4.1, 7, 8, 9, wmapro	2	8kbps~320Kbps	8KHZ~48K Hz	WMA	Non-support WMA Pro, lossless and MBR
WAV	MS-ADPCM, IMA-ADPCM, PCM	2	N/A	8KHZ~48K Hz	WAV	Support 4bit MS-ADPCM, IMA-ADPCM
OGG	Q1~Q10	2	N/A	8KHZ~48K Hz	OGG, OGA	N/A
FLAC	Compress Level 0~8	2	N/A	8KHZ~48K Hz	FLAC	N/A
AAC	ADIF, ATDS Header AAC-LC and AAC-HE, AAC-ELD	5.1	N/A	8KHZ~48K Hz	AAC, M4A	N/A
AMR	AMR-NB, AMR-WB	1	AMR-NB 4.75~12.2kbps@	8KHZ, 16KHz	3GP	N/A

Type	Codec	Channel	Bit rate	Sampling rate	File Format	Remarks
			8kHz AMR-WB 6.60~23.85kbps @16kHz			
MIDI	MIDI Type 0 and 1, DLS version 1 and 2, XMF and Mobile XMF, RTTTL/RTX, OTA, iMelody	2	N/A	N/A	XMF, MXMF, RTTTL, RTX, OTA, IMY	N/A

8.3 Video

Type	Codec	Supported Image Size	Maximum Frame Rate	Maximum Bit Rate (Ideal Case)	File Format	Remarks
MPEG-1/2	MPEG-1/2	48×48 pixels~1920×1080 pixels	30fps	80Mbps	DAT, MPG, VOB, TS	Support Field Coding
MPEG-4	MPEG4	48×48 pixels~1920×1080 pixels	30fps	38.4Mbps	AVI, MKV, MP4, MOV, 3GP	Not support MS MPEG4 v1/v2/v3, GMC, DivX3/4/5/6/7…/10
H.264/AVC	H.264	T3&T6&TB3&TB4&TB6&TB8: 48×48 pixels~4096×2304 pixels Other models: 48×48 pixels~1920×1080 pixels	T3&T6&TB3&TB4&TB6&TB8: 4K@25fps, 1080P@60fps Other models: 1080P@60fps	T3&T6&TB3&TB4&TB6&TB8: 100Mbps Other models: 57.2Mbps	AVI, MKV, MP4, MOV, 3GP, TS, FLV	Support Field Coding, MBAFF
MVC	H.264 MVC	48×48 pixels~1920×1080 pixels	60fps	38.4Mbps	MKV, TS	Support Stereo High Profile only
H.265/HEVC	H.265/HEVC	T3&T6&TB3&TB4&TB6&TB8: 64×64 pixels~4096×2304 pixels Other models: 64×64 pixels~1920×1080 pixels	T3&T6&TB3&TB4&TB6&TB8: 4K@60fps, 1080P@60fps Other models: 1080P@60fps	T3&T6&TB3&TB4&TB6&TB8: 100Mbps Other models: 57.2Mbps	MKV, MP4, MOV, TS	Support Main Profile, Tile & Slice

Type	Codec	Supported Image Size	Maximum Frame Rate	Maximum Bit Rate (Ideal Case)	File Format	Remarks
GOOGLE VP8	VP8	48×48 pixels~1920×1080 pixels	30fps	38.4 Mbps	WEBM, MKV	N/A
H.263	H.263	SQCIF(128×96), QCIF(176×144), CIF(352×288), 4CIF(704×576)	30fps	38.4Mbps	3GP, MOV, MP4	Not support H.263+
VC-1	VC-1	48×48 pixels~1920×1080 pixels	30fps	45Mbps	WMV, ASF, TS, MKV, AVI	N/A
MOTION JPEG	MJPEG	48×48 pixels~1920×1080 pixels	30fps	38.4Mbps	AVI	N/A

Note: Output data format is YUV420 semi-planar, and YUV400(monochrome) is also supported for H.264.