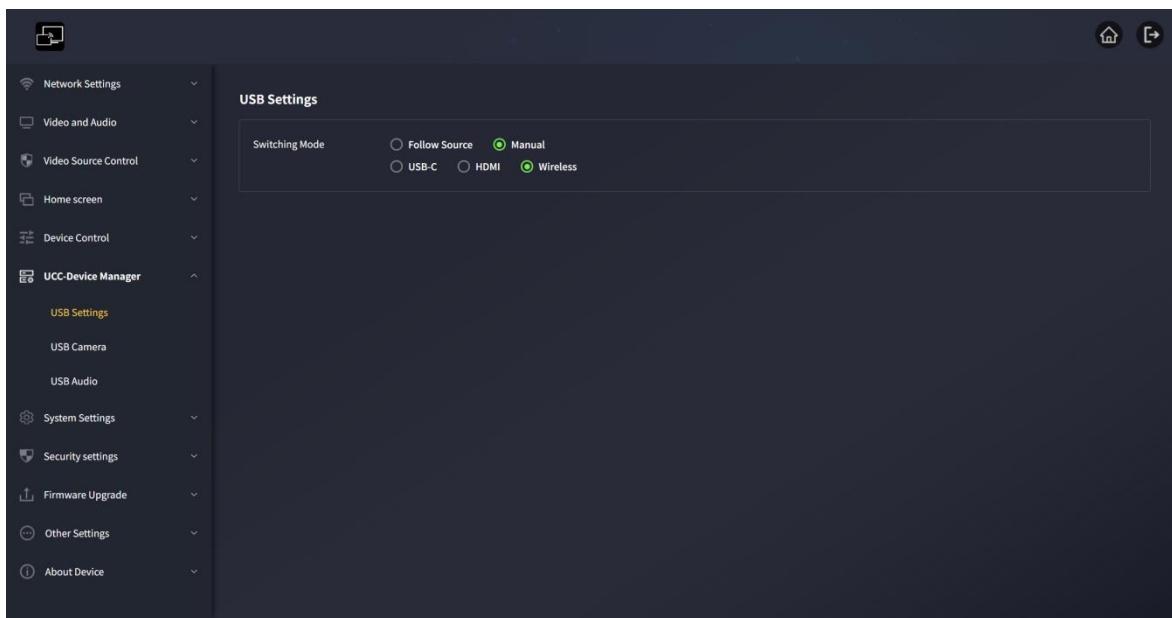


1.6 UCC Device Management

1.6.1 USB Port Settings

USB port settings are mainly used to manage the access permissions of the device to USB interfaces (rear panel USB DEVICES interface).



There are two USB switching modes:

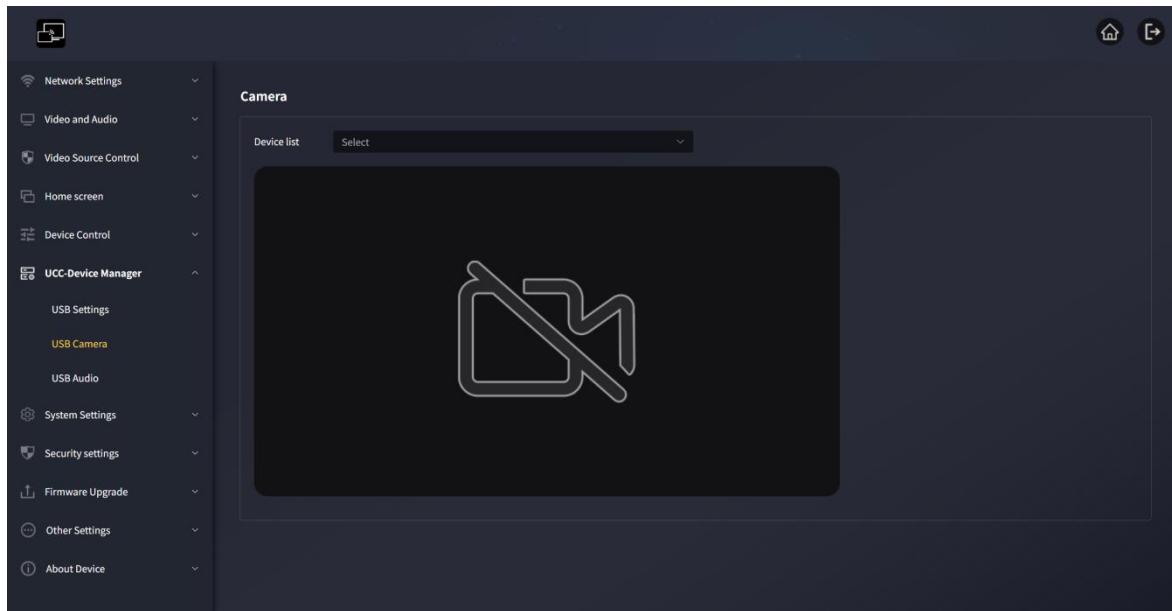
- **Follow Source:** Switch USB interface devices (such as cameras/microphones, etc.) to be accessed by the current video signal input source.

- Manual: Switch USB interface devices (such as cameras/microphones, etc.) to be accessed by the manually selected video signal input source (regardless of whether it is the currently displayed signal source), including HDMI, USB-C, and Wireless three video signal input sources.

1.6.2 USB Camera

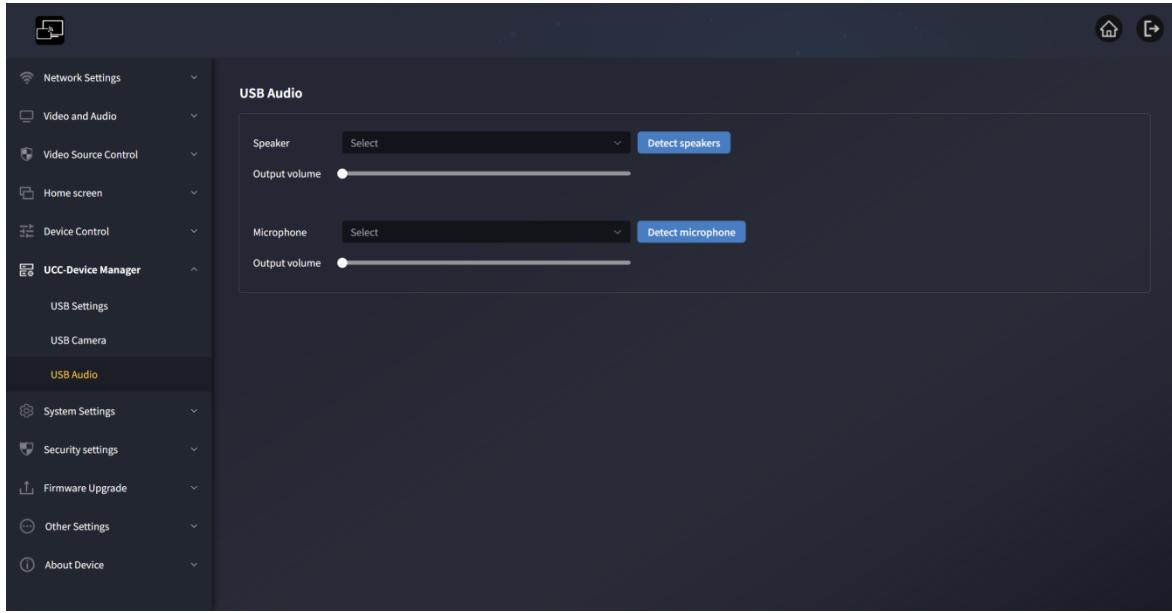
Allows users to select and monitor UVC and UAC devices connected to the S311 receiver.

Allows users to select and view the preview of the current USB video device. When multiple cameras are connected, you can switch the camera to use here.



1.6.3 USB Audio

Allows users to select and view the preview of the current USB audio device. When multiple microphones are connected, you can switch the microphone to use here.



- **Test Speaker:** Click this button to test if the audio device outputs sound normally; click again to cancel.
- **Test Microphone:** Click this button to test if the audio device inputs sound normally; click again to cancel.

1.7 System Settings

1.7.1 Date & Time

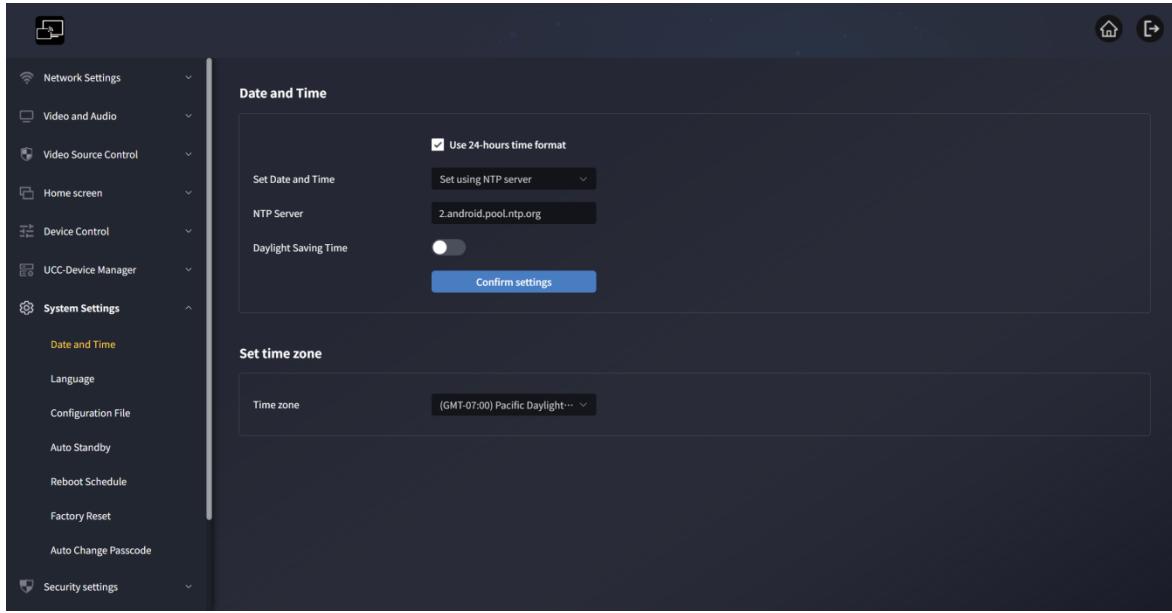
1. Date & Time

Use 24-hour Time Format: When checked, the time will be displayed in 24-hour format; otherwise, it will be in 12-hour format.

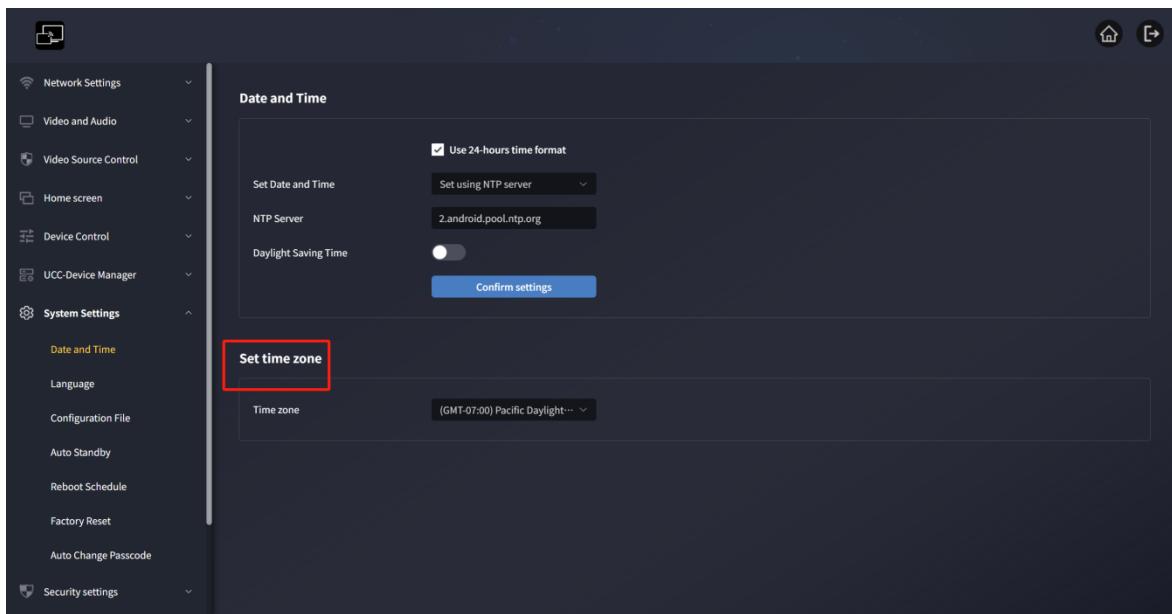
Time Server Address: 2.android.pool.ntp.org

Set Date & Time:

- **Use Network Time:** Check to use the time provided by the NTP time server as the system time.
- **Off:** After turning off network time, you can set the date and time manually.

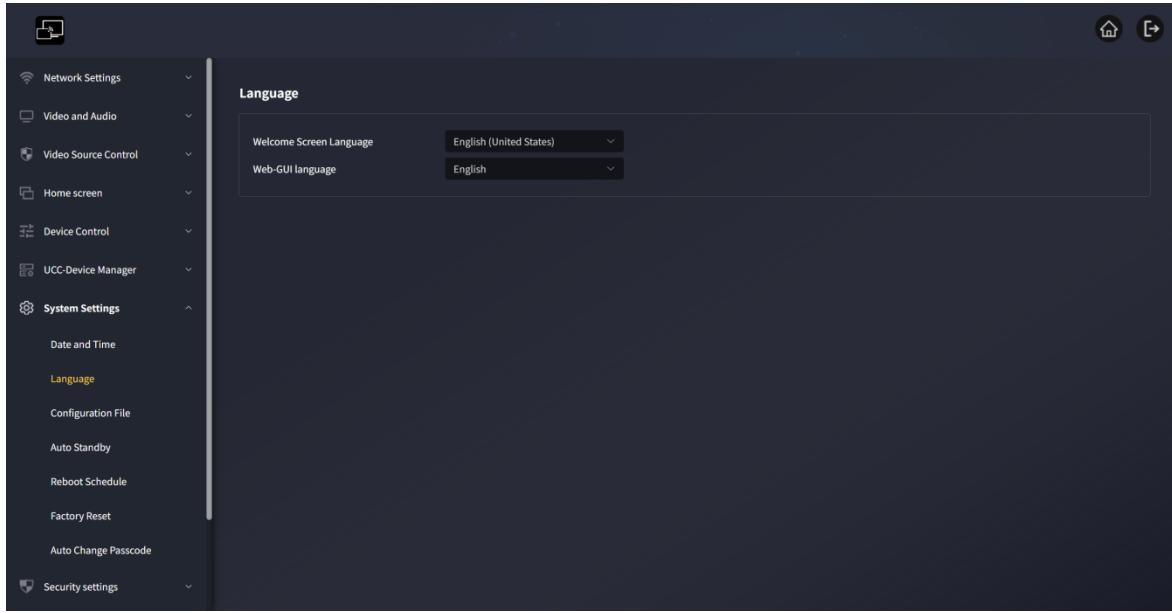


- 2. **Time Zone:** Click the "Time Zone" tab to select the appropriate time zone.



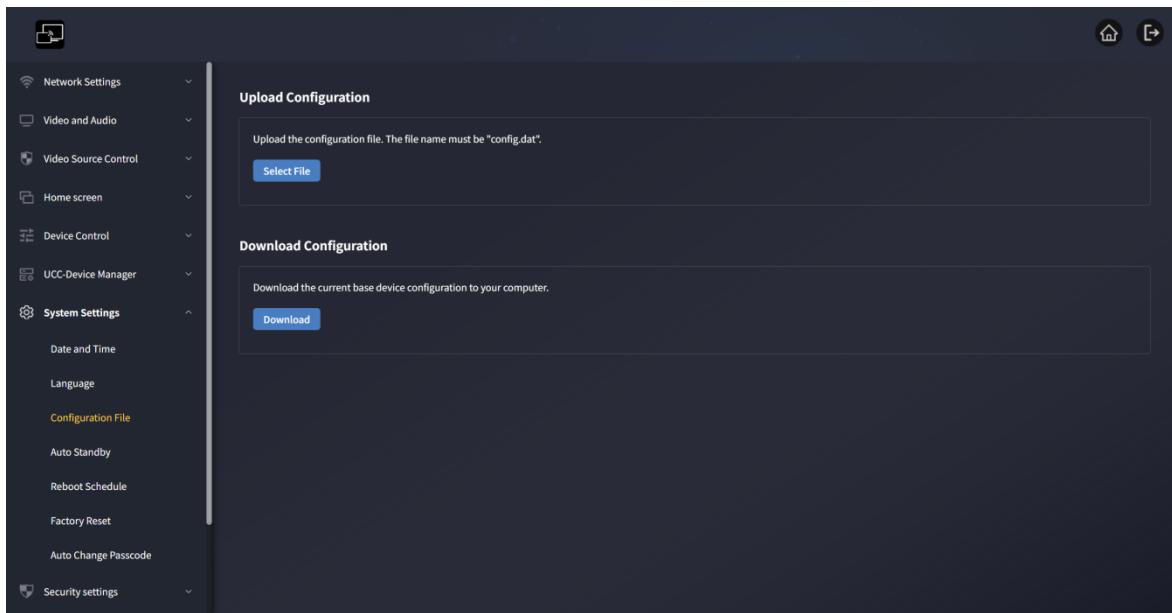
1. 7.2 Language

Allows users to select the display language for the homepage and web page: The default homepage language is English, and the default web page language is English.



1.7.3 Configuration File

A configuration file is a downloadable preset that saves all configured parameters so that they can be loaded onto other devices.

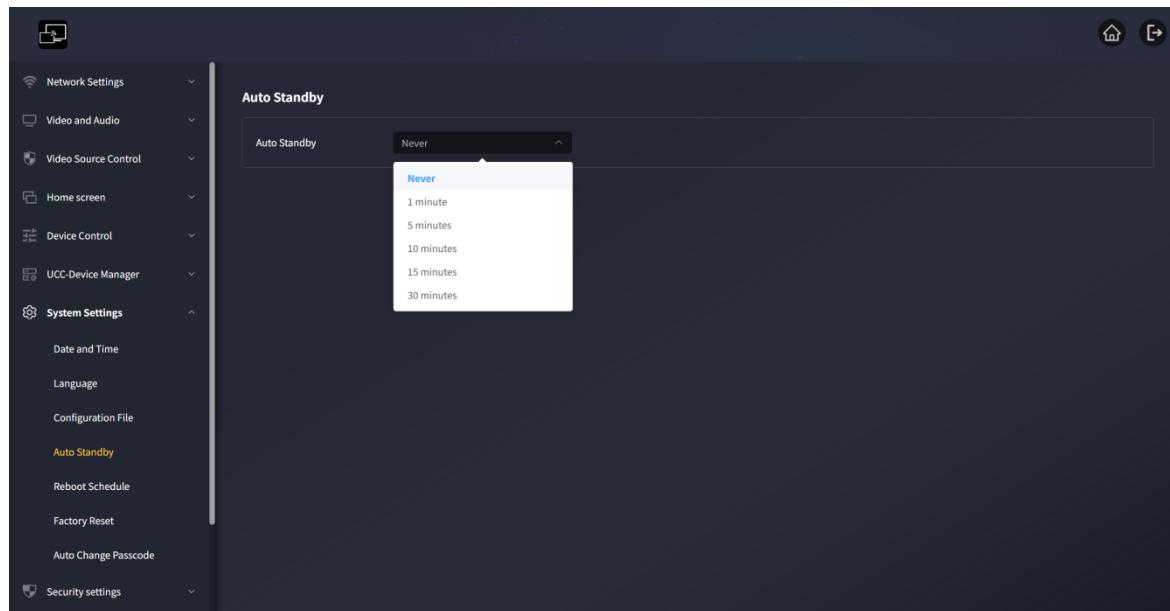


Upload Configuration: Upload the configuration file. The file name must be "config.dat".

Download Configuration: Download the current device configuration to your computer.

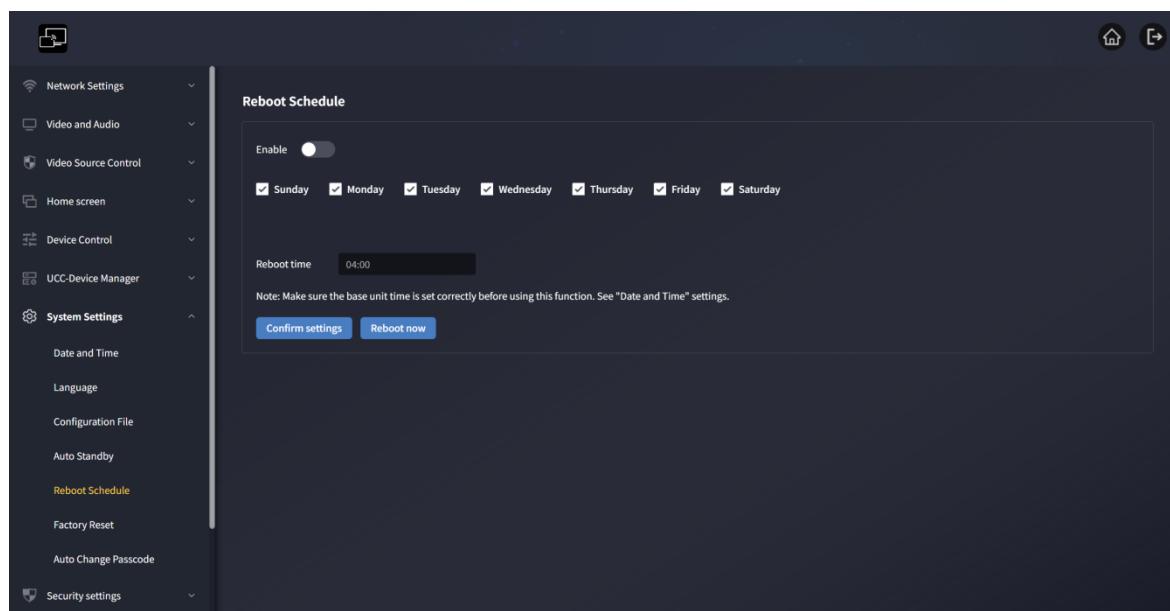
1.7.4 Auto Standby

If the auto standby mode is activated, S311 will automatically switch to power-saving mode after an optional time following the last wireless dongle disconnection, or when the mobile device's WiFi is disconnected, or when there is no system operation. The time can be selected from "Never" up to 30 minutes. In standby mode, the green LED on the front panel will turn to red, and the HDMI output is turned off.



1.7.5 Scheduled Reboot

Allows users to perform scheduled reboots and arrange weekly reboot routines.



Enable Scheduled Reboot Switch:

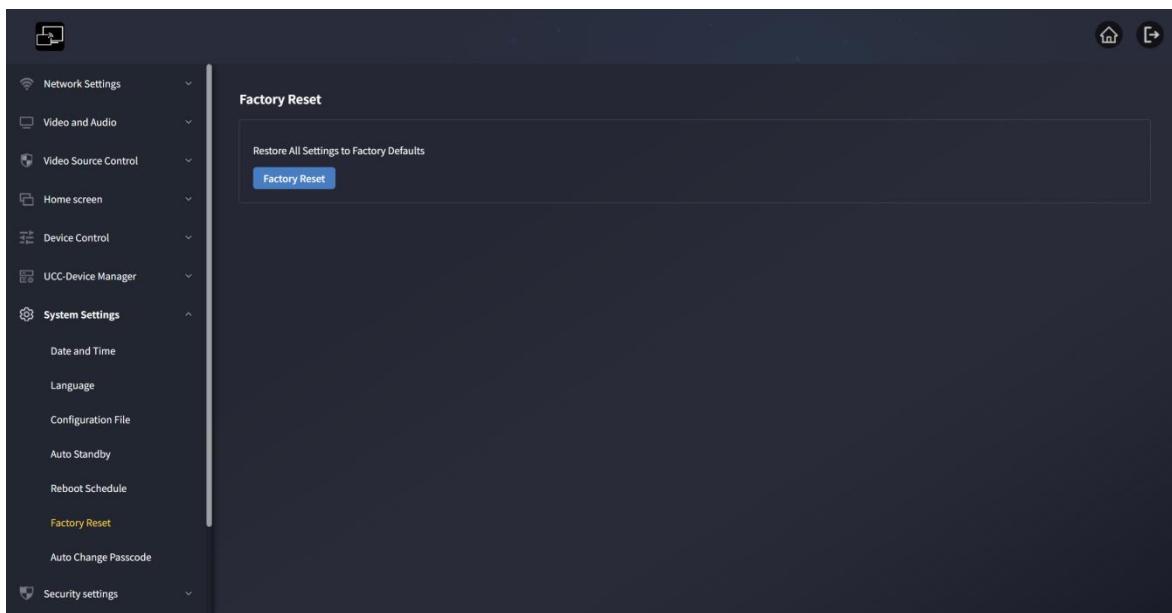
1. Support setting the scheduled reboot time for the S311 receiver, and select any days you need to reboot (from Monday to Sunday).
2. Manually set the reboot time.
3. After confirming the settings, the S311 receiver will reboot at the set date and time.

Regardless of whether scheduled reboot is enabled, you can click "Reboot Now" to reboot the device immediately.

Note: Before using this function, ensure that the base unit time is set correctly. For convenience, the base unit time can be automatically corrected by connecting the base unit to the Internet.

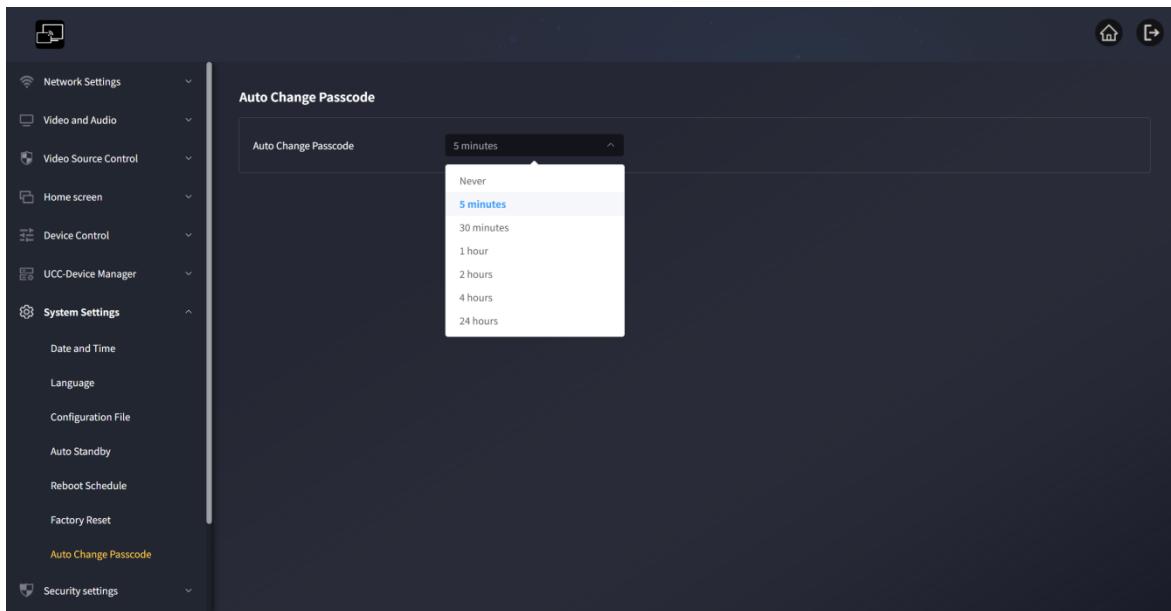
1.7.6 Restore Factory Settings

Allows users to perform factory reset to restore the device to default settings.



1. 7. 7 Auto Change Password

The passwords of all meeting participants remain unchanged while at least one wireless dongle or mobile device is connected to the S311 receiver. After users disconnect, a configurable timeout will start. If the password is changed, users do not need to re-pair the dongle.



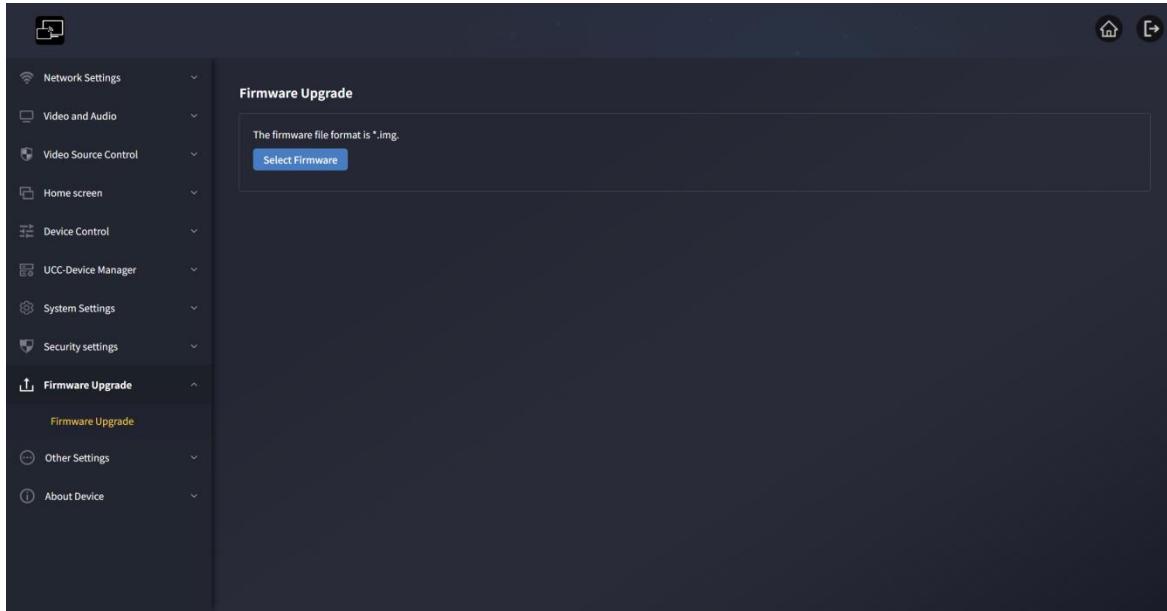
Options for auto changing password:

- Never: Never change the WiFi password (even after POWER-OFF).
- 5 Minutes: Change the WiFi password every 5 minutes.
- 30 Minutes: Change the WiFi password every 30 minutes.
- 1 Hour: Change the WiFi password every 1 hour.
- 2 Hours: Change the WiFi password every 2 hours.
- 4 Hours: Change the WiFi password every 4 hours.
- 24 Hours: Change the WiFi password every 24 hours.

1. 8 Firmware Upgrade

1. 8. 1 Firmware Upgrade

Users can upload local update files to upgradeS311. The firmware file format is *.img.



1.9 Security Settings

1.9.1 Security Level

According to user needs, three different security levels can be set to meet different security requirements.

Click the corresponding item in the menu to adjust the corresponding security functions. The default setting is Level 1.

- **Level 1:** Normal Security; Maintains normal and daily security for any organization (such as classrooms, regular meeting rooms, etc.).
- **Level 2:** Higher Security; Provides higher security for companies, organizations, government agencies, etc., through strong audio and video data encryption; other security functions include restricting "AirPlay" transmission by introducing passwords.
- **Level 3:** For strict security requirements of companies, organizations, authorities, and banks.

This level includes all "Level 2" security measures; in addition, all mobile applications and Web settings GUI will be blocked. Moreover, firmware downgrade will be impossible.

- **Custom:** The user can check security level options as needed.

The security level will be displayed on the main screen; click the icon.



#	Security Item	<input checked="" type="checkbox"/> Level 1	<input type="checkbox"/> Level 2	<input type="checkbox"/> Level 3	<input type="checkbox"/> Customized
1	Dynamic Passcode Enable	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
2	Encryption: Proprietary	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
3	Clear temporary data upon passcode change	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
4	Encryption: AES-256 Bit + RSA-1024Bit	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
5	Telnet Password	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
6	Password changing deletes and removes the data of the base device	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
7	Airplay Passcode Enable	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
8	Miracast Passcode Enable	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
9	Disable Airplay	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
10	Disable Miracast	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
11	Disable "Chromecast"	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
12	Prevent firmware downgrade	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
13	Disable the android APK	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
14	Disable WirelessMedia app for Windows and MAC	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

1.9.2 Login Password

This section allows users to change the password to access the web settings GUI. The default password is "admin".

No password

Current password

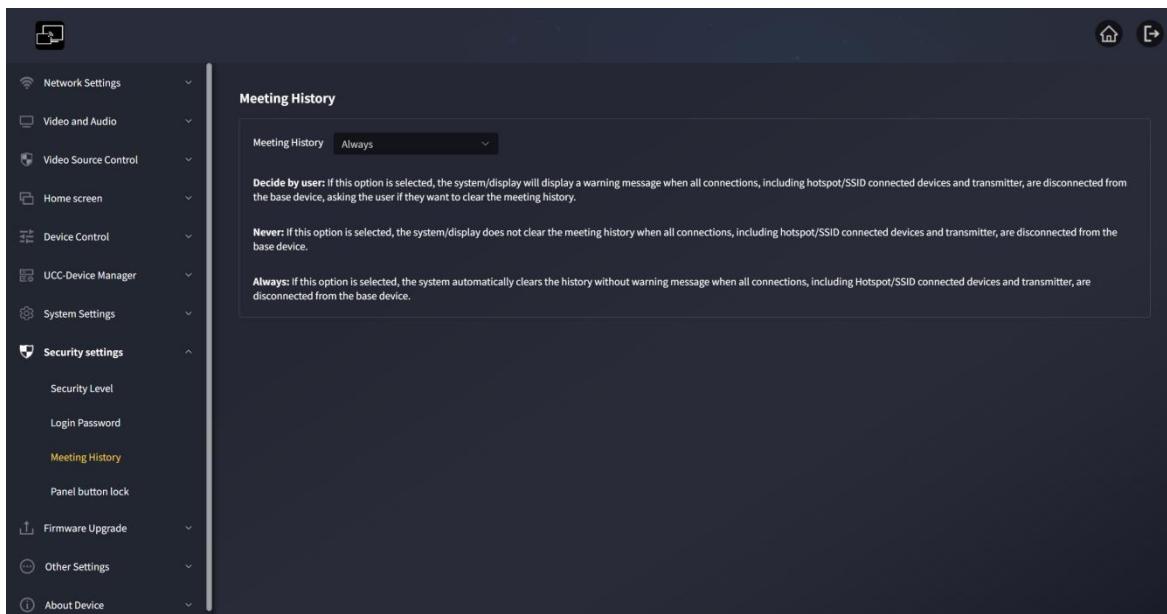
New password

Confirm new password

- **No Password:** After checking the setting, the user can log in to the web terminal directly without entering a password in the future.
- **Current Password:** Enter the current login password of the device.
- **New Password:** Enter the new password you want to set.
- **Confirm New Password:** Enter the set new password again.

1.9.3 Clear Records After Meeting Ends

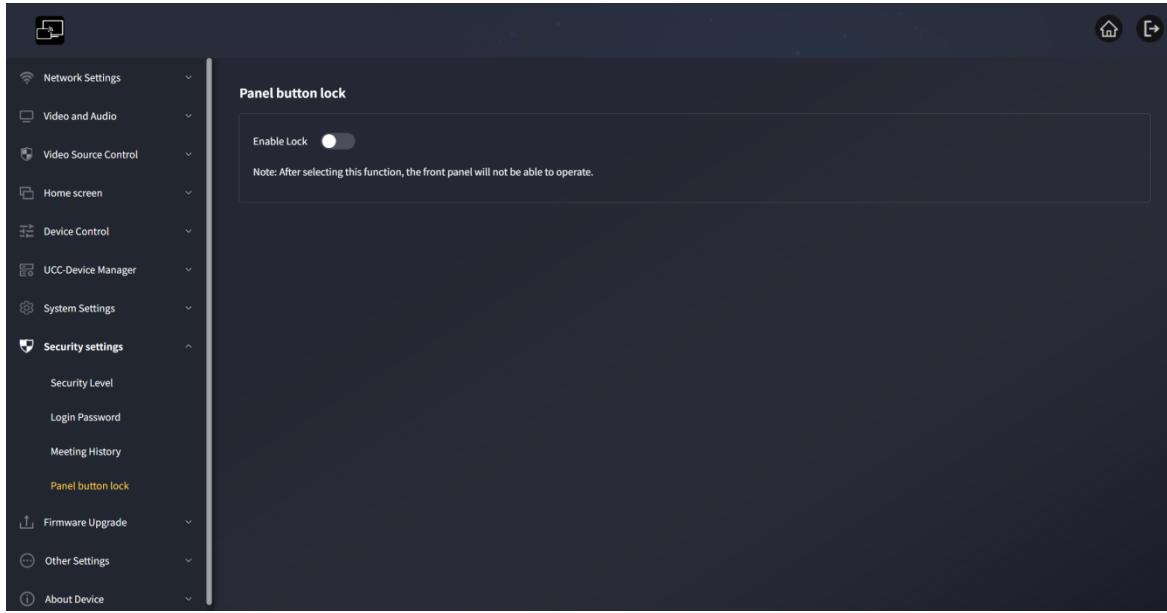
Pictures, videos, and music from mobile devices will be stored in the memory of the Base unit. At the end of the meeting, when the wireless dongle is removed from the laptop/PC, you can choose to clear this memory.



- **Let User Decide:** When all connected devices are disconnected from the receiver, the display will pop up a warning message asking the user whether to clear the meeting history.
- **Never Clear:** When all device connections to the receiver are disconnected, the system will not clear the meeting history.
- **Always Clear:** When all devices connected to the receiver are disconnected, the system will automatically clear the history without displaying a warning message.

1.9.4 Panel Button Lock

The front panel lock switch is a physical or software switch used to control the operation permissions of the device's front panel. It protects the device configuration security and prevents misoperation by restricting users' access or modification permissions to the front panel controls.

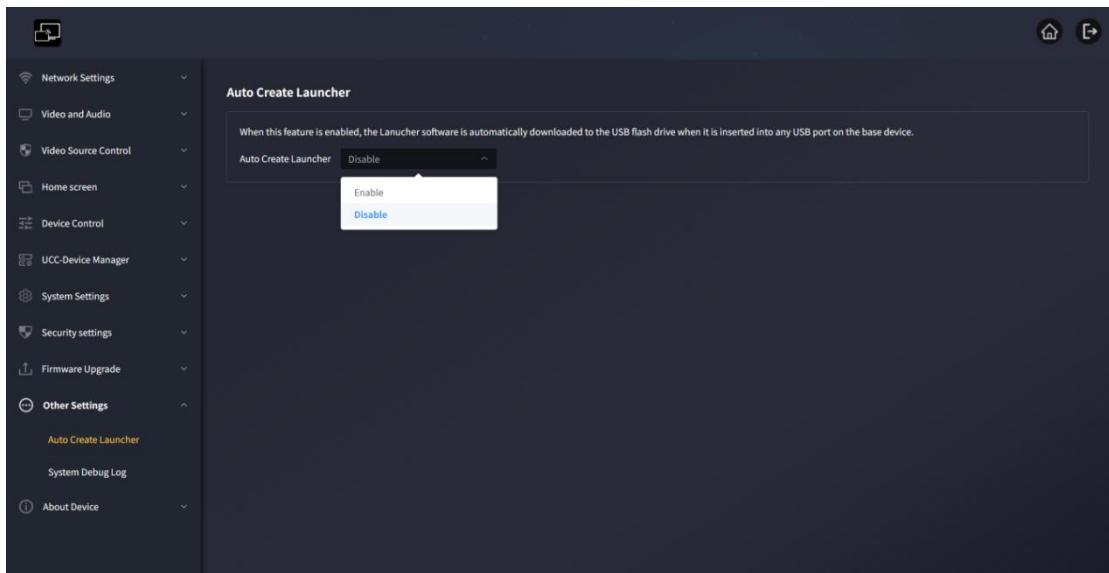


- **Off (Default):** Press the front panel selection key to switch USB channels (wireless/USB-C/HDMI).
- **On:** Pressing the front panel keys has no response, and USB channels will not be switched.

1.10 Other Settings

1.10.1 Auto Create Launcher

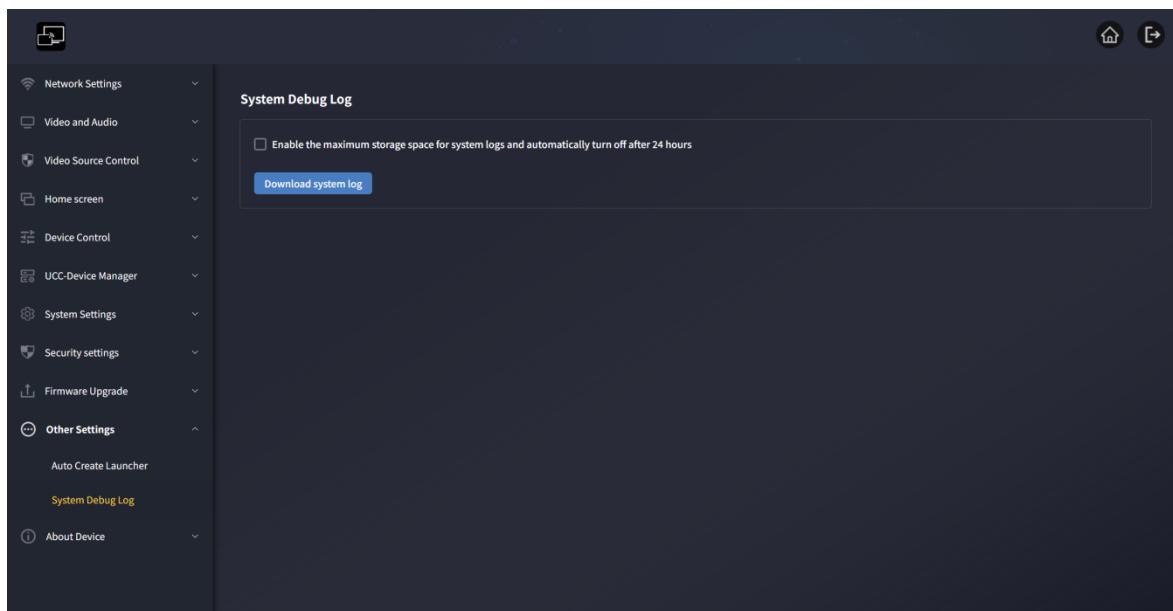
After enabling this function, the Launcher software will be automatically downloaded to the USB flash drive when a USB flash drive is inserted into any USB port of the base unit.



- **On:** Windows and Mac applications WirelessMedia, user manual, and Android APK will be automatically copied to the USB storage when a USB flash drive is connected to the receiver.
- **Off:** Windows and Mac applications WirelessMedia, user manual, and Android APK will not be automatically copied to the USB storage. If needed, you can only manually click the download button on the main screen to download and save to the USB flash drive when a USB flash drive is connected to the receiver.

1.10.2 Developer Tools

Used to capture logs when issue occur.



Log collection Method:

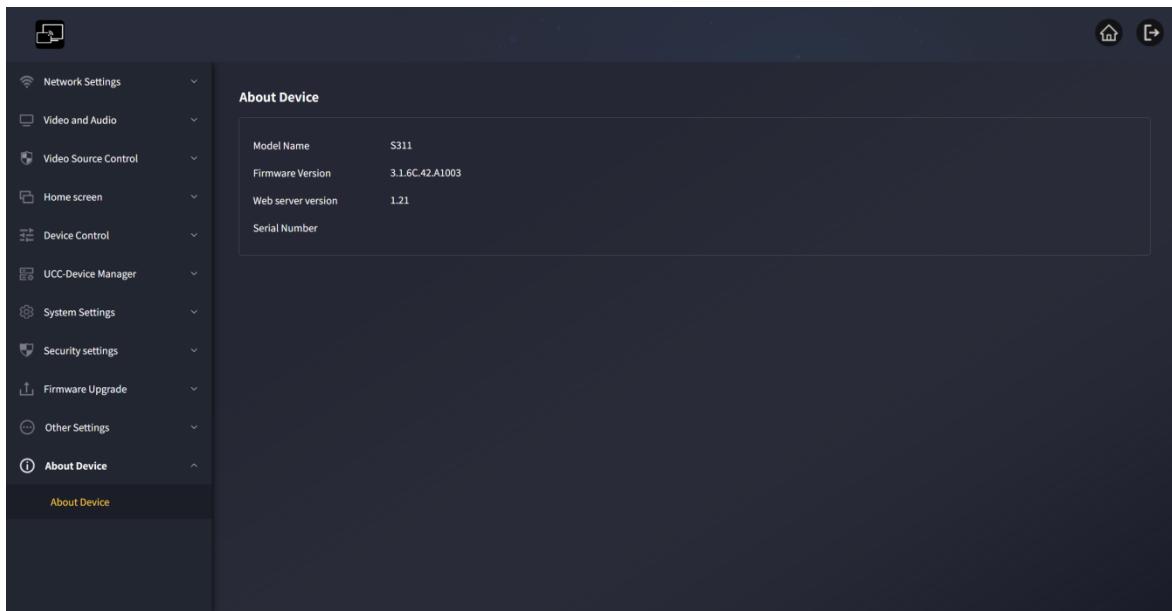
After the issue occurs, enter this page and click "Download System Logs"; the system will automatically start downloading the log files.

After the download is complete, you can open and view the log files on the computer; you can send the downloaded log files to after-sales service, and they will provide you with technical support.

1.11 About Device

1.11.1 About Device

Displays information including device model, firmware version, web server version number, and serial number.



1.12 Firmware Update

There are three different elements that may require firmware updates:

- Receiver S311
- Wireless dongle DG-H28
- Wireless dongle DG-C28

Note: All software is stored in the S311 receiver and then transmitted to other components.

After updating the S311 receiver, you need to check if other components also need updates.

1.12.1 Upgrade S311 Firmware Version

- **External USB Storage Drive Method:**

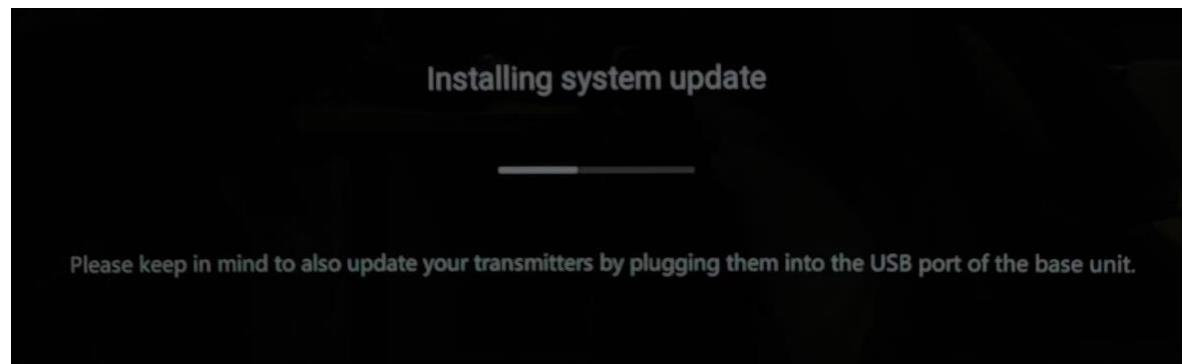
1. Copy the update file "update.img" to the root directory of the USB drive.
2. Connect the USB drive to the port next to USB 2.0 of the S311 receiver.

3. S311 automatically recognizes the "update.img" file in the inserted USB flash drive and starts the "Full Update" program. You can stop the update by removing the USB flash drive within 10 seconds.

Note: Do not disconnect the power during the upgrade. Otherwise, the device firmware will be damaged.

4. The upgrade progress is shown as in the figure. S311 will automatically restart after the update is completed. During the update, the screen may darken temporarily.

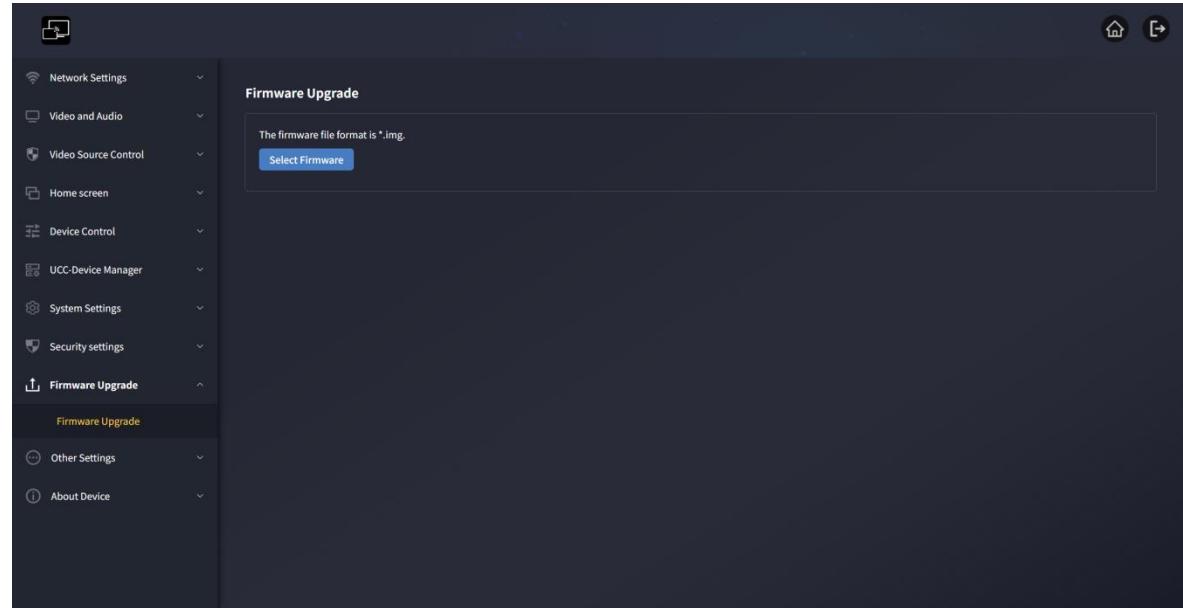
Note: If the progress bar stays at 1%, please use another USB flash drive, as this USB flash drive may be defective.



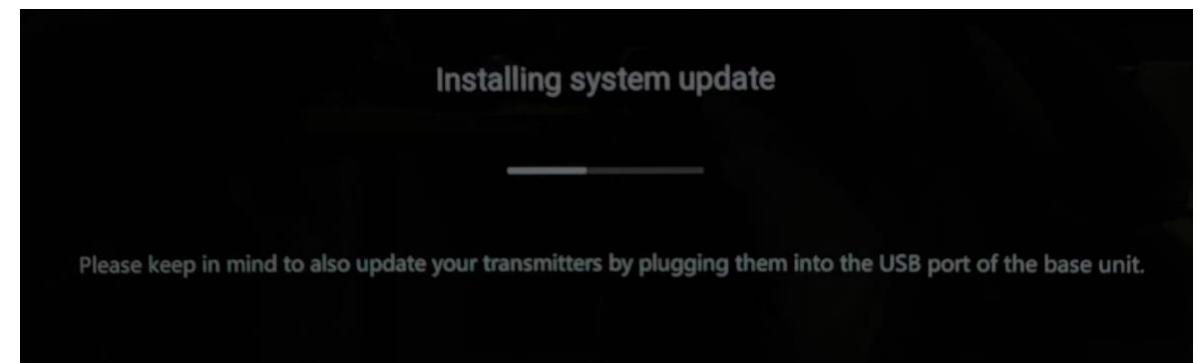
- 5. After the device starts up normally and displays the main screen, you can disconnect the USB flash drive.
- 6. Perform "Restore Factory Settings" after the firmware update is completed.

- Web Upgrade Method:**

Users can upload local update files on the web configuration page to upgrade the base unit firmware. The firmware file format is *.img.



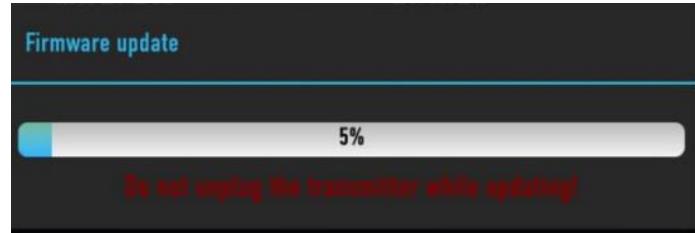
1. Enter the "Firmware Upgrade" option in "Web Settings".
2. Select the "update.img" file.
3. The upgrade progress is shown in the figure below. S311 will automatically restart after the update is completed.



1. The device starts up normally and displays the main screen.
2. Perform "Restore Factory Settings" after the firmware update is completed.

1. 12. 2 Upgrade DG-H28 / DG-C28 Firmware Version

1. Insert DG-H28 / DG-C28 into the corresponding front USB port of S311 for update. It will automatically display a message indicating whether the firmware installed on the wireless dongle is outdated and needs to be upgraded.
2. The upgrade progress starts automatically from the progress bar.



- 3. It will automatically complete "pairing" with the S311 receiver afterward.



- 4. The upgrade progress is completed. Remove the wireless dongle (DG-H28 / DG-C28), and it is now ready for use.

7. Technical Specification

Video	
Video Input	(1) HDMI 2.0b, (1) USB-C 2-lane DisplayPort alt mode, DisplayPort 1.4a, (1) Wireless
Input Connector	(1) Type-A female HDMI, (1) USB Type-C
HDMI input Resolution	Up to 4K@60Hz 4:4:4
USB-C Input Resolution	Up to 4K@60Hz 4:4:4
Video Output	(1) HDMI2.0b
Output Connector	(1) Type-A female HDMI
HDMI Output Resolution	Up to 4K@60Hz 4:4:4
HDCP Version	HDCP 2.x/1.x
AirPlay Resolution	Up to 4K@30Hz
Miracast Resolution	Up to 4K@30Hz
WirelessMedia APP Resolution	Up to 4K@30Hz
WirelessMedia dongles	Up to 4K@30Hz
DG-C28/DG-H28 Resolution	Up to 4K@30Hz
Audio	
HDMI Embedded Audio Fommat	PCM 2CH
Audio Output Connector	(1) 5-pin terminal block. Balanced line audio output.
Frequency Response	-0.02~+0.08 dB(20Hz~20KHz)
Max Output Level	±0.9V
THD+N	-85dB
SNR	106dB
Crosstalk Isolation	100dB
L-R Level Deviation	0dB

Output Load Capability	2K Ω
USB Standard	
USB Host	(1) USB-C: USB 3.2 Gen 1, (1) USB-B: USB 3.2 Gen1
USB Devices	(2) USB-A: USB 3.2 Gen 1, (1) USB-C: USB 3.2 Gen 1, (1) USB 2.0
USB Devices Power	5V@4A (20W) Shared
Control	
Control ports	(1) RS232, (1) TCP/IP
RS232	(1) 3 pin Phoenix connector TX-RX-GND BAUD 2400-115200
TCP/IP	(1) RJ45 port, 10/100/1000Base-T auto negotiation.
Network	
LAN	(1) RJ45 port, 10/100/1000Base-T auto negotiation.
WiFi Standards	IEEE 802.11a/b/g/n/ac
WiFi Frequency Bands	2.4 GHz / 5 GHz
WiFi Antennas	(3) Antennas, MIMO 2x2 and MIMO 1x1
WiFi Encryption	AES, WPA, WPA2, PSK
Security	IEEE 802.1x, HTTPS, TLS, PEAP/TLS
General	
Operation Temperature	0~40°C
Storage Temperature	-20°C~ 60°C
Relative Humidity	0~85% relative humidity, non-condensing
External Power Supply	24V16A
Max Power Consumption	130W (Fully loaded)
Power Consumption Standby	5.95W
USB-C Power Charging	100W PD3.0

Dimension (W*H*D)	215x152x25 mm
Net Weight	1000g (not including the 700g power adapter)
Shipping Dimension	345x265x77mm
Shipping weight	2200g
Safety Compliance	FCC.CE-RED
Environmental Compliance	ROHS, REACH, WEEE

8. Troubleshooting

Here you can find some fundamental problems and possible causes which can be happen during the operation of S311. Find out the problem in the table below and apply the indicated solution.

Problem	Cause	Solution
Using S311 for Android application in Android device or Airplay on iOS device, it can't find S311 device.	WiFi password of S311 changed when android or iOS device is connected to the WiFi of S311.	Reconnect the mobile by entering password displayed on welcome screen.
	The quality or length of the cable between theS311 and the display or the connection between these two.	<ul style="list-style-type: none"> • Replace the cable • Use another cable. • Check the cable to be fasten properly

<p>Image quality on the main display screen is not good.</p>	<p>Improper resolution for the main screen.</p>	<p>Change the resolution on the setting configuration and match it to the native resolution of the main screen.</p> <p>Refer to the 'Display and Audio' section of the 'Resolution' chapter.</p>
<p>Bad wireless connection. The connection between the Dongle and the S311 is not stable.</p>	<p>WiFi problems</p> <ul style="list-style-type: none"> • Interference in the radio channel. • Overload in the radio channel. • S311 does not automatically jump to other channels when there are changes in the RF environment. 	<ul style="list-style-type: none"> • Use a WiFi scanner to find a free wireless frequency and channel and select it via the setting configuration. • Regularly check the RF environment if there are frequently changes in WiFi networks in your environment.
	<p>Low signal strength:</p> <ul style="list-style-type: none"> • Metal cabinets, walls, construction elements, can cause reflections deteriorating the wireless signal. • Obstacles between the wireless Dongle and S311 cause lowering of the wireless strength and quality. 	<ul style="list-style-type: none"> • Put the S311 closer to the main screen. • Change the orientation of the antennas at the rear panel of S311 to the Dongle direction. • Remove or limit as much as possible all obstructions between the Dongle and S311. • Avoid placing the Base-unit in (metal) cabinets, suspended ceilings, under tables or in adjoining rooms.
<p>Low video performance</p>	<ul style="list-style-type: none"> • The media-player is not 	<ul style="list-style-type: none"> • Use another media-player (VLC

<p>(sharpness, audio and video dropouts, video stream is jerking, ...)</p>	<p>ideal.</p> <ul style="list-style-type: none"> The video quality also depends on the laptop power of the PC / laptop and the interaction and CPU load with other running software applications. A laptop in battery mode can be switched to reduced laptop power, to save energy. The transmission of HD video requires a certain amount of CPU power to guarantee the optimum quality of the transmission. 	<p>player...), another browser.</p> <ul style="list-style-type: none"> Update the software of your Video-player to the latest version. Reduce the CPU usage of other software applications. Lower the screen resolution of the laptop. Update driver of graphic card. End low power mode at laptop.
<p>The video is not shown on screen</p>	<p>The content use HDCP</p>	<p>The S31 input does not support displaying HDCP sources. If possible, connect the source device to the S311 native HDMI input.</p>
	<p>The display cable (HDMI) is not correctly connected.</p>	<p>Insert the display cable to the display and the Base-unit</p>
	<p>The displays are switched off.</p>	<p>Switch on the display.</p>
	<p>The S311 base-unit is in standby mode, "Power-LED" is red color.</p>	<p>Power off and on again or insert a dongle into laptop.</p>
<p>When using Windows 7, the following occurs regarding the Window Aero color scheme: "Windows has detected</p>	<p>The connection to S311 is lost.</p>	<p>Safely ignore this message and select "Keep the current color scheme".</p>

that your computer is performing slowly. This may be because these resources are insufficient to run the Windows Aero color scheme. In order to improve..."		
Nothing is shown on the display at all. No LAN connection to the S311.	The displays are switched off.	Switch on the display
	The display cable is not correctly connected.	Insert the display cable to the display and the S311.
	The S311 is in standby mode.	power off and on again the S311.
	Wrong IP address.	<ul style="list-style-type: none"> IP address is not within LAN range. DHCP is not enabled.
No WiFi connection between mobile devices and S311.	Wrong WiFi frequency.	Check mobile device to select the correct 2.4GHz or 5GHz
	Wrong SSID and password	Enter the correct SSID.

No audio when transmit local file to S311.	Unsupportive audio format, including Dolby MS11, DDCO、DTSLBR, DTS, SRS-THEATERSOUND, DTS_StudioSound3D, DTS_HD.	If possible, reformat it to the other audio format, like DD, DD+, HE-AAC, DTS DMP, WMA, DRA, COOK
	No connected audio device.	Make sure the audio is turned on.
	Volume is set to OFF.	Adjust the volume level at Options

There is no sound at main display.		in menu of S311.
	The volume level is set too low in the options of the app program on PC.	Adjust the volume in the app on PC.
	Audio signals may be muted.	Click with right-mouse button at speaker icon in the taskbar and switch on.
	The volume level is set too low.	Adjust the volume level at Options in menu of S311.
	Audio is muted in mixer of volume in taskbar.	Right-mouse click at speaker icon in taskbar, open mixer and unmute S311 or "Video Playback".
	The software of used Video-player is not actual.	Update Video-player. Try another player.
	An active virus scanner can block the Audio.	Check the filter-settings in Virus scanner. Deactivate the player for a check.
There is no sound with MacBook.	Problem of sound-flower App, which is integrated into driver app.	<ul style="list-style-type: none"> • You need Admin-password. • Go to the macOS System Preferences and select the "Security & Privacy" tab. Find the "allow to run/install the sound-flower" there click on "Allow" next to "Matt Ingalls", to allow this sound-flower to install on the Mac Book. • Run the app again, it'll auto-install the sound-flower to the MacBook.

There is no sound	The volume is set too low, on the	Increase the volume on the mobile
-------------------	-----------------------------------	-----------------------------------

via AirPlay	mobile device.	device.
There is no sound at main screen, when mirroring a video by the App for Android".	Due to the limit of the Android system, Android doesn't provide an interface to capture the audio. In this case, there is no sound when mirroring the video.	Use wireless Dongle or Apple Airplay to do mirroring when necessary
Can not update firmware of the S311.	Flash disk format is NTFS.	Please re-format the flash disk to be FAT format to update it.
Can not work airplay with MacBook / iPhone/ iPad.	Operation System Requirement Mac OS 10.9 iOS 8.0 and later (app).	<ul style="list-style-type: none"> • To use AirPlay, you must connect the iOS device to the WiFi of S311 and enable the AirPlay feature in the Control Center. • Update the iOS device to a newer operating system.
Poor Video-quality with AirPlay	There are 2 states for AirPlay: a) Mirroring: 1: 1 copy of the screen b) Streaming: Videos (Internet, Youtube). The image will not be displayed on the iOS device. => The picture is jerky.	Reduce "Quality" in settings of Youtube, for example from "Automatic" to 720p.
Can not work with Android device.	Operation System Requirement Android 2.3 and later (app).	Update to the latest OS.

FCC Caution.

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.

Any Changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment.

Note: 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.

***RF warning for Mobile device:**

This equipment complies with FCC radiation exposure limits set forth for an uncontrolled environment. This equipment should be installed and operated with minimum distance 20cm between the radiator & your body.