# HIKVISION

DS-51TL Interactive Display

User Manual

#### **Interactive Display**

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#### **Regulatory Information**

#### **FCC Information**

Please take attention that changes or modification not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment.

FCC compliance: This equipment has been tested and found to comply with the limits for a Class A digital device, pursuant to part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference when the equipment is operated in a commercial environment. This equipment generates, uses, and can radiate radio frequency energy and, if not installed and used in accordance with the instruction manual, may cause harmful interference to radio communications. Operation of this equipment in a residential area is likely to cause harmful interference in which case the user will be required to correct the interference at his own expense.

#### **FCC Conditions**

This device complies with part 15 of the FCC Rules. Operation is subject to the following two conditions:

- 1. This device may not cause harmful interference.
- 2. This device must accept any interference received, including interference that may cause undesired operation.

#### **EU Conformity Statement**

This product and - if applicable - the supplied accessories too are marked with "CE" and comply therefore with the applicable harmonized European standards listed under the EMC Directive 2014/30/EU, the LVD Directive 2014/35/EU, the RoHS Directive 2011/65/EU.



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2006/66/EC (battery directive): This product contains a battery that cannot be disposed of as unsorted municipal waste in the European Union. See the product documentation for specific battery information. The battery is marked with this symbol, which may include lettering to indicate cadmium (Cd), lead (Pb), or mercury (Hg). For proper recycling, return the

battery to your supplier or to a designated collection point. For more information see: www.recyclethis.info

#### **Industry Canada ICES-003 Compliance**

This device meets the CAN ICES-3 (A)/NMB-3(A) standards requirements.

# Applicable Models

This manual is applicable to DS-51TL/P Series Interactive Display (hereafter referred to the device).

# **Symbol Conventions**

The symbols that may be found in this document are defined as follows.

Symbol	Description	
NOTE	Provides additional information to emphasize or supplement important points of the main text.	
<b>WARNING</b>	Indicates a potentially hazardous situation, which if not avoided, could result in equipment damage, data loss, performance degradation, or unexpected results.	
DANGER	Indicates a hazard with a high level of risk, which if not avoided, will result in death or serious injury.	

#### Safety Instructions

- Proper configuration of all passwords and other security settings is the responsibility of the installer and/or end-user.
- In the use of the product, you must be in strict compliance with the electrical safety regulations of the nation and region. Please refer to technical specifications for detailed information.
- Input voltage should meet both the SELV (Safety Extra Low Voltage) and the Limited Power Source with 100~240 VAC or 12 VDC according to the IEC60950-1 standard. Please refer to technical specifications for detailed information.
- Do not connect several devices to one power adapter as adapter overload may cause overheating or a fire hazard.
- Please make sure that the plug is firmly connected to the power socket.
- If smoke, odor or noise rise from the device, turn off the power at once and unplug the power cable, and then please contact the service center.

#### Preventive and Cautionary Tips

Before connecting and operating your device, please be advised of the following tips:

- Ensure unit is installed in a well-ventilated, dust-free environment.
- Unit is designed for indoor use only.
- Keep all liquids away from the device.
- Ensure environmental conditions meet factory specifications.
- Ensure unit is properly secured to a rack or shelf. Major shocks or jolts to the unit as a result of dropping it may cause damage to the sensitive electronics within the unit.
- Use the device in conjunction with an UPS if possible.
- Power down the unit before connecting and disconnecting accessories and peripherals.
- Improper use or replacement of the battery may result in hazard of explosion. Replace with the same or equivalent type only. Dispose of used batteries according to the instructions provided by the battery manufacturer.

# **TABLE OF CONTENTS**

Chapter 1 Important Notice	8
1.1 Safety Instructions	8
1,2 Preventive and Cautionary Tips	9
Chapter 2 Operation and Maintenance Precautions	11
2.1 Use of Power Cable	11
2.2 Cleaning and Maintenance	12
Chapter 3 Connections and Installation	13
3.1 Precautions for Installation	13
3.2 Control Panel Buttons.	13
3.3 Interfaces	15
3.4 Connection to Personal Computer (PC)	18
3.4.1 Connect to PC by VGA	19
3.4.2 Connect to PC by HDMI	19
3.5 Computer Installation	20
3.6 Remote Control.	21
3.7 Mounting	22
Wall Mounting	22
Mobile Mounting	23
Chapter 4 Basic Operation	24
4.1 Startup & Shutdown	24
4.1.1 Startup	24
4.1.2 Eco Mode	24
4.1.3 Standby	24
4.1.4 Shutdown	25
Chapter 5 Sidebar Operations	26
5.1 Basic Operations	26
5.2 Annotating	27
5.3 Tool	29
5.3.1 Screenshot	29
5.3.2 Freeze Screen	30
5.4 Control Center	31
5.4.1 Live View	31
5.4.2 Switch Channel	32
5.4.3 Display Parameter	33
5.4.4 Sound Mode	34
5.4.5 Light Sensitive Settings	34
5.4.6 VGA Signal Control	35
Chapter 6 Configuration	36
6.1 Network	36
6.1.1 Set Wired Network	36
6.1.2 Set Wireless Network (Optional)	37

# Interactive Display

6.1.3 Set Hotspot	
6.2 Display	38
6.3 Audio	40
6.4 Language and Input Method	41
6.5 Date and Time	41
6.6 Applicaion Mangagement	41
6.7 Temperature Control	42
6.8 Advanced Settings	43
6.8.1 Device Name	43
6.8.2 Input Source Settings	44
6.8.3 Startup/Shutdown Settings	44
6.8.4 Wakeup Settings	44
6.8.5 EDID Version	44
6.8.6 USB Settings	44
6.8.7 Boot Animation Settings	45
6.8.8 PC One-Touch Restore	45
6.8.9 Floating Ball Settings	45
6.8.10 Entity Key Settings	45
6.8.11 Restore to Factory Default	46
6.9 Security Settings	46
6.9.1 Lock Screen Password	46
6.9.2 USB Key	46
6.10 View System Info	47
Chapter 7 Smart Applications	48
7.1 File Management	48
7.2 Browser	49
7.3 Roaming Buttons	49
Appendix 1 Parameter Description	51
Appendix 2 Troubleshooting	53

# Chapter 1 Important Notice

## 1.1 Safety Instructions

For safety concerns, the device has been strictly tested before shipment. However, incorrect installation or usage may lead to hazardous results such as electric shock and fire. To ensure the service life and best performance of the device, please read the notice and plate signs carefully and follow the safety instructions. Keep this guide properly for later use.



#### WARNING

- To reduce the risk of fire or electric shock, please do not expose the device to rain or humid environment.
- Electric discharge may last for a short period of time after the power is shut down. Please wait for two minutes after the power shut down to operate the device.
- To avoid the risk of electric shock, please do not operate when the power is on.
- Only use the original power cable delivered with the device. Contact authorized dealer to purchase power cable with same specifications.
- Please do not frequently plug and unplug the power cable when the power is on.





#### WARNING

The device may generate radio interference in indoor environment. Necessary precautions may be required.

## 1.2 Preventive and Cautionary Tips



# **!** WARNING

- Only use power supply of 100-240 VAC, 50 Hz.
- Only connect/disconnect the recording and playback box and computer box when the power is shut down.
- Do not place the device in:
  - Direct strong lighted, humid, over-heated/cooled, dusty environment.
  - An environment where flammable and explosive matter are stored and used.
  - An environment of flammable and corrosive gas.
  - Places like bathroom and kitchen.
- Do not use damaged or unfit power socket. Make sure the plug and the socket are in good contact.
- Do not let dust or metal attachment adhere to the power plug and socket.
- Do not damage the power cable:
  - Do not modify the cable in any form.
  - Do not place heavy matter on the cable.
  - Keep the power away from heat.
  - Do not disconnect the power plug by pulling the cable.
- Do not parallel multiple plugs in one socket to avoid fire risk caused by power overload.
- Do not approach the device with fire (e.g. a lit candle) to avoid the risk of fire or electric shock.
- Do not place anything containing liquid on the device to avoid the risk of fire or electric shock caused by liquid-splashing.
- Do not let sharp or metal articles and liquids contact the signal connectors or heat dissipation holes to avoid short circuit, product damage and electric shock.
- The hole on the shell is designed for heat dissipation. Do not block the hole when installing the device.
- Do not touch the device with a wet finger to avoid risk of electric shock.
- Do not operate the device in heavy rain, especially lightning weather to avoid electric shock. Contact professional technicians for repairing.
- Do not use chemical reagent to clean the device. Do not let anything into the device.



#### DANGER

- Do not let children climb onto the device.
- Keep small accessories away from children.
- If the device will not be used for a long time. Shut down the power of the device and disconnect the power supply.
- Disconnect the power plug before cleaning the device. Use soft cloth for cleaning.
- Contact service center for internal cleaning.
- Make sure the power supply matches the requirements specified by the plate on the shell.
- Disconnect power plug and antenna in thunderstorm weather.
- Keep the power cable away from physical or mechanical damage.
- Make sure the power supply is grounded.
- After the environment temperature changed from low to high. Wait for a period of time before powering on the device.
- Make sure the environment is dry and well-ventilated, and heat dissipation is good.
- Turn down the volume when using earphones.



Please read the warning information on device and manual carefully.

# Chapter 2 Operation and Maintenance Precautions

The LCD panel on the device is made by high-precision technology. However, tiny spots on the screen that are always or never lit may be observed, or when observed from side, the color may and brightness may appear to be uneven. Yet the above phenomena are common among LCD displays rather than faults and will not affect the performance of the device.

- The device and its accessories are subject to change without prior notice.
- The fragile materials of the display are vulnerable to falling and impact. Please hold with care.
- Improper operations during debugging and operating may cause damage to the device.
- Scratching or knocking the device with hard objects is strictly forbidden. Do not frequently turn on/off the power of the device when operating to avoid the risk of damage and faults.
- If smoke, odor or noise rise from the device, turn off the power at once and unplug the power cable, and then please contact the service center.
- When installing, clean the surface and rear of the display to ensure the performance.
- Do not fix the device too tight, otherwise the display may be bent.
- Our company is not responsible for any fault caused by third-party when operating the device and other failure or damage incurred.
- Do not operate the device in an environment of dust, high humidity, or oil and steam contacting to avoid the risk of fire and damage.
- Do not place the device on unstable or unsafe surface. Avoid strong impact, vibration or vibration.
- Do not operate the device near heating device or place of high temperature to avoid the risk of fire.
- Ensure the accessories are complete before installing the device. Otherwise contact your dealer.

### 2.1 Use of Power Cable

- If the power cable is damaged or failed, contact service center. Make sure the power supply is properly grounded and matches the requirements specified by the plate on the shell.
- Do not expose the device to rain or humid environment. Disconnect power plug and antenna in thunderstorm weather.
- If the device will not be used for a long time. Shut down the power of the device and disconnect the power supply.
- Electric discharge may last for a short period of time after the power is shut down. Please wait for two minutes after the power shut down to operate the device.

#### **Interactive Display**

 Only use the original power cable delivered with the device. Contact authorized dealer to purchase power cable with same specifications.

## 2.2 Cleaning and Maintenance

- The hole on the rear shell is for heat dissipation. Do not pour or spray liquid to the rear shell or use wet cloth for cleaning.
- Disconnect the power plug before cleaning.
- Use a dry, soft and dust-free cloth to clean the device.
- Contact service center for internal cleaning.
- Proper maintenance can avoid certain early-stage failures.
- Clean the device on a regular basis to make the device look new.

# Chapter 3 Connections and Installation

#### 3.1 Precautions for Installation

- Install the device near an available AC power socket for easy power connection.
- For safety, only use the wall mount or base that is suitable for the device.
- Place the device on a stable surface or fix the device steadily on the wall.
- Contact professional staff for wall mounting.
- Do not place the device near mechanical vibration source.
- Do not place the device in an environment where insects have easy access.
- Do not let the device face the air conditioner directly to avoid condensing.
- Do not place the device in strong electromagnetic field to avoid radio interference.

#### 3.2 Control Panel Buttons.

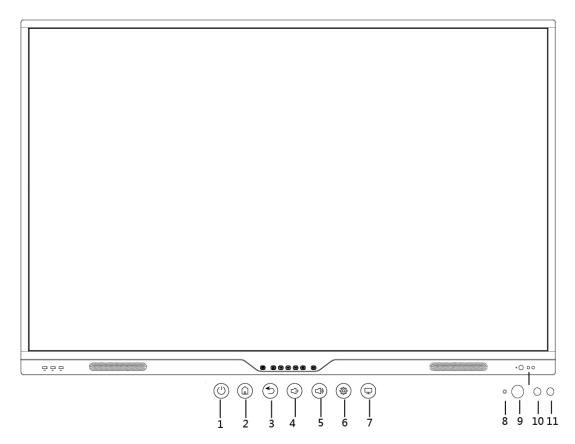


Figure 3-1 Control Panel Buttons

## Interactive Display

Table 3-1 Description of Control Panel Buttons

No.	Button	Description
1	G	Multi-functional button
2		Android home screen
3	Û	Back
4	Ŕ	Volume-
5	回	Volume+
6	0	Short press to enter the main menu.  Long press to lock the screen.
7	모	The entity key,. Its default function is start up/shut down Windows, you can customize its function.
8	0	Infrared receiver and power indicator.
9		Light sensor
10	0	<ul> <li>Indicator of Android system</li> <li>Flashing(blue):The system is starting up.</li> <li>Solid(blue): The system started normally.</li> <li>Solid(red):The system is standby.</li> </ul>
11	0	Indicator of Windows power, it is green when windows start up.

# 3.3 Interfaces

## Front and Back Panel

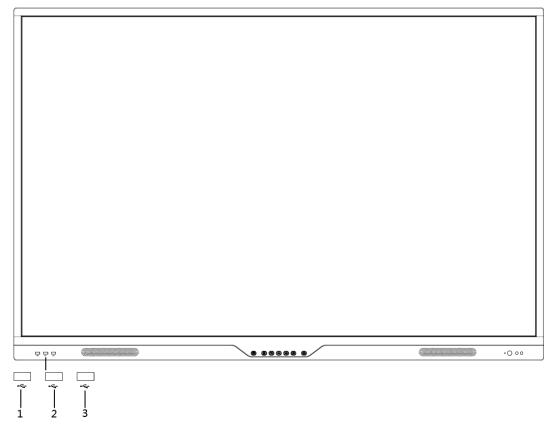


Figure 3-2 Front Panel

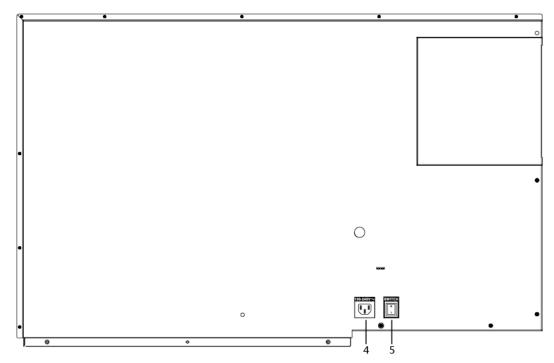


Figure 3-3 Back Panel

Table 3-2 Panel Description

No	Name	Function Description
1	USB	Windows/Android USB
2	USB	Windows/Android USB
3	USB	Windows/Android USB
4	100-240V~	Power supply
5	SWITCH	Power switch

#### Interfaces on Side Panel

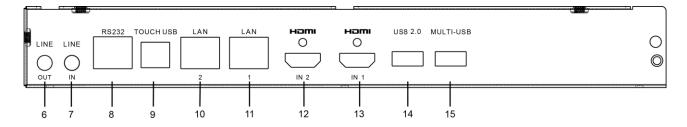


Figure 3-4 Interfaces on Side Panel

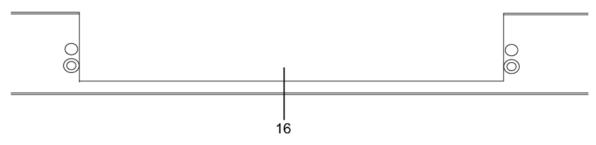


Figure 3-5 Computer Interface

Table 3-3 Panel Description

No.	Name	Function Description
6	LINE OUT	Audio output interface
7	LINE IN	Audio input interface
8	RS-232	RS-232 Serial interface
9	TOUCH USB	Touch control USB interface
10	LAN2	Network interface
11	LAN1	Network interface
12	HDMI IN2	HDMI2 input interface
13	HDMI IN1	HDMI1 input interface
14	USB 2.0	USB 2.0 interface
15	MULTI-USB	Multi-functional USB interface
16	PC Interface	Mounting interface for built-in PC

## **Bottom Interfaces**

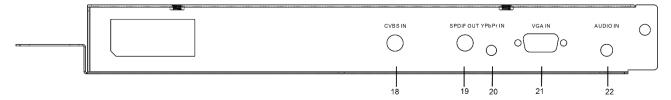


Figure 3-6 Bottom Interfaces

Table 3-4 Panel Description

		·
No.	Name	Function Description
18	CVBS IN	CVBS signal input interface
19	SPDIF OUT	Digital multimedia speaker interface
20	YPbPr IN	YPbPr signal input interface
21	VGA IN	VGA input interface
22	AUDIO IN	Audio input interface



- The appearance of different models under the same series may vary and is subject to change.
- Connecting both VGA and YPbPr signal sources at the same time is not allowed. Only one of them can be connected.

# 3.4 Connection to Personal Computer (PC)



The device must be disconnected from power supply before installation and disassembly.

## 3.4.1 Connect to PC by VGA

# NOTE

- USB cable is not contained in the product. Please purchase USB cable with type A connector to type B connector.
- Connect audio cable to LINE IN.

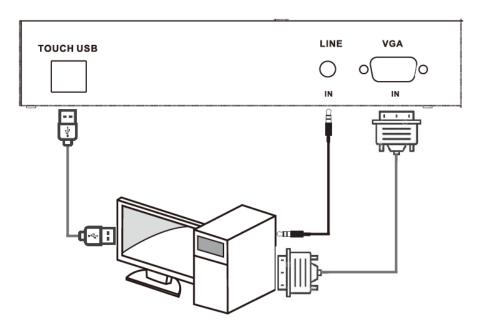


Figure 3-7 VGA Connection

## 3.4.2 Connect to PC by HDMI



 USB cable is not contained in the product. Please purchase USB cable with type A connector to type B connector.

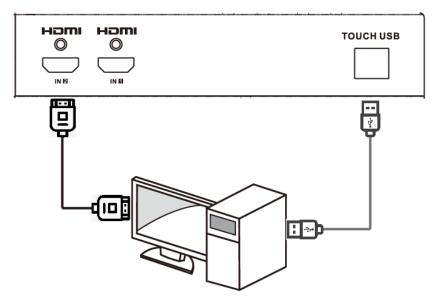


Figure 3-8 HDMI Connection

When PC signals are connected to the interfaces on the front panel of the device, the TOUCH-USB refers to the one on the front panel. The same applies to the rear panel.

# 3.5 Computer Installation

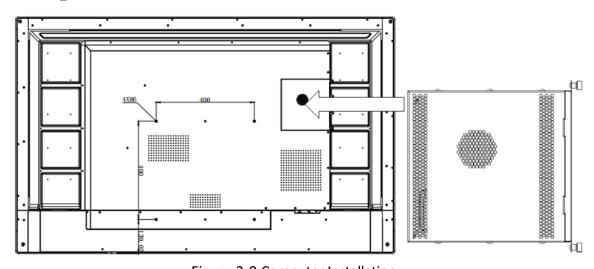


Figure 3-9 Computer Installation

The computer box is installed at the side slot of the device. When installing the box, make sure its ventilation hole is facing the same direction with the rear panel as shown above. Fasten the two side screws to fix the box into position.



#### WARNING

To avoid potential device damage, the computer box can be removed only after the device is disconnected from power.

## 3.6 Remote Control

To replace the batteries: take off the battery case cover, put in two AAA batteries and make sure the positive and negative electrodes are properly matched.



Figure 3-10 Remote Controller

Table 3-5 Description of Remote Control Buttons		
Button Name	Function Description	
Ф	Standby and startup	
衂	Audio on/off	
2	Enter start menu	
Space	Space	
Alt + Tab	Switch window for external Windows input	
Alt + F4	Close window for external Windows input	
0 - 9	Input numbers	
W-Board	Run Android whiteboard	
Capture	Screenshot	
PgUp	Previous page for powerpoint	
PgDn	Next page for powerpoint	
Red button	Run status bar	
Green button	Extended function	
Yellow button	Extended function	
Blue button	Extended function	
Home	Android home screen	
(X)	Backspace	
<b>◄/►/▲/▼</b>	Navigation	
Menu	OSD menu; switch to signal source	
Back	Back	
CH+/-	Select ATV/DTV, channel	
VOL+/-	Adjust volume	
ECO	Turn on/off the screen backlight	
LOCK	Lock/unlock screen	
F1 – F12	F1 - F12 in Windows	



The appearance of the remote control is subject to change.



#### WARNING

When using the remote control, aim the device at the sensor receiver. Any obstacle in between may disturb normal operation.

Keep the control from strong vibration. Avoid direct sunlight when setting or placing the control, otherwise it may be deformed.

The control may malfunction under direct or strong light condition. In this case, change the operating direction or move closer to the sensor receiver.

Low battery reduces controlling distance, and new battery should be replaced. If the control will not be used for a long time, take out the battery to avoid weeping which may damage the control.

Do not use batteries of different types together or mix new and old batteries. Always change the batteries in pair.

Do not recharge, short-circuit, heat or disassemble batteries, or throw batteries into fire. Dispose of batteries according to environmental regulations. Do not expose batteries to overheated environment.

## 3.7 Mounting

#### Wall Mounting

The device can be installed using wall mount or mobile mount, as shown below.

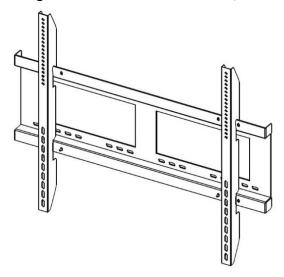


Figure 3-11 Wall Mount Front View

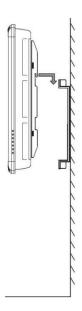


Figure 3-12 Wall Mount Side View



The wall mount is mobile horizontally. Please leave enough room at side for maintenance service.

## Mobile Mounting

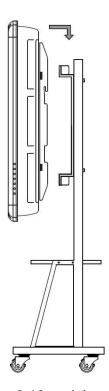


Figure 3-13 Mobile Mount

# Chapter 4 Basic Operation

## 4.1 Startup & Shutdown

#### 4.1.1 Startup

Connect the device to power supply and turn on the power switch. The power indicator on the front panel will turn red. Then press the multi-function power button on the front panel, the power indicator will turn blue.

When the device is powered on, the multi-function power button on the front panel can control the internal PC to startup or shutdown.



If the startup mode is set as Power On and Start, then the device will start up directly after turning on the power switch, and the power indicator will turn blue. See 6.8.3 Startup/Shutdown Settings for details.

#### 4.1.2 Eco Mode

The Eco function reduces the power consumption of the device by controlling the electric current used by the panel. Enabling the Eco will reduce the screen brightness to save power, plus the screen brightness automatically transitions fluidly-reducing energy use even more.

Enable the Eco mode through the following two ways.

- Press the multi-function power button on the front panel.
- Press the ECO button of the remote control.

Repeat the same operation again or touch anywhere on the screen to turn on the screen.

### 4.1.3 Standby

Switch the device to the standby mode in the following two ways:

- Long press the multi-function power button on the front panel.
- Press the power button of the remote control



When the device is installed with a running computer box, the system will prompt you to shut down the unit first.

#### **Interactive Display**

**Result**: When the device is switched to standby, the power indicator on the panel turns from blue to red.



Press the power button on the front panel or remote control to wake up the device.

#### 4.1.4 Shutdown

If the device is not installed with computer box, directly switch off the power to shut down the device.

If the device is installed with computer box. Press and hold the multi-function power button on the front panel to shut down the computer box. Then siwtch off the power to shut down the device.



Switching off the power of the device directly leads to force shutdown of the computer box. Next time when the device starts up, the Windows may enter error recovery mode and the touch screen will be disabled. Please access mouse and keyboard.

# Chapter 5 Sidebar Operations



Software interfaces and functions may vary with different device models. All pictures in this manual are for illustration purpose only.

Turn on the device to go to the main page. Tap or to show the sidebar.



Figure 5-1 Main Page

# 5.1 Basic Operations

Functions of the shortcut icons in sidebar are described below.

Table 5-1 Shortcut Icon Description

Icon	Function	Icon	Function
5	Return to the previous page.		Display all the windows.
	Return to the main page.	0	Enable the annotating mode.
9	Select shortcut tools.	=	Open the control center.

# 5.2 Annotating

Tap to enable annotating. You can add annotations anywhere on the page by touching and moving on the screen. The annotation bar pops up on the side of the screen.



Figure 5-2 Annotation Bar

## Interactive Display

Table 5-2 Annotation Bar Descriptions

Icon	Description	Icon	Description
	Select the pen color and hue range.	S	Select pen thickness. Enable angled stroke or not.
亩			Generate QR code to share the annotation. Other devices can scan the QR code to download the annotation.
			<ul> <li>When the LAN download is enabled, annotation can only be shared in LAN.</li> </ul>
	Delete the annotation.		<ul> <li>When the LAN download is disabled, public network will be used as the prior way to share annotation. If public network is not available, then it will use LAN to share annotation.</li> </ul>
9	Save the annotation page.	←]	Exit annotating.
@	Enable/Disable the LAN annotation sharing.		

## 5.3 Tool

Select Tools in the sidebar.

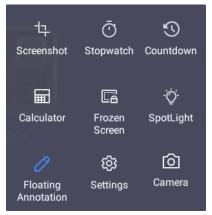


Figure 5-3 Tools

Table 5-3 Tool Description

Icon	Description	Icon	Description
4	Capture a screenshot of the current page.		Freeze the current screen image.
Ō	Stopwatch.	Ϋ́	Spotlight. It can light up a desired circular region as your desire.
<b>©</b>	Countdown.	0	Enable floating annotations.
	Calculator.	<b>(3)</b>	Go to settings.
<b>©</b>	Camera.		

#### 5.3.1 Screenshot

Tap then a capture area pops up on the current page. Adjust the area by tapping and dragging the four corners. The screenshot toolbar pops up on the lower right corner of the area.

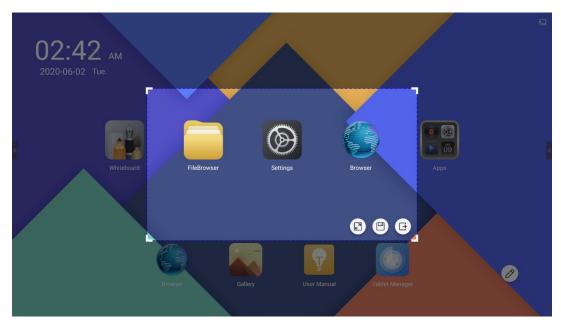


Figure 5-4 Screenshot Toolbar

Table 5-4 Screenshot Toolbar Descriptions

Icon	Description
	Capture the whole page.
	Save the screenshot in the capture area.
<b>B</b>	Exit screenshot.

## 5.3.2 Freeze Screen

Tap , then the current image will be frozen. You can zoom in to view the details of the image, add annotations on the image, or move the frozen image.



Figure 5-5 Toolbar

Table 5-5 Figure 6-5 Frozen Toolbar Descriptions

Icon	Description	Icon	Description
$\odot$	Zoom in the frozen image.	$\Theta$	Zoom out the frozen image.
K X	Display the frozen image in full screen.		Save the frozen image.
/	Call the annotation tool, and add annotations on the frozen image.	<u></u>	Exit.

#### 5.4 Control Center

There are multiple ways to enter the control center.

- Go to the sidebar and tap
- Press on the panel.
- Press **MENU** on the remote control.

In the control center, you can view live image from other signal sources, switch channels, adjust brightness and volume, etc.

#### 5.4.1 Live View



You can view live image from other connected signal sources under Android channel.

Step 1 Tap Live View

Step 2 Select a signal source. After a signal source is selected, the live view window on the right will display the waiting image.



Figure 5-6 Live View

Step 3 (Optional) Tap the live view window, the device will switch to live view signal source.

#### 5.4.2 Switch Channel

Tap Channel Switch, then select the available signal source (you can use direction buttons on remote control, or tap the screen to select the desired signal source).



Figure 5-7 Switching Channel

Figure 5-8

Name	Description	Name	Description
Android	Android operation system.	PC	Build-in computer signal source.
VGA	VGA signal source.	HDMI 1	HDMI signal source.
HDMI 2	HDMI signal source.	YPBPR	YPBPR signal source.
AV	AV signal source.	ATV	Analog TV signal source.

Name	Description	Name	Description
DTV	Digital TV signal source.		

## 5.4.3 Display Parameter



When the channel is not an Android channel, display parameters will be configurable.

Use direction buttons on remote control, or tap the screen to enter the display parameter settings interface.

- Tap Picture Mode to select the picture display mode, four types are available, including Standard, Game, Vivid, and User.
- When User mode is selected, you can manually adjust contrast, brightness, acutance, and saturation (when Zoom Mode is P2P, only contrast and brightness are adjustable).
- Tap Color Temperature, three types of mode are available, including Standard, Cold, and Warm.
- Tap **Zoom Mode**, multiple types are available, including 16:9,4:3, etc.

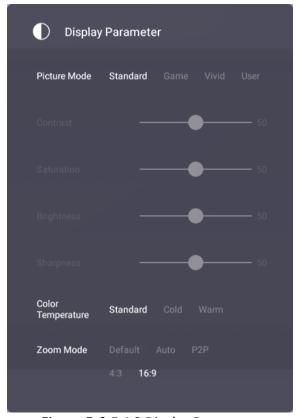


Figure 5-9 5.4.3 Display Parameter

#### 5.4.4 Sound Mode

Use direction buttons on remote control, or tap the screen to enter the interface.

- Tap **Sound Mode**, four modes are available, including **Standard**, **Music**, **Film**, and **User**.
- After the mode is selected, you can adjust the volume and balance.
- When Sound Mode is selected as User, you can manually adjust its parameters, like High Pitch, Low Pitch, etc.



## 5.4.5 Light Sensitive Settings

Use direction buttons on remote control, or tap the screen to enter the interface.

- You can manually adjust the backlight.
- Enable **Light Sensitive**, the device will adjust the screen backlight according to the environment brightness.

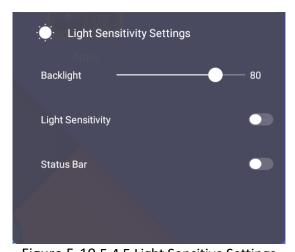


Figure 5-10 5.4.5 Light Sensitive Settings

• Enable Status Bar, then device temperature, CPU usage and memory usage will be displayed at the upper-right corner.

## 5.4.6 VGA Signal Control



You can set VGA parameters when the channel is VGA.

Use direction buttons on remote control, or tap the screen to enter the interface of Others.

- When the signal source is VGA, you can manually adjust parameters like Clock, Phase, etc.
- After tapping AUTO ADJUST, the device will automatically adjust its parameters.

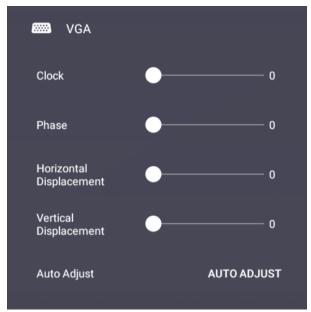


Figure 5-11 VGA

# Chapter 6 Configuration

After device starts up, press at the control panel (or press **Menu** in remote control, or hold the infrared in screen bottom) to pop up menu on the screen.

By operating the menus, you can switch input signal sources, set display and sound parametes, search channels, and etc.

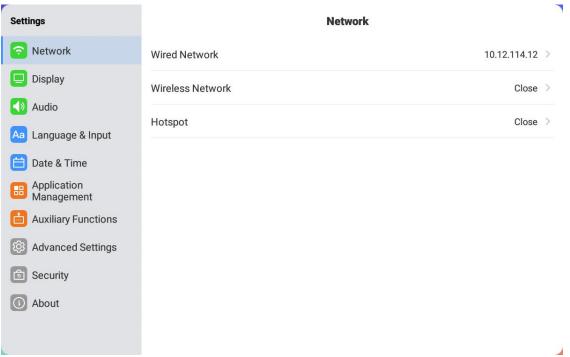


Figure 6-1 Menu

#### 6.1 Network

From the **Settings** menu, you can configure the network, Bluetooth, hotspot, display, language, and date & time settings.

#### 6.1.1 Set Wired Network

Step 1 Go to **Settings** > **Network** > **Wired Network**.

Step 2 Enable Wired Network.



Figure 6-2 Wired Network

Step 3 (Optional) Tap Network Settings to set proxy or static IP.

#### 6.1.2 Set Wireless Network (Optional)

Go to **Settings** > **Network** > **Wireless Network** to enable it, and add or connect to an available wireless network.

#### Connect to an Wireless Network

Select an available wireless network, and enter its password to join it.

You can tap the connected wireless network to view its information. If you want to clear the network information, tap **Clear Network**.

Tap Cancel to exit the interface.

#### Add Other Networks

Step 1 Tap Add Other Networks.

Step 2 Enter the Wi-Fi name.

Step 3 Set Security.

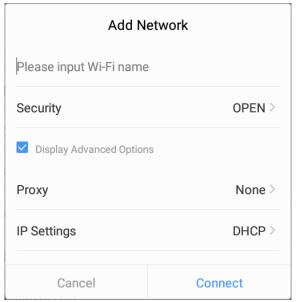


Figure 6-3 Add Wireless Network

Step 4 (Optional) Check **Display Advanced Options** to set proxy and IP settings.

Step 5 Tap Connect to connect your device to the network.

#### 6.1.3 Set Hotspot

When your device is connected to a wired network, it can become a WLAN hotspot to share its network.

Step 1 Go to **Settings** > **Network** > **Hotspot**.

Step 2 Select Hotspot.

Step 3 Enable Portable WLAN Hotspot to turn on hotspot.

Step 4 Tap **Set WLAN Hotspot** to set hotspot parameters, including the security mode and the password.

Step 5 Click Save.



If your device supports both 2.4 GHz and 5 GHz, it is recommend to set AP Frequency as 5 GHz to improve the network transmission speed.

## 6.2 Display

You can set display parameters like brightness and sleep mode in **Settings > Display**.

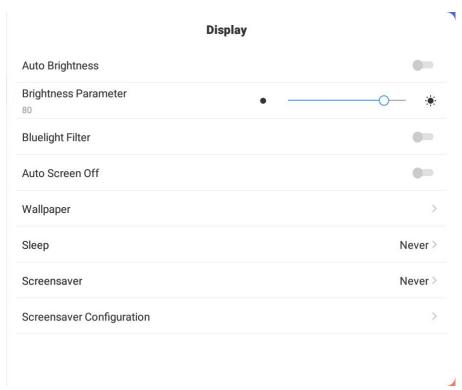


Figure 6-4 Display Settings

- Auto Brightness: The System will automatically adjust the brightness according the environment.
- Brightness Parameter: You can manually adjust the brightness.
- **Bluelight Filter:** After it enabled, the device will filter bluelight, and you can set the level of filtering. The higher filtering level you have set, the more bluelight will be filtered.
- Wallpaper: Select a wallpaper from local directory for your device.
- **Sleep**: The system will go to sleep mode when there is no operation for a certain period.
- **Screensaver**: When there is no operation for a certain period, the device will enable screensaver.
- Screensaver Configuration: You can set the screensaver image.

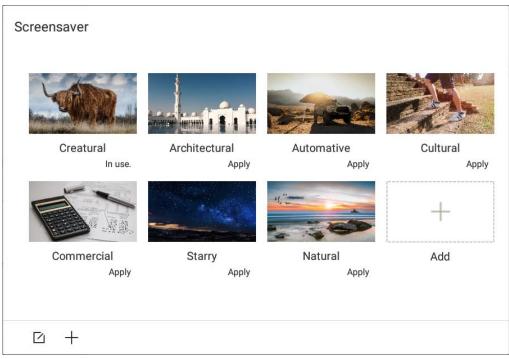


Figure 6-5 Set Screensaver



You can click + to add new pictures into the screensaver.

## 6.3 Audio

Go to **Settings** > **Audio** to set audio parameters. Under **Standard**, **Music** and **Film** mode, you can only set **Balance** and **Volume**. Under **User** mode, you can custom all parameters.

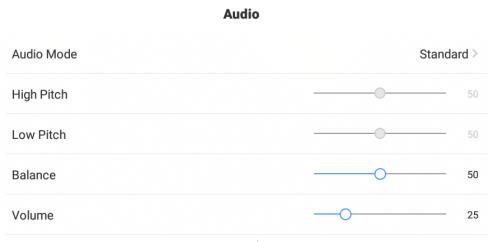


Figure 6-6 Audio Settings

## 6.4 Language and Input Method

Go to **Settings** > **Language & Input** to configure the following settings

- Language: Different languages are selectable.
- **Input Method**: Two input methods are provided. Downloading third-party input method is supported.



Figure 6-7 Language & Input

#### 6.5 Date and Time

Go to **Settings** > **Date & Time** to set the date and time.

• **Time Sync**: The device will sync time with internet when it is enabled. You can disable it to manually set the time.

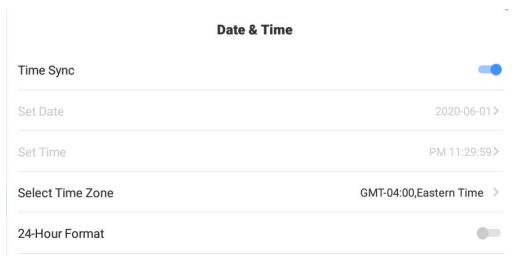


Figure 6-8 Date & Time

# 6.6 Applicaion Mangagement

Go to **Settings** > **Application Management** to manage the applications installed on the system.

You can select an application to view the detailed information, and perform the following operations for the application: force stop, clear data, clear cache, etc.

The pre-installed system apps cannot be uninstalled. You can go to **Application Details**, and tap the app icon to open an app.

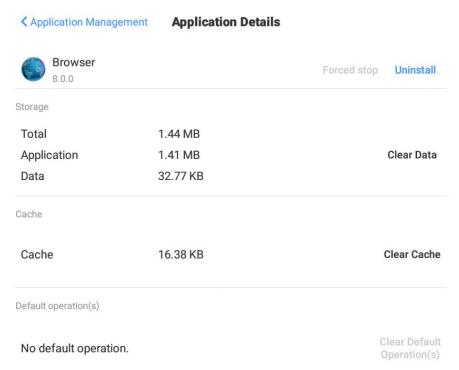


Figure 6-9 Application Management

## 6.7 Temperature Control

The system can monitor the internal temperature in real-time. When the temperature exceeds the warning or alarm threshold value, the system will notify you to avoid overheat and device damage.

Step 1 Go to Settings > Auxiliary Functions > Intelligent Temperature Control.

Step 2 Enable **Temperature Detection**.

Step 3 Set Warning Temperature and Alarm Temperature.

- Warning Temperature: When the device temperature exceeds the warning temperature threshold, the temperature will become red in the status bar at the upper-right corner.
- Alarm Temperature: When the device temperature exceeds the alarm temperature threshold, the temperature information will pop up, and ask you whether to shut down the device.

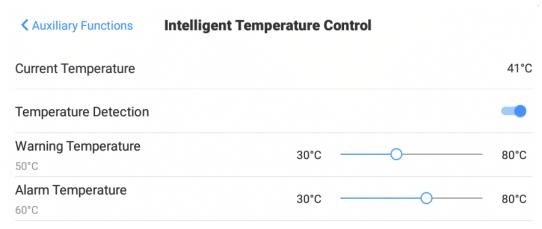


Figure 6-10 Intelligent Temperature Control

# 6.8 Advanced Settings

Go to **Settings** > **Advanced Settings** to configure the following settings.

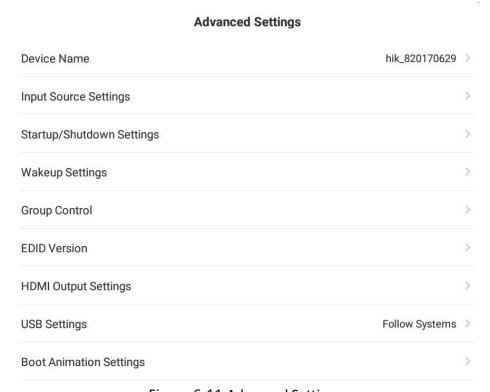


Figure 6-11 Advanced Settings

#### 6.8.1 Device Name

You can view the device name, or tap the device name to edit it.

#### 6.8.2 Input Source Settings

- **Startup Input Source**: Select the input signal source as internal PC or external signal source when the device starts up.
- Rename Startup Input Source: In order to distinguish different sources, you can edit the input source name.
- Auto Switch When Connecting Signal Source: When a signal source is plugged in and detected, the device will automatically switch to this source.
- Auto Switch When Disconnecting Signal Source: After the external signal source is disconnected, the device will automatically switch the source to which you have set in advance.

## 6.8.3 Startup/Shutdown Settings

- Startup Mode: Two options are available, Startup When Powered On and Standby When Powered On.
- Scheduled Startup/Shutdown: To set the daily startup and shutdown time for your device.
- No-signal Shutdown: When there is no signal in a certain period, the device will shut down automatically.

#### 6.8.4 Wakeup Settings

- Wake from Serial Port: The device will wake up when it receives the request from serial port.
- Wake from Signal Source: The device will wake up when it detects input signal source.

#### 6.8.5 EDID Version

EDID version is classified as 1.4 and 2.0.

- 1.4 version is suitable for input signals with wider resolution types (up to 3840 × 2160, 30 fps).
- 2.0 version is suitable for input signals with up to 4K, 60 fps.

#### 6.8.6 USB Settings

You can assign which operating system to use the USB interface.

- Android: USB interface is only available for Android operating system.
- PC: USB interface is only available when operating system is PC.
- Follow Systems: The operating system of which can use the USB interface is depend on the system. If the system is using Android as its operating system, then USB interface will be available for Android.

#### 6.8.7 Boot Animation Settings

If you have a boot animation in the bootanimation folder of a USB flash drive, you can use it as the device boot animation.

Or, you can reset the boot animation. New settings will take effect after restart.

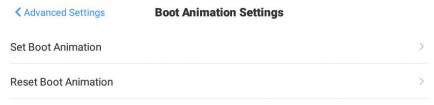


Figure 6-12 6.8.8 Boot Animation Settings

#### 6.8.8 PC One-Touch Restore

You can restore the internal PC to factory defaults.

### 6.8.9 Floating Ball Settings

Floating ball functions can be customized.

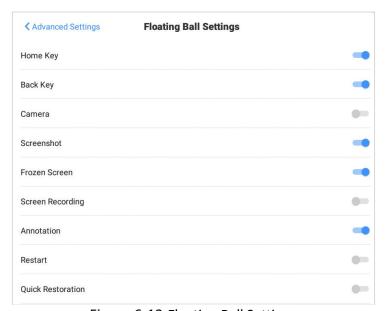


Figure 6-13 Floating Ball Settings

## 6.8.10 Entity Key Settings

You can customize the function of the rightmost button ( $\Box$ ) at your device front panel.

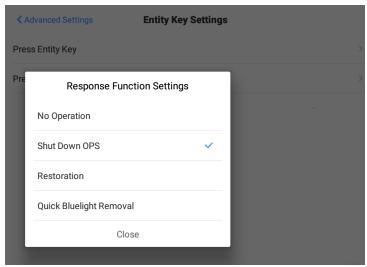


Figure 6-14 Entity Key Settings

#### 6.8.11 Restore to Factory Default

When your device is restored to factory default settings, all configuration data will be lost. Please be cautious when operating this function.

# 6.9 Security Settings

#### 6.9.1 Lock Screen Password

Lock screen password is used for unlocking your device when the device starts up, or wakes up.

Step 1 Go to **Settings** > **Security**.

Step 2 Enable lock screen password.

Step 3 Enter the lock screen password, and confirm it.



- You can change the lock screen password after it is enabled.
- You can tap Lock Setting Items to select whether to enter lock screen password when go to network settings or advanced settings.

#### 6.9.2 USB Key

When you have forgot your password, you can use a specified USB key to unlock the screen.

# NOTE

- USB key product is an optional item.
- The function is open by default.

# 6.10 View System Info

Go to **System > About** to view system information.

# Chapter 7 Smart Applications

# 7.1 File Management

Step 1 Tap File Management.

Step 2 Tap Image/Doc/AV to view the corresponding files.

- Tap the **All** tab to view all the document, capture, video, picture, and music files saved in device or connected USB flash drive.
- Tap the All button in right bottom corner to select all files in current page.
- Tap the Copy/Paste/Delete button to copy/paste/delete the selected files.

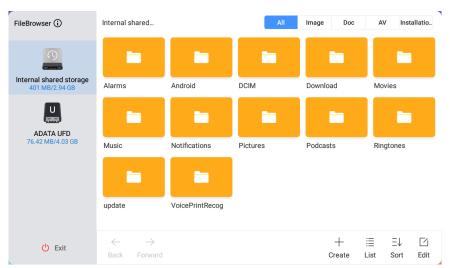


Figure 7-1 File Management

Table 7-1 File Management Icon Description

Icon	Description	Icon	Description
$\leftarrow \rightarrow$	Go to the previous/next page.	+	Add new folder.
000	Change the display type of viewing files.	Ξ↓	Sort the file order.
ď	Open the file operating bar. The icon description of file operating bar is shown below.		

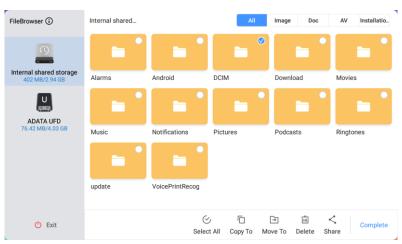


Figure 7-2 File Operating Bar

Table 7-2 File Operating Bar Icon Description

Icon	Description	Icon	Description
$\otimes$	Select all files.		Duplicate the selected file.
$\rightarrow$	Move the selected file.	Ē	Delete the selected file.
<	Share the selected file.		



Tap a file and hold, then the options like move, duplicate, share will appear.

#### 7.2 Browser



Ensure your device is properly connected to internet.

Tap Browser, then enter a website in the address bar to surf the internet.

# 7.3 Roaming Buttons

Tap the screen in two points and hold till the roaming button pops up. You can drag it to any area of screen, or tap the roaming button to unfold it and show buttons.



Figure 7-3 Roaming Button

Figure 7-4 Roaming Button Description

Icon	Description	Icon	Description
(-	Exit the current interface.		Go back to home page.
5	Return to the previous step.	•	Add note to the captured picture
	Take a screenshot.		Freeze the current screen image.

# Appendix 1 Parameter Description

	Image mode	Bright, standard, gentle, user, game, auto, computer, bright-color, nature, and sport are provided.
	Contrast	The difference in luminance or color that makes an object distinguishable. Increase the value to enhance the difference. Decrease the value to reduce the difference. Contrast value range: [0,100].
	Brightness	The luminance of the image. Increase the value to enhance the brightness. Decrease the value to reduce the brightness. Brightness value range: [0,100].
Image	Sharpness	The definition of the image. Increase the value to enhance the sharpness. Decrease the value to reduce the sharpness. Sharpness value range: [0,100].
	Saturation	The color intensity of the image. Increase the value to enhance the saturation. Decrease the value to reduce the saturation. Saturation value range: [0,100].
	Color temperature	Standard, warm, and cool options are provided.
	Ratio	Default, 16:9, auto, panorama, Just Scan, zoom in 1, zoom 2, 14:9, and point-to-point potions are provided.
	Sound mode	Standard, Music, Movie, Sports, User, On-Site1, and On-Site2 are selectable.
Sound	Low pitch	The low pitch value. Increase the value to enhance the low pitch. Decrease the value to reduce the low pitch. Low pitch value range: [0,100].
	High pitch	The high pitch value. Increase the value to enhance the high pitch. Decrease the value to reduce the high pitch. High pitch value range: [0,100].
	Balance	The balance of left and right channels. Drag the slider to left to increase the left channel volume. Drag the slider to right to increase the right channel volume. Balance value range: [L50, R50]. The balance volume is 0 as a general rule.
	Volume	The volume value. Increase the value to enhance the volume. Decrease the value to reduce the volume. Volume value range: [0,100].

# Interactive Display

Light	Backlight	The screen brightness. Increase the value to enhance the brightness.  Decrease the value to reduce the brightness. Backlight value range: [0,100].
Other	Status bar	Shows the device temperature, CPU usage, and memory usage.

# Appendix 2 Troubleshooting

Trouble	Reason	Solution
Snow spots exist in image and the device is noisy.	<ul> <li>Antenna is loose or cable is damaged.</li> <li>Antenna type is wrong.</li> <li>Antenna direction or positon is wrong.</li> <li>Signal is week.</li> </ul>	<ul> <li>Check whether the antenna plug and cable are well.</li> <li>Check whether the antenna type is VHF or UHF.</li> <li>Adjust the antenna direction and position.</li> <li>Try the strengthening signal equipment.</li> </ul>
No image in screen, no sound sends out from the device, and the power indicator is unlit.	Power supply plug is loose.	Check the power cable connection.
Spots or stripes exist in the image.	Signal is being interrupted by automotive, neon light, electricity, blower, etc.	Do not use the interruption producing equipment near the device.
Image ghosting.	<ul> <li>The device signal is reflected by the nearby mountain or high building.</li> <li>Antenna direction is wrong.</li> </ul>	<ul><li>Try the high-gain antenna.</li><li>Adjust the antenna direction.</li></ul>
The image is not colored.	The saturation is low.	Enter Image settings interface and increase the saturation value.
The device sends out no sound.	<ul><li>The volume is low.</li><li>The device is muted.</li></ul>	<ul> <li>Increase the volume.</li> <li>Press the  button in remote control to turn on audio.</li> </ul>
No signal in display and power indicator flashes in red.	Signal input cable is loose or striped.	Check whether the signal input cable is well.

# Interactive Display

Trouble	Reason	Solution
Image doesn't perfectly fill into the display or is fuzzy.	<ul><li>Wrongly adjusted.</li><li>Display mode is wrong.</li></ul>	<ul> <li>Apply auto-adjust function.</li> <li>Enter the More menu to adjust horizontal or vertical position.</li> <li>Apply recommended display mode.</li> </ul>
Control via remote control is invalid. Or control distance of remote control is too short.	<ul> <li>IR receiver is overlapped.</li> <li>Remote control battery is insufficient.</li> </ul>	<ul><li>Remove the overlap object.</li><li>Change battery.</li></ul>
Accessing internet via browser failed.	<ul> <li>Network parameters are unavailable.</li> <li>Network connection is not well.</li> <li>Network server is not enabled.</li> </ul>	<ul> <li>Request network         administrator for available         network IP address and other         parameters.</li> <li>Check the network cable         connection.</li> <li>Consult the internet service         provider.</li> </ul>
Playing back online video is not fluent.	<ul> <li>Network bandwidth is insufficient.</li> <li>Buffer or download multiple movies synchronously.</li> <li>Multiple computers share the same network.</li> </ul>	<ul> <li>Increase your network bandwidth.</li> <li>Try another playback address.</li> </ul>
Device halted or crashed.	<ul> <li>Too many programs are running.</li> <li>The device is interrupted by the external situation (lightning, static electricity, etc.).</li> </ul>	Cut off device power supply for 1 to 2 minutes. And power on the device again.

