

Avoiding a Major Mistake That Musicians Can Make

By Benjamin Gribaudo – June 2003

Do you, the musician, desire that everyone in the audience enjoy your music at an appropriate volume with good tone quality and with all parts in musical balance? In the ideal situation, the performance room's acoustics would be sufficient to achieve these goals. In reality, even a concert hall cannot satisfy the needs of every performance, much less a church sanctuary, a school theater or a multi-purpose room! When the acoustics are not sufficient, a sound reinforcement system is required—meaning microphones, mixers, amplifiers and speakers.

A major problem arises when musicians assume that audio equipment is automatically capable of perfect amplification. Since musical sounds are complex, reinforcing them is a challenge. Quality equipment and a knowledgeable, experienced audio engineer are foundational to accomplishing this task.

A good reinforcement system will provide a variety of microphones from which to choose. Microphones may be compared to musical instruments. Each instrument has its own timbre, dynamic range, frequency range, and sound radiation pattern. In like manner, each microphone model adds a unique tone character to the audio it "hears," is optimized for certain volume levels, only captures a specific range of pitches, and has a pattern with which it picks up sound. An ideal mic for a male solo may be a poor choice for a female vocalist. The preference for a brass choir can be very different from the one for a string ensemble. And, a mic excellent in the recording studio may prove insufficient on stage. The best choices can vary from facility to facility, depending on the available equipment and the room's acoustics. The engineer must know the characteristics of each of his microphones in order to be able to select the correct ones for every application.

Once the microphones are selected, they must be positioned so that the sound captured has a pleasing tone color. When more than one voice or instrument shares a mic, it must be aimed to pick up all performers in proper balance. After this achievement, the engineer has many knobs and buttons to tweak, making fine adjustments to optimize sound quality.

The task of reinforcing a musical performance is complex, requiring quality equipment and a good engineer. Yet, that is not all that is required. You are needed, too! In most cases, the complexity of the setup and the intricacy of the adjustments make critical a "sound check"—a dress rehearsal with the sound engineer to insure that everything has been done right. Many times, musicians work hard on their pieces while forgetting to rehearse with the engineer. On stage, the impact of the performance is diminished by feedback, abrupt volume changes, poor tone quality or a part being accidentally soloed out. All these effects lessen the quality of the presentation, disappointing the performer and reducing the audience's enjoyment. A completed "sound check" almost eliminates the likelihood of these problems.

This vital practice should be done in the performance setting shortly before the program. The engineer needs to hear the way you plan to sound when performing, so

Avoiding A Major Mistake That Musicians Can Make

By Benjamin Gribaudo – Page 2 of 2

the musical pieces should be almost all ready. His task is made difficult when musicians frequently stop to correct themselves and to modify their music.

You may say, “I am in a small, amateur group. Does what you say still apply?” Most certainly! The size of your group and its level of skill may affect the level of quality expected, but it does not change the underlying need to rehearse with your sound engineer. However, when only a simple setup is required, such as a soloist in a small church, leadership may decide that this rehearsal is unnecessary. The equipment’s arrangement is so straightforward that any errors would be insignificant.

The final rehearsal with the sound engineer is indispensable. It achieves the goal of the audience hearing you the way you want to sound—with pleasing tone quality, at the right volume and with all parts in musical balance.