

Title:

Listening - A Question Of Studio Monitoring.

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Summary:

Monitoring in a music studio is, quite simply, the most important part of the studio set up. Your studio may contain the most advanced equipment available, but without accurate monitoring, you will never hear an accurate mix, which is kinda pointless, isn't it?!

So, what's the difference between a good pair of hi fi speakers and true studio monitors?

Well. hi fi speakers exaggerate the lows, and often the highs, to create maximum impact. This can be good to listen to, b...

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Article Body:

Monitoring in a music studio is, quite simply, the most important part of the studio set up. Your studio may contain the most advanced equipment available, but without accurate monitoring, you will never hear an accurate mix, which is kinda pointless, isn't it?!

So, what's the difference between a good pair of hi fi speakers and true studio monitors?

Well. hi fi speakers exaggerate the lows, and often the highs, to create maximum impact. This can be good to listen to, but it's seldom accurate. Studio monitors are designed to be very accurate to insure a real reproduction of what's actually being recorded. They're also built to much sturdier and exacting standards than hi fi speakers, to cater for the vigourous demands of studio use.

Monitors must be very transparent sounding to enable you to mix parts of the music like vocals, bass and even reverb trails without each part colliding into one and other.

To fully understand the concept of monitoring, you must understand that it's an

art. It's more than just conveniently placing a pair of speakers in the room.

We're all different, as are studio monitors, and we use the ones with which we're most comfortable and can best judge the mix. I've used Yamaha NS10s, Dyn-Audio and Tannoys over the years, but have settled with a pair of Alesis M1 active for near-field monitoring and a pair of Alesis Monitor Two's for midfield monitoring. They're my personal preference and what I'm used to. There are more expensive monitors available on the market, but surprisingly accurate results can be achieved with less expensive monitors just by following a few simple rules.

When monitoring, you're listening to the placement of sound, dynamics, eq, reverb trails, echoes and delays etc. Correctly placed monitors allow you to do this. Hi fi speakers, however good, do not!

A professional, well recorded mix will sound good on anything, and that is the single most important principle to remember. If you use a pair of hi fi speakers to monitor, your mix may well sound great to YOU on THOSE speakers, but I guarantee it won't sound great to others elsewhere!

So, the first rule is, don't use hi fi speakers to monitor.

Nearfield monitors are intended for mounting close to the listener. The idea is to improve the direct acoustic path between the speaker and the listener by making it shorter, thereby giving less opportunity for the reflected sounds to get back in and muddle things up. With nearfield monitoring, the surrounding acoustic environment becomes less of a problem. However, try to optimise the listening environment whenever possible and be aware of the effect that the size of the listening room can have on low frequency response. Usually, the smaller the room, the stronger the bottom end will be.

The ideal placement of speakers is out in the room, away from side and rear walls, and reflective surfaces like tiles, windows or table tops. Unfortunately, and particularly in home studios, this isn't always possible. So do what is practical with the environment you have.

The physical spacing between the speakers is very important, approximately 3 feet apart. A good set of monitors, if positioned correctly in a reasonably non-reverberant room, will give accurate results. There should be equal distance between the listener and either speaker. In other words, the listener and the two speakers are the three corners of a triangle with equal length sides. Both speakers must be turned in accordingly so that from your prime position, you see only the face of both speakers. Also, your ears should be level with the

tweeters, so, if you're placement of the speakers is higher, perhaps on a shelf or wall mounted on brackets, then the speakers must be tilted down accordingly.

Most studios use monitor speakers in the horizontal position. This set-up will promote a strongly focused centre image, ideal for the vocalist, for example. And because the image width is narrower, the sounds can be placed with greater precision than when the speakers are placed vertically. Also, in the horizontal position, there will be much less chance of first reflections from the studio environment colouring your mix.

However, that isn't to say that monitors shouldn't ever be used in the vertical position. Indeed, some manufacturers recommend that in 'perfect' situations, they should be. With vertical placement you hear the mix with the deepest and widest soundstage possible. But this wide a dispersion pattern can add strong reflections to the sound you hear, muddying the mix, hence the preference for the horizontal position.

The rules for midfield monitors are the same as with nearfield, except that the three cornered triangle is much bigger, usually a minimum of 6 ft.

So, the second rule is, place the monitors correctly, read the instructions that come with the monitors and attain a better understanding of your listening environment.

When recording for any length of time, you will get listening fatigue, So take regular breaks every few hours. It's amazing how differently things can sound when you return refreshed.

There is also an old saying; "If a song sounds great at low volume, it'll sound great at any level. But a song that sounds great loud will not necessarily sound great at a lower volume".

Think also of the effect on your hearing over time when constantly listening at loud levels!

So, the third rule is, take regular breakes when recording, make your regular listening level a sensible one and listen at louder levels only occasionally, for feel and bass purposes.

There is of course, a place for the car stereo and hi fi in the process. When I'm happy with the mix, I listen on my hi fi and car stereo. If it still sounds good, then I can be confident that it's a good mix.

So, the fourth rule is, a professional, well recorded mix will sound great on

any system. So use your car stereo and hi fi to 'final check' your mix.