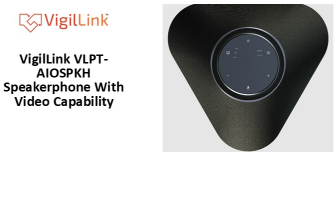


VigilLink VLPT-AIOSPKH Speakerphone With Video Capability User Manual

Contents

VigilLink VLPT-AIOSPKH Speakerphone With Video Capability

Specifications

- Product Name: All-in-one Speakerphone with Video Capability
- Product Number: VLPT-AIOSPKH
- Document Number: VL-UserManual_VLPT-AIOSPKH_Rev1
- Power: DC 24V Power Adapter
- Connectivity: HDMI IN, Type-C (DP), USB-A
- Microphone: 4x omnidirectional array with echo cancellation
- Speaker Output: 10W

Product Description
In Type-C mode, the VLPT-AIOSPKH offers 60W charging, HDMI IN, Type-C (DP), and USB-A for video compatibility. It features an advanced microphone array with echo cancellation, noise reduction, and speech enhancement. The 10W speaker delivers quality sound for meetings and music playback. Easy plug-and-play setup for complete meeting room solutions.

Operation Controls and Functions
The VLPT-AIOSPKH supports various applications like Zoom, Tencent Meeting, and Teams. It includes features such as video switching, screen mirroring, guide screen, OSD, web UI, Wi-Fi settings, audio control, firmware upgrades, and more.

Product Usage

Setting Up

1. Connect the DC 24V Power Adapter to the speakerphone.
2. Connect the AC Power Cord to a power source.
3. Use the included cables to connect HDMI IN, Type-C (DP), and USB-A as needed.
4. Fix the speakerphone in place using the fixing bar and screws.

Using the Speakerphone

1. Power on the speakerphone using the power button.
2. Adjust volume levels using the control buttons or via the web UI.
3. Switch between different audio inputs if needed.

4. Use the microphone array for clear voice capture during meetings.

Video and Screen Controls

- Switch between video sources using the provided controls.
- Enable screen mirroring for sharing content from external devices.
- Access the on-screen display (OSD) for additional settings and configurations.

FAQ

Q: Can I use the speakerphone without connecting it to a power source?
A: No, the speakerphone requires a power source to function properly. Connect the DC 24V Power Adapter for power.

Welcome, to the VigillInk User Manual!
Thank you for your purchase. At VigilLink, we prioritize the end-user experience by focusing on ease of use, ensuring our solutions are straightforward to install and program
for our valued dealers. Our mission goes beyond product development; we aim to create a seamless experience for both integrators and end-users.
We value your feedback and would love to hear about your experience. Positive feedback reassures us that we have achieved our goals. If there are any areas where we have not met your expectations, we encourage you to reach out and share your thoughts so we can understand your experience and work to exceed your expectations in the future.

Thank you again for your purchase, and we look forward to hearing from you!
Mickey Park
Founder and CEO, VigilLink

Surge protection device recommended
This product includes sensitive electrical components that can be damageed by electrical spike, suges, shocks, of lightning strikes. To sfeguard and prolong the lifespan of yor equiptment, it is highly recommended to use surge protection systems.

Caution
The product requires the use of UTP connectors.
Please connect in direct interconnection method and do not cross connect.

Product Description

The VLPT-AIOSPKH is a versatile all-in-one speakerphone with integrated video capabilities, designed to enhance conference room experiences. It supports USB-C, HDMI, Wireless BYOD inputs, and HDBT output, offering seamless connectivity and exceptional audio performance to ensure that every participant is heard clearly during calls. This device allows for presentations from various devices such as laptops, smartphones, or tablets, via Type-C port or HDMI input, with BYOD support to push content directly to a display.
In Type-C mode, it offers 60W charging, keeping devices powered during extended meetings. For video, it features HDMI IN, Type-C (DP), and USB-A, ensuring broad compatibility:

- Type-C Mode:** HDMI out / HDBT out supports up to 4K 30Hz.
- HDMI IN:** HDMI out / HDBT out supports up to 4K 30Hz.
- USB 3.0 Display-Link Technology:** Supports up to 1080P 60Hz.
- BYOD Mode:** Supports up to 1080P 30Hz.

For audio, the VLPT-AIOSPKH boasts an advanced 4x omnidirectional microphone array with echo cancellation, active background noise reduction, and speech enhancement, ensuring optimal performance in any meeting room. Its powerful 10W speaker delivers a full range of sound, perfect for both meetings and music playback. With its plug-and-play simplicity, the VLPT-AIOSPKH makes it easy to set up a complete meeting room solution with just one device.

Featured Highlights

- All-in-One conferencing and collaboration solution integrating mic, speaker, and video connectivity to meet the needs of small to medium-sized conference rooms.
- Plug-and-play functionality for simple deployment and easy use.
- Powerful amplifier and speaker combination producing outstanding clarity, ensuring everyone can hear every word during meetings.
- 360° voice pick-up with 4 MEMS digital mic arrays and a sound pick-up distance of 5-7 meters for clear sound.
- AEC, noise reduction, and full duplex mode, ensure clear and smooth communication in virtually any listening environment.
- Type-C/USB 3.0 or HDMI IN connection allows for integration with both new as well as legacy laptops.
- Built-in HDBT output allows for extending 4K video signal up to 40 meters.
- BYOD content sharing via Miracast, Airplay, and optional USB-C dongle.
- Integrated options for controlling the connected display.
- Full compatibility with operating systems and UC applications, such as Zoom, Tencent Meeting, Teams, and more.

Included Components

Qty	Component
1	Speakerphone
1	DC 24V Power Adapter
1	AC Power Cord (with US Pins)
1	USB Type C to Type C Cable with Type C to USB 3.0 Type A Adapter
1	Cable Fixing Bar (with Screws)

Specifications

Technical	
Video Input	1 x USB-C In (Type-C or USB3.0 via Display link); 1 x HDMI In; 1 x LAN; 1 x WLAN
Video Output	1 x HDMI Out; 1 x HDBT Out
Video Resolution supported (max)	Input: • HDMI/USB Type-C: up to 4K@30Hz 4:4:4 8bit USB 3.0 (Displaylink): up to 1080P@60Hz • Wi-Fi/Dongle: up to 1080P@30Hz Output: • HDMI/HDBT OUT: up to 4K@30Hz 4:4:4 8bit
Speaker	10 Sound pressure level: 82±3db 1m/1w at 1KHz Respond range: 150Hz~17K Hz Distortion: 5% max
Mics	4x Omnidirectional Mics Array Sensitivity:-26 dB 94 dB SPL @ 1 kHz SNR:64 dB(A) 20 kHz bandwidth,A-weighted fCLOCK=2.4 MHz THD:0.2% 94 dB SPL @ 1 kHz AOP:120dB SPL 10% THD @ 1 kHz Frequency Response: ±2dB (100~10KHz) @94dB SPL
Meeting with	More than 10 People
Transmission Distance	HDBT OUT: up to 40m/131ft at 3840*2160 30Hz

Mechanical	
Operating Temperature	0°C to 45°C (32°F to 113°F)
Storage Temperature	-20°C to 70°C (-4°F to 158°F)
Humidity	10% to 90%, non-condensing
ESD Protection	**Human-body Model:** • ±8kV (Air-gap discharge)/ • ±4kV (Contact discharge)
Power Supply	DC 24V 5A
Charging via Type-C Port	60W (Max)
Power Consumption	89W (Max)
Device Dimension (W x H x D)	267.3mm x 105.5mm x 232mm/10.52” x 4.15” x 9.13”
Product Net Weight	1.06kg/2.33lbs

OPERATIAON CONTROLS AND FUNCTIONS

Speaker

NO	NAME	FUNCTION DESCRIPTION
1	Speaker	Outputs audio of input source.
2	Source Switch Butto	Press to select the source: • AUTO: When there is no wire source or only showing Wireless source (default). • HDMI: Select HDMI source with USB host • TYPE-C: Select Type-C source with USB host
3	LED	• AUTO LED lighting blue: When there is no wire source or only showing Wireless source • HDMI LED lighting blue: Select HDMI source • TYPE-C LED lighting blue: Select Type-c source
4	Mute Video Button	Press to mute/unmute video. Note: Video mute is working no matter the source is active or inactive; After power cycle, it comes back the default status (unmute).

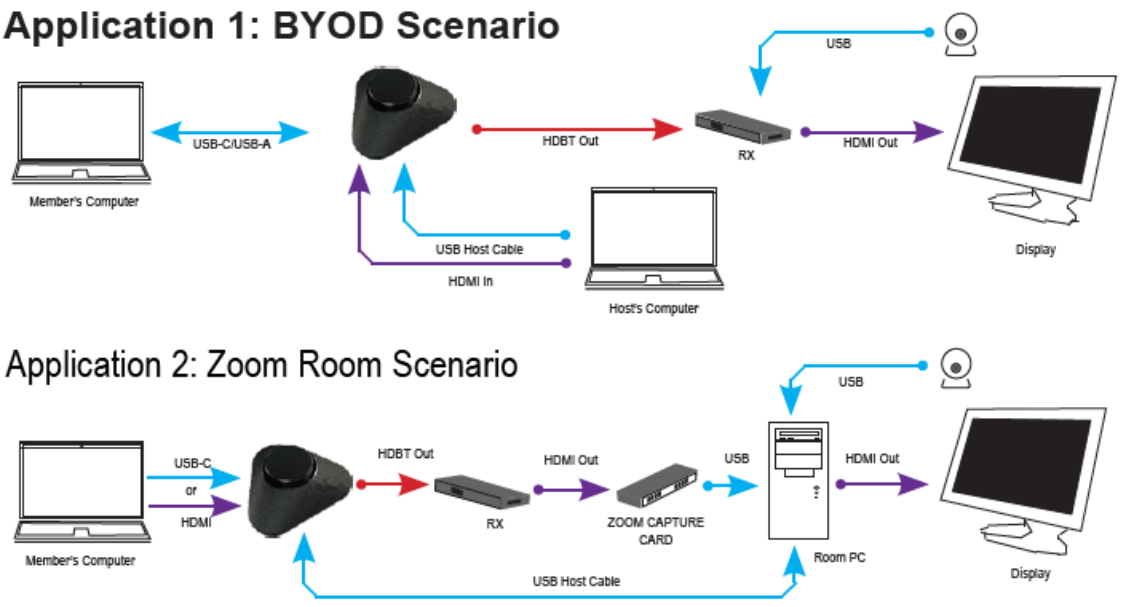
5	Status LED	Lighting blue: Valid signal input is detected. Lighting white: No signal input is detected. Lighting red: Video is muted. Breathing and lighting white: Standby status.
6&7	BYOD ON/OFF Button & LEDs	Press to set BYOD (Airplay and Miracast) function to On/Off. On/Off LED will light blue when set BYOD function to On/Off.
8	Volume Up Button	Press to increase volume.
9	Mute Mic Button	Press to mute/unmute the mics.
10	Volume Down Button	Press to decrease volume.
11	Mic	4 x Omnidirectional mics array for picking up sound.
12	Paring	Connect to Dongle for pairing.
13	DC 24V	Connect to the power adapter provided.
14	LAN	Connect to a network device (e.g. network switch, router, computer, etc.) for Airplay Mirroring signal input and LAN control (Web GUI & Telnet API)
15	HDBT Out	Connect to an HDBT receiver.
16	HDMI Out	Connect to an HDMI display.

NO	NAME	FUNCTION DESCRIPTION
17 & 18	HDMI IN &USB-B	• HDMI IN: Connect to an HDMI source. • USB-B: Connect to the USB host device using a mini USB to USB Type A cable. Note: USB-B is bound with HDMI IN.
19	USB 3.0	• Connect to a USB Device.
20	USB-C	USB 3.1 Gen1: 5Gbps USB PD: 60W Max Connect to a USB-C video source (e.g. laptop) for video input using the USB Type C cable provided. You can also use either of the following suggested cables: • USB Type-C to USB 3.0 Type-A cable; • USB Type-C to Type-C cable (USB 3.1 Gen 1 or above).

Note:

- Press and hold the “+” & “-” buttons together for five seconds, the speakerphone blinks red twice to indicate that buttons are locked.
- Press and hold the “+” & “-” buttons together for five seconds,

Applications



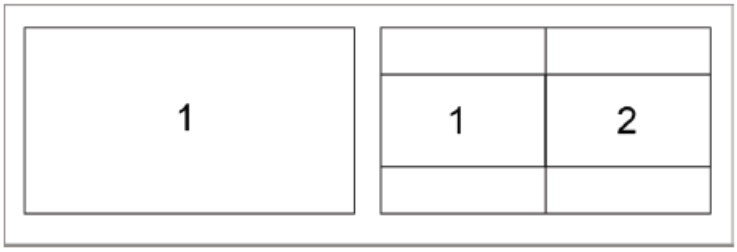
1. In Zoom Room scenario, USB 3.0 adaptor on Type-C cable does not work.

2. In Zoom Room scenario, all the USB devices are connected with Room PC, Type-C or HDMI IN source is just used for sharing content.
3. When switching the scenario, you need to reboot the device to make the settings take effect. (Using Web UI or API commands to switch the scenario, refer to “Web UI” section or the separate document “API Command Set_ UAV-G709-000”.

Note: After the speakerphone is connected to a laptop with the cable provided, it can be detected by the system and specific application in the name of the following:

Key Functions
The device offers multiple functions such as Video switching, automatic signal switching, Guide Screen and OSD, allowing for easy control on the system.

Video Switching
The device supports full screen and split screen, as shown in the following figure.



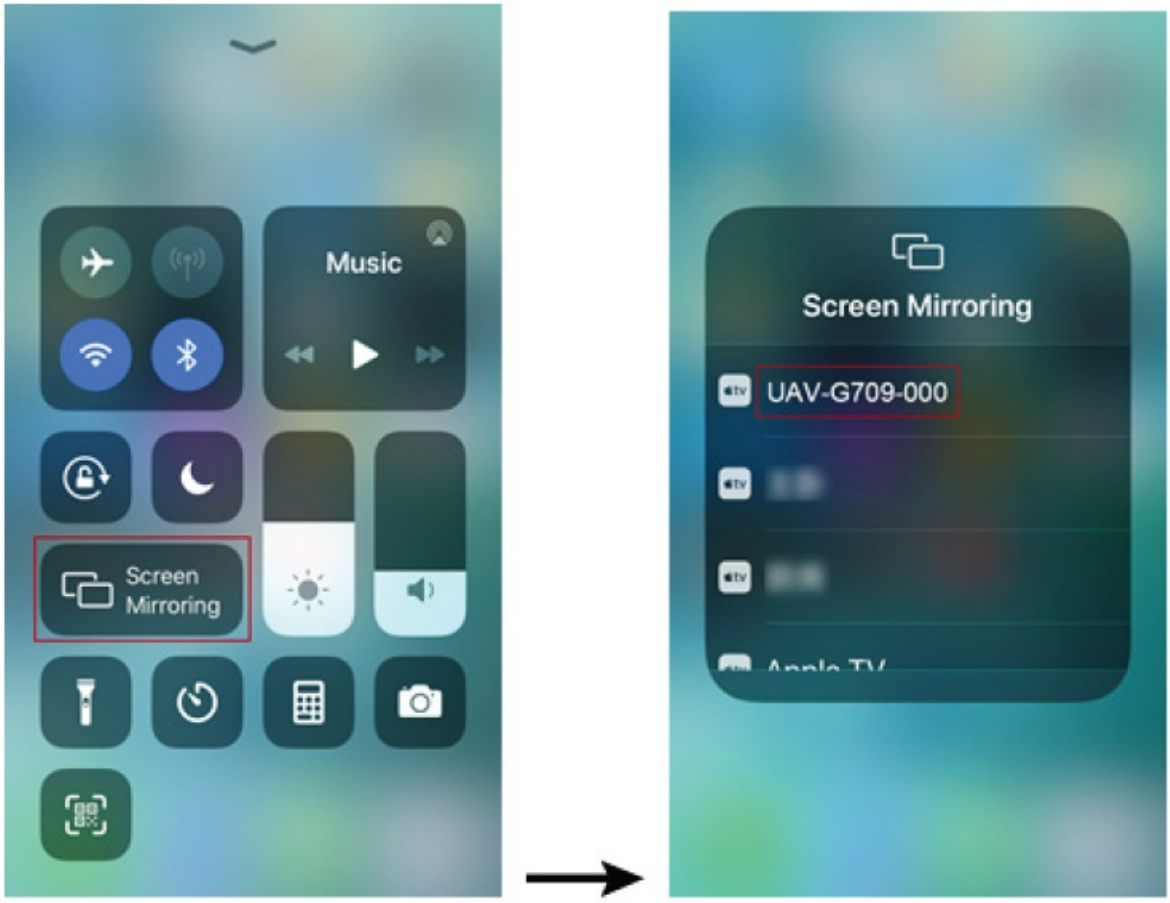
1. When BYOD is set to OFF, it is only working as full screen, and can switch sources between HDMI IN /USB Type-C / Type-C dongle, it will follow the rule: “Last-in-first-out”:
    - When a video source inputs, the device automatically switches to this source and output it.
    - When the current source input is removed, theNote:
      You can switch HDMI IN/Type-C source via plug/unplug cable or pressing button on top panel.
      During switching sources, the USB device is always bound with the selected source.
2. When BYOD is set to ON, the device supports switching among all sources.
    - When one source is connected to the device, the device is in full screen mode.
    - When two or more sources are connected to the device, the device is in split screen and the latest inserted source will replace the earliest connected source to show in the corresponding split screen.
    - When remove the source selected currently:
    - Firstly, check the last selected wired source, if it is active, the device will switch to the source and show it on the screen.
    - If last selected wired source is not active, the device will check the other wired source. If it is active, the device will switch to the source and show it on the screen.
    - if there’s no active source, it will show Guide screen on the display, after 1 minutes, the device will send CEC power off command to turn off the sink display and its power LED is weak breathing lighting.
      Note: If new source replaces the current wireless source (Dongle / Airplay / Miracast), the current wireless source is disconnected with the device.

Screen Mirroring
With screen mirroring support, the device allows users to wirelessly share multimedia from their devices on any HDMI displays. Screen mirroring can be performed over Airplay Mirroring, Miracast and Dongle.

1. Screen Mirroring over Airplay

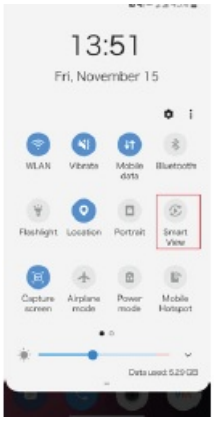
Take iPhone 8 (iOS 15.2) for example:

1. Connect your iPhone to the soft AP of the device.
    - Soft AP SSID: as same as the device name and can be obtained from OSD at the upper right of the display screen. By default, it is set as UAV-G709-000.
    - Password: set through Web UI or Telnet API and can be obtained from OSD at the bottom right of the display screen. By default, it is set as 12345678.
2. Slide up from the bottom of the iPhone's screen to show the control center. Click Screen Mirroring and choose the device name in the pop-up list



3. The display device displays your iPhone's screen.
4. To disconnect iPhone from the device: click Stop Mirroring, the display stops displaying your iPhone's screen.

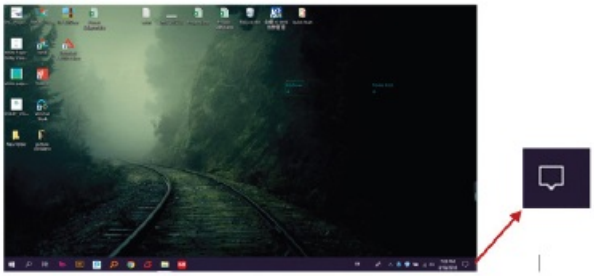
Screen Mirroring over Miracast
For Android mobile (take Samsung Galaxy S9 for example):

1. Enable the Wi-Fi or WLAN feature of the mobile.
2. Slide down from the top of the screen and click the Smart View icon in the pop-up interface.
3. 

   The Smart View window appears and starts to search for Miracast receiver. Click the device name in the search result, the display will output the mobile' screen.

For Windows 10 PC:

1. Enable the WLAN feature of your PC.
2. Click the icon on bottom right of the screen to open Action Center.



3. Click Connect.

4. Click the device name in the search results.
5. The display device displays PC's content once your PC is connected to the device successfully.
6. To disconnect PC from the device: click Disconnect, the display stops displaying PC's content.

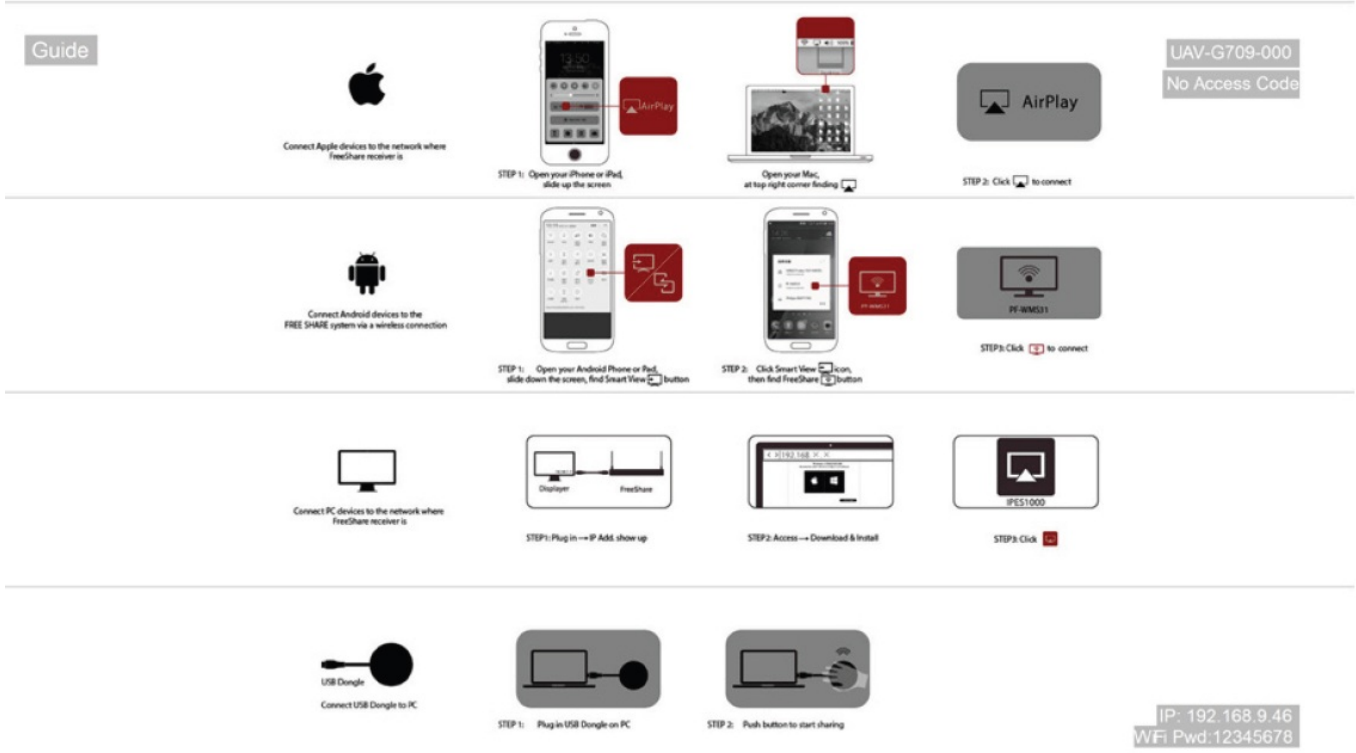
Note:

- The icon and interface of the Miracast function may vary on different computers.
- Some Windows 10 computers may fail to perform screen mirroring with Miracast due to compatibility issues.
  Tip: Both the Airplay mirroring and Miracast support access code. If you see the PIN entry window appears on your devices, input the access code which can be obtained through OSD. (See "OSD" section for more

information.)

Screen Mirroring over Dongle
Dongle allows you to share your laptop's content on the display screen in a simple way – just by clicking the button of the Dongle connected to the laptop without installing any additional software. For more information, see the user guide of Dongle.(Note: Dongle is sold separately.)

Guide Screen
The device uses a Guide Screen to convey the basic connec-tion instructions for user access. The Guide Screen can be personalized to allow custom connection instructions on the device's Web UI page.
When all video sources are disconnected from the device, the Guide Screen appears on the display screen automatically as following.



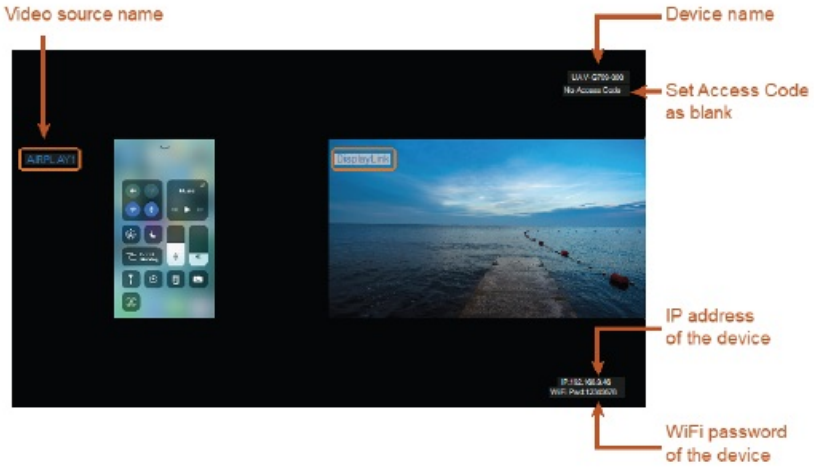
Note:

- This Guide Screen picture can be changed though Web UI setting, please refer to Guide Screen section for more information.
- By default, if Guide Screen picture is being output for 60 seconds, a countdown timer with the time period of 60 seconds will appear on the Guide Screen. When the timer ticks to zero, if the connected display is CEC-sup-ported, it will enter standby mode.

OSD
The device supports OSD (On Screen Display) to convey device basic information, including video source's information, access code, device name and IP address, etc. Here are two different OSD examples in different scenarios.

Example 1: Full Screen mode

Example 2: Split Screen mode



Note:

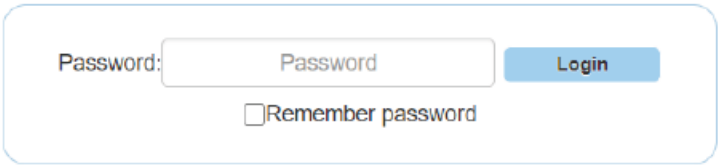
- When the device outputs Guide Screen picture, the OSD will be displayed all the time.
- When the device outputs specific video sources, the OSD will be displayed on the display device's screen for 10 seconds and then disappear.
- By default, the access code is set as blank, therefore the OSD doesn't display the access code. If you want to set access code, see BYOD section for more infor-mation.

Web UI

The Web UI designed for this device allows for basic controls. It can be accessed through a modern browser, e.g. Chrome, Safari, Firefox, IE10+, etc.

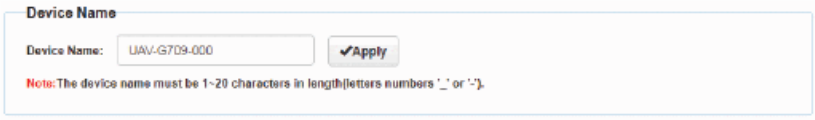
To get access to the Web UI:

1. Connect the LAN port of the device to a local area network. Ensure there's a DHCP server in the network so that the device can obtain a valid IP address.
2. Connect the PC to the same network as the device.
3. Input the device's IP address in the browser and press Enter, the following window pops up.



4. Input password (default password: admin) and click Login to enter the main page of Web UI.
   The Web UI main page consists of four tabs: General, Video, Audio and Advanced Setting.

General Page Device Name



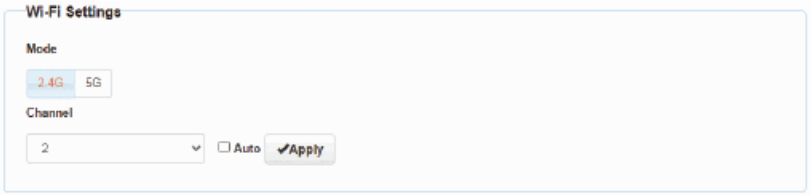
UI Element	Description
Device Name	Redefine the device name to names easy to remember. Note: The name must be 1~20 characters in length, including letters, numbers, “_” or “-”.
Apply	Click to perform settings.

Network

UI Element	Description
Network	For network settings in the device’s LAN port.
IP Mode	Select an IP mode from DHCP and Static.
IP Address	By default, it’s set as DHCP.
Subnet Mask	Set IP address manually for the device when Static mode is selected.
Default Gateway	Set subnet mask manually for the device when Static mode is selected.

UI Element	Description
DNS Server 1	Set gateway address manually for the device to communicate with another network that uses different communication protocols when Static mode is selected.
DNS Server 2	Set DNS server manually for the switcher to ensure normal network communication.
Apply	Click to perform settings.

Wi-Fi Settings

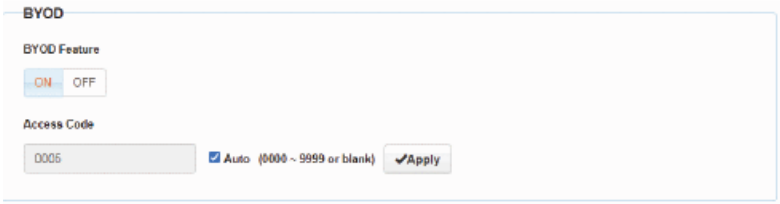


UI Element	Description
Mod	• 5G: Configure the device's frequency band as 5GHz. • 2.4G: Configure the device's frequency band as 2.4GHz. • By default, the device works at 5GHz. If your wireless devices don't support 5GHz Wi-Fi, configures the frequency band as 2.4G before connecting them to the device via Miracast.
Channel	Configure the wireless channel for the device. By default, it is set as Auto. Auto means the device select a wireless channel automatically for itself.
Apply	Click to perform settings.

Soft AP

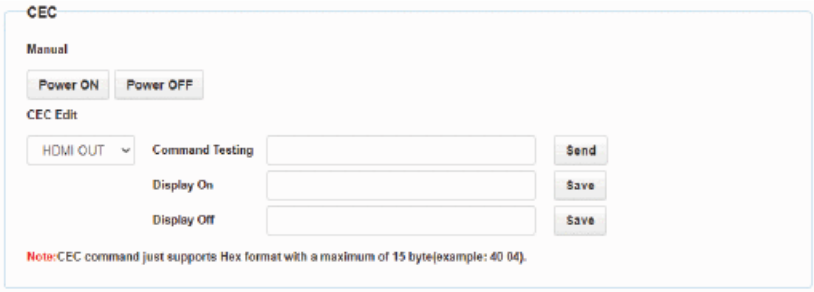
UI Element	Description
Setting	• On: Enable the device's soft AP function. • Off: Disable the device's soft AP function.
Soft AP Router	• On: Enable the device's soft AP router function so that wireless devices connected to soft AP are able to access the internet (in he condition that the LAN port of the device is connected to the internet). • Off: Disable the device's soft AP function to prevent wireless devices c onnected to soft AP from access- ing the internet. *Note: Before you use this feature, ensure the soft AP function is enable d.*
Soft AP Password	*Configure soft AP password.* *Note: The soft AP password must be 8~20 charac- ters in length, includin g letters, numbers, "_" or "-".*
Apply	Click to perform settings.

BYOD



UI Element	Description
BYOD Feature	• On: Enable the device's BYOD feature. • Off: Disable the device's BYOD feature.
Access Code	Enter a four-digit access code to help prevent users from accidentally con necting to an unintended device and protect from an unauthorized access. • When an access code is configured, it appears on • the upper right corner of the display. • If you don't want to set access code, you can enter nothing here. By default, it's set as blank.
Auto	When "Auto" is checked, the device randomly generates a four-digit acces s code in the following cases: • The device switches to Guide Screen. • The device reboots.
Apply	Click to perform settings.

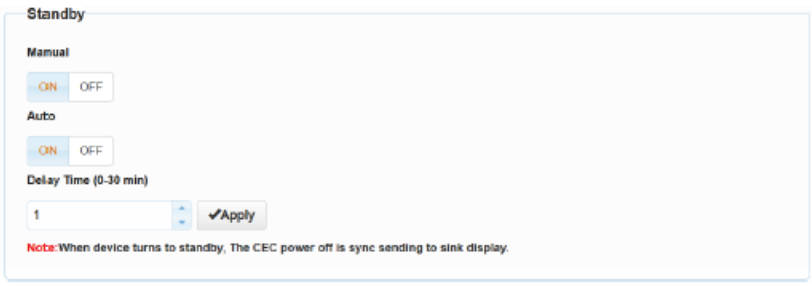
CEC



UI Element	Description
CEC	Set display on or off through CEC commands.
Power On	Click to power on the connected display through CEC command.

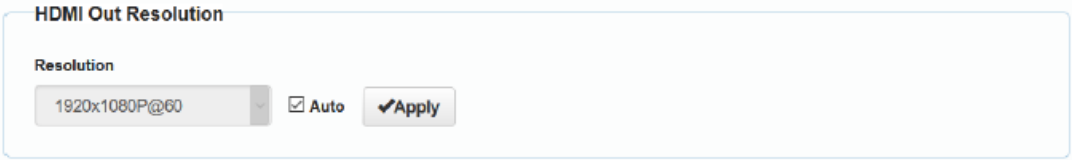
UI Element	Description
Power Off	Click to power off the connected display through CEC command.
CEC Edit	Configure CEC Display On and Off commands for passing through them to HDMI Out and/or HDBT Out port.
Command Testing	Enter the CEC command of a controlled display device for click “Send” to test if it is available before you enter it in **Display On** and **Display Off**.
Display On	Enter the CEC Display On command of a controlled display device and click “Save”. For more information about the command, see the user guide of your display devices. By default, it’s set as blank.
Display Off	Enter the CEC Display Off command of a controlled display device and click “Save”. For more information about the command, see the user guide of your display devices. By default, it’s set as blank.
Apply	Click to perform settings.

Standby



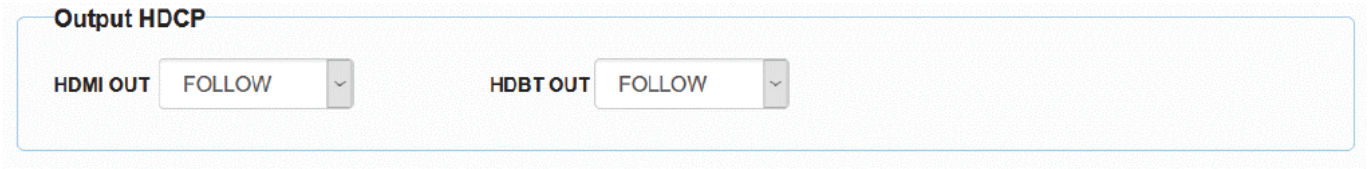
UI Element	Description
Standby	Set the device to standby or to wake up from the standby status.
Manual	• On: Set the device to standby status manually. • Off: Set the device to wake up from standby manually.
Auto	• On: Enable automatic standby function for the device. • Off: Disable automatic standby function for the device.
Display On	Set a period of time that remains before the count- down timer begins for auto standby. • For example, when the current input is Guide Screen, 1 minute means i f there's no signal present at the device in 1 minute, the countdown tim er for device standby begins; when the timer ticks to zero, the device e nters standby mode. *Note: If the connected display doesn't support CEC or isn't correctly se t with RS232 commands, the word "Standby" appears in the middle of t he Guide Screen.* • If it's set to 0 minute, it means this function is dis- abled, you cannot set the device to standby mode. By default, auto standby is set as 1 minute.
Apply	Click to perform settings.

Video HDMI Out Resolution



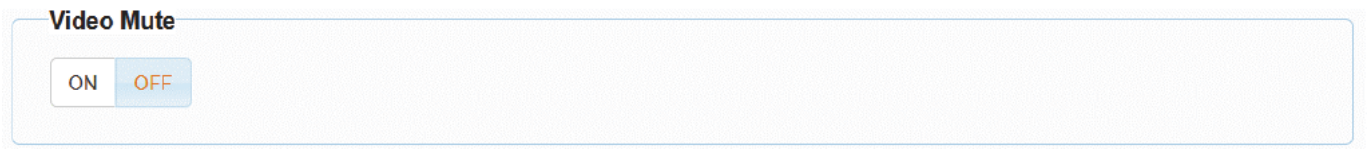
UI Element	Description
Resolution	Set the output resolution for HDMI Out. Two opera- tion methods are offer ed. • Auto: select to output the maximum resolution supported by display ba sed on the display's EDID. E.g. If display supports up to 4K@60Hz, the device outputs 4K@60Hz. • Resolution range list: select a desired output resolution from the drop-d own menu to output this fixed resolution. By default, it's set as Auto.

Output HDCP



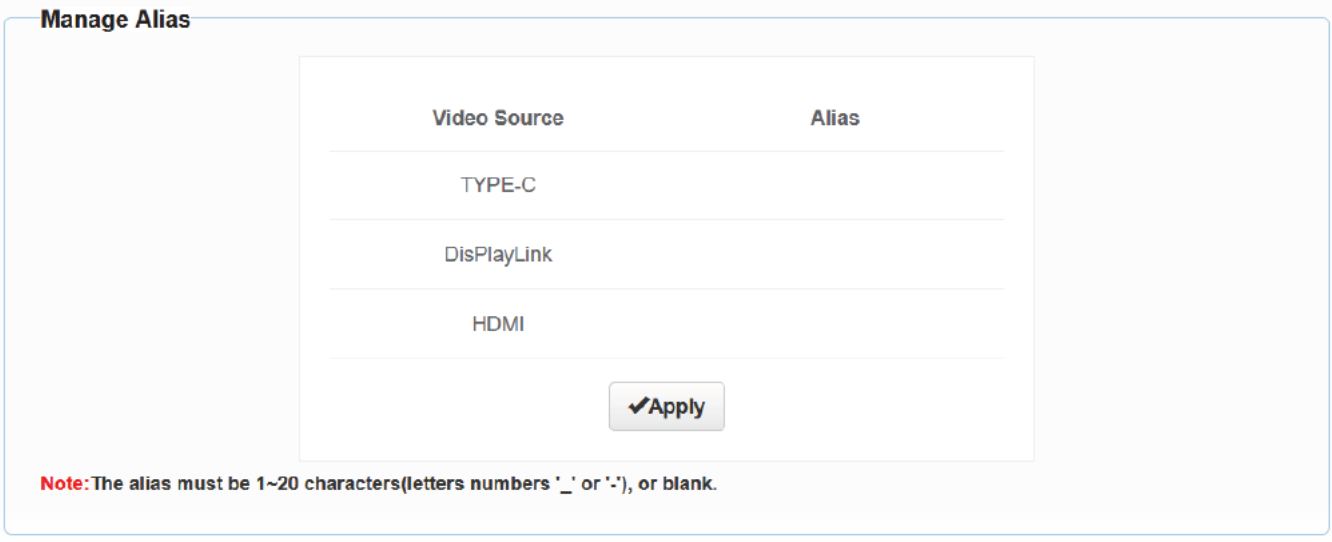
UI Element	Description
Output HDCP	Set the HDCP capability for HDMI Out and HDBT Out. • Follow: Set the output HDCP of HDMI Out to follow the HDCP capability of video input. • HDCP 1.4: Set the output HDCP of HDMI Out to HDCP 1.4. By default, it's set as Follow.

Video Mute



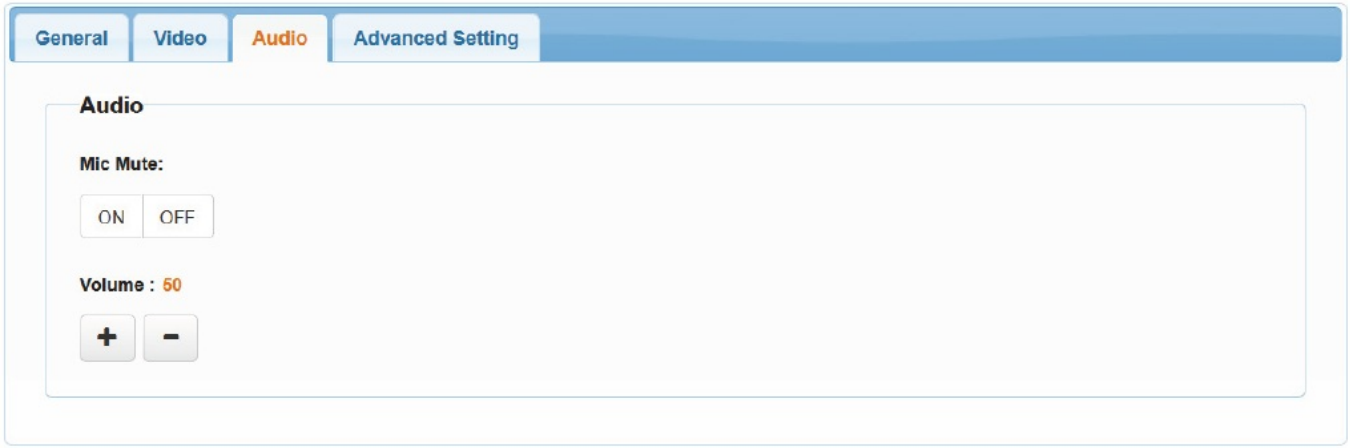
UI Element	Description
Video Mute	• On: Set video mute on. • Off: Set video mute off. By default, it's set as Off.

Manage Alias



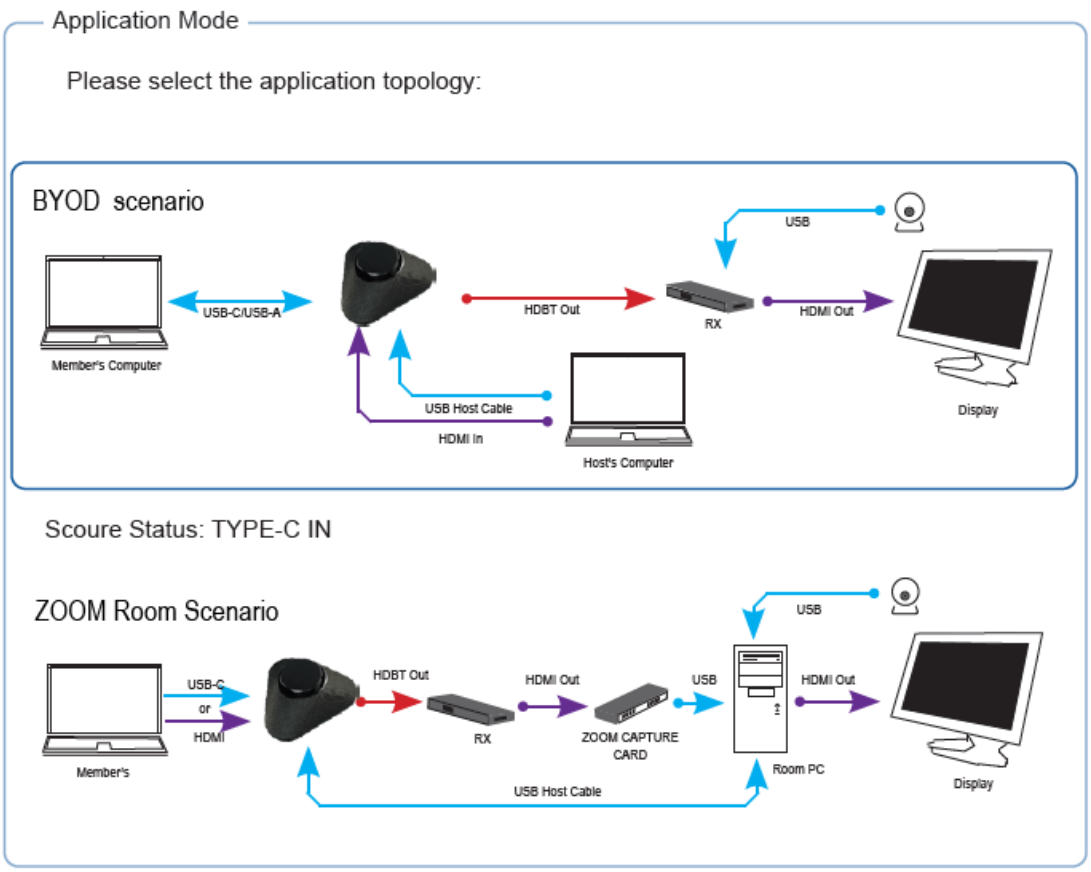
UI Element	Description
Video Source	Displays the video source name.
Alias	Enter a name to change the video source name to a new one.
Apply	Click to perform the current settings.

Audio



UI Element
Mic Mute
Volume

Advanced Setting Application Mode

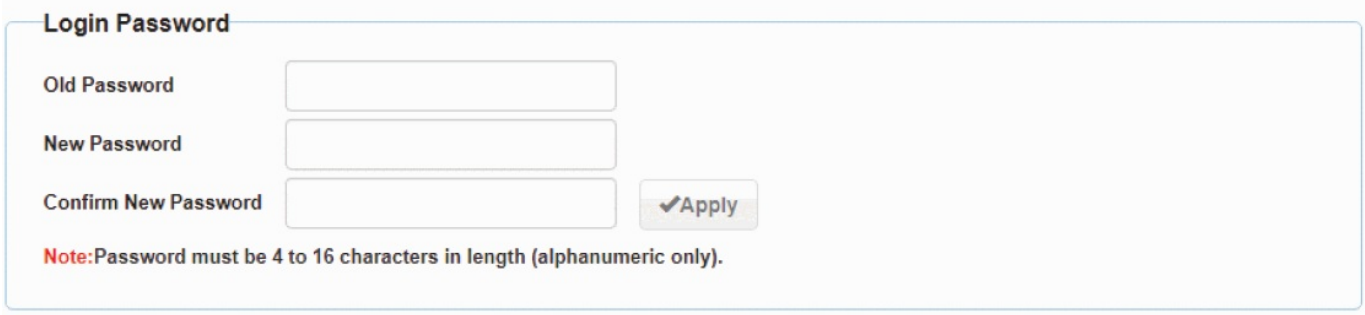


UI Element	Description
Application mode	Perform networking according to application 1 or application 2, and click t o select either of them.
Source Status	Shows the current selected source name.

Network Security

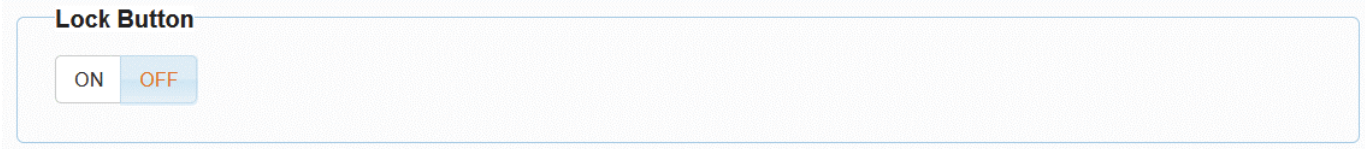
UI Element	Description
Telnet over TLS	• On: Set telnet over TLS to on. • Off: Set telnet over TLS to off.
Change TLS Password	Change TLS password. Click “Apply” to take effect. Note: Password must be 4 to 16 characters in length (alphanumeric only).
Volume	• On: IP address will be shown on Guide Screen. • Off: IP address will not be shown on Guide Screen

Login Password



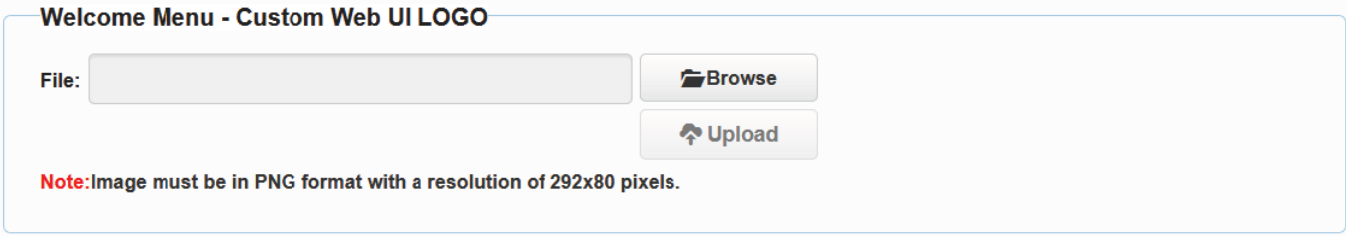
UI Element	Description
Login Password	Set a new login password. *Note:* *The new password must be 4 to 16 characters in length, alphanumeric only.*
Apply	Click to perform current settings.

Lock Button



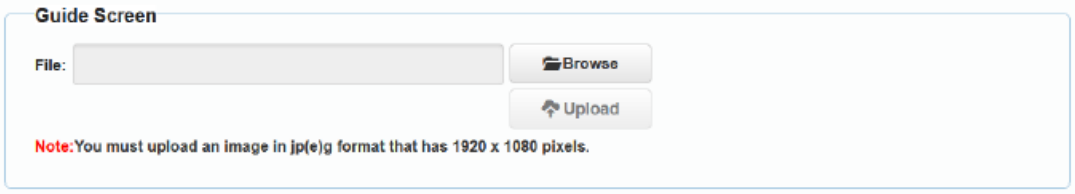
UI Element	Description
Lock Button	*On: Enable Lock Button function. Off: Disable Lock Button function.*

Welcome Menu – Custom Web UI Logo



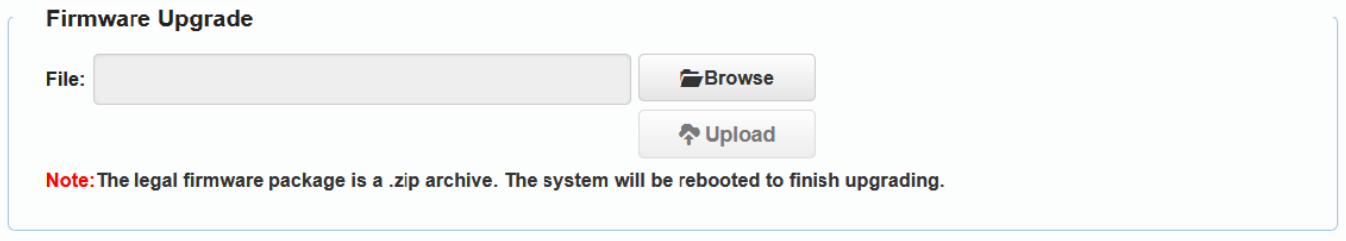
UI Element	Description
Browse	*Set a new logo for the Web UI.*
Upload	Click to upload the logo image to the device. Note: The image must be in PNG format with a resolution of 292×80 pixels.

Guide Screen



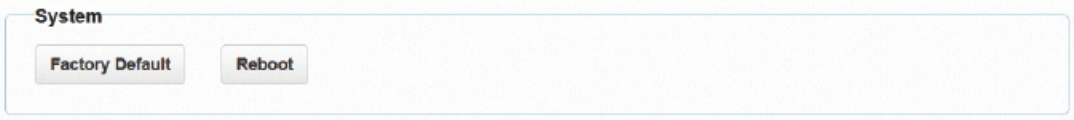
UI Element	Description
Browse	Set a new picture for Guide Screen.
Upload	Click to upload the picture file to the device. Note: The picture must be in jp(e)g format that has 1920 x 1080 pixels.

Firmware Upgrade



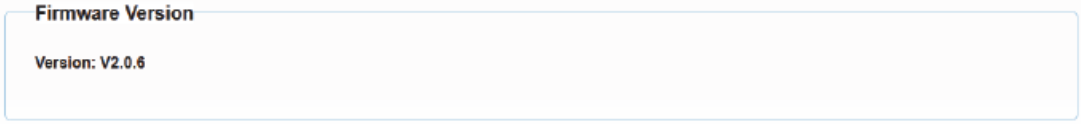
UI Element	Description
Browse	Click to browse for the local upgrade file for firmware upgrade.
Upload	Click to upload the upgrade file to the device. Note: The upgrade file is a .zip archive. After the up- grade file is uploaded completely, the device reboots.

System



UI Element	Description
Factory Default	Click to restore the device to its factory defaults. Note: You can also perform this task by sending the API command “gbcontrol –reset-to-default”. For more information, see the separate API document.
Reboot	Click to restart the device.

Firmware Version



Firmware version shows the current firmware in use.

Headquarters
46 Corporate Park #130 Irvine, CA 92606
949-701-4742
info@vigillink.com

For order support, please contact your Distributor or Reseller.
For technical support, check with the our website www.vigillink.com or contact info@vigillink.com

Documents / Resources

	VigilLink VLPT-AIOSPKH Speakerphone With Video Capability [pdf] User Manual VLPT-AIOSPKH Speakerphone With Video Capability, VLPT-AIOSPKH, Speakerphone With Video Capability, Video Capability, Capability

References

- VigilLink
- User Manual