



# ACS10 Hardware Guide

The following guide is intended as an overview of your Aurender's hardware interface. Detailed installation information is found in the included [Quick Start Guide](#) and a comprehensive Conductor App Overview, ACS Manager App Overview and How-To guides are found in the [Aurender Knowledge Base](#).

## Box Contents

- Aurender ACS10
- AC Power Cord
- Quick Start Guide

**Not included:** An iOS (iPad or iPhone) or Android device is required to interface with and control your Aurender. The Aurender must be connected to a Local Area Network (LAN) via Ethernet (CAT5 or higher) in order to facilitate communication between your remote device and the Aurender. Please review the "Connect to Local Area Network (LAN)" section of the included [Quick Start Guide](#) for more information on network connectivity.

## Digital Transport

This model is a high performance digital audio transport. It features digital outputs only - there are no analog outputs on board this model. Pair this model up with a high performance Digital-to-Analog Converter (DAC) for a complete digital front end solution.

## Complete Library Management Solution

ACS10 functions as a complete music library management solution. With the built-in ability to create file-based content from CDs, edit metadata, move, rename, and delete files, it offers everything one needs to manage a complex digital music library - WITHOUT a traditional computer.

In-Depth library management tasks are accomplished via the companion ACS Manager application, available on iOS and Android devices.

## DAC Compatibility

AES/EBU and SPDIF outputs & inputs are universally compatible. However, with USB, compatibility between any two devices is not always guaranteed! Sometimes, special drivers or software provisions must be made to establish compatibility over USB.

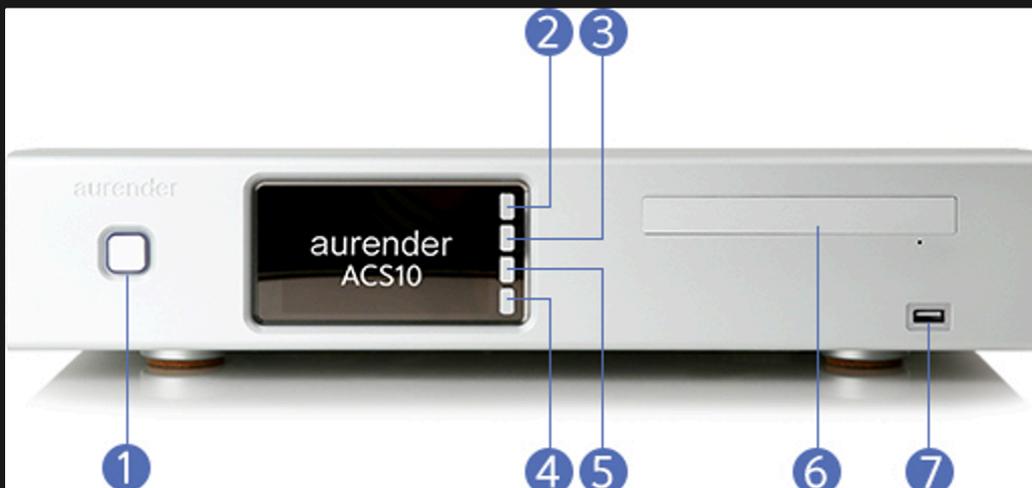
DACs that fully adhere to the USB Audio Class 2 (UAC2) protocol will be supported without issue.

For DSD playback, if the DAC supports the industry standard DoP protocol, then it will be compatible with Aurender's DSD output. DoP is a lossless, unadulterated transmission of DSD from source to DAC. It is NOT to be confused with DSD-to-PCM transcoding, which is usually less desirable from an audio performance perspective.

On some Aurender models (see "File Type & Resolution Support" comparison table below), "Native" DSD output is available via USB. However, only a very small handful of select DACs support "Native" DSD input FROM A LINUX BASED SOURCE. Most DACs that report Native DSD input only work with ASIO drivers for Windows computers. Native DSD compatibility must be detected and enabled on a case-by-case basis.

In general, if a DAC works with a Mac computer without the need for any custom drivers, it will work beautifully with Aurender servers as well. Consult your DAC manufacturer for confirmation of USB compatibility with a Linux based sourced component like Aurender.

## Front Panel



### 1. On/Off

With the AC switch on the rear in the ON position, simply press and release the front panel On/Off button to turn the Aurender on or off. The surrounding LED light will pulse while the unit is starting up or shutting down, and it will stop pulsing when fully turned on or off. Pressing and holding the On/Off button will trigger a forced shut down and this should be avoided. More information on proper shut down procedure is found here: [What is the proper way to shut down my Aurender?](#)

## 2. Display Menu

Press the Display Menu button to cycle through various display options including Song Information, Ripping Menu, and Playlist Menu. In the Ripping Menu, other buttons adopt different functions as indicated on screen.

Playlists may be selected and played using the four buttons on the right side of the front panel display. Use the Previous (11) and Next (12) buttons to scroll between playlists. Use the Play/Pause (10) button to select a playlist. After the playlist is selected, press the Play/Pause button again to start playback.

## 2. Play/Pause

Press to start or stop playback. Press and hold for 8 seconds to manually engage Remote Support mode for technical support. More info on Remote Support mode here: [How can I contact Aurender Technical Support?](#)

## 4. Play Previous/Eject (from Ripping Menu screen)

Press to skip to the previous track.

From Ripping Menu screen, press to eject tray loading CD drive

## 5. Play Next

Press to skip to the next track.

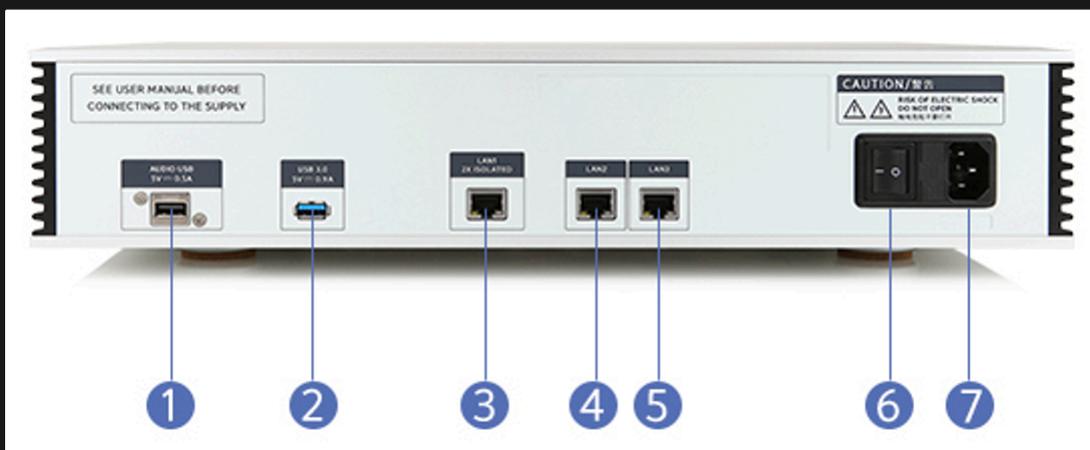
## 6. Tray Loading CD drive

Use the Display Menu (2) button to toggle to the Ripping Menu screen. Once you are on the Ripping Menu screen, use the Previous/Eject (4) button to open the CD tray. Insert CD into tray and ACS10 will automatically begin extracting or "ripping" audio files from the inserted CD. Use the ACS Manager companion app to configure CD ripping settings.

## 7. USB 2.0 Data Port

Use to connect Nimbie auto loading CD ripper (sold separately).

## Rear Panel



### 1. Dedicated proprietary USB Audio Class 2.0 Output

Aurender's filtered and isolated USB port is designed to connect to asynchronous USB DACs. Use a USB 2.0 certified A/B cable to connect with a compatible USB DAC.

### 2. USB 3.0 Data Port

This USB data port can be used to copy files from USB memory devices or for connectivity with compatible external control devices (eg. Nimbie auto loading CD ripper, dCS USB-to-RS232 dongle, MSB Pro125-to-Clock module, Constellation preamps, etc.). For best audio performance, this port should not be used as a USB audio output.

### **3. Double Isolated Gigabit Ethernet Port**

This model uses 2 transformers in the Ethernet port circuit for superior noise filtration without detrimental signal loss.

The Aurender must be connected to your Local Area Network via Ethernet (CAT5 or higher). In case there is no Ethernet connection available in the location where your Aurender is to be installed, please see the following support article for other options: [What if I do not have an Ethernet/LAN connection in my listening room?](#)

### **4-5. Gigabit Ethernet ports**

This model features additional Ethernet ports to function as a switch for connecting other network attached devices to your LAN.

### **6. AC Power Switch**

Press the rocker switch away from the AC power socket to turn AC power on, press towards the AC power socket to turn it off. The rear panel power switch should be used to turn the unit off only after the unit has been shut down via the front panel On/Off button or via the app. The front panel On/Off button LED light will pulse while the unit shuts down. Once it is dimly lit after shut down procedure is complete, it is safe to flip the rear panel AC power switch to the "off" position. More information on proper shut down procedure is found here: [What is the proper way to shut down my Aurender?](#)

### **7. AC Power Socket**

Connect an IEC AC Power cord to a grounded power source/outlet.

## **ACS10 Deployment Options**

### **Standalone ACS10:**

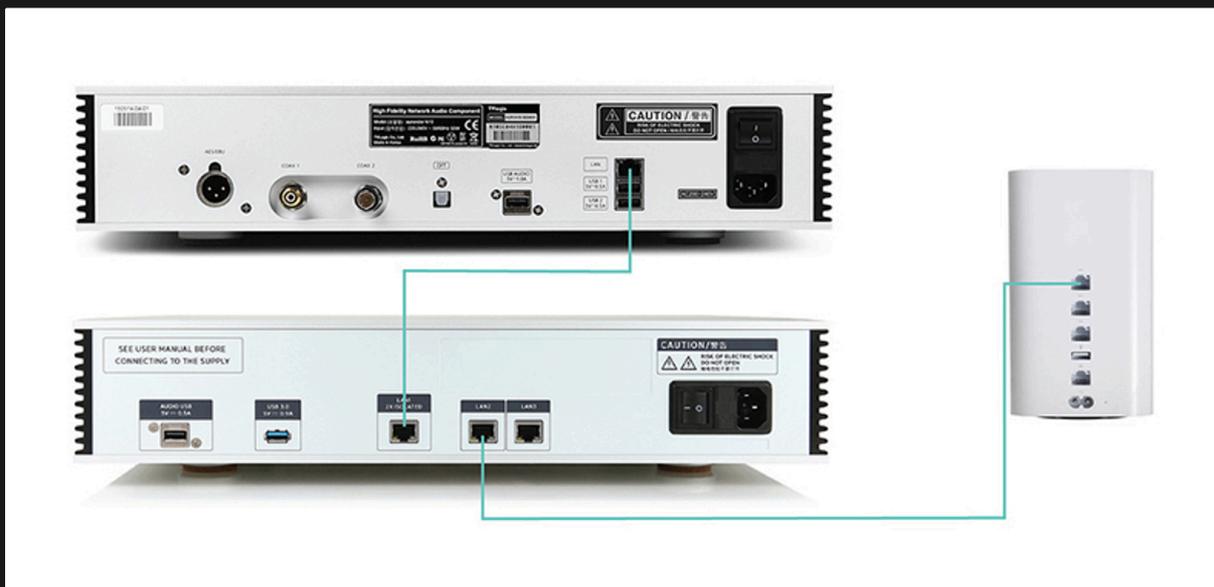
ACS10 functions as an exceptionally high-end standalone digital source component with Aurender's hallmark filtered and isolated USB audio output. If ACS10 is being used as a standalone player, use the "2X Isolated" LAN port to connect to your router:



### Companion to another Aurender player:

In addition to being a stellar standalone player, ACS10 can be used as companion piece or add-on for use with another Aurender player. In this case, the ACS10 functions as the "mothership" where your entire music library resides. Your other Aurender will sync and stream content from the ACS10 storage (this is configurable in the "ACS" section of the Settings Menu in the Conductor app). This is an ideal solution for a critical listening system because it minimizes the amount of background computer tasks performed by the primary Aurender player. However, you may also use ACS10 as the source for your main system, and use another Aurender player to feed a second system.

If the OTHER Aurender player is the one which will serve as the source component to feed your PRIMARY or "critical listening" system, use ACS10's LAN2 or LAN3 ports (it does not matter which one) to connect to your router. Then, use the 2X isolated LAN port to connect to your other Aurender via Ethernet. This way, the primary Aurender player will be very well isolated from any noise picked up over a long Ethernet cable run. See below:



In order to use ACS10 as a companion to another Aurender player, both devices must be on the same LAN. However, they need not be DIRECTLY connected via Ethernet as long as they are both connected to the same LAN. So, you may position the ACS10 and other Aurender in different rooms as long as they are both connected to the same network.

## File Type & Resolution Support

View a comparison table of file type and sample rate support by model and output/input [here](#)

## Positioning

- Place your device on a flat and stable surface.
- Keep away from heat sources, such as radiators.
- Do not stack other products on top of the Aurender.
- Allow space around the device for ventilation.
- Do not place inside an enclosed cabinet without ventilation.

## Precautions & Safeguards

Please read the following instructions carefully before setting up the Aurender Music Player.

- The super-capacitor power cache acts as an uninterruptible power supply. In case of any sudden power failures, the Aurender ACS10 will power itself down safely. Even so, proper shut down procedure should be observed to turn off your ACS10 whenever possible.
- All devices should be turned off before making any power cables or analog/digital interconnections.
- Only plug your Aurender into grounded plugs and grounded sockets.
- Do not drop the device to avoid internal damage.
- Do not disassemble the device. Doing so may cause inadvertent damage that would not be covered under warranty.
- Keep magnetic materials away from Aurender. Hard drives and other internal electronics are subject to damage from magnetic interference.
- Do not expose device to oil, dust, water, high humidity, or smoke.
- Keep ventilation openings free from obstruction.
- When cleaning, use only a soft cloth. Keep out of contact with water or other liquids.
- All servicing must be performed by an authorized dealer or distributor. Otherwise, the warranty will be voided.
- Unplug power cord during severe lightning storms (after shutting down properly).
- Please note that hard drives can break down. Do not consider your Aurender the "Master" copy of your precious music library! Rather, maintain a separate master copy and consider your Aurender as a secondary backup copy. It is important to back up your music collection periodically to a separate memory device. In the event of drive failure, Aurender is not responsible for any loss of data. The drive manufacturer will only replace faulty drives under warranty and do not compensate for any loss of data.

