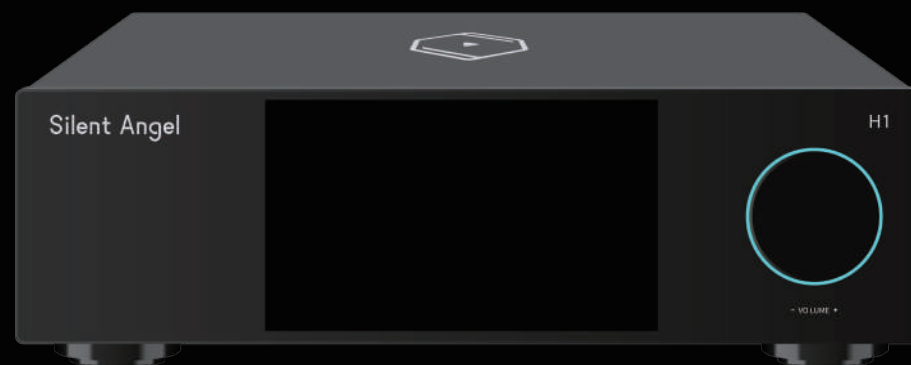
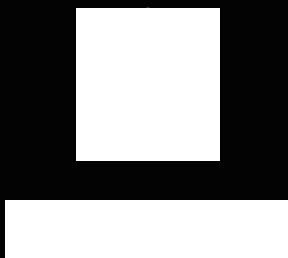


Integrated High-resolution Music Streamer and DAC

Silent Angel H1



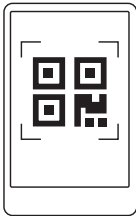
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Thank you for choosing the Silent Angel H1 All-in-One Digital Streamer & DAC.

You may contact us via the methods below
for prompt support services.

www.silentangel.com



Scan the QR code above to install the VitOS Orbiter app
on your smartphone or tablet.

START EXPLORING...

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Precautions for Product Use

- To prevent fire, electric shock or damage to the unit, do not expose the device to rain, humidity or splashing liquids. Do not place water-filled containers such as vases on top of the unit.
- For proper ventilation, do not install the unit inside bookcases, built-in cabinets or other enclosed spaces. Ensure curtains or other objects do not block the ventilation vents; overheating may lead to electric shock or fire hazards.
- Do not place lit candles or other open flames on the unit.
- Do not disassemble the casing to avoid electric shock hazards. Only qualified professional technicians are authorized to open the unit.

Placement

- Place the player on a flat surface. Keep it away from direct sunlight, high temperature, high humidity and frequent vibration. Failure to do so may damage the casing and internal components and shorten the service life of the unit.
- Do not place heavy objects on the unit to prevent sound distortion and abnormal audio performance. Maintain a clearance of no less than 15 centimeters between the unit and the wall during installation.

Power Supply

- Do not apply excessive voltage, otherwise the unit may be overloaded and cause a fire. Connect the AC power cord correctly and ensure the power cord is intact. Do not pull, bend the power cord or place heavy objects on it.
- Do not overload wall sockets. Extra caution is required when using extension cords and multi-plug sockets, as improper use may result in electric shock or fire hazards.
- Do not sandwich the AC power cord between the player and walls or bookshelves.
- Unplug the unit from the power socket when it will not be used for an extended period to prevent damage caused by lightning strikes.

Moisture Prevention

- Avoid operating the unit in damp environments such as humid basements. Condensation formed by moisture may cause damage to the device.

Service

- Do not attempt to repair this unit by yourself. Unauthorized disassembly, repair or reassembly by unqualified personnel may lead to electric shock or permanent damage to the equipment. Unplug the power cord immediately and contact your local authorized agent if any of the following faults occur, or any malfunctions not specified in this manual appear:
 - A. Abnormal audio output or display performance
 - B. Damaged power cord or plug
 - C. Liquid spillage or foreign objects entering the interior of the unit
 - D. The unit has been exposed to rain or splashed with water
 - E. The unit has fallen from a height or suffered physical damage from other impacts
 - F. Abnormal operational behavior of the unit, which generally requires professional inspection and maintenance to restore normal working condition.
- When component replacement is necessary, confirm that maintenance technicians install original manufacturer-specified parts or replacements with identical specifications to the original components. Unapproved substitute parts may cause fire hazards, electric shock or other equipment damage. Upon completion of maintenance and repair work, ask the technician to conduct a full safety inspection.

About This Manual

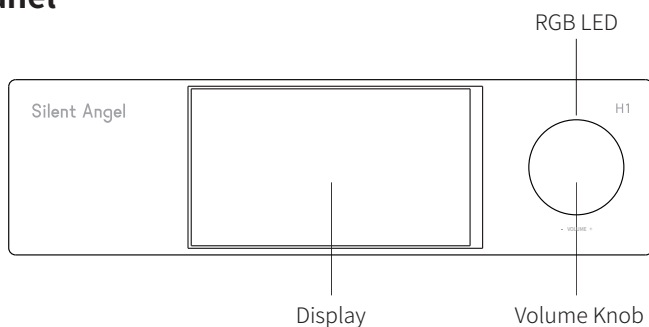
- Please read this user manual carefully, keep it properly for future reference, and operate the device strictly in accordance with the instructions contained herein.
- The interface illustrations shown in this manual may differ slightly from the actual display on your screen. Such discrepancies are caused by differences in software versions.

01 | PRODUCT DESCRIPTION

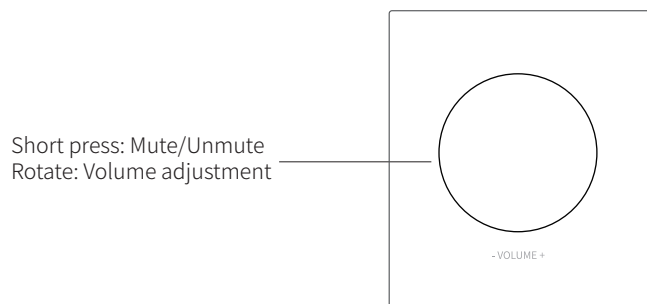
Interface Description

The Silent Angel H1 is equipped with a comprehensive range of audio input/output interfaces and data transmission interfaces. Please refer to this manual for details.

Front Panel



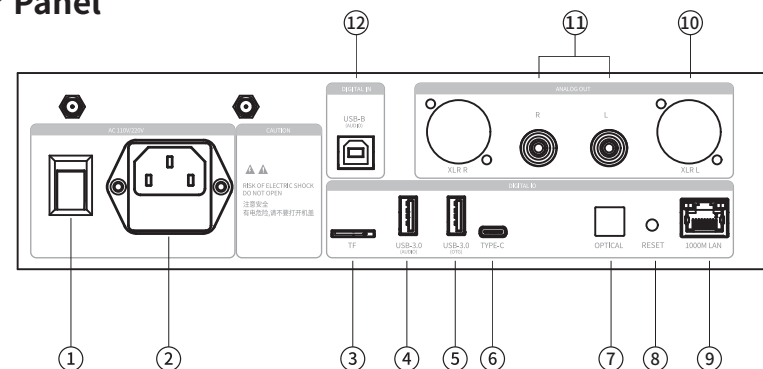
Volume Knob



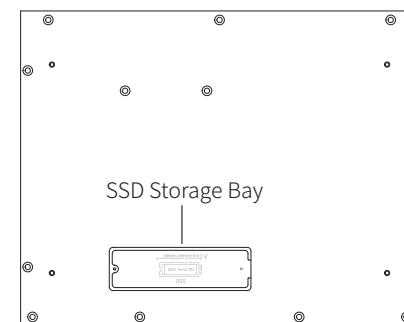
Notice:

Press and hold the volume knob for 5 seconds to enter AP configuration mode. Refer to this manual for detailed AP network configuration instructions.

Rear Panel



- ① **Power Switch**
Turns the player on and off.
- ② **AC IN**
Connect the AC power cord
- ③ **TF**
For installing the system TF card
- ④ **USB3.0 Audio Port:**
Supports connection to external USB storage devices, external DACs and other peripherals.
- ⑤ **USB3.0 Audio Port:**
Supports connection to external USB storage devices, external DACs and other peripherals.
- ⑥ **Type-C Port (USB 2.0):**
For connecting external DAC devices.
- ⑦ **Optical Interface:**
Supports PCM up to 24Bit/192kHz; DSD audio is supported via D2P and DOP encapsulation.
- ⑧ **RESET**
Restart the unit
- ⑨ **Ethernet Port:**
1Gbps Gigabit Ethernet
- ⑩ **XLR-L & XLR-R:**
Balanced XLR audio output interfaces for left channel and right channel respectively.
- ⑪ **RCA L and RCA R:**
Unbalanced RCA audio output connectors for left channel and right channel.
- ⑫ **USB-B Port:**
USB audio input for connecting mobile phones, computers and other devices; maximum support for DSD512 and PCM 768kHz/32bit.



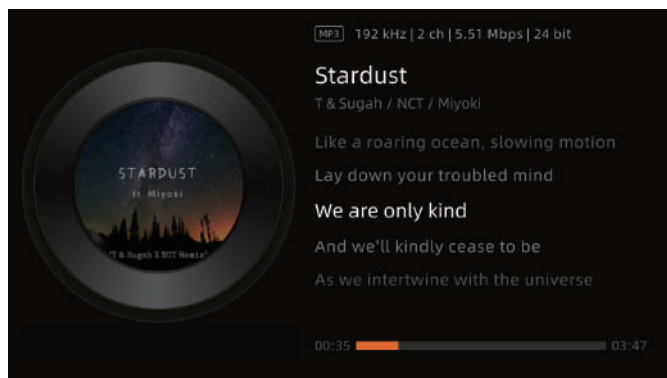
Specifications

Product Name	Integrated Digital Music Player & Decoder
Model	Silent Angel H1
Color	Black
Body Material	Aerospace-grade full aluminum chassis with matte blasting process consistent with Apple's finishing standard
Display	Screen Size: 5.5-inch non-touch screen. Resolution: 720×1280, landscape orientation
Operating System	Linux OS
UI Language	Multi-language selection available
Chip Solution	CPU Model: RK3568 quad-core ARM Cortex-A55, maximum main frequency up to 2.0 GHz
Memory Configuration	DDR4: 4GB
TF Card	Built-in 32GB TF Card
Audio DAC	Dual ES9039Q2M
Audio Processor	XMOS XU316 3rd Generation, 16-core
Operational Amplifier Chips	6 units of Silent Angel self-developed Kmute + 2 units of OPA1612
Power Supply	High-quality low-ripple audiophile-grade power supply
Hard Disk Interface	M.2 (NVMe PCIe 3.0) interface
USB Interfaces	USB-C (USB 2.0): Supports audio transmission 2 × USB 3.0 ports: Compatible with external removable storage devices and audio output
Wired Network	RJ-45 (1000M/100M/10Mbps)
Wireless Network	Model AP6275PR3, supports dual-band Wi-Fi (2.4GHz)
Music Playback & DAC Decoding	DSD: Supports DSD64 to DSD256, compatible with DSF, DFF, ISO-DSD and ISO DST formats. PCM: Supports sampling rates from 44.1kHz to 768kHz (16Bit ~ 32Bit). Supports audio formats including DXD, WAV, FLAC, AIFF, ALAC, MP3, MP2, AIF; sampling rate coverage: 8kHz ~ 768kHz (16Bit ~ 32Bit). CUE file supported, enabling automatic track splitting, track selection playback, fast forward and rewind functions.
Network Streaming & Audio Casting	High-Resolution Audio (Beta), AirPlay 2, DLNA Renderer Built-in apps: Xianlai Premium version of QQ Music, Spotify Connect, TIDAL Connect, Internet Radio
File Management	Supports automatic scanning of music files to generate albums; functions including favorites collection, custom playlists, album browsing and content search are available.
Playback Display	Supports display of lyrics, album covers and song metadata.
Playback Settings	Playback modes include sequential playback, shuffle play, single-track repeat and all-track repeat. Compatible with NAS and streaming servers.
System Settings	Audio output configuration, language settings, advanced settings, device information
USB-B Audio Input	Supports DSD512 Native, PCM up to 768kHz/32bit System compatibility: Windows 7~11, macOS, Android, iOS, HarmonyOS

USB-AUDIO Audio Output	Max support PCM 32Bit/768kHz, DSD256; DSD audio can be output in D2P and DOP modes.
USB-C Audio Output	Max support PCM 32Bit/768kHz and DSD256; DSD signals can be output via D2P and DOP modes.
OPT Optical Audio Output	Max support PCM 24Bit/192kHz; DSD can be output in D2P and DOP modes.
XLR Audio Output Characteristics	Output Level (Vrms): 4.5 Vrms (Bandwidth: 20 Hz~20 kHz) Total Harmonic Distortion plus Noise (THD+N): <0.00008% @ 1 kHz (-121 dB @ 1 kHz) Noise Floor: <1.7 μVrms Signal-to-Noise Ratio (SNR): 129 dB @ 1 kHz Frequency Response: 20 Hz~20 kHz (±0.07 dB) Channel Separation (Crosstalk): -120 dB Dynamic Range (DNR): 129 dB @ 1 kHz
RCA Audio Output Characteristics	Output Level (Vrms): 2.5 Vrms (Bandwidth: 20 Hz~20 kHz) Total Harmonic Distortion plus Noise (THD+N): <0.0001% @ 1 kHz (-118 dB @ 1 kHz) Noise Floor: <1.5 μVrms Signal-to-Noise Ratio (SNR): 126 dB @ 1 kHz Frequency Response: 20 Hz~20 kHz (+0.06 dB) Channel Separation (Crosstalk): -120 dB Dynamic Range (DNR): 126 dB @ 1 kHz
Control Method	Supports control via dedicated APP on mobile phones and tablets running Android and iOS systems; the APP enables full-function operation of the player.
Power Input	AC 110~120 V~/AC 220~240 V~, 50/60 Hz
Rated Power Consumption	25 W
Overall Dimensions	280*220*77.7mm

02 | PRODUCT BASIC FUNCTIONS

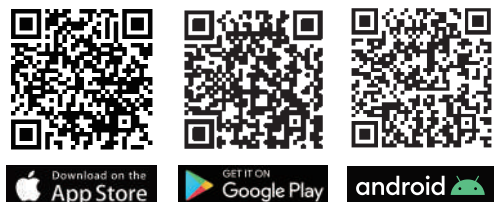
Main Interface Introduction



Note: The display screen of this device is used to display album artwork, audio information, lyrics, artist name, album name, track title and other playback-related information during playback.

Intelligent Control APP Download

The Silent Angel H1 is fully operated via connection with the mobile APP. Please download the VitOS Orbiter intelligent control APP prior to use. The QR code below serves as the download entry for Android devices, which can be scanned directly for downloading. For iOS devices, search for VitOS Orbiter directly in the App Store to complete download and installation.

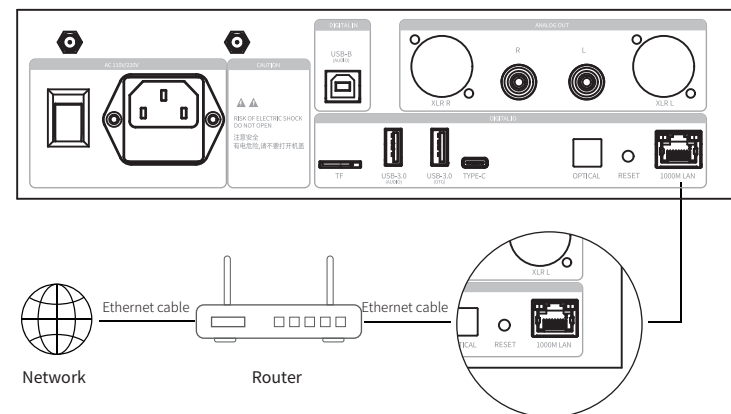


Scan the QR code above to install the VitOS Orbiter app on your smartphone or tablet.

Note: Silent Angel H1 must be connected to the network first, and it can only be discovered by your mobile device when both are on the same local network.

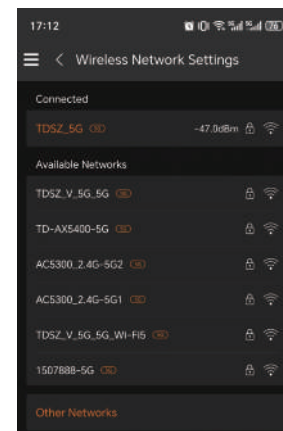
Wired Network Connection

Before using the Silent Angel H1, please complete network connection first. For wired networking, connect an Ethernet cable routed from the LAN port of your router or switch to the network port on the device; the unit will obtain network access automatically. Afterwards, launch the installed VitOS Orbiter control APP on a mobile device within the same local area network. The APP will automatically detect the Silent Angel H1. Select the corresponding device and tap to enter the control page, then you can fully operate the player for audio playback and all other functions.



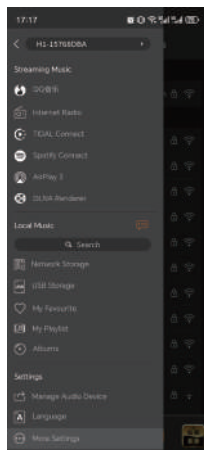
Wi-Fi Connection

When the device is already connected via wired Ethernet and paired normally with your mobile device, navigate to More Settings > Network Settings > Wireless Network Settings in the left sidebar menu to configure Wi-Fi connection. Once connected successfully, you may disconnect the Ethernet cable. The player will automatically reconnect to the saved Wi-Fi upon subsequent power-on for convenient control. Alternatively, you may set up Wi-Fi via AP Mode without a pre-existing wired network connection. Refer to the section AP Mode Configuration in this manual for detailed operating steps.

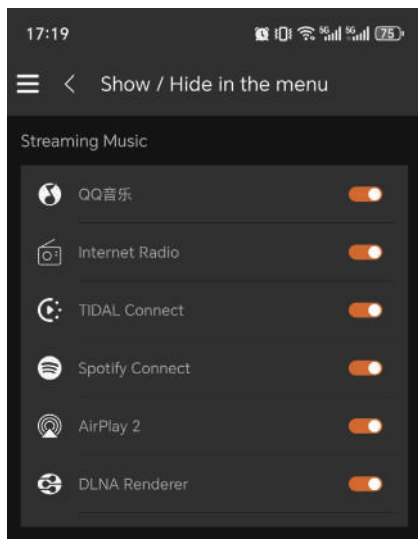


Streaming Music

The Silent Angel H1 is pre-installed with QQ Music Silent Angel Premium, HIGHRESAUDIO (beta), Internet Radio, TIDAL Connect, Spotify Connect, AirPlay 2 and DLNA Renderer. Simply tap the target application to control playback directly.



The streaming music sidebar on the left supports showing or hiding individual apps. Go to More Settings in the menu bar > Show/Hide in Menu to toggle the display status of apps in the list.



Network Storage

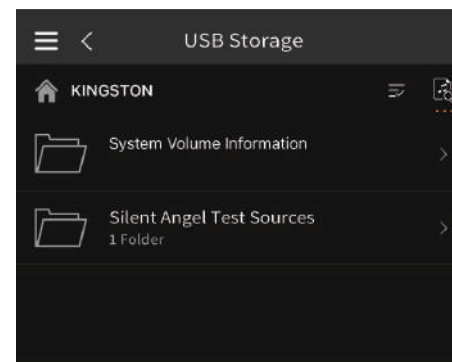
Silent Angel H1 supports playback from LAN NAS and SMB network shares. Navigate to Network Storage > Add Network Storage in the left menu bar; the device will automatically scan all shared devices on the local network. If automatic scanning fails, perform a manual scan instead. Select the target storage device, complete login and connection, then you can access and play music files conveniently.

(Note: If the selected path contains a large number of music files, please wait patiently during the NAS scanning process.)



USB Storage

Silent Angel H1 supports external USB storage devices. After plugging the USB drive into the unit's USB port, tap USB Storage in the left sidebar menu. The player will recognize the external storage, allowing you to play music tracks, add songs to favorites, create playlists and perform other related operations.

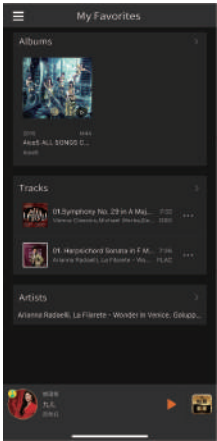


Note:

For portable hard drives without separate power supply, the maximum supported capacity is 1 TB. Supported file systems: exFAT, FAT32, NTFS.

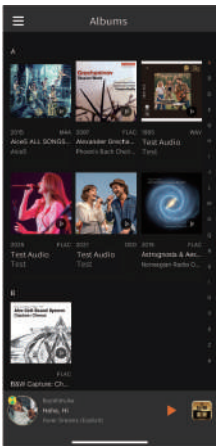
My Favorites

The My Favorites function supports favoriting albums, tracks and artists. You may manage them according to your preferences for quick one-tap access to your favourite music.



Album Usage

After installing the internal SSD and connecting USB storage devices, tap Albums in the left menu bar to enter the album page. The device will automatically scan album covers of music files stored in local USB storage, sort albums alphabetically by the initial letter, and you can start playback directly.



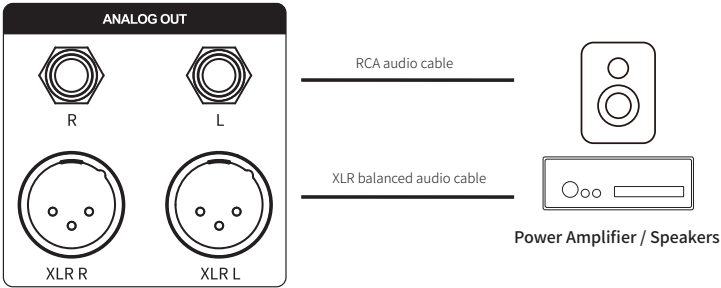
Selection and Connection of Inputs and Outputs

Select the corresponding input and output options according to your actual device connection configuration. Options include output to an external USB decoder. Details of connection and operation for the three output modes are shown below:
The device defaults to playback via its built-in player. Available output options include analog audio output and digital audio output.



1. Analog Audio Output Mode

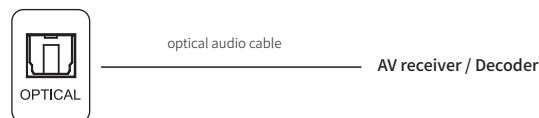
Use a pair of XLR balanced audio cables or high-quality RCA audio cables to connect the left and right channels of the unit's XLR balanced port or RCA port to the corresponding XLR balanced input or RCA input of your power amplifier or active speakers. Set the audio output to Analog Audio Output within the control APP and tap Apply to confirm the setting. Switch the input source of the power amplifier to XLR or RCA accordingly; you may then play local music and music from built-in streaming applications directly.



Note:
*XLR and RCA signals are hardware-decoded by the built-in DAC, supporting up to DSD256 and PCM 32bit/768kHz.

2. Digital Audio Output Mode

Connect the optical port of this unit to the input port of a decoder or AV amplifier with a square-ended optical audio cable. Set the audio output mode to Digital Audio Output in the control APP and tap Apply. You can then play local music and music from built-in streaming applications directly.



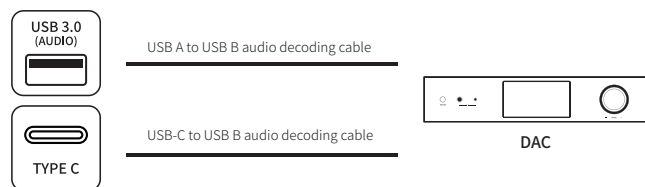
Note:

*The optical output supports a maximum PCM resolution of 24bit/192kHz. For DSD audio, only D2P and DOP64 modes are available.

3. External USB DAC Output Mode

Connect this unit's USB AUDIO or Type-C port to the USB input port of an external DAC via a USB audio cable.

Set the audio output option to External USB DAC Output in the control APP and tap Apply. Afterwards, local music and tracks from built-in streaming apps can be played directly.

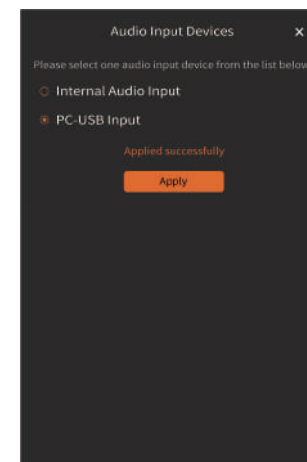


Note:

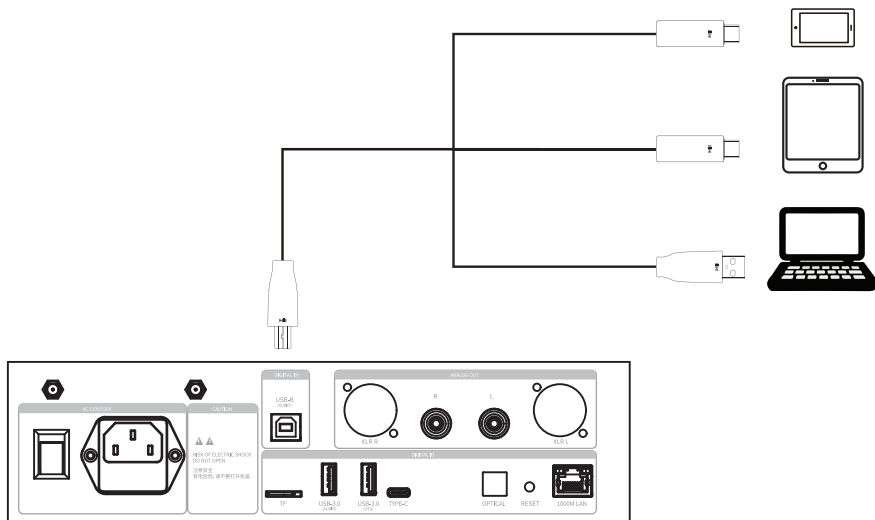
*The USB audio output supports up to PCM 32bit/768kHz and DSD256.

USB Input Mode

When using the USB-B port for input, analog audio output (XLR/RCA) is available. The connection and operation steps are as follows:



1. Connect a high-quality well-shielded DAC cable to the USB-B female port on the rear panel of the Silent Angel H1, then plug the other USB-A or USB-C connector into a computer, mobile phone or other devices.
2. Use a pair of XLR balanced audio cables or high-quality RCA audio cables to connect the left and right channels of the unit's XLR balanced interface or RCA interface to the corresponding XLR balanced input or RCA input of your power amplifier or active speakers.
3. In the menu bar of the control APP, go to More Settings > Device Settings > General > Audio Input Device, switch to PC-USB Input and tap Apply. Set the input source of the power amplifier or active speakers to XLR or RCA accordingly. Meanwhile, set the audio output to Analog Audio Output in the control APP and tap Apply to confirm.
4. After properly installing the driver and playback software on a Windows PC following the tutorial, the device can normally play audio files up to DSD512 and PCM 32bit/768kHz.
5. When connected to the Type-C port of a mobile phone, the phone can stream audio directly for decoding and playback via the Silent Angel H1.



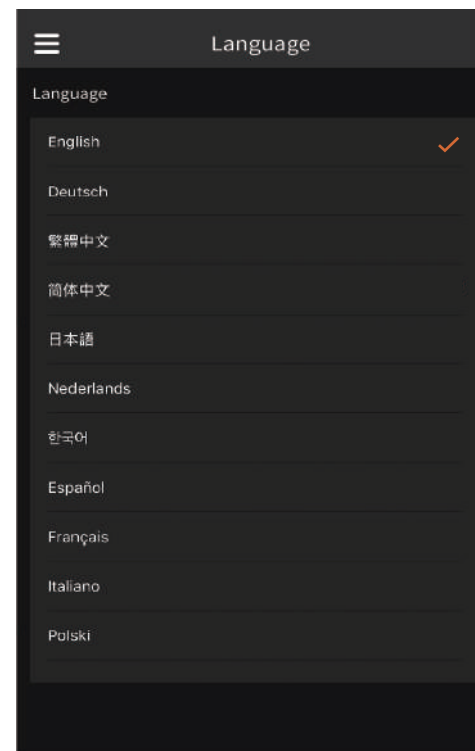
Notes

- *For Windows PCs, download and install the driver from the official Kaiboer website. Scan the QR code on the right to access relevant video tutorials and driver downloads.
 - *Mac computers install the driver automatically. Simply select this USB device as the system audio output in system settings.
 - *Certain Android smartphones such as Huawei require switching the USB connection mode to MIDI prior to connecting the cable. If no audio is heard, reconnect the cable and turn up the device volume.
 - *For OPPO, VIVO and similar mobile phones, enable the OTG switch under Additional Settings before making the connection. Playback anomalies may stem from APP compatibility issues and are not attributable to this unit itself.
 - *To play DSD audio on mobile phones, use a compatible playback APP and activate the exclusive USB audio mode within the APP.
- (Remark: The driver is incompatible with Windows XP; Windows 7 or newer operating systems are required.)

03 | SYSTEM SETTINGS

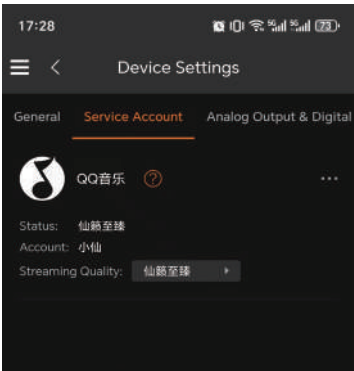
Menu Language Setting

Go to the left sidebar menu of the control APP > Language, then select your preferred display language for the interface menus.



Service Account Management

In the left menu bar of the control APP: More Settings > Device Settings > Service Account.
This page displays the login account information for the streaming apps built into the device. You may check account status and configure streaming audio quality here.



Analog & Digital Output Settings

Navigate via the left menu bar of the control APP: More Settings > Device Settings > Analog & Digital Output.
On this page, you may configure parameters including format, sampling rate and bit depth for optical output as well as XLR/RCA output.



Note:
*The optical audio output supports a maximum of PCM 24bit/192kHz and DOP64.

USB Audio Output Settings

On the left menu bar of the control APP: More Settings > Device Settings > USB Audio Output.
Parameters such as format, sampling rate and bit depth sent via USB to an external DAC can be configured on this page.



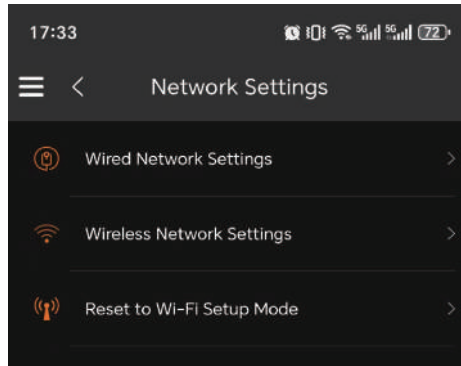
Note:
*USB audio output supports up to DOP256, D2P, and PCM 32bit/768kHz.

AP Mode Configuration

On the left menu bar of the control APP: More Settings > Network Settings > Reset to AP Mode. You may reset the network to AP mode on this page.

Alternatively, press and hold the volume knob on the front panel of the unit for more than 5 seconds to reset the network to AP mode. This configuration method requires no network cable for network provisioning.

Go to the Wi-Fi settings on your mobile phone, search for the Wi-Fi signal named H1-xxxxxx and connect to it without a password. Launch the ViTOS Orbiter control APP afterwards, navigate to the left menu bar: More Settings > Network Settings > Wireless Network Settings, then select an available Wi-Fi network to complete the connection.



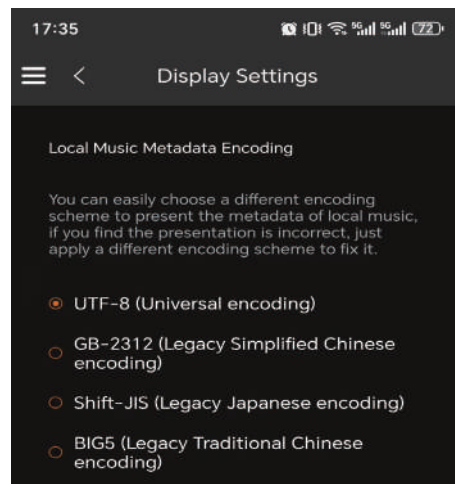
Note:

*After you configure the unit to connect to Wi-Fi via your mobile phone, please ensure your mobile phone is connected to the same Wi-Fi network as the device.

Display Settings

Go to the left menu bar of the control APP: More Settings > Display Settings.

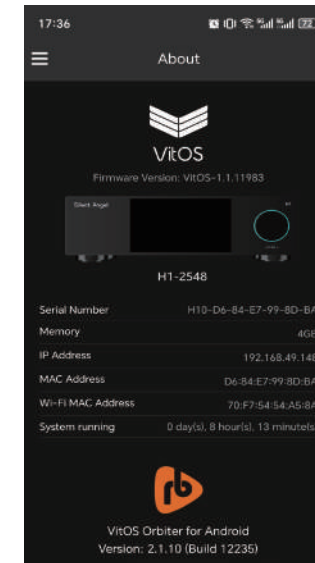
Different metadata encoding formats can be selected on this page to fix abnormal display issues of local music information.



System Upgrade

Navigate through the left menu bar of the control APP: About.

The latest firmware upgrade information can be viewed on this page. Tap the upgrade button directly if an update is needed, then follow the on-screen prompts to finish the upgrade process. The unit will restart automatically once the upgrade is completed.



Note:

*Do not power off the device during the firmware upgrade process.

Special Statement

Silent Angel will release irregular firmware updates to continuously optimize user experience.

The contents of this manual may differ slightly from the actual operation of the product. We reserve the right to adjust the functions and specifications of the device without prior notice.

For further operation guidelines, please visit our official website: www.silentangel.com

Product certificate card

Inspected and qualified in accordance with technical specifications,
approved for delivery.

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.
- 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.