**Home Studios vs. Professional Studios and Their Impact**

There are a lot of new technologies and recording software these days to be able to produce your own recordings from your own home. Such programs like Pro Tools and Pro Logic allow you to record on your PC or MAC. With this in mind, however, the final product can vary in quality depending on the skills and experience that you may have in audio production.

 Professional recording studios have all the equipment needed to produce a clean, professional, high quality recording. Also, their engineers generally have years of experience in the field and are able to catch certain sounds, feedback or any other noises that you may miss during the mixing process. To have a home studio, you need to be a good audio engineer and have a great deal of knowledge in the field in order to produce similar if not the same quality recordings.

 One advantage of having a home studio, though, is the fact that it is less expensive than using a professional studio. For this reason, many professional studios have lowered their prices over the past few years in order to compete with home studios and with each other. It’s also more beneficial to use a professional recording studio because the facility is designed for professional recording projects. By having a home studio, however, there are certain things you have to consider, one of them being the aspect of sound proofing your ‘studio space’. You don’t want other noises leaking into your studio like cars driving by, birds chirping, lawn mowers, etc. Using a professional studio would obviously eliminate all of these cons.

 Depending on what you want to record will help you decide whether to use a home or professional studio. If the sound of a certain instrument, for example, acoustic guitars, drums or piano, is affected by the room that it’s being played in, then it would be better off to record it in a professional studio where the rooms are designed for those specific instruments. Electrical instruments such as keyboards, electric drum kits and electric guitars could be recorded in a home studio as there are many pieces of equipment - such as amplifiers and computer software - that are now available on the market for use in home studios and are fairly easy to use for recording your projects.

 There are many pros and cons between home and professional studios. It all comes down to what it is you want to record, how you want the quality of the final project to sound like, and if it will all be your money’s worth.

**Job Opportunities and Salaries for Recording Engineers**

There have been stories about contracting CD sales and major studios closing down over the last 10 years. However, the audio engineering profession has grown significantly since 1999. The average annual incomes have increased, rising from $30,000 to $46,000 between 1999 and 2010.

 The number of jobs for broadcast, audio and video engineers generally grew by 20%-25% from 1999 to 2010. Growth, however, isn’t expected to be as high over the next decade. Although it isn’t much, a 1% drop in job growth is expected over the next 8 years. Despite this drop, there are still a number of areas in which recording engineers can work in such as Motion Picture and Video (24%), Broadcast and Cable Television (14%), Music Recording (14%), Live Arts, Entertainment and Sporting Events (12%), and Broadcast Radio (4%).

 As mentioned previously, the average salary for audio engineers is roughly $46,000 - $56,000. Depending on the line of work, the top 10% earning medium is near $100,000 and the bottom 10% being closer to $20,000 a year. The highest salary for engineers in motion picture and video is about $73,000. For engineers who work in broadcast television can earn roughly above $50,000, while those in the recording and live sound industries can earn a little above $40,000.

 California has the largest market for sound engineers, followed by New York. Job opportunities in these two states make up almost 45% of all jobs in the audio production field. After these two massive markets is Florida (15%) followed by Illinois and Texas (7%). After these are Nashville, Boston, Las Vegas and Seattle which have higher job opportunities relative to other cities and their size.

 Although the job growth in this field is expected to slow considerably over the next few years, there are still plenty of areas in relation to audio production that are becoming available to sound/recording engineers. Audio books, podcasts and internet radio are small markets, but are growing radically. And with more video in the world, there is more recorded sound, along with more opportunities in streaming web videos. It has been suggested that the audio and video professions may continue merging to an extent.

**Mastering Engineers**

 A mastering engineer is a person who is skilled in taking audio that has already been recorded or mixed either in mono, stereo, or multichannel formats and prepares it for distribution whether as a CD, vinyl record, or a different type of streaming audio.

 The mastering engineer’s responsibility is the final edit of an audio production and its preparation for manufacturing copies. He/she should have a complete understanding of audio engineering and may even hold an audio or acoustic engineering degree. Most of these engineers master music or speech audio material, and may also have arrangement and record production skills, which would allow them to “trouble-shoot” any mixing issues and improve the final sound. Exceptional mastering skills are gained with experience which can take several years of practice.

 The equipment that mastering engineers use is practically entirely dedicated for this type of audio production and is usually very expensive. Some mastering engineers rely on not only what they hear, but on what they see. Some use frequency spectrum analyzers, phase oscilloscopes, and sensitive peak meters as guides during the pre-mastering process which can be taken to an exceptional level of precision and maximum sonic release.

 Award-winning mastering engineers have the ability to make a mix consistent with respect to skewed factors based upon the insight of listeners, regardless of their playback systems and the environment. This is something that is very difficult to do because of the many different types of systems that are now available and the effect that they have on the attributes of the recording. An example of this would be when a recording sounds excellent on one speaker/amplifier but sounds significantly different on a computer-based system playing back an MP3. Longer periods of listening to improperly mastered recordings can lead to hearing fatigue that eventually makes them sound disturbing to the ear. A professional mastering engineer makes mixes that have a good harmonic balance which can be accomplished by correcting and taking away any tonal imbalances that are created by improper mixing. This would then produce a more natural, satisfying and more enjoyable sound to the listening audience. This is why mastering is considered to be more of an art as well as an audio engineering discipline.