

Who's Listening??

(There's Mud on the Platform!!!)

Getting The Right Monitor Mix

By Bob Applegate

Just to set the record straight – I love musicians, I am one. – I love choirs; I've been in several. Keep in mind that I am basing this article on my 35+ years as a performing musician as well as 25+ as a mix operator. That said, the choir and musicians should not be our first concern as mix operators. The fact is that they need to hear certain things at certain volumes to enable them to play and sing at their best. However, when monitor speakers are turned up to levels that interfere with the sound quality in the main seating or the monitors cause feedback, then the problem must be addressed by US – the mix operators. Sometimes the musicians simply cannot have what they want without destroying the very quality of service that they desire to provide. At this point, **they** must learn to adapt to less (less volume, less monitor, less mix sophistication, less of all of it) in an effort to improve the quality of sound to those listeners we are trying to reach.

At First United Methodist Church of Peoria, the sanctuary mix location is over 75' from the monitor speakers, which face the choir. The same monitor speakers are within 10' of the listeners in the choir. If the monitor facing the choir is loud enough that I can hear it at the mix position while the main speakers are on, then the choir monitor mix could certainly be said to be too loud for the room mix. Keep in mind that it is a balancing act between the needs of the choir and the needs of the congregation and the mix operator controls the fulcrum between the two sides. Generally I set the level for the choir at the point where they can just start to hear the monitors, which means that they are still hearing the house sound, but the monitors arrive first so they can understand the words without hearing the late arriving echoes from the room. In this ratio of room to monitor sound, I can satisfy most of the desires of the choir without drastically harming the sound quality to the congregation.

Concerning the ministers and staff using pulpit microphones and lapel microphones it is always a good idea to explain to the microphone users that certain microphones cannot be placed into the monitors due to acoustic regeneration of the signals (feedback). Keep any lapel microphones and distant microphone applications (such as pulpits, lecterns and choirs microphones) out of the monitors entirely. This will improve the sound quality and increase the available gain on the microphones. The increased gain will provide greater amplification of the source with less feedback and greater working distance from the talker to the microphone.

As a sound operator and/or user, you have to ask yourself, why do we have a sound system and what is it intended to accomplish? Sometimes you will get complaints from system users when you follow these rules, however you will generally not be getting complaints from the congregation. Often it helps to explain the rules to the choir and staff so that we can all be on the same page. Remember that ultimately it is not the choir, staff or even the congregation that we are serving.

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