newline

STV+ Series

Intelligent Display

User Manual V1.2

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Welcome to the world of **Newline**.

Thank you for choosing the **Newline** STV+ series Interactive Intelligent Display. Please use this document to get the most out of your screen.

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, and (2) this device must accept any interference received, including interference that may cause undesired operation.

NOTE 1: This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

- Reorient or relocate the receiving antenna.
- Increase the separation between the equipment and receiver.
- Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
- Consult the dealer or an experienced radio/TV technician for help.

NOTE 2: Any changes or modifications to this unit not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment.

The symbol of the crossed out wheeled bin indicates this machine should not be placed in municipal waste. Instead, dispose of waste equipment by handing it over to a designated collection point for the recycling of electrical and electronic equipment.

Energy Star Compliance.

Signage Displays with Plug-in Module.

As an ENERGY STAR Partner, Newline Interactive Inc., has followed the EPA's enhanced Product qualification and certification process to ensure that the products marked with the ENERGY STAR logo are ENERGY STAR qualified per the applicable ENERGY STAR guidelines for energy efficiency. The logo appears on the pen tray near front connections on all ENERGY STAR qualified Signage Displays.

The ENERGY STAR program for Signage Displays was created by EPA to promote energy efficiency and reduce air pollution through more energy-efficient equipment in offices, classrooms and factories. One way that a product achieve this goal is by using a power management feature to reduce power consumption when the product is not in use.

In the event that brightness settings or power mode settings are changed by the user, energy consumption of the display may increase beyond the limits required for ENERGY STAR certification.

Additional information on the ENERGY STAR program and its environmental benefits are available on the EPA ENERGY STAR Power Management website at http://www.energystar.gov/powermanagement.

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For production, above information will need to be available for the Energy Star V8 build from 27th January 2020.

STV-4324-PLUS/STV-5524-PLUS: Manufacturer-reported maximum luminance LMax Reported is 260 cd/m2. STV-6524-PLUS: Manufacturer-reported maximum luminance LMax Reported is 270 cd/m2. STV-7524-PLUS: Manufacturer-reported maximum luminance LMax Reported is 300 cd/m2. STV-8524-PLUS: Manufacturer-reported maximum luminance LMax Reported is 350 cd/m2. STV-9824-PLUS: Manufacturer-reported maximum luminance LMax Reported is 450 cd/m2.

Symbol Conventions

Symbols are used in this document to indicate operations that need particular attention. The symbols are defined as follows:

NOTE	Provides additional information to supplement operation in the main text.
CAUTION	Indicates a potentially hazardous situation that, if not avoided, could result in equipment damage, data loss, performance deterioration, or unanticipated results.
WARNING	Indicates a hazard with risk that, if not avoided, could result in death or injury.

Safety Instruction

For your safety, please read the following instruction before you use the machine. Serious injury or property damage may be caused by improper operations. Do not try to repair the machine on your own.

⚠ WARNING	
	Disconnect the machine from power supply immediately if major failures occur. Major failures include the following: • Smoke, peculiar smell or abnormal sound is discharged from the machine. • No image or sound is displayed, or the image error occurs. In the preceding scenarios, do not continue to use the machine. Disconnect power supply immediately and contact professional staff for troubleshooting.
	Do not drop liquid, metal or anything combustible into the machine. • If any liquid or metal is dropped into the machine, power off the machine and disconnect power supply, then contact professional staff for solutions. • Pay attention to children when they are close to the machine.
	Put the machine on a stable surface. An unstable surface includes and does not limited to an inclined plane, a shaky stand, desk or platform, which might cause turnover and damage.
	Do not open the cover or change the machine on your own. High voltage components are installed in the machine. When you open the cover, high voltage, electric shock, or other dangerous situations may occur. If inspection, adjustment, or maintenance is required, contact the local distributor for help.
	Use the specified power supply. • To prevent the machine from being damaged, do not use any types of power cables other than the one provided with the machine. • Use a three-wire socket and ensure that it is properly grounded. • Pull out the power plug from the socket if the machine is not used for a long period.
	Clean the dust and metal on the power plug regularly. • Fire or electric shock may be caused if the machine is powered on, when you are cleaning. • Pull out the power plug before cleaning it with a dried cloth.
	Do not put items on the top of the machine. • Do not put items, such as a container for liquid (a vase, flowerpot, cosmetics or liquid medicine) on the top of the machine. • If any water or liquid is spilled on the machine, a short circuit may occur and cause fire or electric shock. • Do not walk on or hang any items on the machine.

⚠ WARNING

Do not install the machine in an improper place.

- Do not install the machine in humid places, such as the bathroom, the shower room, near windows, or outdoor environments that experience rain, snow or other harsh weather. Avoid installation near hot spring vapor. The preceding environments may cause faults in the machine or electric shock under extreme conditions.
- Do not put exposed fire source, such as an ignited candle, on the machine.

Pull out the power plug during thunderstorms.

- Do not touch the machine during a lighting storm to avoid electric shock.
- Install or place components that supply high enough voltage to cause personal injury out of the reach of children.

Do not touch the power cable with wet hands.

⚠ CAUTION

Do not install the machine in high temperature environments.

- Do not install the machine near a heat source, such as a radiator, a heat reservoir, a stove or other heating machines.
- Do not expose the machine to direct sunlight, which may cause high temperatures and subsequent faults in the machine.

For transport:

- Pack the machine for transport or maintenance by using the cartons and cushioning material provided with the machine.
- Vertically move the machine during transport. The screen or other components are easily broken if the machine is moved by an improper way.
- Before you move the machine, disconnect all external connections and separate all toppling preventing machines. Move the machine carefully to prevent it from being hit or squeezed, especially the screen, which may cause injury if broken.

Do not cover or block up any vents on the machine.

- Any overheated components may cause fire, damage the machine, and shorten the service life.
- Do not lay the machine down where the venting surface will be covered.
- Do not install the machine on a carpet or cloth.
- Do not use a cloth such as table cloth to cover the machine.

⚠ CAUTION

Keep away from the machine when you use a radio.

The machine complies with the international EMI standard to pervent radio interference. However, interference may still exists and causes noise in the radio. If noise occurs in the radio, try the following solutions.

- Adjust the direction of the radio antenna to avoid the interference from the machine.
- Keep the radio away from the machine.

Use the battery correctly.

- Galvanic corrosion, electric leakage, and even fire may be caused by improper battery usage.
- It is recommended to use the designated type of battery and install the battery by correct electrodes (positive and negative).
- Do not install and use new battery with a used one.
- Take out the battery if the remote control is not used for a long period.
- Do not expose the battery to overheated environments such as sunlight and firing.
- Dispose of the used battery based on your local regulations.

Do not damage the power cable.

- Do not damage, change, twist, bend, or forcibly drag the power cable.
- Do not put weights (such as the machine itself) on the power cable.
- Do not forcibly drag the cable when you pull out the power plug. If the power cable is damaged, please contact the local distributor to repair or replace it.
- The power cable in the accessory box is for this machine only. Do not use it on other machines.

Additional advice:

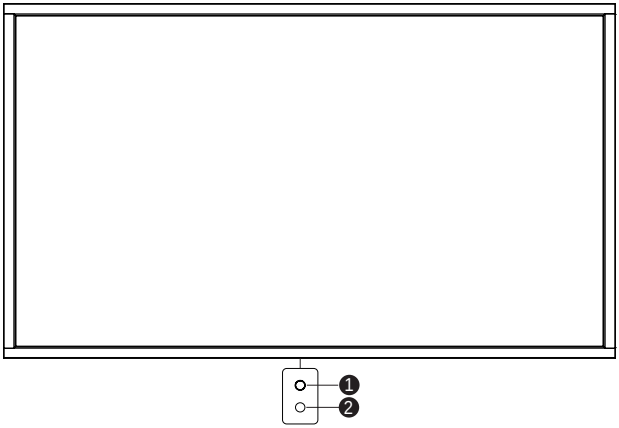
- Use the machine in an environment with comfortable lighting. It is harmful to your eyes to watch in a too bright or too dark environment.
- Relax your eyes after a period of time for watching.
- Keep sufficient distance from the machine to protect your eyes and prevent eyestrain.
- Adjust the volume to an appropriate level, especially at night.
- Use amplifier equipment as the audio input source with caution. If you must use amplifier equipment, the input power should not exceed the maximum of speaker power. Otherwise, the speaker can become overpowered and damaged.

1 Parts and Functions

Parts

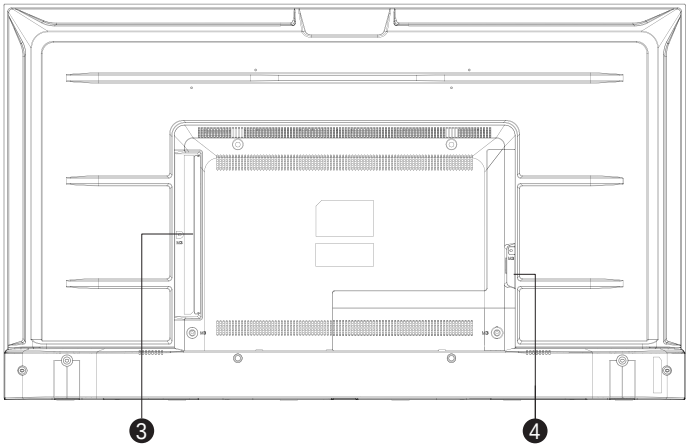
◆ Front View

● STV-4324-PLUS / STV-5524-PLUS / STV-6524-PLUS
STV-7524-PLUS / STV-8524-PLUS / STV-9824-PLUS:

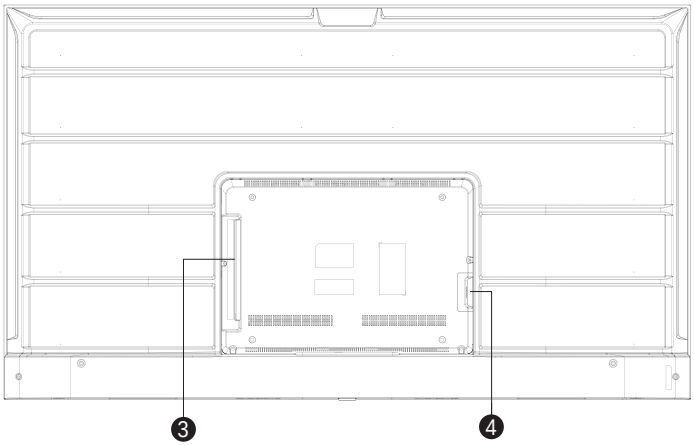


◆ Rear View

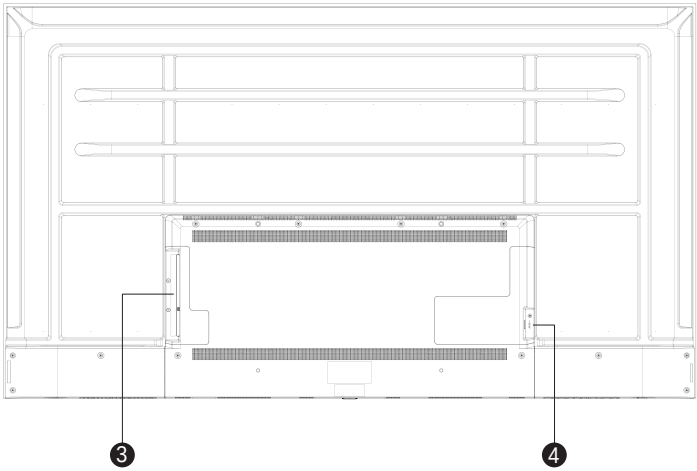
● STV-4324-PLUS / STV-5524-PLUS:



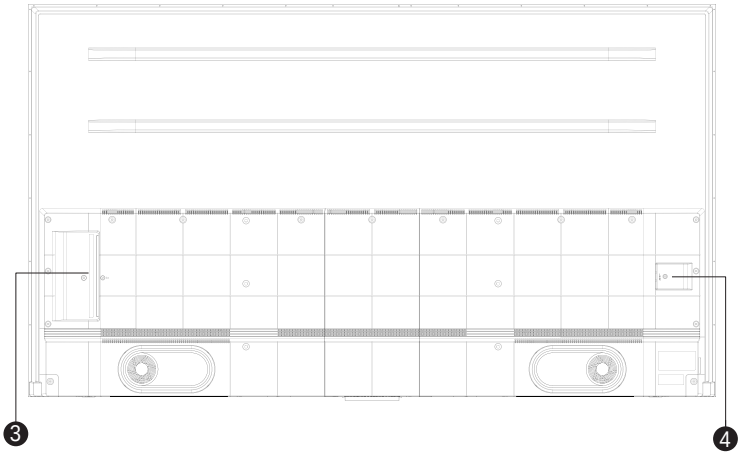
● STV-6524-PLUS / STV-7524-PLUS:



● STV-8524-PLUS:



● STV-9824-PLUS:



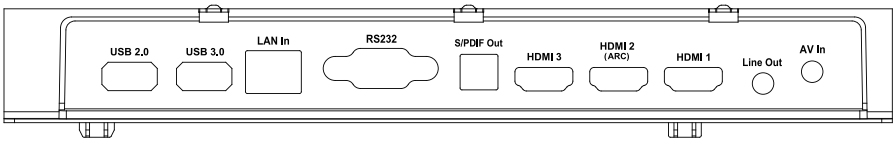
1. Indicator Light
2. Power Switch
3. Rear Ports
4. Power Supply Plug

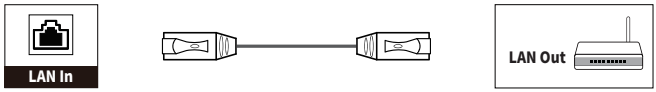
◆ Rear Ports

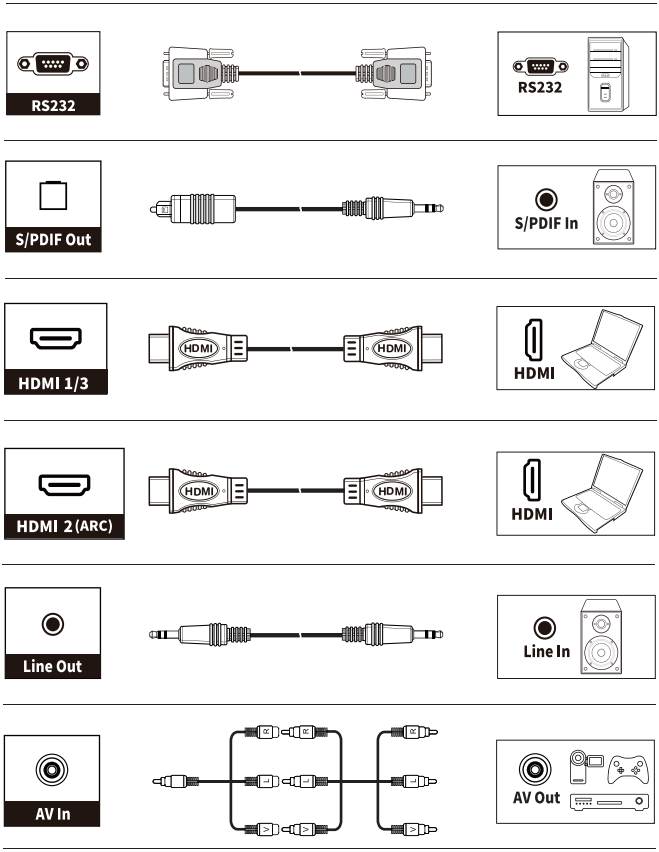
CAUTION

- While HDMI offers support for cables of varying lengths, the maximum cable length that Newline recommends for optimal perfommance is 3 meters (10 feet) for HDMI and1.8 meters (around 6 feet) for Display Port. Using cable longer than recommended length may cause data loss and a negative impact to display quality.

● Right interface







Note

Please do not connect a 2.4G wireless mouse and USB 3.0 devices simultaneously, on the left back side of the display, in order to avoid the interference.

Remote Control

CAUTION

Carefully read the following instructions before using the remote control to avoid possible faults:

- Do not drop or damage the remote control.
- Do not spill water or other liquids on the remote control.
- Do not place the remote control on a wet object.
- Do not place the remote control under direct sunlight or near an overheating heat source.

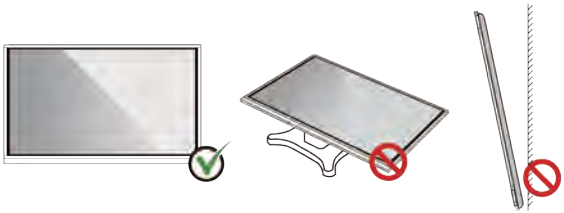
Buttons	Operations
⏻	Power on/off/Sleep/Restart.
🔇	Mute/Unmute Audio.
⌂	Go back to Home page
☰	Open the system menu.
‹ ^ ›	Up/Down/Left/Right
OK	Confirm/OK.
←	Return to Previous/Exit
⎆	To select input source.
USB	To access File Commander.
🔊+/🔊−	To control the volume.
⌨	To access WiFi channel and wired network channel under settings.
🖱	Open/turn off the wireless mouse mode.
⚙	To display the Settings menu.
⋮⋮⋮	To access application list page.
SMART	To start pairing Bluetooth accessories.

2 Installation Guide

Safety Precautions

◆ Installation Environment

◆ Installation Direction



Hang the Product Horizontally | Do Not Lay Flat | Do Not Install Tilted

Installation Precautions

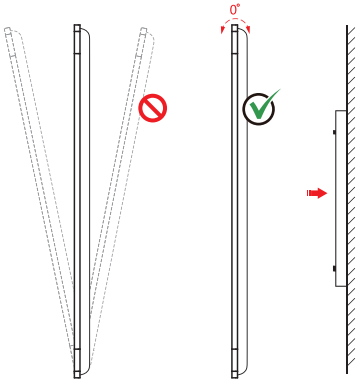
- When using a mobile stand, ensure that the weight of the machine is less than the loading capacity of the mobile stand.
- When using the wall-mount bracket, ensure that the wall can support the weight of the machine. We recommend that the wall surface be reinforced and have a loading capacity 4 times of the weight of the machine. Consult a professional installer for wall-mount installation.

Note

- The company does not undertake relevant legal responsibility for any problems caused by improper operation, if the third party mobile stand, or wall-mount bracket is beyond the scope of the machine.
- Do not install the machine where it might be hit by a door.

◆ Vertical installation

When installing, try to keep the machine vertical.Excessive tilt angle may cause the screen glass to fall off or the machine to collapse.

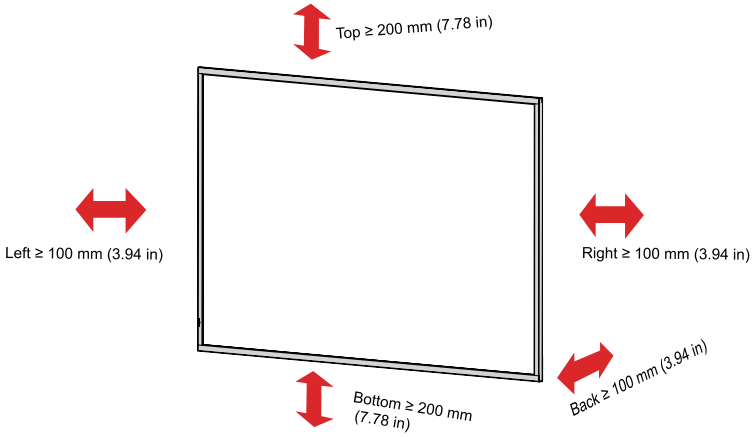


📖 Note

For any problem, please contact our support desk. Our company is not responsible for any damage or losses incurred by users if the users fails to follow the instructions.

◆ Ventilation

Ensure adequate ventilation and/or air conditioning environment. We recommend keeping certain distances from the side of the machine to the wall or panels. Ventilation requirements are shown in following figure.



Installation

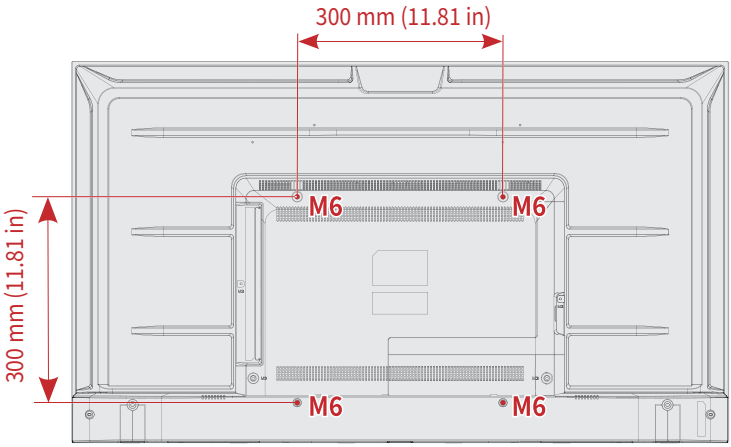
The dimensions of the four bracket mounting holes on the back panel are VESA MIS-F compliant. Dimensions of the mounting holes on the back panel are shown on the following figue.

- STV-4324-PLUS / STV-5524-PLUS: 300 x 300 mm /11.81 x 11.81in;
- STV-6524-PLUS / STV-7524-PLUS: 400 x 300 mm /15.75 x 11.81in;
- STV-8524-PLUS: 500 x 400 mm/19.68 x 15.75 in;
- STV-9824-PLUS: 800 x 200 x 200 mm/31.50 x 7.87 x 7.87in.

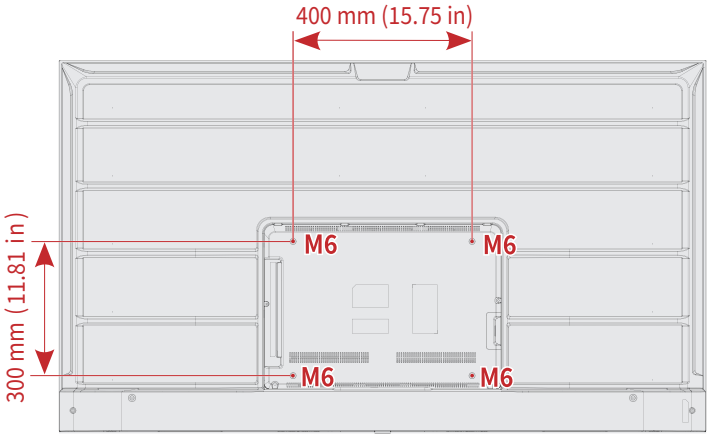
Note

- Consult a professional installer to install the machine.

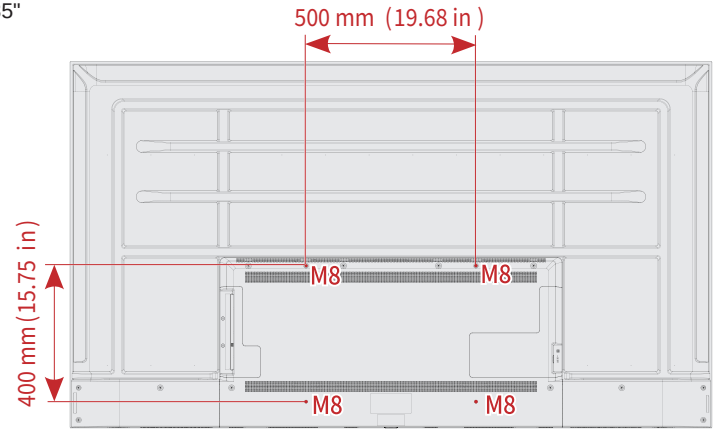
43"/55"



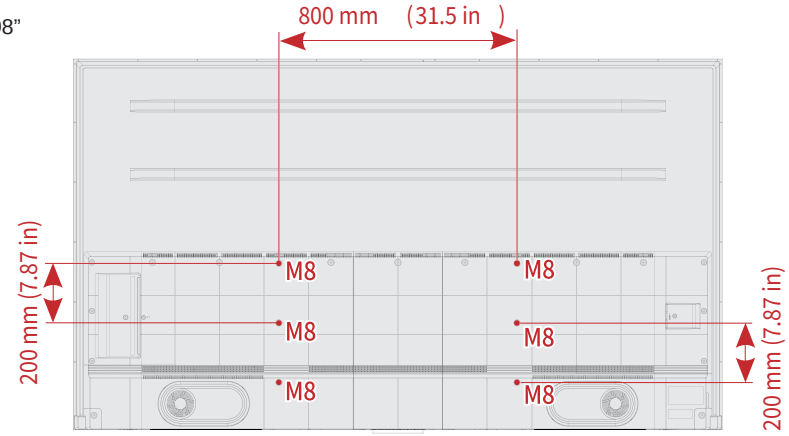
65"/75"


400 mm (15.75 in)
300 mm (11.81 in)
M6
M6
M6
M6

85"


500 mm (19.68 in)
400 mm (15.75 in)
M8
M8
M8
M8

98”


800 mm (31.5 in)
200 mm (7.87 in)
M8
M8
M8
M8
M8
M8
200 mm (7.87 in)

3 Turning On/Off

Power On

Step 1: Plug the power supply into the power outlet fully and plug the power connector into the side of the machine. Ensure the power is in the range of 100 V to 240 V with frequency at 50 Hz/60 Hz ± 5%.

Note

The power outlet should be installed near the machine and shall be easily accessible.

Step 2: Press the “Power” button on the bottom or on the remote control.

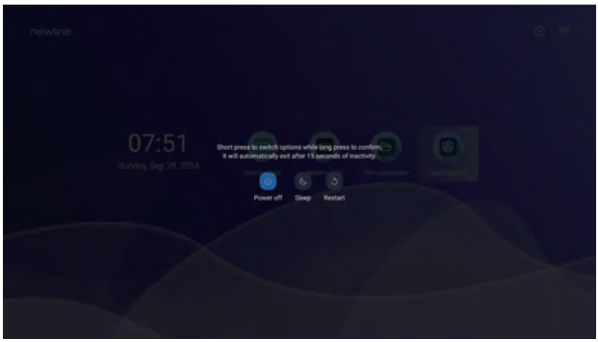
Power Off

Step 1: Press the “**Power**” button on the bottom or press on the remote control, the power indicator will turn to red.

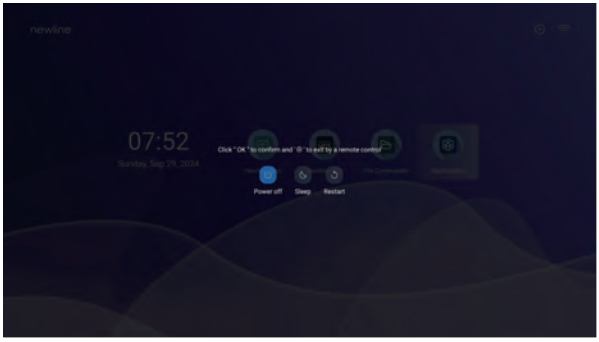
Step 2: If you are not going to use the display for an extended period of time, we recommend you to unplug the power cord.

Power Option

Press the physical power button once to enter the power option menu (Power off/ Sleep/Restart). Short press to switch options and long press to confirm. It will automatically exit this menu after 15 seconds of inactivity.



Press the ⏻ button on the remote control to enter the power option menu, including Power off (default)/Sleep/Restart. Press "**OK**" to confirm your option.



Standby Modes

Standby modes include **True Power Off Mode**, **Fast Boot Mode** and **Sleep Mode**.

True Power Off Mode

When the WoL and WoW options are turned off, selecting Power Off will cause the panel to enter **True Power Off Mode**. At this time, the panel is completely powered down with all components turned off. In this state, the panel can only be powered back on through certain predefined methods such as physical power button, RS232, Auto Power On or a remote control signal.

Fast Boot Mode

When the WoL and/or WoW option is turned on, selecting Power Off will cause the panel to enter **Fast Boot Mode**. This is a low-power state that allows the panel to quickly resume full operation while conserving energy. It can be powered on by various signals such as physical power button, Wake on LAN (WoL), Wake on Wireless LAN(WoW), RS232, Auto Power On or a remote control signal.

Sleep Mode

In **Sleep Mode**, the panel will turn off the backlight and the sound, and can be woken up through some predefined methods, such as physical power button, RS232, IP Control or remote control signal.

Boot-up Screen

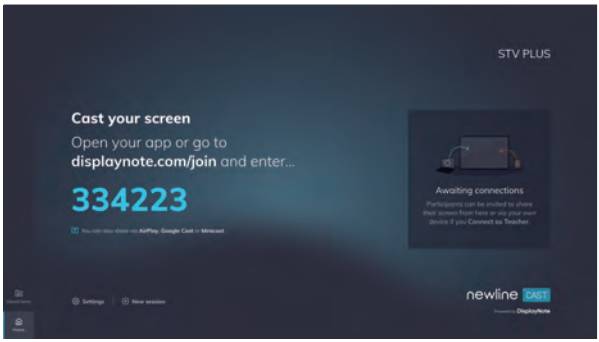
When the display is turned on, the screen will show the boot-up page. As shown in the following figure.

Welcome page

The panel will display the Welcome page after boot-up. This screen displays the logo, time, date, Newline Cast, Newline VCS, File Commander, Applications and Wi-Fi status icon, as shown in the following figure.

◆Newline Cast

Select **Newline Cast** on the Welcome page to enter the screen sharing application. On screen directions will appear for you to follow in order to wirelessly cast to the display, as shown in the following figure:

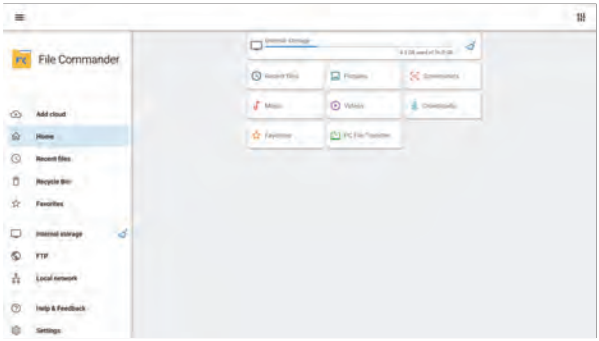


◆Newline VCS

Select **Newline VCS** to enter the digital signage application, as shown in the following figure. Account activation is required to use this application.

◆File Commander

Select **File Commander** to view MultiMedia. In this interface you can preview all files in the internal storage and storage devices connected via USB ports.

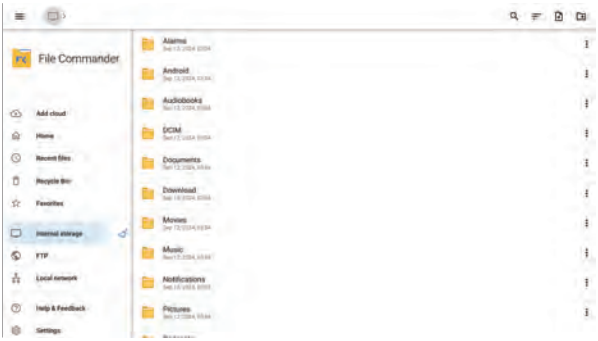


Icons on the top of right corner

Icons	Function
	Click to search the files by files name
	● The system supports two view modes: list and grid. You can click on the top right corner to switch or view modes. ● Click to display files based on name, size, type and date.
	Click to create new file
	Click to create new folder

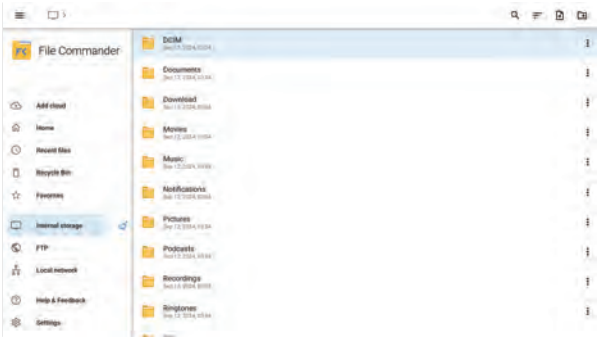
File Management

Display supports connection to USB flash memory. Enter the File application, you can preview all files in the internal storage and storage devices connected via USB ports.

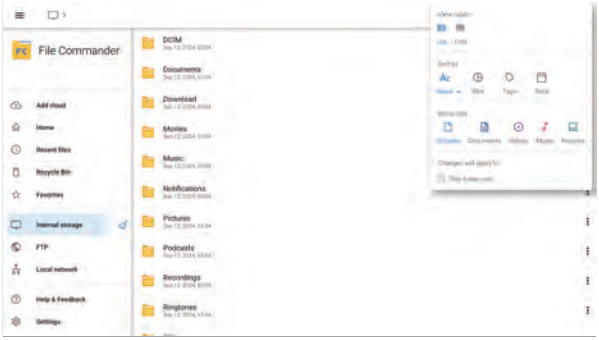


File Filtering

You can click the menu at the left side to display files by types, for example: **Documents, Download, Movies, Music, Notifications** and **Pictures.**



You can also click at the top right corner to filter files by **View mode**, **Sort by** and **show only**.



File Search

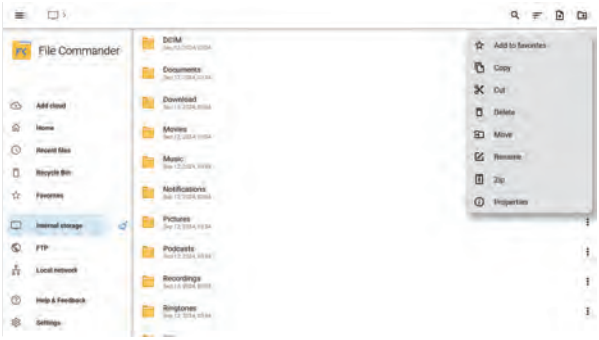
Enter the **Files** application, and click in the dialog box that is displayed, enter keywords in the search box according to requirements. The system will display a list of files that match the keywords.

Note

- Use the keyboard on remote control to enter keywords.
- Use mouse function of remote control to click the soft keyboard on screen to enter keywords.

File Operation

Enter the **Files** application, You can create folders according to requirements, select files, and set **Add to favorites/Copy/Cut/Delete/Move/Rename/Zip/Properties**. For details on other operation, click ⋮ in the right side for more operation.



Note

After entering the files interface, select the file items using the mouse function of remote control.

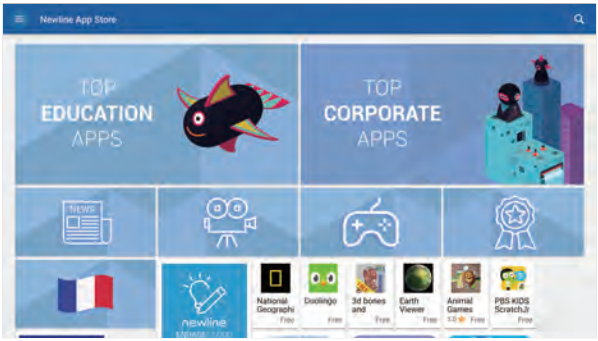
◆ Applications

Select **Applications** or press the button ⋮⋮⋮ on the remote control to enter the application list. **Applications** display all pre-installed applications. Select the icon of an application to run the application. Long press the **OK** button to remove/uninstall apps.

Name	Icons	Functions
Chromium		Select this icon to enter the Chromium application.
File Commander		Select this icon to enter the File Commander application.
Newline App Store		Select this icon to enter the Newline App Store.
Newline Broadcast		Select this icon to enter the Newline Broadcast application.
Newline Cast		Select this icon to enter the Newline Cast application.
Newline Display Management+		Select this icon to enter the Newline Display Management+ application.
Newline VCS		Select this icon to use the Newline VCS application for digital signage.
Officesuite		Click this icon to enter the Office suite application. In this application, you can view office files, including excel, word, power point, and PDF files.
Settings		Select this icon to enter the settings interface.
VLC		Select this icon to enter the VLC application.

- **Newline App Store**

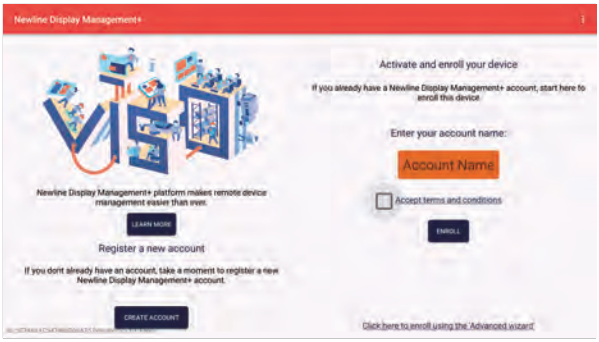
  Select **Newline App Store** to enter Newline app store. You can view all the apps here, search the apps you want in this interface as shown in the following figure. Press ← button on remote control to return to the upper interface.



Notes: 1. STV+ series does not support Google Play Services.
2. Not all apps are supported for the STV+ series.

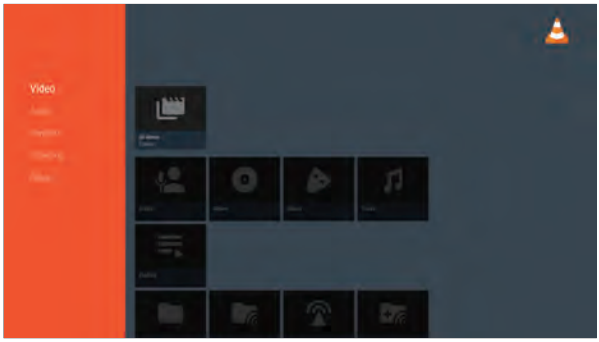
- **Newline Display Management+**

  Newline Display Management+ is a remote display management solution that enables users to centrally manage the Newline displays from the comfort of their desk. Users can deploy and install apps, configure display settings, and push updates without being in front of the display.



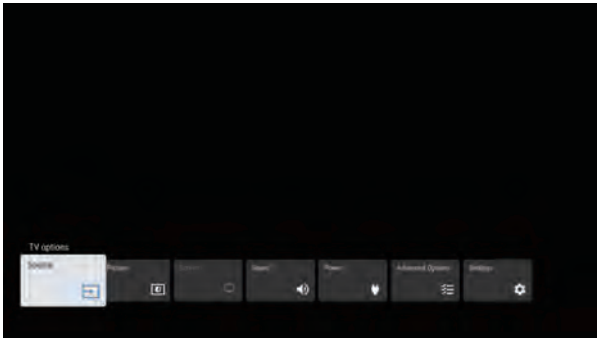
- **VLC**

  VLC is a free and open source cross-platform multimedia player and framework that can play most multimedia files and various streaming media protocols. You can choose **Video**, **Audio**, **Playlists**, **Browsing** and **Other i**n this interface.



Menu Page (in source)

On the Input source page, press the menu button ☰ on the remote control to view TV options menu items include **Source, Picture, Screen, Sound, Power, Advanced Options** and **Settings**. Press ‹ / › on the remote control to select a menu item, press **OK** to complete the menu switching and option setting in the menu. If you don't want the menu page, press ← to exit the menu page.

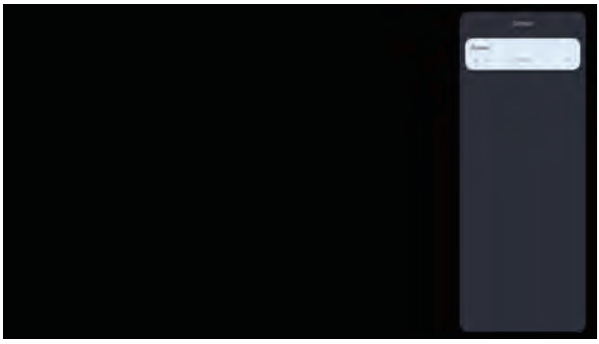


◆ Source

Select the **Source** item in the menu, in this interface including **Home, AV, HDMI 1, HDMI 2 (eARC/ARC)** and **HDMI 3.**

◆ Screen

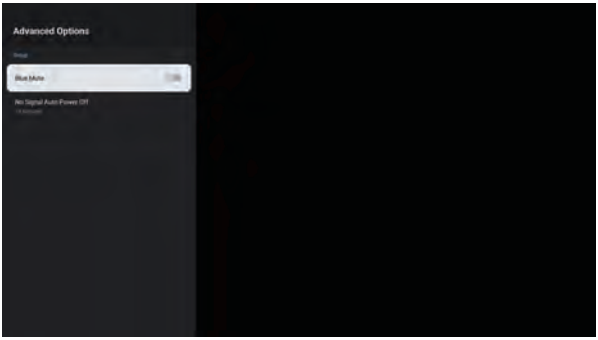
After connecting to the signal source, you can set the screen display ratio (Automatic > Super zoom > 4:3 > Movie expand 14:9 > Movie expand16:9 > Wide screen > Full > Unscaled). Press ← button on remote control to return to the upper interface.



◆ **Advanced Options**

Select the **Advanced Options** item in the menu, in this interface including **Blue Mute** and **No Signal Auto Power Off**. Press **OK** button on the remote control to enable and disable the blue mute.

No Signal Auto Power Off: Select this item to set the auto power off time when there is no signal detected (Off > 5 Minutes > 10 Minutes > 15 Minutes > 30 Minutes > 60 Minutes). The default is 15 Minutes.



Menu Page

On the Home page, press the menu button ☰ on the remote control to view menu page. The menu items include **Picture** and **Sound**.

Press ‹ / › /^ /˅ on the remote control to select a menu item, press **OK** to complete the menu switching and option setting in the menu. If you don't want the menu page, press ← to exit the menu page.

◆ Picture

Select the **Picture** item in the menu, in this interface including **Picture Mode**, **Backlight, Brightness, Contrast, Saturation, HUE, Sharpness, Advanced Settings** and **Reset to Default.**

- **Picture Mode:** Select **Picture Mode** to change the picture mode (User > Standard > Vivid > Sports > Movie > Game > Energy Saving).
- **Backlight:** Press ‹/› on the remote control to adjust the backlight.
- **Brightness:** Press ‹/› on the remote control to adjust the brightness.
- **Contrast:** Press ‹/› on the remote control to adjust the contrast.
- **Saturation:** Press ‹/› on the remote control to adjust the saturation.
- **HUE:** Press ‹/› on the remote control to adjust the hue.
- **Sharpness:** Press ‹/› on the remote control to adjust the sharpness.
- **Reset to Default:** Select **Reset to Default** to reset picture settings to default.

Advanced Settings

Select **Advanced Settings** to enter the following interface. Press ← to exit the setting.

- **Color Temperature:** Select this item to change the Color Temperature (User > Cool > Standard > Warm). Select **Red Gain**, **Green Gain** and **Blue Gain** then press ‹/› on the remote control to adjust the gains.
- **DNR (Digital Noise Reduction):** Digital noise reduction technology, uses digital processing to reduce impurities mixed in video signals (Off > Low > Medium > Strong). The default setting is Medium.
- **MPEG NR (MPEG Format Noise Reduction):** Eliminate noise generated in videos using the MPEG compression standard. The purpose is to reduce the impact of noise caused by MPEG compression and improve the viewing experience (Off > Low > Medium > Strong), the default setting is Medium.
- **Gamma:** Select this item to change the Gamma (Dark > Middle > Bright).
- **HDMI RGB Range:** Select this item to change the HDMI RGB range.

◆ Sound

Select the **Sound** item in the menu to enter the following interface.

- **Sound Style:** Select **Sound Style** to change the sound mode (User > Standard > Vivid > Sports > Movie > Music > News). Press the button to mute or unmute audio.
- **Balance:** Press ‹/› on the remote control to adjust the balance.
- **Bass:** Press ‹/› on the remote control to adjust the bass.
- **Treble:** Press ‹/› on the remote control to adjust the treble.
- **Surround Sound:** Press **OK** button on the remote control to enable and disable the Surround Sound.
- **Speakers:** Press **OK** button on the remote control to enable and disable the speakers.
- **eARC:** Press ‹/› on the remote control to adjust the eARC (Auto > Off).
- **Auto Volume Control:** Press **OK** button on the remote control to enable and disable the Auto Volume Control.
- **Reset to Default:** Select **Reset to Default** to reset sound settings to default.

Settings

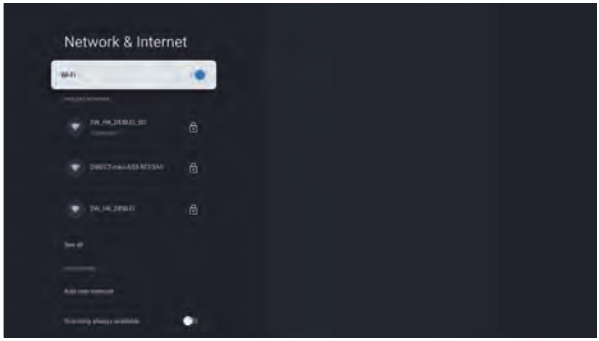
Press the button ⚙ on the remote control to enter the settings interface. This interface displays **Network & Internet, Source & Inputs, Display & Sound, Apps, System** and **Remotes & Accessories.**

◆ Network & Internet

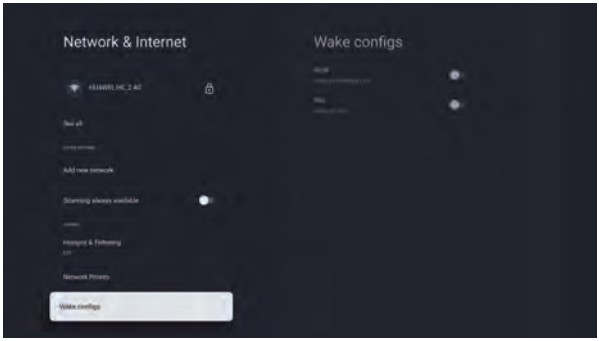
Select the **Network & Internet** or press the button ⌨ on the remote control to enter the network setting interface. You can view network status information, set **Wi-Fi, Add new network, Scanning always available, Hotspot & Tethering, Network Priority** and **Wake configs**.

Press ← button on remote control to return to the upper interface.

- **Wi-Fi:** Press **OK** button on the remote control to enable the Wi-Fi function.
- **Add new network:** Select this item to add new network. If you need to connect to an enterprise-level network or add a WiFi certificate, you can also click this entry to jump to the menu for settings.
- **Scanning always available:** Press **OK** button on the remote control to enable the Scanning always available.
- **Hotspot & Tethering:** Select this item to set hotspot and tethering.
- **Network Priority:** Select this item to set Network Priority (Ethernet/Wifi).



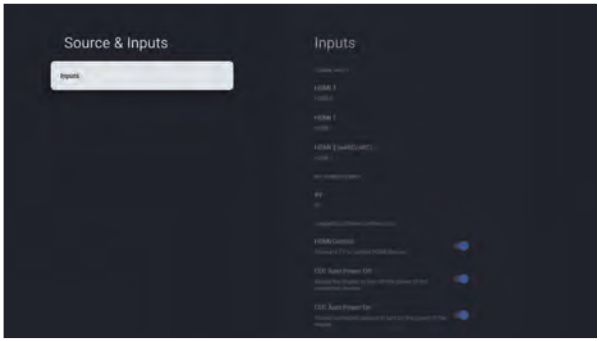
- **Wake configs:** Wake on LAN (WoL) and Wake on Wireless LAN (WoW) are technologies that allow the panels to be powered on from Fast Boot Mode remotely via a network. WoL operates over a wired Ethernet connection, while WoW operates over a wireless network connection.
  The WoL and WoW options will have an impact on entering different standby modes. If one or both of WoL and WoW are turned on, and the remote control selects power off, the panel will enter Fast Boot Mode. If WoL and WoW are both turned off, the panel will enter True Power Off Mode.
  WoW: Wireless network wake-up, supports WoW in Fast Boot Mode, default is Off.
  WoL: Wired network wake-up, support WoL in Fast Boot Mode, default is Off.
  Note: WoW & WoL are also supported after power loss.



◆ **Source & Inputs**

Select the **Source & Inputs** to enter the inputs setting interface. You can view standby inputs and not connected inputs here. This interface also includes **HDMI Control, CEC Auto Power Off, CEC Auto Power On** and **CEC Device List.**
Press ← button on remote control to return to the upper interface.

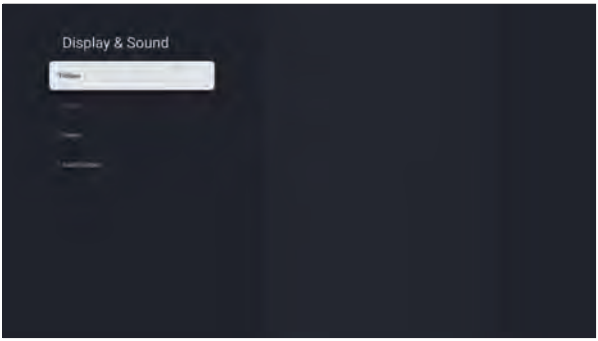
- **HDMI Control:** Select this item to allow the display to control HDMI devices.
- **CEC Auto Power Off:** Select this item to allow the display to turn off the power of the connected devices.
- **CEC Auto Power On:** Select this item to allow connected devices to turn on the power of the display.
- **HDMI EDID Version**: EDID1.4/EDID2.0/Auto.
- **CEC Device List:** Select this item to check the CEC device list.



◆ **Display & Sound**

Select the **Display & Sound** to enter the display and sound setting interface. This interface includes **Picture, Screen, Sound** and **Audio Output**.
Press ← button on remote control to return to the upper interface.

- **Screen:** Select this item to enter the screen settings(only available when in a source).
- **Audio Output:** Select this item to enter the audio output settings.

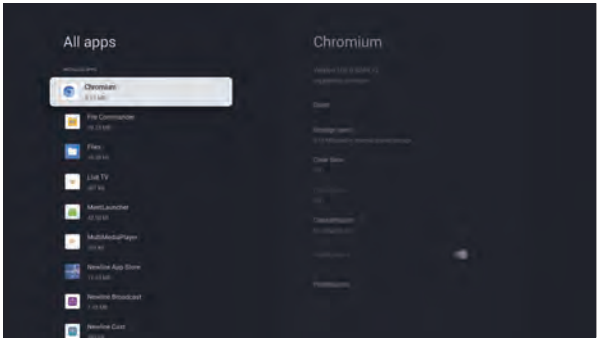


◆ Apps

Select the **Apps** to enter the apps setting. This interface includes **See all apps, App permissions, Special app access, Security & Restrictions.**

Press ← button on remote control to return to the upper interface.

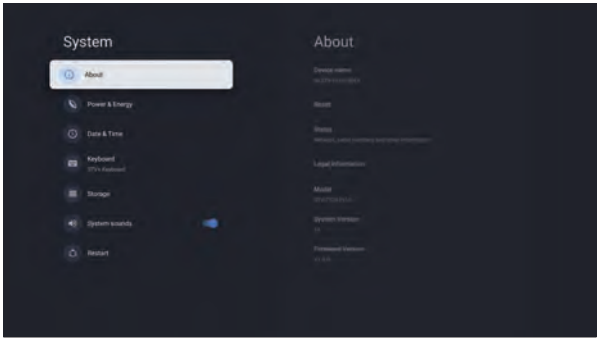
- **See all apps:** Select this item to see all apps. Select app to see details.
- **App permissions:** Select this item to check all app permissions.
- **Special app access:** Select this item to view all Special app access.
- **Security & Restrictions:** Select this item to check Security & Restrictions.



◆ System

Select the **System** to enter the system setting interface, including **About, Power & Energy, Date & Time, Keyboard, Storage, System Sounds** and **Restart.**

Press ← button on remote control to return to the upper interface.

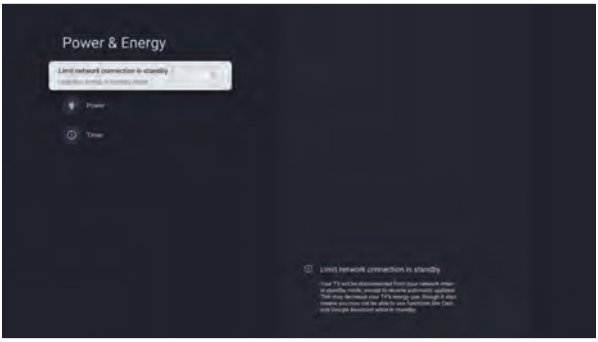


About

Enter **About** to check **Device name, Status, Legal information, Model, System Version** and **Firmware Version**. Select **Reset** to restore factory settings. In order to confirm the factory reset, you need to enter the PIN code: 1111.

Power & Energy

Select **Power & Energy** to enter the Power & Energy interface. You can enable the **Limit network connection in stand by** to use less energy in standby mode. This interface also includes **Power** and **Timer**.



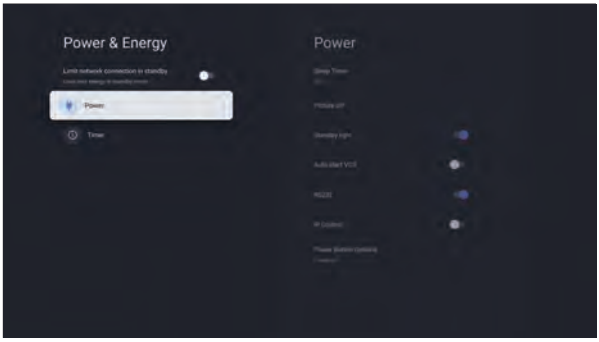
Power

Select **Power** to enter the power setting interface, including **Sleep Timer**, **Picture off**, **Standby light**, **Auto start VCS**, **RS232**, **IP Control** and **Power Button Options**. Press **OK** button on the remote control to enable and disable the **Standby light**, **Auto start VCS**, **RS232** and **IP Control**.

Sleep Timer: The default is off. After selecting the time, the panel will power off after the countdown ends. There are options from 10 minutes to 120 minutes. For example, if you select 10 Minutes, the panel will power off after 10 minutes. There will be a pop-up prompt window when the countdown is left with 1 minute. Once powered down, the Sleep Timer setting will default back to Off

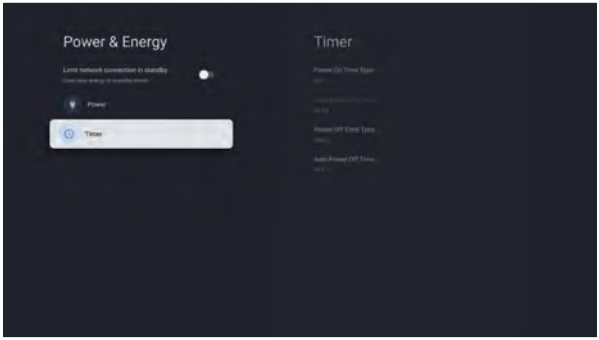
Power Button Options: There are **Standby** and **Power On** options, the default is standby. When **Standby** is selected, the panel will enter standby by default after it is powered off and powered on again.

When **Power On** is selected, the panel will power on automatically after it is powered off and powered on again.



Timer

Select **Timer** to set the Auto Power On & Off times.

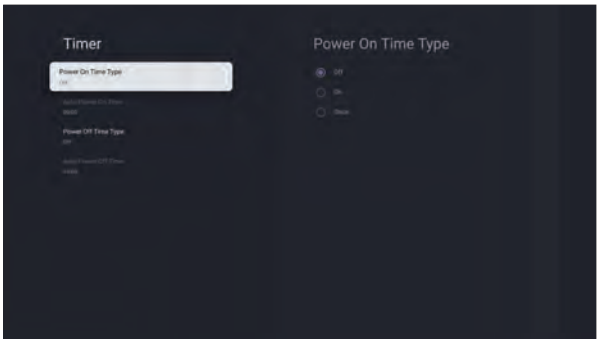


Power On Time Type: Automatic power-on function(Off/On/Once), default Off.

- When selecting Off, the Auto Power On Time function is grayed out;
- When selecting On, you can set the Auto Power On Time and select the cycle and time;
- When selecting Once, you can set the Auto Power On Time without periodic selection. The set effective time only takes effect once. After the effect is completed, the Auto Power On function automatically returns to Off.

Auto Power On Time: Follows the system's 12-hour/24-hour format. The user can select: hour, minute, (AM/PM), period and select "Set" to take effect.

After the scheduled power on time is set, there will be a note in the function menu (Ex. If you set the panel to automatically start at 22:00 on Monday and Tuesday, it will display: Mon Tue 22:00.)



(Power On Time Type defaults to Off. At this time, Auto Power On Time is grayed out and cannot be selected.)

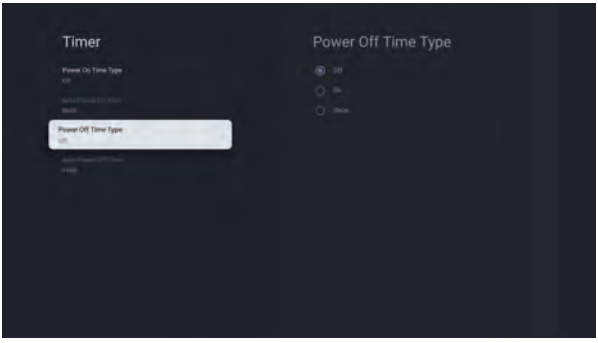
(When Power On Time Type is turned On, this is the Auto Power On Time interface.)

(When Power On Time Type selects Once, this is the Auto Power On Time interface.)

Power Off Time Type: Automatic shutdown function(Off/On/Once), default Off.

- When Off is selected, the Power Off Time function is grayed out;
- When selecting On, you can set the Power Off Time and select the cycle. You can select multiple cycles;
- When selecting Once, you can set the Power Off Time without periodic selection. The set effective time only takes effect once. After the effect is completed, the Auto Power Off function automatically returns to Off.

Auto Power Off Time: Follow the system's 12-hour/24-hour format. The user can select: hour, minute, (AM/PM), period and select "Set" to take effect.



(Power Off Time Type defaults to Off. At this time, Auto Power Off Time is grayed out and cannot be selected.)

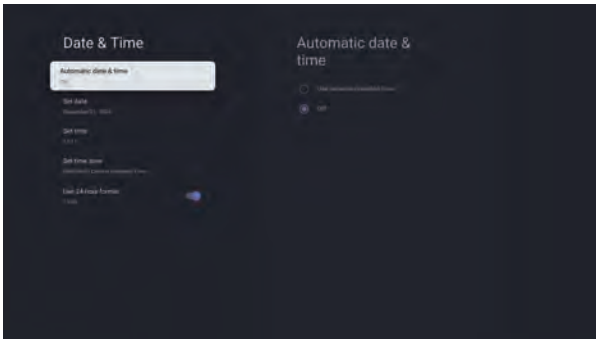
(When Power Off Time Type is On, this is the Auto Power Off Time interface.)

(When Power Off Time Type is Once, this is the Auto Power Off Time interface.)

Date & Time

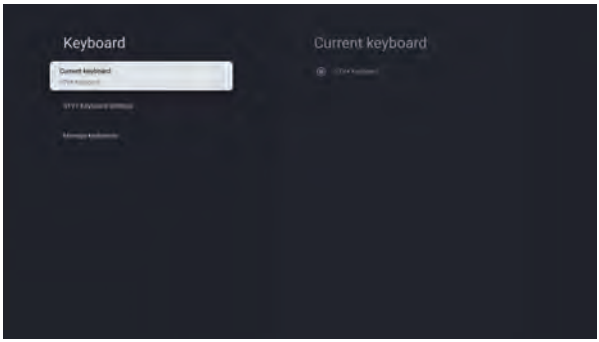
Select **Date & Time** to enter the setting interface. You can set **Automatic date & time** to use network-provided time, and set **date & time, time zone** and **Use 24-hour format** in this interface.

Use 24-hour format: When the option is on, it is 24-hour format. When the option is off, it is 12-hour format. The system defaults to 24-hour format.



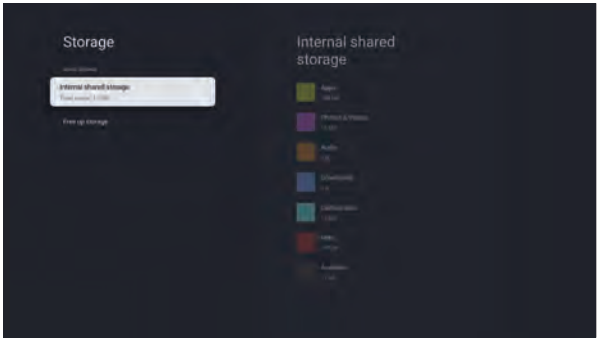
Keyboard

Select **Keyboard** to enter the keyboard interface. You can view **Current keyboard** in this interface, check **STV+ Keyboard Settings** and **Manage keyboards**.



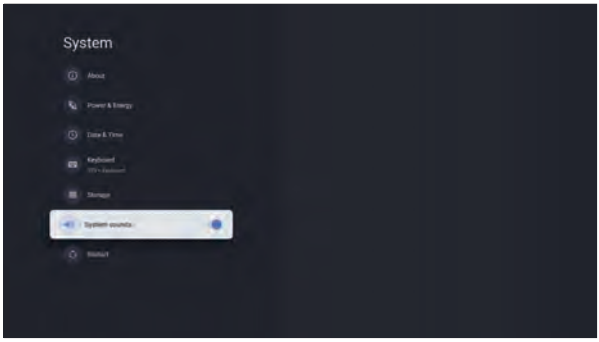
Storage

Select **Storage** to enter the storage interface. You can view **Interal shared storage** and **Free up storage** in this interface.



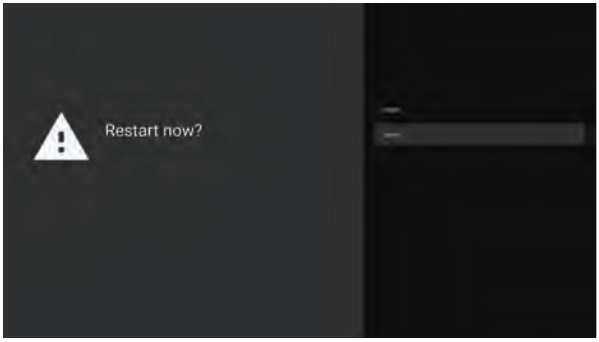
System sounds

Press **OK** button on the remote control to enable the **System sounds**.



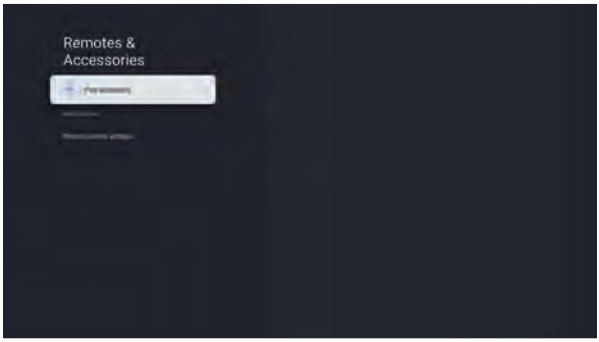
Restart

Select **Restart** to restart the panel.



◆ Remotes & Accessories

Select **Remotes & Accessories** to **Pair accessory** and check **Remote control settings**.



5 Serial Port Control

Before using IP Control and/or RS-232 serial port control, you need to ensure that the setting is enabled. RS-232 is enabled by default.

Instructions to enable/disable RS-232 & IP Control:

1. Settings > System > Power & Energy > Power
2. If you need to use IP Control, turn on the IP Control option switch; if you need to use the RS232 serial port, turn on the RS232 option;

IP Control:

Use a network connection to control the device over an Internet Protocol (IP) network; IP Control supports the commands listed in the section below.

Note: Power On via IP Control is not supported.

- **The following is an example test method. There is no standard usage instruction for this function:**

1. **Configuration:** Connect the PC and the large screen to the same network, start the IP Control debugging tool, select TCP Client for the port number, fill in the corresponding IP address and port number, and click connect.
2. **Send commands:** After the connection is successful, enter the command in the command pane to test.

Configuration information for using tools	
IP	Machine IP
Port: TCP/UDP	6688

RS-232 operation instructions:

RS-232 is a standard protocol for serial communication. RS-232 over serial refers to the use of this standard to enable communication between devices using a serial port.

- **How to use:**

1.**Configuration:** The PC and the large screen are connected via a physical RS-232 (DB9) cable, and the serial port is configured to use the same communication settings, including baud rate, data bits, parity and stop bits.

2.**Send commands:** After the connection is successful, send commands to the large screen terminal through RS-232. The display receives the command, interprets the command, and performs the requested operation. The screen will respond by returning a return value to confirm command execution or provide status information.

Configuration information for using tools			
Port: COM1 (Set according to PC or controlling product's port number)			
Baud rate	19200	Odd/even check	None
Data bits	8	Stop bit	1

The following table lists button controlling codes. The buttons share same functions with corresponding buttons on the remote controller:

Function	Controlling Codes	Return Codes
Power On	7F 08 99 A2 B3 C4 02 FF 01 00 CF	7F 09 99 A2 B3 C4 02 FF 01 00 01 CF NOTE: Support the panel power on from true power off mode and Fast Boot mode. Only supported by RS-232 commands and not by IP Control.
Power off	7F 08 99 A2 B3 C4 02 FF 01 01 CF	7F 09 99 A2 B3 C4 02 FF 01 01 01 CF NOTE: Support the panel power off (1) WOL/WOW on, enter Fast Boot Mode; (2) WOL/WOW off, enter true power off mode.
Sleep Mode On	7F 08 99 A2 B3 C4 02 FF 01 04 CF	7F 09 99 A2 B3 C4 02 FF 01 04 01 CF NOTE: The panel goes to sleep.
Sleep Mode Off	7F 08 99 A2 B3 C4 02 FF 01 03 CF	7F 09 99 A2 B3 C4 02 FF 01 03 01 CF NOTE: The panel wakes up from sleep mode.
Mute/ Unmute	7F 08 99 A2 B3 C4 02 FF 01 02 CF	7F 09 99 A2 B3 C4 02 FF 01 02 01 CF
Signal source	7F 08 99 A2 B3 C4 02 FF 01 06 CF	7F 09 99 A2 B3 C4 02 FF 01 06 01 CF
Display status	7F 08 99 A2 B3 C4 02 FF 01 09 CF	7F 09 99 A2 B3 C4 02 FF 01 09 01 CF
HDMI 1	7F 08 99 A2 B3 C4 02 FF 01 0A CF	7F 09 99 A2 B3 C4 02 FF 01 0A 01 CF
HDMI 2	7F 08 99 A2 B3 C4 02 FF 01 52 CF	7F 09 99 A2 B3 C4 02 FF 01 52 01 CF
HDMI 3	7F 08 99 A2 B3 C4 02 FF 01 53 CF	7F 09 99 A2 B3 C4 02 FF 01 53 01 CF
VOL -	7F 08 99 A2 B3 C4 02 FF 01 17 CF	7F 09 99 A2 B3 C4 02 FF 01 17 01 CF
VOL +	7F 08 99 A2 B3 C4 02 FF 01 18 CF	7F 09 99 A2 B3 C4 02 FF 01 18 01 CF
Menu	7F 08 99 A2 B3 C4 02 FF 01 1B CF	7F 09 99 A2 B3 C4 02 FF 01 1B 01 CF
Home page	7F 08 99 A2 B3 C4 02 FF 01 1C CF	7F 09 99 A2 B3 C4 02 FF 01 1C 01 CF
Return (exit)	7F 08 99 A2 B3 C4 02 FF 01 1D CF	7F 09 99 A2 B3 C4 02 FF 01 1D 01 CF

Function	Controlling Codes	Return Codes
OK	7F 08 99 A2 B3 C4 02 FF 01 2B CF	7F 09 99 A2 B3 C4 02 FF 01 2B 01 CF
←	7F 08 99 A2 B3 C4 02 FF 01 2C CF	7F 09 99 A2 B3 C4 02 FF 01 2C 01 CF
→	7F 08 99 A2 B3 C4 02 FF 01 2D CF	7F 09 99 A2 B3 C4 02 FF 01 2D 01 CF
↑	7F 08 99 A2 B3 C4 02 FF 01 2E CF	7F 09 99 A2 B3 C4 02 FF 01 2E 01 CF
↓	7F 08 99 A2 B3 C4 02 FF 01 2F CF	7F 09 99 A2 B3 C4 02 FF 01 2F 01 CF
Set volume	7F 08 99 A2 B3 C4 02 FF 05 XX CF	7F 09 99 A2 B3 C4 02 FF 05 XX 01 CF NOTE: XX indicates the value of volume (0- 100), corresponding to the hexadecimal number system (00 - 64).
Set display mode	7F 08 99 A2 B3 C4 02 FF 06 XX CF	7F 09 99 A2 B3 C4 02 FF 06 XX 01 CF NOTE: XX indicates the mode. 00-standard, 01-ECO mode, 02-custom.
Increase backlight brightness	7F 08 99 A2 B3 C4 02 FF 01 47 CF	7F 09 99 A2 B3 C4 02 FF 01 47 01 CF
Decrease backlight brightness	7F 08 99 A2 B3 C4 02 FF 01 48 CF	7F 09 99 A2 B3 C4 02 FF 01 48 01 CF
Set the value of backlight brightness	7F 08 99 A2 B3 C4 02 FF 09 XX CF	7F 09 99 A2 B3 C4 02 FF 09 XX 01 CF NOTE: XX indicates the value of backlight brightness (1- 100), corresponding to the hexadecimal number system (01- 64).
Switch backlight	7F 08 99 A2 B3 C4 02 FF 01 15 CF	7F 09 99 A2 B3 C4 02 FF 01 15 XX CF NOTE: XX = 01 indicates the backlight is on. XX = 00 indicates the backlight is off.

Function	Controlling Codes	Return Codes
Settings	7F 08 99 A2 B3 C4 02 FF 01 20 CF	7F 09 99 A2 B3 C4 02 FF 01 20 01 CF
Mute On	7F 09 99 A2 B3 C4 02 FF 0F 00 CF	7F 09 99 A2 B3 C4 02 FF 0F 00 01 CF
Mute Off	7F 09 99 A2 B3 C4 02 FF 0F 01 CF	7F 09 99 A2 B3 C4 02 FF 0F 01 01 CF
Switch Backlight On	7F 09 99 A2 B3 C4 02 FF 0E 01 CF	7F 09 99 A2 B3 C4 02 FF 0E 01 01 CF
Switch Backlight Off	7F 09 99 A2 B3 C4 02 FF 0E 00 CF	7F 09 99 A2 B3 C4 02 FF 0E 00 01 CF
Set Display message on the OSD	7F 09 99 A2 B3 C4 02 FF 1A XX CF NOTE: ● XX indicates the value of text content up to 50 characters Closing/clearing command: 7F 09 99 A2 B3 C4 02 FF 1A 20 CF	7F 09 99 A2 B3 C4 02 FF 1A 00 XX CF NOTE: ● XX = 01 indicates set OSD OK. ● XX = 00 indicates set OSD failed.
Activate Newline cast	7F 08 99 A2 B3 C4 02 FF 00 0D CF	7F 09 99 A2 B3 C4 02 FF 00 0D 01 CF
Close Newline cast	7F 08 99 A2 B3 C4 02 FF 01 0D CF	7F 09 99 A2 B3 C4 02 FF 01 0D 01 CF
Activate Newline broadcast	7F 08 99 A2 B3 C4 02 FF 00 0F CF	7F 09 99 A2 B3 C4 02 FF 00 1F 01 CF
Close Newline broadcast	7F 08 99 A2 B3 C4 02 FF 01 0F CF	7F 09 99 A2 B3 C4 02 FF 01 1F 01 CF

Function	Querying Codes	Return Codes
Power supply	7F 08 99 A2 B3 C4 02 FF 01 37 CF	7F 09 99 A2 B3 C4 02 FF 01 37 XX CF NOTE: ● XX indicates the power on/off state. ● XX = 01: power on state ● XX = 00: power off state
Speaker	7F 08 99 A2 B3 C4 02 FF 01 82 CF	7F 09 99 A2 B3 C4 02 FF 01 82 XX CF NOTE: ● 01: mute ● 00: non-mute
Current signal source	7F 08 99 A2 B3 C4 02 FF 01 50 CF	7F 09 99 A2 B3 C4 02 FF 01 50 XX CF NOTE: ● HDMI 1= 19 ● HDMI 2= 1F ● HDMI 3= 1E
Speaker volume	7F 08 99 A2 B3 C4 02 FF 01 33 CF	7F 09 99 A2 B3 C4 02 FF 01 33 XX CF NOTE: XX indicates current volume value (XX is a hexadecimal value, range: 00- 64). For example, XX = 20 indicates current volume value is 32 (decimal value), XX = 00 indicates mute state.
D.Mode	7F 08 99 A2 B3 C4 02 FF 01 35 CF	7F 09 99 A2 B3 C4 02 FF 01 35 XX CF NOTE: XX indicates the mode. 00-standard, 01-ECO mode,02-custom
Backlight brightness	7F 08 99 A2 B3 C4 02 FF 01 49 CF	7F 09 99 A2 B3 C4 02 FF 01 49 XX CF NOTE: XX indicates the value of backlight brightness (1 - 100), corresponding to the hexadecimal number system (01 - 64).
Backlight status	7F 08 99 A2 B3 C4 02 FF 01 81 CF	7F 09 99 A2 B3 C4 02 FF 01 81 XX CF NOTE: ● XX = 00 indicates the backlight is on. ● XX = 01 indicates the backlight is off.
Sleep Mode Status	7F 08 99 A2 B3 C4 02 FF 01 45 CF	7F 09 99 A2 B3 C4 02 FF 01 45 XX CF NOTE: ● XX indicates the sleep wake up/sleep state. ● XX = 01: Sleep Mode Off state ● XX = 00: Sleep Mode On state

Function	Querying Codes	Return Codes
Return to system state of the previous options	7F 08 99 A2 B3 C4 02 FF 0A 00 CF	7F 08 99 A2 B3 C4 02 FF 0A 00 AB CD EF GH IJ OPQR ST UV CF NOTE: ● AB: Power supply ● CD: Speaker ● EF: Current signal source ● GH: Speaker volume ● IJ: D.Mode ● OP: backlight brightness ● QR: backlight state ● WS: Sleep Mode Status The return value description of EF: 01 HDMI1 02 HDMI2 03 HDMI3 04 File Manager 05 Android Home Page