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The Importance of a Good Sound System

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Churches need sound systems for a variety of reasons such as: cassette recordings, hearing assistance systems, amplification for the spoken word and reinforcement for various music applications. The simple fact is, most churches cannot get along without a sound system. Today's design technology and equipment can guarantee quality sound for any size church. Unfortunately, you can probably think of a church with poor sound quality.

This article will look at what makes quality sound. Then the article will provide you with some specific tests to perform on your sound system to determine if an adjustment is necessary.

First, the amplified sound should sound natural. That is, the sound from the loudspeaker system should sound the same as the talker or singer, but only louder. Try this experiment on your sound system. Turn the system off and have a friend read aloud for a while. You should be standing about eight feet away. Listen carefully and imprint the live, unamplified sound in your memory. Now, move to the rear of the room and turn up the sound system. With the same person reading, does your sound system reproduce the same voice tone and quality? Does the sound appear to come from the reader? Is it clear? Can you understand what the reader is saying without straining? If your answer is no to any of the previous questions, then your system may be in need of some improvement or adjustment.

Many people, especially young adults, have grown up with high quality stereo systems in their homes, cars or trucks. They know good sound. They also want to hear that same quality in their church sound system. It is easier to accept the sound of speech on a poor system than music. Even though it doesn't sound natural, you can usually understand the words which makes it is easy to get by without improvements. However, if a soloist sings or a CD is played, it becomes much harder to accept that poor sound system. The reproduced sound is not natural, so we become frustrated and distracted. All too often the system has too much distortion, and that becomes irritating. It is hard to maintain a spirit of worship.

So let's get practical. How can you evaluate your sound system? First, do the simple test mentioned above. Second, use the following test for intelligibility. Place as many listeners as you can find in different locations in your church nave or sanctuary. Have some sit in areas where people complain about the sound. Put others in the front, sides, and rear. Now, have a talker, with a good clear voice, speak on the sound system. The volume should be adjusted to a comfortable level. Using the word list, do this simple test. The reader should say, "Write the word (____) now," and insert one of the list words into the blank. Say the word only once. The listeners should write down the word they hear. After the test is complete, have the listeners score their word lists. Spelling doesn't count; nor do the words that are spelled differently but sound the same such as

hear and here. If you find that many listeners have more than 15% wrong, then you should be concerned about the intelligibility of your sound system. When your pastor is speaking and you are a regular attendee, you can probably fill in the missing words based on the context of the sentence. However, new people, who might not know church terminology, may find it impossible to understand. They could easily get frustrated and never come back.

Next, listen to some familiar music from a CD. Does it sound natural? Are there high frequencies from the strings and cymbals? Can you hear the bass? Listen at different locations. Does the quality change a lot as you move around?

After your testing, look at the results. If the sound is intelligible throughout your church, that's great. If you do have some concerns be aware that there are solutions to the problems. Contact churches where you have heard good sound systems. Find out who designed and installed their systems. Ask if they were easy to work with. Did they use a consultant for the design or was it a design/build contractor?

How to choose the right design and contractor is another issue. The bottom line is that you must find a company and people you can trust.

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