

## USB-A, USB-B, Network Connection FAQ

**Q: Should I use a USB DAC or streamer (network audio player) to playback my digital music files?**

A: USB and network audio are two entirely different fundamental approaches. You're either a USB DAC person or a network audio person. There is no need to incorporate both into one unit.

- An USB DAC requires a computer to be connected directly to the DAC via a USB cable and sit right next to the audio system due to USB cable length limitations. Control of the music is typically handled at the computer through the media player software one chooses. Typically, an USB DAC can only connect and play music from one computer at a time. Some media players do have iOS or Android apps to make control a bit more flexible. If not, you must go to your computer to control music selections. An USB DAC is a good choice if you do not have a home network, not network savvy, or don't care about seeing or possibly hearing a computer while enjoying your music.
- A streamer (network audio player) connects to your network with either a wired Ethernet or wireless Wi-Fi signal. The computer(s) and various network devices that store your digital music files can be located anywhere (AWAY) from your audio system as long as they are connected to the same network as your streamer (network audio player). The Streamer (network audio player) controls the playback of the music. Specialized server software one can install on their computer(s) expands playback capabilities. Many streamers like our DMS-500 and AiOS have custom apps for iOS and Android so control can take place from anywhere within your network, such as while sitting and relaxing. Streamers can play music from multiple networked computers seamlessly and are good choice for those comfortable with networks and computers as to maximize comfort and flexibility while enjoying your music.

**Q: Can't I use a USB-DAC to stream network audio?**

A: Yes, but...

To do so, you still either need a local computer connected to the DAC via USB alongside your audio system, or use a streaming "appliance" that has USB output.

If using a computer connected to the DAC via USB alongside your audio system, you can connect to other computers if the local computer and the other computers are all connected to the same network. They would all have to run the same media player software and you could potentially send music from one networked computer to the local computer connected to the DAC via USB if all are set up properly. That's a big if! However, this begs the question, if you have your local computer that is connected to the DAC via USB connected to a network as a means to play music from another computer on the network, then isn't a more elegant solution to use a device that is designed and engineered to do this instead of a jerry-rigged solution of various computers using a combination of network, software, and USB. There are "audio" solutions and there are "computer" solutions. Computer solutions can pose many detrimental issues when used as an "audio device." Cary Audio streamers (network audio players) are not repurposed computers like many so called streamers.

Using a streaming appliance that has an USB output has its own set of issues. First off, the appliance **MUST** be compatible with the USB DAC and have a compatible driver preinstalled for the DAC. At worst it won't work at all. At best it will only play up to or down to the DAC's capabilities.

If you want to stream network audio, it's always best to use a device or devices that are designed to work together or as one. There are way too many network, USB, file type, resolutions, bit depths, etc., issues to consider within digital music along with the various audio components, software, computers, etc., needed to play together nicely. When forcing one method to act like another method, or pairing different solutions together as one, way too much can go wrong, and will, even if you don't know it. Many times when attempting these types of solutions, the various components will manipulate the files just to get them to play without you even knowing it's been manipulated. So, be cautious.

Bottom line, if you want network audio streaming, use a device designed for network audio. If you want local computer USB, use a USB-DAC. There really is no reason to use both solutions. Pick one and enjoy!

**Q: How come the DMS-500 and AiOS streamers don't have square computer USB (Type-B) inputs?**

A: A network audio streamer can do everything a computer USB (Type-B) DAC can, but more. For those accustomed to using a dedicated local computer such as a laptop or Mac Mini, etc., connected to a USB-DAC, those same computers can connect to your network via Ethernet or Wi-Fi instead of having to be connected directly to the audio component via a USB cable. Using a streamer like the DMS-500 or AiOS, you can access all the same music and music files from that same computer with the benefit of **NOT** having to have the computer right next to your audio system! Additionally, many believe there are sonic benefits to sending digital music over Ethernet or Wi-Fi to an audio component. It is superior to an USB cable connected to a computer due to computer noise, jitter and timing anomalies associated with USB. Ethernet and Wi-Fi don't have these same inherent issues.

**Q: I see USB inputs on the DMS-500 and AiOS. Does this mean I can connect my computer directly with a USB cable?**

A: No. The rectangular USB inputs on these units are what's called USB Type A. This means they are **ONLY** intended to connect USB devices; such as USB hard disc drive or USB flash drives. Not computers.

**Q: What's the advantage of a USB Type-A (rectangular) input if I can't connect a computer to it?**

A: The Type-A USB inputs are a means to playback your digital music files without a computer. It's computer-less digital audio. If you copy or store your music file to a USB hard drive or USB flash drive, you can connect them directly to these inputs to play back your music. It's also a great way to share music when having guests over. Tell them to bring a USB flash drive or hard drive with a party playlist, or, as a means to explore others music collections.

Q: I see other various USB inputs on my component labeled "Firmware". Can I connect my computer or USB device to these for music playback?

A: No. USB inputs labeled "Firmware" are only for servicing use and are NOT intended for audio playback from a computer or USB devices. Attempting to do so may damage the unit and void warranty service.