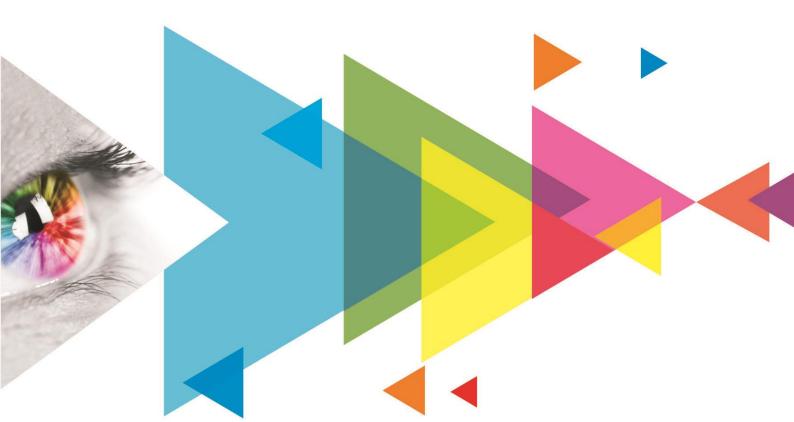


TU20 Pro & TU15 Pro LED Playback Control Processor



User Manual

Change History

Document Version	Release Date	Description
V1.5.0	2024-06-24	 Updated the getting started instructions. Added instructions for the secondary screen and device diagnostics. Added instructions for managing device files. Added instructions for hotspot name and password formats. Updated the audio output description. Added instructions for signal source operations. Updated the instructions for managing media libraries and managing programs. Added instructions for online update operations.
V1.4.0	2024-03-25	 Updated system UI. Added instructions for screen mirroring on ViPlex Handy. Added instructions for file explorer. Added instructions for media player. Added instructions for automatically playing programs on startup. Added instructions for wallpaper.
V1.1.0	2023-08-11	 Added instructions for how to upgrade the remote manually. Updated the instructions for system upgrade. Updated the instructions for screensaver. Updated the instructions for play program after boot.
V1.0.0	2023-04-04	First release

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1 Introduction

This document introduces the operating method of the TU20 Pro and TU15 Pro to help users get started with the LED playback control processors quickly.

The TU20 Pro and TU15 Pro are playback control processors specially designed by Xi'an NovaStar Tech Co., Ltd. (hereinafter referred to as NovaStar) for indoor LED screens. They integrate the Android system and sending card functions into one unit, and allow third-party apps to run on them, featuring powerful interaction and playback control capabilities.

The TU20 Pro and TU15 Pro support wireless screen mirroring from Windows, macOS, iOS and Android terminals. For a standard 1080p video, the mirroring transmission is at up to 60 fps with a system latency of less than or equal to 80 ms at 8 meters. For different application scenarios, it provides 4 modes to let the document presentation, video playback and remote meetings have the optimal display effect.

In addition, the TU20 Pro and TU15 Pro support control by the ViPlex Handy and VNNOX Care apps.

- With ViPlex Handy, you can effortlessly perform program editing, program publishing, screen control, and screen mirroring. For related operations, please refer to the ViPlex Handy Media Player Control App User Manual.
- With VNNOX Care, you can easily perform screen configuration, screen topology and automatic screen configuration backup. You can also complete screen topology mapping by taking photos and gain access to features like cloud module and seam correction. For related operations, please refer to the help center of VNNOX Care.

TU20 Pro and TU15 Pro share the same operations. The screenshots provided in this document take the TU20 Pro as examples.

2 Getting Started

Do the following steps to quickly get started with the LED playback control processors.

Step 1: Set up the Hardware

- Step 1 Open the package.
- Step 2 Prepare the accessories, such as Ethernet cable, remote, and mirroring dongle.
- Step 3 Build the hardware environment according to the following diagram. You can also connect common peripherals as needed, such as mouse, keyboard, sound system, camera and infrared touch frame.

Figure 2-1 Hardware architecture LED Screen



Step 4 Connect the Ethernet cables from the LED screen to the Ethernet output ports of TU20 Pro/TU15 Pro in the order shown below.

Figure 2-2 Rear panel – TU20 Pro (6 Ethernet ports) / TU15 Pro (4 Ethernet ports)



Step 5 Connect the power cable to power on the device.

Step 2: Install Related Apps

Search for ViPlex Handy and VNNOX Care in the app store, download and install them.

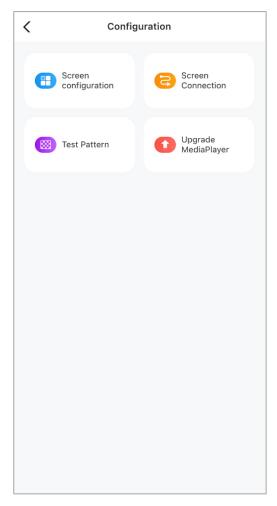
• With ViPlex Handy, you can effortlessly perform program editing, program publishing, and screen control.

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 With VNNOX Care, you can easily perform screen configuration, screen topology, seam correction, and automatic screen configuration backup.

Step 3 Configure the LED Screen

Step 1 Open VNNOX app and connect to the LED playback control processor.



- Step 2 Click Configuration to enter the configuration page
- Step 3 Click **Screen configuration** and follow the instructions to download the receiving card configuration file and light up the screen.
- Step 4 Click **Screen Connection**, follow the instructions to enable **Mapping**, and complete screen topology by taking photos with the mobile phone.

The above is the overall operation process. For detailed steps, see the app user manual.

Step 4 Initialize the System

For the first-time use of the LED playback control processor, do the following steps to complete the initialization settings.

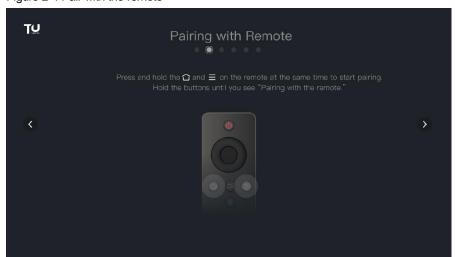
Step 1 Set the system language. You can choose Simplified Chinese, Traditional Chinese, or English.

Figure 2-3 Select a language



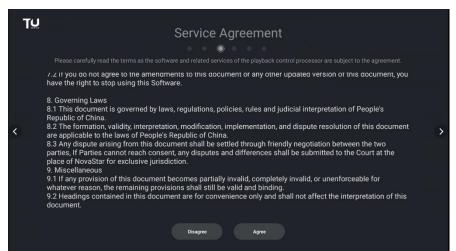
Step 2 To pair the remote using Bluetooth, point it at the device's infrared sensor. Then, simultaneously press and hold the **Home** and **Menu** buttons on the remote until you see the **Connecting to the remote** window pop up.

Figure 2-4 Pair with the remote



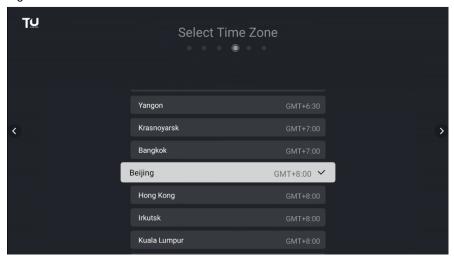
Step 3 Read and agree to the **Service Agreement**.

Figure 2-5 Service agreement



Step 4 Select a time tone.

Figure 2-6 Select a time zone



Step 5 Select the Wi-Fi network you want to connect to and enter the password. Then, click **Connect**.

Figure 2-7 Connect to Wi-Fi



Figure 2-8 Enter password



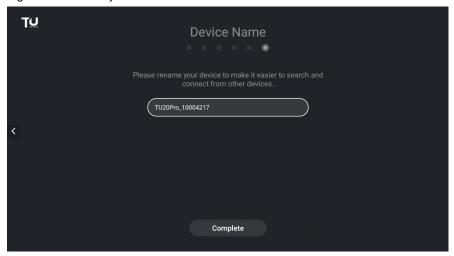
Note

The password must be at least 8 characters long.

Step 6 Rename your device to make it easier to search and connect from other devices.



Figure 2-9 Rename your device





The hotspot name will be updated automatically if you rename the device.

Step 7 The initialization settings are done. You can start using the LED playback control processor.

3 Usage of the Remote

3.1 Buttons on the Remote

Figure 3-1 Description of buttons on the remote



3.2 Bluetooth Pairing Method

Point the remote at the device's infrared sensor and hold down the **Menu** and **Home** buttons simultaneously until the **Connecting to the remote** window appears at the bottom of the screen.

4 Screen Mirroring

4.1 Wireless Mirroring

Ensure that the network is connected before using wireless screen mirroring. For details, please refer to Step 5 in 2 Getting Started.

4.1.1 Mirror from Mobile Phone

Screen mirroring on ViPlex Handy

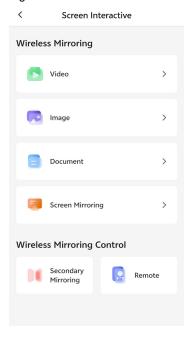
Step 1 On the main screen, click to navigate to the screen mirroring settings.





- Step 2 Scan the QR code on the screen to download and install ViPlex Handy on your phone.
- Step 3 Open the ViPlex Handy and tap Local Control on the main page.
- Step 4 Connect your phone to the hotspot of the LED playback control processor (default name: TUxx Pro_xxxx; default password: SN2008@+).
- Step 5 Navigate to Local Devices and select the device you want to connect.
- Step 6 Return to the main page and tap **Screen Interactive**.

Figure 4-2 Screen interaction



Step 7 Do the following as required.

 Display image: Select an image from the album and display it on the screen. Swipe left or right to switch between images.

Figure 4-3 Display image

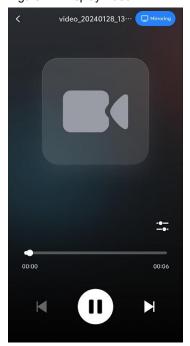


 Display video: Select a video from the album and display it on the screen. It will return to the video selection interface once the playback is finished.

You can pause/resume the playback, drag the playback progress, adjust the volume, and switch videos with the remote.

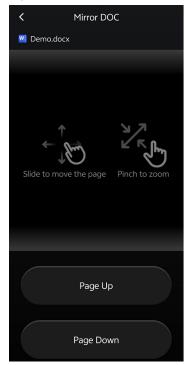
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Figure 4-4 Display video



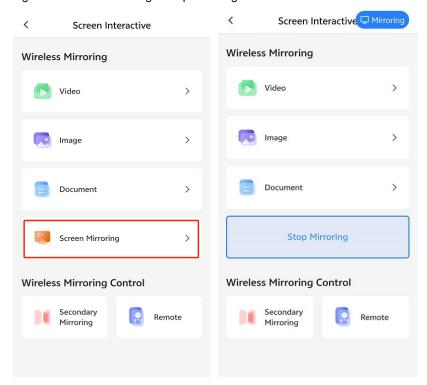
 Display document: Select a document from the file explorer and display it on the screen. Use the remote to scroll through pages and move the cursor (Supported file formats include PPT, WORD, PDF, and EXCEL. This feature is not supported by iOS).

Figure 4-5 Display document



Mirror screen: You can mirror the display of the phone/tablet onto the screen. Tap Screen Mirroring to starting mirroring and tap Stop Mirroring to stop. You can also open the floating window and tap Stop to stop mirroring.

Figure 4-6 Screen mirroring & Stop mirroring

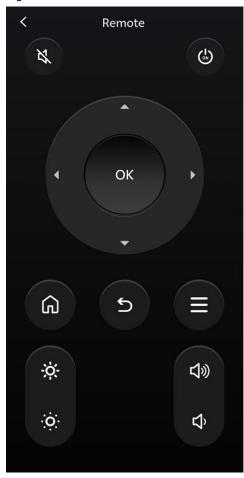


Note:

- Tap Mirroring on top of the interface and then tap **Stop** to stop.
- Please enable the floating window permission for ViPlex Handy before mirroring screen.
- For iOS devices, you can only start mirroring after enabling **Screen Mirroring** in the control center. To stop the mirroring, simply disable **Screen Mirroring**.
- Other screen casting functions will be unavailable when using the screen mirroring function.
- Secondary mirroring: Control the display screen in real-time on your phone/tablet.
- Remote: On the **Device Management** or screen mirroring interface, tap **Remote** to perform operations such as clicking, swiping, returning to the main menu, going back to the previous menu, adjusting volume, and zooming in or out of the display screen with two fingers (for images and documents).

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Figure 4-7 Remote



Mirroring from iOS

- Step 1 Connect your phone to the hotspot of the LED playback control processor (default name: TUxx Pro_xxxx; default password: SN2008@+).
- Step 2 Open the control center.
- Step 3 Tap Screen Mirroring and select the device to start mirroring.

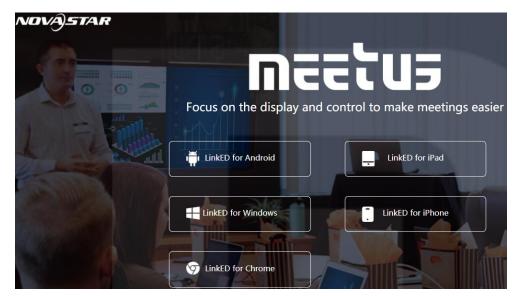
Figure 4-8 Screen mirroring - iOS



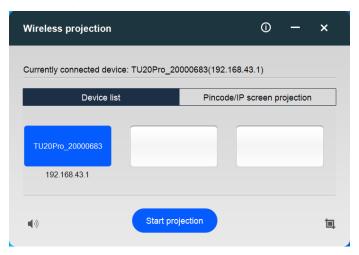
4.1.2 Mirroring from PC

Mirroring from Windows

Step 1 On the PC, open a browser, enter the website address "meexus.cn/English.html" and download the LinkED for Windows client.



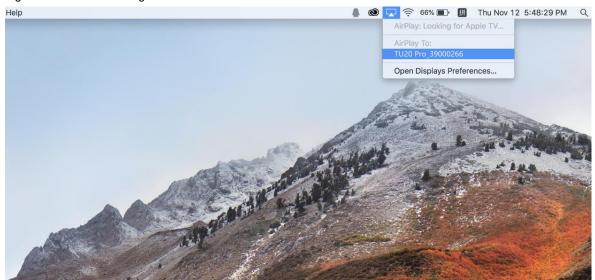
- Step 2 Connect the PC to hotspot of the LED playback control processor (default name: TUxx Pro_xxxx; default password: SN2008@+).
- Step 3 Run the client on the PC. The connected device will be detected by the client automatically. Then, click **Start projection**.



Mirroring from macOS

- Step 1 Connect the PC to hotspot of the LED playback control processor (default name: TUxx Pro_xxxx; default password: SN2008@+).
- Step 2 Click the AirPlay icon in the menu bar at the top of your screen, and select the device you want to mirror the screen to.

Figure 4-9 Screen mirroring - Mac



4.1.3 Mirroring via Dongle

- Step 1 For the first-time use, or after you change the device name, hotspot name or hotspot password, you must insert the mirroring dongle into the USB port of the LED Playback control processor for pairing.
- Step 2 Insert the paired dongle into the USB port of the PC.

Figure 4-10 Connection successful



Step 3 When a pop-up window with the "Connection successful" message appears on the desktop, press the round button on the dongle to start mirroring.



When using the mirroring dongle to mirror from the macOS PC for the first time, authorization is required. (The following operations use the 10.13.6 version as an example.)

1. On the desktop, open the PTB USB drive.

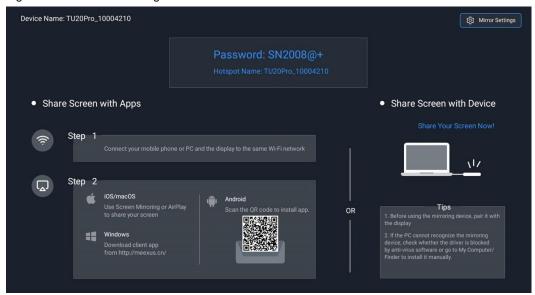


- 2. Double click the Client program to run it.
- 3. Follow the instructions to complete the authorization.

4.1.4 Mirror Screen Settings

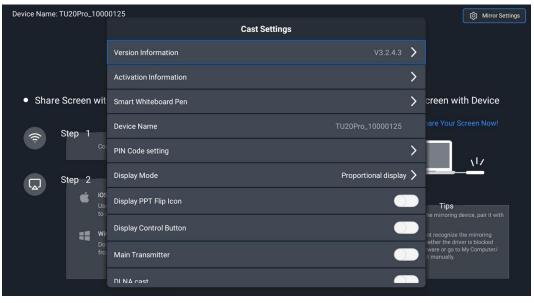
Step 1 On the main screen, click to navigate to the screen mirroring settings.

Figure 4-11 Wireless mirroring



Step 2 Press the **OK** button on the remote to open the screen mirroring setup interface.

Figure 4-12 Mirror Screen Settings



Step 3 Do the following as required.

- Version: Check the mirroring dongle version.
- Activation information: Click to check the activation status, activation code, MAC address, and split-screen quantity.
- Smart whiteboard pen: Click to use the smart whiteboard pen.
- Device name. Check the device name.
- Screen code: Set a screen code if enabled.
- Display mode: Set the display mode. Available options include Proportional, Full Screen, and Adaptive.
- Show slide navigation icons: Click to show/hide navigation icons for slides.
- Show master control ball: Click to show/hide the master control ball.
- Primary mirroring dongle: Click to enable/disable the primary mirroring dongle.
- DLNA cast: Click to enable/disable DLNA mirroring.
- Split-screen mode: Set the split-screen mode. Available options include Full Screen, Two-Split Screen, and Four-Split Screen.
- Activation upgrade: Click and enter the activation code in the pop-up window and press **OK** to activate.
- Mirroring timeout: Click and select mirroring timeout in the popup window, available options include 15s/30s/45s/60s.

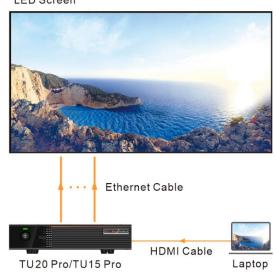
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4.2 Wired Mirroring

4.2.1 Connect Signal Source

Connect the LED playback control processor to the device you want to mirror the screen from via HDMI cable.

Figure 4-13 Wired mirroring LED Screen

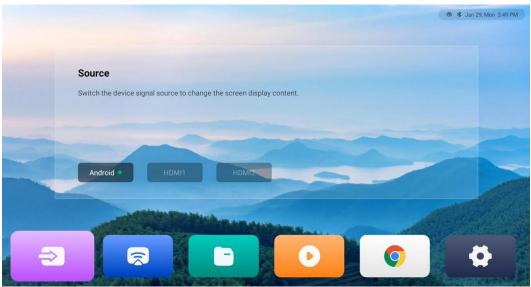


4.2.2 Switch Signal Source

You can switch the signal source via the following method.

Step 1 On the main screen, click or press the **Menu** button on the remote to open the signal source adjustment window.

Figure 4-14 Signal source



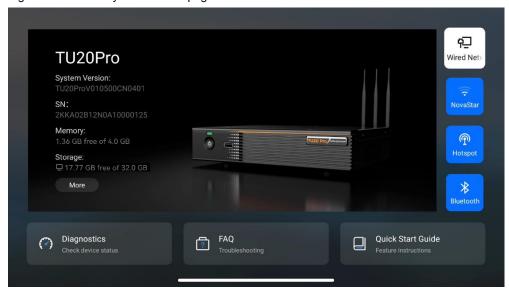
Step 2 Select the signal source that you want to display, and press the **OK** button on the remote.

5 Secondary Screen

5.1 Access the Secondary Screen

Step 1 To access the secondary screen interface, first navigate the cursor to the left of the home screen, then press the **Left** button on the remote again. In this interface, you can find details such as the device name, system version, product serial number (SN), memory status, and storage information.

Figure 5-1 Secondary screen homepage

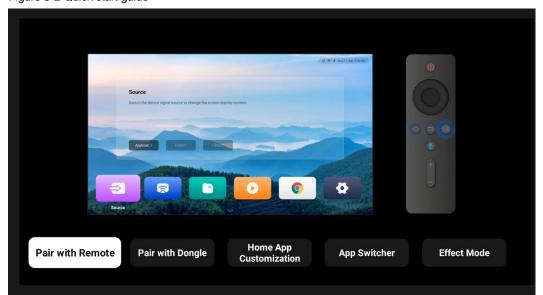


- Step 2 To view more information, click **More** and you will be redirected **Settings > System > About > Device Information**. For more details, please refer to 8.7.1 About.
- On the right side of the secondary screen's homepage, you can click **Wired Network**, **Wi-Fi**, **Hotspot**, and **Bluetooth** to redirect to **Settings** > **Network** > **Wired Network****Wireless Network****Hotspot****Bluetooth**. For more details, please refer to section 8.1.1 Wired network to section 8.1.4 Hotspot.

5.2 Quick Start Guide

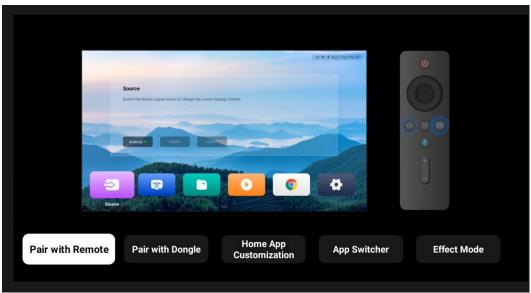
Step 1 To access the Quick Start Guide, simple click **Quick Start Guide** at the bottom of the secondary screen's homepage.

Figure 5-2 Quick start guide



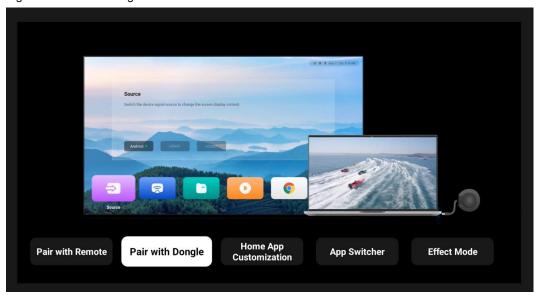
- Step 2 Press the Left/Right buttons on the remote to navigate through Pair with Remote, Pair with Dongle, Home App Customization, App Switcher, and Effect Mode.
 - Click **Pair with Remote** to open the remote pairing instruction screen.

Figure 5-3 Pair with remote



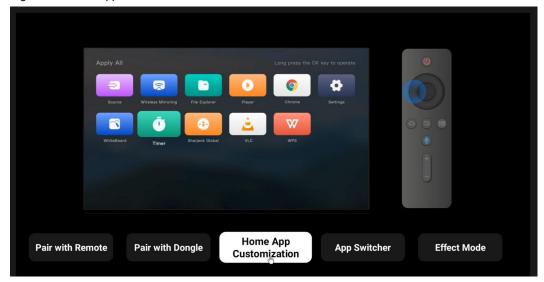
• Click **Pair with Dongle** to open the dongle pairing instruction screen.

Figure 5-4 Pair with dongle



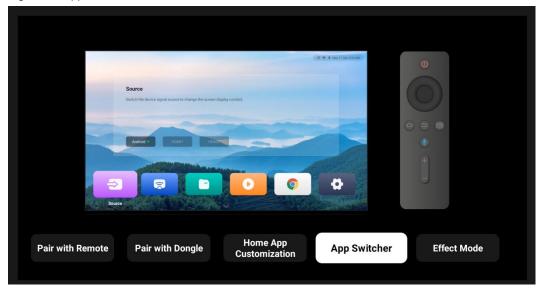
• Click **Home App Customization** to open the home app instruction screen.

Figure 5-5 Home app customization



Click App Switcher to open the app switcher instruction screen.

Figure 5-6 App switcher



• Click **Effect Mode** to open the effect mode instruction screen.

Figure 5-7 Effect mode



Step 3 On the right side of the secondary screen's homepage, you can click Wired Network, Wi-Fi, Hotspot, and Bluetooth to redirect to Settings > Network > Wired Network\Wireless Network\Hotspot\Bluetooth.

For more details, please refer to section 8.1.1 Wired network to section 8.1.4 Hotspot.

5.3 Diagnostics

The diagnostic feature is used when various issues arise during device usage, such as flickering screens, disconnections during mirroring, audio output failure, unrecognized USB drives, and more. With device diagnostics, users can promptly identify and pinpoint the issues, thus improving the overall experience.

Step 1 To access diagnostics, simple click **Diagnostics** at the bottom of the secondary screen's homepage.

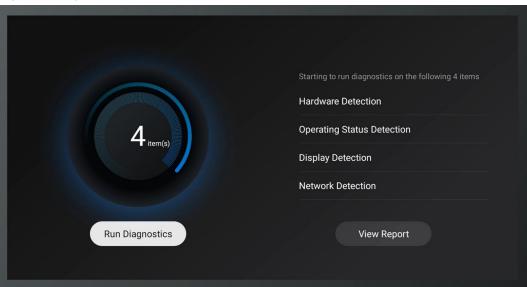


Figure 5-8 Diagnostics

Step 2 Click Run Diagnostics to run tests on Hardware Detection, Operating Status Detection, Display Detection, and Network Detection.

Figure 5-9 Running diagnostics



Once the diagnostic process is complete, you will see either Device normal or Device abnormal Step 3 displayed on the left. On the right, you can view the test items categorized as Normal, Abnormal, or Not tested. To see detailed information about all detected items, click View Report.

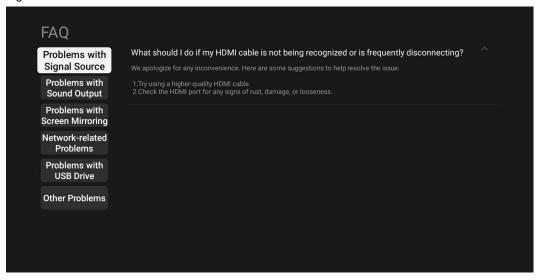
Figure 5-10 Diagnostic result



5.4 FAQ

To access FAQ, simple click **FAQ** at the bottom of the secondary screen's homepage. Step 1

Figure 5-11 FAQ



Step 2 Use the remote's **Up** and **Down** buttons to toggle between the categories of issues on the left, then press **OK** to view the specific questions.

6 File Explorer

6.1 Manage Device Files

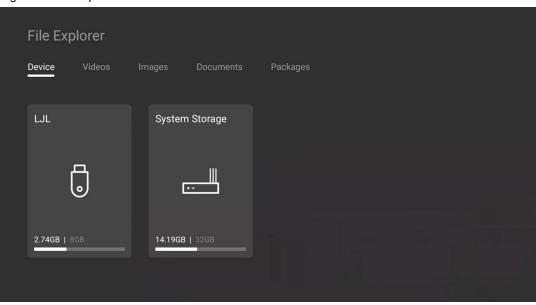
You can manage the files or folders within the device. This section will illustrate the process using folder management as an example.

Step 1 On the main screen of the system, click



to open the File Explorer interface.

Figure 6-1 File explorer

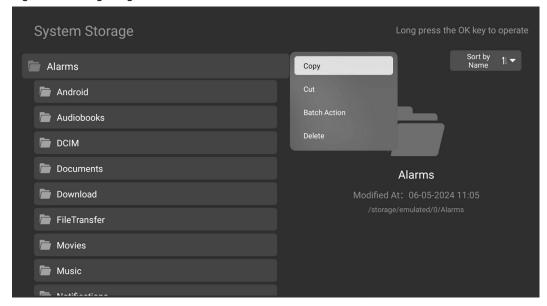


Step 2 You can view and manage files by file path.

In the **Devices** tab, you can choose to access the inserted USB drive or system storage to perform actions such as viewing, copying, cutting, pasting, and executing batch actions.

 Manage single file: Select a file and then press and hold the remote OK button until a pop-up menu appears.

Figure 6-2 Manage single files

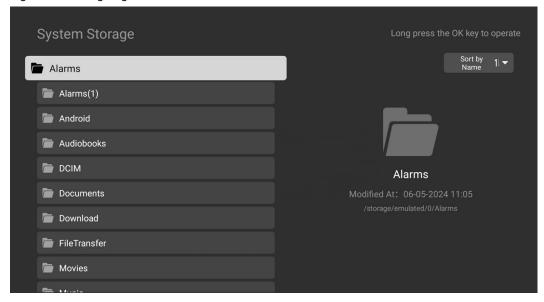


Copy: Example: To copy the "Alarms" folder, first bring up the pop-up menu and select Copy. Next, navigate to the target location where you want to paste the folder. Finally, click the Paste icon on the right side of the screen and wait until the process is completed. If you change your mind and want to cancel the paste, simply click Cancel.

Figure 6-3 Paste



Figure 6-4 Pasting single files



- Cut: The Cut operation is similar to the Copy operation. You can refer to the instructions above.
- Delete: Bring up the pop-up menu and select **Delete**.
- Batch action (batch copying and batch cutting share the similar process): First, bring up the pop-up menu
 and select Batch Action. Then, select the files you want to copy or cut. Next, click the Copy or Cut icon on
 the right side of the screen and then navigate to the target location. Finally, click the Paste icon on the right
 side of the screen and wait until the process is completed. If you change your mind and want to cancel the
 paste, simply click Cancel.

Figure 6-5 Manage multiple files

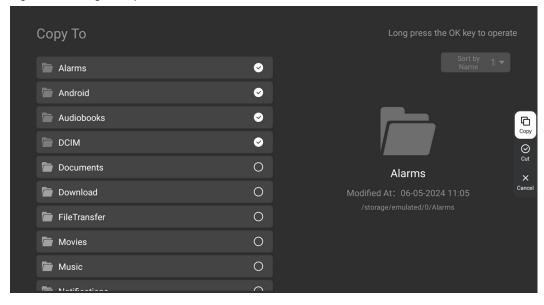


Figure 6-6 Pasting multiple files



Note

- Only files located in the **Device** tab can be pasted; copying, cutting, and pasting are not avilable in the video, image, document, and package tabs.
- Pasting will fail if there is insufficient storage space, and you cannot past a folder to its current location.
- If the file being pasted has the same name as a file or folder in the current location, the pasted file will be renamed.
- File sorting: You can sort files by file name (default), file size, or modification time.



- Files can be sorted by file name from A to Z or Z to A, with A to Z as the default.
- · Files can be sorted by file size from small to large or large to small, with small to large as the default.
- Files can be sorted in ascending or descending order based on the time of modification, with descending order as the default.
- To switch the sorting order, simply press the remote OK button to toggle between ascending and descending.

6.2 Manage Files by Type

Step 1 On the main screen of the system, click to open the File Explorer interface.

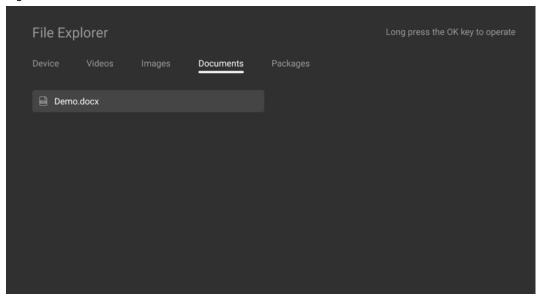
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Figure 6-7 File explorer



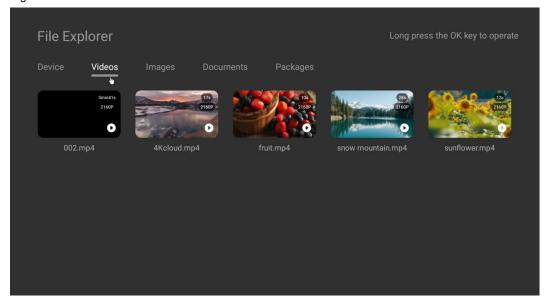
- Step 2 You can view and manage files by file types.
 - In the **Documents** tab, you can short press the **OK** button on the remote to open the selected document, or long press the **OK** button to delete it.

Figure 6-8 Documents



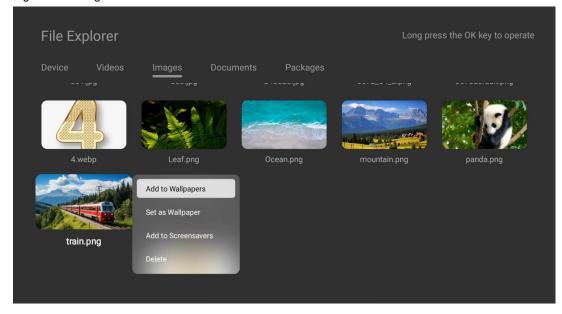
In the Videos tab, you can short press the OK button on the remote to preview the selected video, short
press the Left or Right button to switch between videos, and double-press Return button to exit preview
mode. Long press the OK button to delete the video.

Figure 6-9 Videos



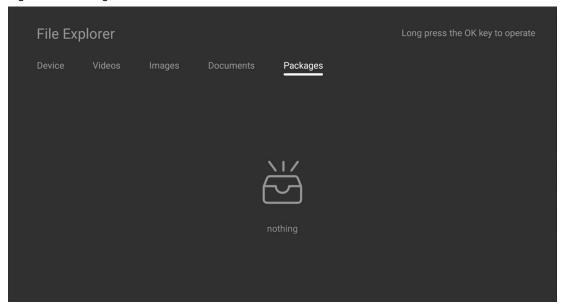
In Images tab, you can short press the OK button on the remote to preview the selected image, short
press the Left or Right button to switch between images, and double-press Return button to exit preview
mode. Long press the OK button to delete the image.

Figure 6-10 Images



 In the Packages tab, you can short press the OK button on the remote to open the selected package, or long press the OK button to delete it.

Figure 6-11 Packages



7 Media Player

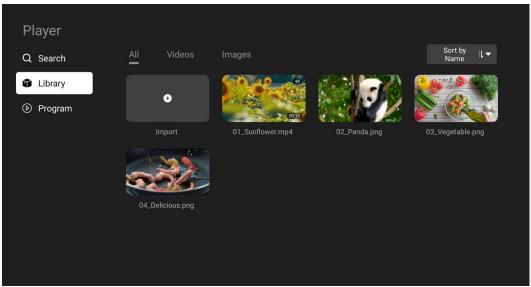
7.1 Manage Media Library

- Step 1 On the main screen of the system, click to open the Player interface.
- Step 2 Select **Library** from the navigation bar on the left.

There are one video and three images pre-installed in the library by default.

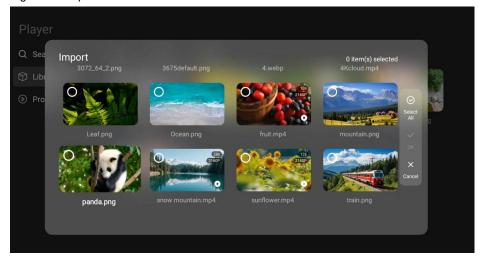
You can sort the images and videos by name, size, or time on the top right corner of the screen.

Figure 7-1 Media Library



Step 3 To import new media files, click **Import**, select a file, and then click **OK**.

Figure 7-2 Import

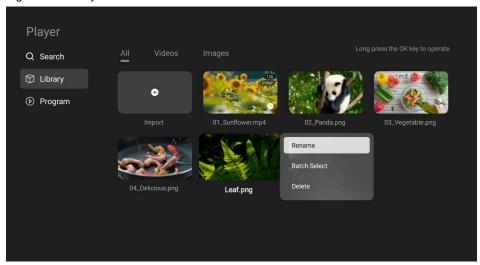


Note

You need to insert a USB drive first before you can import images and videos.

Step 4 After selecting a media file, long press the **OK** button on the remote to access options such as renaming, bulk selection, and deletion. (System preset media is not editable by long press.)

Figure 7-3 Library



- Step 5 After selecting a media file, short press the **OK** button on the remote to start or pause the playback. Short press the **Down** button to bring up a menu for **Playlist** and **Play Order**
 - Playlist: Short press the Left or Right button to switch between media files and long press the buttons to fast forward or rewind.
 - Play Order: Press the Left or Right button to switch between Repeat List, Play Once, and Repeat One.

Figure 7-4 Media playback





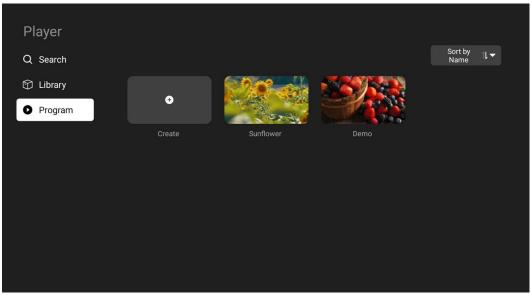
If using touch input: The menu area can be scrolled up and down or selected by a single tap; the list area can be swiped left or right or selected by a single tap; the function items are to be selected by a single tap for execution.

7.2 Manage Program

- Step 1 On the main screen of the system, click to open the Media Player interface.
- Step 2 Select **Program** from the navigation bar on the left.

You can sort the programs by name, size, or time on the top right corner of the screen.

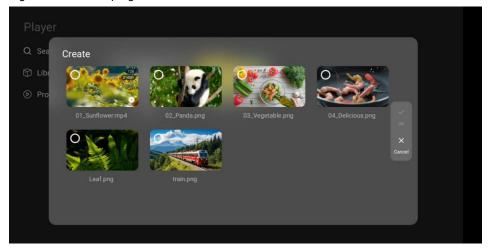
Figure 7-5 Program



Step 3 To create a new program, click **Create**, select the desired media files from the library and then click **OK**.

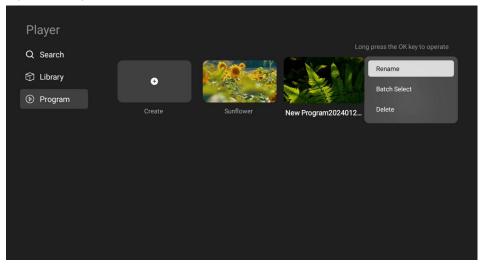
What's more, programs can also be edited in the VNNOX app and published to the playback control processor. For detailed operations, please click **Me > Help > User Manual** in the VNNOX app and refer to the user manual.

Figure 7-6 Create a program



Step 4 After selecting a program, long press the **OK** button on the remote to access options such as renaming, batch selection, and deletion (The default program cannot be edited).

Figure 7-7 Program operations



Step 5 After selecting a program, short press the **OK** button on the remote to start or pause the playback. Short press the **Down** button to bring up a menu for **Playlist**.

Playlist: Short press the **Left** or **Right** button to switch between media files and long press the buttons to fast forward or rewind.

Figure 7-8 Program playback



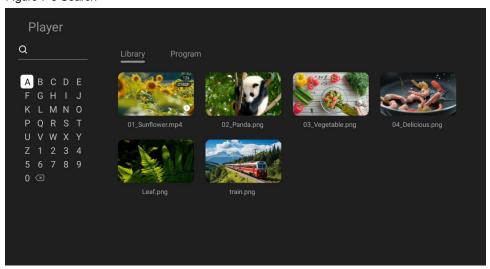


If using touch input: The menu area can be scrolled up and down or selected by a single tap; the list area can be swiped left or right or selected by a single tap; the function items are to be selected by a single tap for execution.

7.3 Search

- Step 1 On the main screen of the system, click to open the Media Player interface.
- Step 2 Select **Search** from the navigation bar on the left.
- Step 3 You can search in the **Library** and **Program**.

Figure 7-9 Search



Step 4 Input letters and numbers, and the media/programs with corresponding names will be filtered in real time.

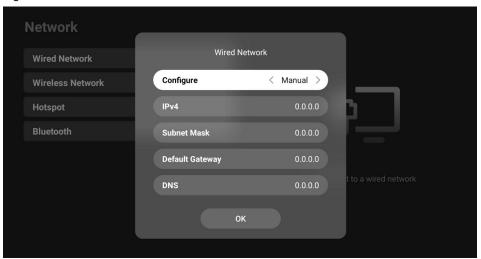
8 Settings Management

8.1 Network Settings

8.1.1 Wired network

- Step 1 On the main screen of the system, click to open the settings interface.
- Step 2 Select **Network > Wired Network** to open the wired network interface.

Figure 8-1 Wired network

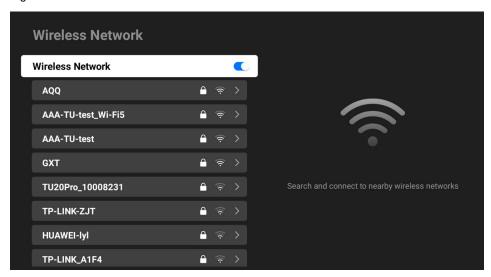


- Step 3 Select **Auto** or **Manual** for the configuration mode.
 - Auto: The device automatically obtains an IP address.
 - Manual: Manually set a static IP address for the device.

8.1.2 Wireless Network

- Step 1 On the main screen of the system, click to open the settings interface.
- Step 2 Select **Network > Wireless Network** to open the wireless network interface.

Figure 8-2 Wireless network

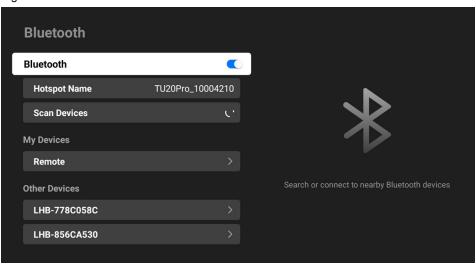


- Step 3 Select an available Wi-Fi network near you and enter the password in the displayed window.
- Step 4 Press **OK** to connect to the Wi-Fi network.

8.1.3 Bluetooth

- Step 1 On the main screen of the system, click to open the settings interface.
- Step 2 Select **Network** > **Bluetooth** to open the Bluetooth interface.
- Step 3 Toggle on Bluetooth.

Figure 8-3 Bluetooth

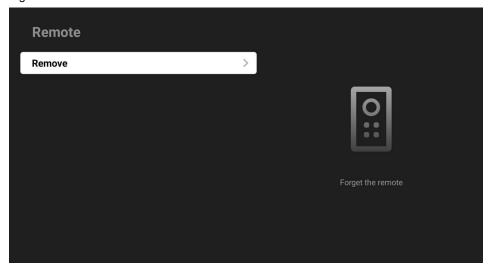


Step 4 Select a target device from **Other Devices** to start pairing.

Remove the Remote

- Step 1 Select **Remote** from **My Devices** to open the remote settings interface.
- Step 2 Click **Remove** to forget the current remote.
- Step 3 If you want to forget the connected remote and pair with another one, simply click **Remove** and then follow the instructions to pair with a new remote.

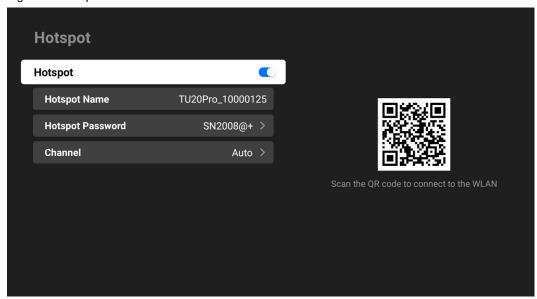
Figure 8-4 Remove the remote



8.1.4 Hotspot

- Step 1 On the main screen of the system, click to open the settings interface.
- Step 2 Select **Network** > **Hotspot** to open the hotspot interface.
- Step 3 Toggle the hotspot option on () and set the device name, hotspot password, and channel information. You can also quickly connect to the device's hotspot by scanning the QR code on the right with your mobile phone.

Figure 8-5 Hotspot



- The device name must follow the below rules:
 - Emojis are not allowed.
 - The name must be between 1 and 24 characters in length.
 - Only the supported characters are allowed, including: `~!@#\$%^&*-_+=`
 - The device name and hotspot name are the same, and the hotspot name will automatically change to match any updates to the device name.
- The password must follow the below rules:
 - The password must be between 8 and 24 characters in length.
 - Only the supported characters are allowed, including: `~!@#\$%^&*-_+=`
 - The password must contain at least three of the followings: uppercase letters, lowercase letters, numbers, and symbols.



- After you change the hotspot name or password, please insert the mirroring dongle into the USB port of the playback control processor for pairing again.
- Please consider changing to a stronger password if your current one is weak.

8.2 Display and Effects

8.2.1 Effects

To have a more comfortable viewing experience, you can adjust the display effects via the following methods.

Step 1 On the main screen of the system, click

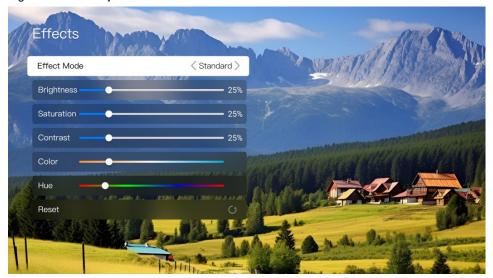


to open the settings interface.

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Step 2 Select **Display and Effects** > **Effects** to open the effect adjustment interface.

Figure 8-6 Effect adjustment



- Step 3 Select a mode according to your need.
 - Standard: Suitable for most content viewing.
 - Meeting: Suitable for document display and providing a more comfortable viewing experience.
 - Vivid: Suitable for movie, video and image playback and delivers vibrant and pleasing effects.
 - Skin: Suitable for video meeting scenarios and guarantees accurate and natural skin tones.
- Step 4 You can fine-tune the effect parameters after selecting a mode to satisfy personalized requirements.
 - 1. On the remote, press the **Menu** button to enter the menu.
 - 2. Select **Effect** and press the **OK** button to open the effect adjustment interface.
 - Adjust the values for Brightness, Saturation, Contrast, Color Temperature and Hue to customize the display effect.
 - 4. (Optional) If you are not satisfied with the effect after adjustment, press the **Reset** button to reset the parameter values to the defaults.

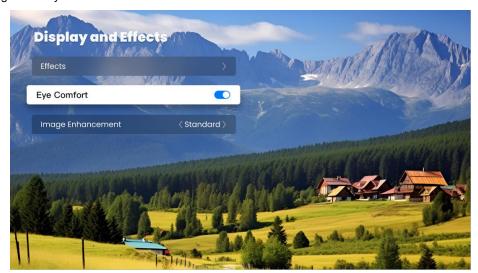
8.2.2 Eye Comfort

- Step 1 On the main screen of the system, click to open the settings interface.
- Step 2 Select Display and Effects > Eye Comfort to enable or disable the Eye Comfort Mode.

The Eye Comfort Mode enables a little yellowish display on the screen to relieve eye fatigue.

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Figure 8-7 Eye comfort



8.2.3 Image Enhancement

- Step 1 On the main screen of the system, click to open the settings interface.
- Step 2 Select **Display and Effects > Image Enhancement**.
- Step 3 Select an image quality mode Natural, Standard, Ultimate, or Off.

The display effect can be significantly enhanced through three key factors: contrast, details, and color. This results in a more nuanced and vibrant image gradation, clearer and sharper edge details, as well as brighter and more vivid colors.

Figure 8-8 Image enhancement

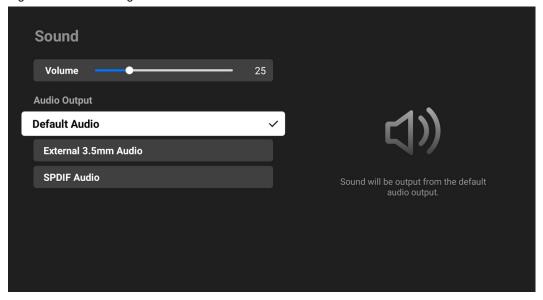


8.3 Sound Settings

- Step 1 On the main screen of the system, click to open the settings interface.
- Step 2 Select **Sound** to open the sound interface.

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Figure 8-9 Sound settings



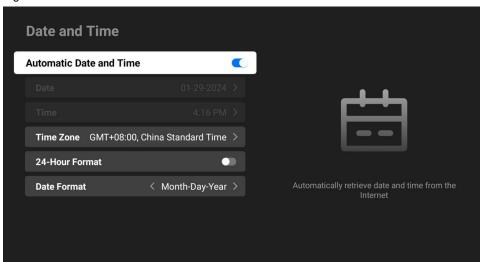
Step 3 You can adjust the system volume and select an **Audio Output** option from the following: **Default Audio**, **Force 3.5mm Audio Output**, and **SPDIF Audio**.

8.4 General Settings

8.4.1 Date and Time

- Step 1 On the main screen of the system, click to open the settings interface.
- Step 2 Select **General** > **Date and Time** to open the date and time interface.
- Step 3 The date and time settings that are available include the following options.
 - Automatic date and time: Automatically retrieve date and time from the Internet. You can also disable this
 function and then manually set the date and time of the system.
 - 24-hour format: Show the time in the 24-hour format. The system time is displayed in the 12-hour time format by default.
 - Date format: Set the date format to Year-Month-Day (default), Month-Day-Year or Day-Month-Year.

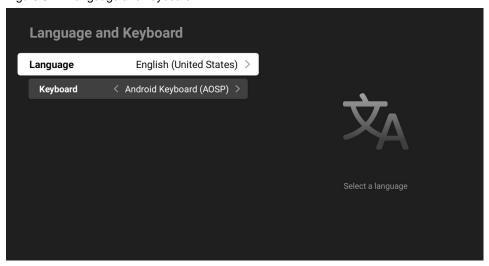
Figure 8-10 Date and time



8.4.2 Language and Keyboard

- Step 1 On the main screen of the system, click to open the settings interface.
- Step 2 Select **General** > **Language and Keyboard** to open the language and keyboard interface.
- Step 3 You can set the language and input method for the system.
 - Language: Available options include **English (United States)**, **Simplified Chinese (China)**, and **Traditional Chinese (China)**.
 - Keyboard: Available options include Android keyboard (AOSP).

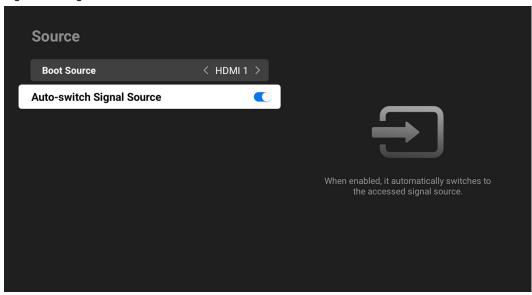
Figure 8-11 Language and keyboard



8.4.3 Signal Source

- Step 1 On the main screen of the system, click to open the settings interface.
- Step 2 Select **General** > **Source** to open the signal source interface.

Figure 8-12 Signal source



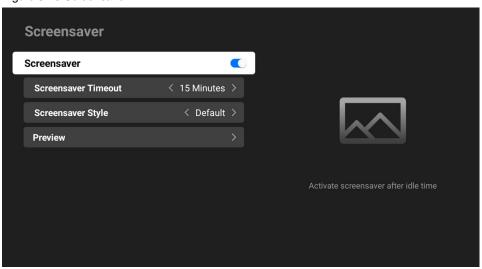
- Step 3 Select a Boot Source option from the following: Android, HDMI 1, and HDMI 2.
- Step 4 Enable or disable **Auto-switch Signal Source** as needed (this option is enabled by default).

- When enabled, the device will automatically redirect to the main screen upon detecting a signal source connection.
- If this option is disabled, a popup alert will appear when the main screen receives a signal source input.

8.4.4 Screensaver

- Step 1 On the main screen of the system, click to open the settings interface.
- Step 2 Select **General** > **Screensaver** to open the screensaver interface.
- Step 3 Toggle on Screensaver.
- Step 4 Set a screensaver idle time. Available options are 15 minutes, 30 minutes, 1 hour.
- Step 5 Choose between **Default** and **Custom** for **Screensaver Style**.
 - Default screensaver displays the current date and time.
 - Custom screensaver displays any image you choose. Press the OK button to select an image and you can select up to 10 images.
- Step 6 Click **Preview** to preview the current screensaver in full screen.

Figure 8-13 Screensaver



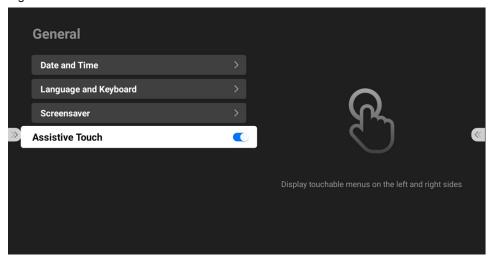
8.4.5 Assistive Touch

- Step 1 On the main screen of the system, click to open the settings interface.
- Step 2 Toggle on **General > Assistive Touch** to show the Assistive Touch menu on both sides of the screen.

Press the icon on the left and right sides of the screen to open the sidebar.

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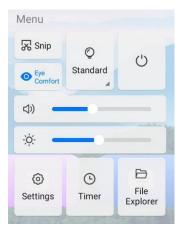
Figure 8-14 Assistive touch



- Back button. Click to go back to the previous interface.
- : Home button. Click to go back to the main screen.
- Pencil button. Click to activate the commenting tool.
- Signal source button. Click to display all signal sources, and you can easily switch between them. Options that are grayed out indicate that there is no signal available and cannot be selected. The green dot signifies the currently active source.



• Henu button. Click to access the menu bar, which enables convenient access to various functions, as illustrated below.



- Recents button. Click to show all active or open apps, allowing you to easily find or close them.



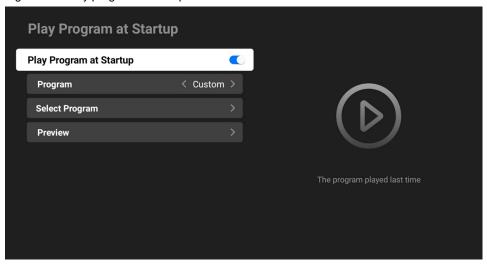
The remote cannot operate the assistive touch menu. You need to connect a mouse or use a touchscreen for control.

8.5 Playback Settings

8.5.1 Play Program at Startup

- Step 1 On the main screen of the system, click to open the settings interface.
- Step 2 Select Playback > Play Program at Startup to open the corresponding interface.
- Step 3 When **Play Program at Startup** is enabled, the program will automatically start playing when the device is powered on or wakes up from sleep mode.
- Step 4 Choose a program to be played. Available options include Last Played and Custom.
 - Last played: The video that was played before power-off will automatically start playing upon power-on.
 - Custom: Click Select Program to choose a program to be played. You can only select 1 program.

Figure 8-15 Play program at startup

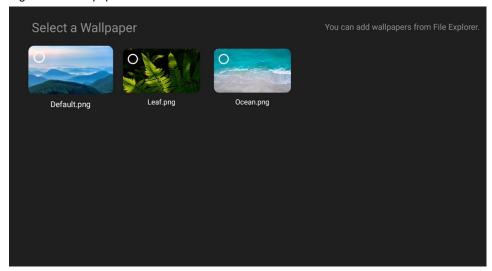


8.6 Personalize

8.6.1 Wallpaper

- Step 1 On the main screen of the system, click to open the settings interface.
- Step 2 Select **Settings** > **Personalize** > **Wallpaper** to open the wallpaper interface.
- Step 3 Select a wallpaper and then click **OK**.

Figure 8-16 Wallpaper

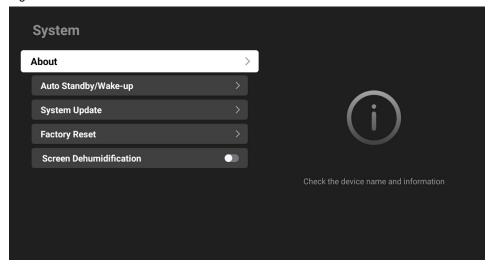


8.7 System Settings

8.7.1 About

- Step 1 On the main screen of the system, click to open the settings interface.
- Step 2 Select **Settings > System> About** to open the corresponding interface.
- Step 3 Click **Device Name** to set a name for your device.
- Step 4 Click **Device Information** to check the below information.
 - Version
 - Android version
 - System version
 - System version release time
 - Sending card FPGA version
 - Receiving card model
 - Receiving card MCU version
 - Receiving card FPGA version
 - Storage
 - Memory
 - Storage
 - Status
 - Device MAC address
- Step 5 Click the **Service Agreement** to view the terms and conditions of this device.

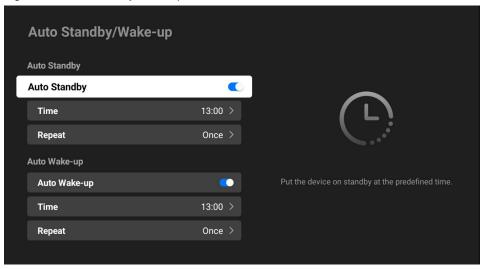
Figure 8-17 About



8.7.2 Auto Standby/Wake-up

- Step 1 On the main screen of the system, click to open the settings interface.
- Step 2 Select Settings > System> Auto Standby/Wake-up to open the corresponding interface.
- Step 3 Enable Auto Standby and Auto Wake-up as needed.
- Step 4 Set the time and repeat pattern for **Auto Standby** and **Auto Wake-up**.

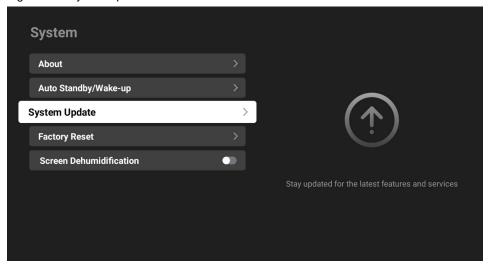
Figure 8-18 Auto Standby/Wake-up



8.7.3 System Update

- Step 1 On the main screen of the system, click to open the settings interface.
- Step 2 Select **Settings** > **System** > **System Update** to open the corresponding interface.

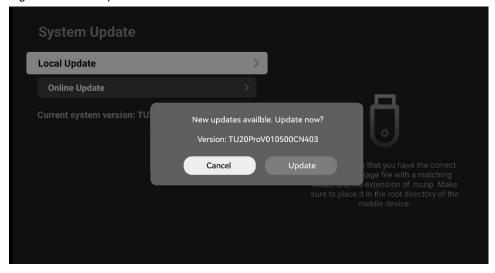
Figure 8-19 System update



Step 3 Select Local Update or Online Update.

Local update: Insert the USB drive that contains the update package into the USB port of the device. The
update package has a file extension of *.nuzip and the package must be placed in the root directory of the
USB drive. When the screen displays "There are update packages in the root directory of the USB flash
drive and update is available", press the **Update** button.

Figure 8-20 Local update

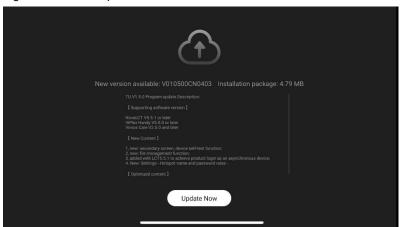




The update process takes approximately 5-8 minutes. During this time, do not turn off the device, remove the USB drive, or use the remote control. (Turning off the power or removing the USB drive can be dangerous and may damage the device.)

 Online update: The system will automatically start checking for the latest update. If a new version is available, click **Update Now** and wait for the process to finish.

Figure 8-21 Online update





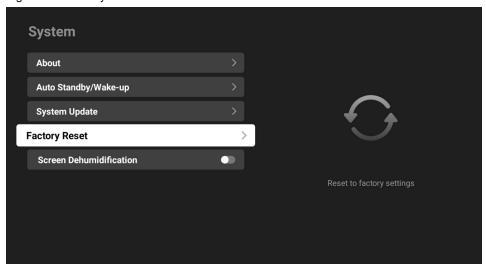
- Before starting the online update, make sure you are connected to the Internet.
- The online update consists of two stages: After detecting the latest version, click **Update Now**. If the
 installation package for the current version is already available locally, the system will proceed directly to
 install it.
- Please do not exit the update process intentionally. If the update is interrupted due to a shutdown or power outage, the installation package will be saved locally.

8.7.4 Factory Reset

- Step 1 On the main screen of the system, click to open the settings interface.
- Step 2 Select **Settings** > **System** > **Factory Reset** to open the factory reset interface.
- Step 3 Click Factory Reset to reset the device to its factory default settings.

Factory reset will erase all the data including local documents, images, videos, applications, etc., and the data cannot be recovered.

Figure 8-22 Factory reset



Note

After factory reset, you need to perform commercial activation for the mirroring dongle again.

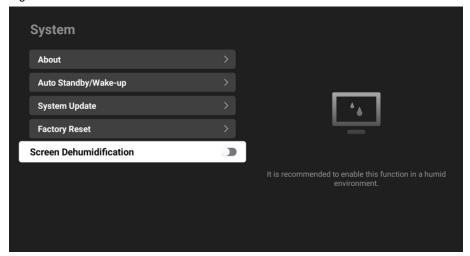
8.7.5 Screen Dehumidification

- Step 1 On the main screen of the system, click to open the settings interface.
- Step 2 Select **Settings** > **System** to open the system settings interface.
- Step 3 You can enable or disable **Screen Dehumidification** as need. By default, this feature is disabled, but it will take effect in real-time once you enable it.

LED products are moisture-sensitive. In order to extend the service life of the screen in a relatively humid environment, when the device is not turned on for a period of time, it needs to be dehumidified before it is turned on again.

After activating the dehumidification function, the system will begin the dehumidification process according to the length of time the device has been powered off. This process includes automatically adjusting the screen brightness and implementing aging procedures for different periods of time. The power-off duration of the device is calculated by subtracting the last power-down time from the subsequent power-up time of the device.

Figure 8-23 Screen dehumidification



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Official website
www.novastar.tech
Technical support
support@novastar.tech