

I prefer to use the Sony 7506 series phones. They seal off the outside sound pretty well, they have a strong high end, and they have a reasonably tight low end. In addition, they are very durable, they're a standard in recording studios, and Sony sells all of the parts separately so they're easy to repair.

Ear Buds

Most musicians prefer to use ear buds for their in-ear phones. They are small, visually unobtrusive, and capable of adequately blocking out the outside sounds. Most of the time, the audience is unaware of the ear buds, especially when the user has custom-molded earpieces.

If you're serious about your in-ear monitors, get some custom-molded earpieces. Simply visit an audiologist and have him or her make molds of your ear canals. These molds are then sent to a company that uses those molds to make synthetic earpieces that fit exactly in your ears. These molded pieces are very efficient at blocking outside sounds, and they're comfortable in a performance setting, where they must be worn for an hour or so at a time.

The earpieces simply connect to the ear-bud drivers. Each ear piece must be manufactured to fit your make and model of ear-bud driver. The most popular drivers for in-ear systems are the Shure E series ear buds. The E-3, E-4, and E-5 have become the most common drivers because they sound great and they're durable. The ear buds also come with several standard earpieces, which work well, but not as well as custom-molded earpieces. If you're using the standard earpieces, listen to them all—they all sound different and work better for certain types of source material. Shure also provides a few different sizes of each different material so that users can get the best seal against outside sounds.

ButtKicker

When using any in-ear system, especially in the absence of a real bass amplifier, guitar amplifier, and acoustic drums, it is common for the musicians to feel as if they've lost much of the power that they feel in truly acoustic live performances. If the house volume is low, this feeling of powerlessness is exaggerated.

Ear Buds with Optional Ear Pieces

The most comfortable in-ear headphones are known as ear buds. They are comfortable, they work well, and they don't mess up your hair. High quality ear buds, like the Shure E-4s (pictured) provide a full low end and an excellent high end. Notice that there are several different interchangeable ear pieces. They all sound different, feel different, and some even accentuate different frequency ranges. Listen to them all and decide which ones are best for your unique needs.

One of the sets in this picture was custom-molded for my ears. This is the optimal way to use ear buds—they effectively seal off outside sounds and they are very comfortable. Check out www.sensaphonics.com for more information about custom molded ear pieces.



The Guitammer Company has come to the rescue with a device called the ButtKicker. This device is a specially designed low-frequency driver that attaches to the ButtKicker platform for those who stand while performing. They also make the drum throne mounting bracket so that the drive can easily be mounted to any drum throne. The ButtKicker really does make the musicians feel as if they're playing in a large venue at a high volume level. Because music is such an emotional expression, a simple tool such as the ButtKicker can help the musicians play better and more expressively together.

Recommended In-Ear Systems

There are a few different in-ear monitor theories, and the systems that serve each school of thought are similar in functionality, although different in capacity.

Aux-Based Systems

Some systems are built with between four and ten inputs. They assume that the FOH mixer will still send separate mixers through the onboard auxes to the headphone system. This leaves the control of the mix in the hands of the sound operator while still eliminating the need for floor monitors.

There are different ways to use these systems. They all make sense, but some might make more sense for your application.

1. Use a small system, such as the Furman HDS-6. This device accepts four mono sends and one stereo send at the hub. Each musician has his or her own personal listening station with level controls for all four auxes and the stereo input. The simplest approach involves the sound operator—he or she should build a custom mix to send to each of the four inputs. These mixes can be used by four individual musicians or shared by multiple musicians.
2. Again, use a small system, such as the Furman HDS-6. With this method the sound operator should develop a mix of vocals only on aux bus 1, drums only on aux bus 2, bass guitar on aux bus 3, and guitars on aux bus 4. He or she should then send them all to the four mono inputs of the system hub. Connect a split from the keyboard DIs to the stereo input of the hub. With this approach, each musician builds a custom mix from all these ingredients. Any monitor system channel that contains one instrument alone can easily be fed from the stage by splitting the DI output into the hub input—this frees up more auxes for the sound operator to use for other tasks.

Channel-Based System

Aviom Technologies has been the dominant force in the development of this technology. Their systems are based on 16-channel hub systems connected to personal monitoring stations that each have full level and pan control of all 16 channels. This is an amazing performance tool for instrumentalists and vocalists.

With this system, musicians can adjust the mix so that they hear exactly what they want to hear. Aviom devices carry high-quality analog signals along with high-definition digital audio up to 192 kHz, 24-bit. Their Pro64 series also provides for the transmission of up to 14 channels of non-audio control data, such as MIDI, RS-232, and GPIO.