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MUSIC TECH

An Intelligent Mixer Quick Guide

BY JA MIXDOWNS

THE 8 STEP PROCESS TO HAVE YOUR MIXES TRANSLATE WELL IN ALL PLAYBACK SYSTEMS EVERY TIME!

Introduction

Before we get started I want to express my gratitude and thank you for allowing me to be a part of your music creation journey. I'm very passionate about my role as a mentor and my goal is to do my best to help you reach your mixing and mastering goals every step of the way. And in my opinion, this is one of the most important pieces of content that I've developed for my students as it is arguably the most important skill that we need to master if we want to be great at mixing music.

By a long shot, the greatest challenge producers and artists have when it comes to mixing is getting their mixes to sound good everywhere and translate well in all playback systems. Whenever I ask people what they want to learn most about mixing, this topic comes up more than any other and there's actually not even a close second. And for good reason. Not only is it one of the most challenging aspects of mixing, but it's also the true hallmark of a mix well done and to a large extent, this actually the purpose of why we mix our music. And that is why I consider this to be one of my important pieces of content I've made so far in my teaching journey. So in this guide, we're going to cover all of the bases thoroughly, so that by the time you are through with this content, you will know exactly what needs to be done to achieve mixes that translate well on a consistent basis.

And you'll be happy to know that your gear and plugins or should I say lack of quality gear or fancy plugins don't play a major role in the outcome of this whatsoever. Yes, better quality gear and certain plugins can help you get better results, but it is definitely not the determining factor in this equation. All of these techniques we're going to cover have very little to do with the type of gear or software that you're using but with practical methods that anyone with a studio space can implement almost immediately.

So in my 11 year journey of being a mix engineer, I've studied this topic long and hard trying to master this all important aspect of mixing and mastering. And I've been able to confidently narrow it down to 8 key factors that will allow you to accomplish this skillset on a consistent basis and get consistent results.

The 8 key factors to mixes translating well consistently:

1. **Having an acoustically treated room (when mixing in speakers)**
2. **Proper monitoring setup**
3. **Using reference tracks**
4. **Mastering**
5. **Mixing in mono or checking your mix in mono**
6. **Use reliable playback systems (and don't change them)**
7. **Use headphone monitoring software (when mixing in headphones)**
8. **Mix at low volume levels**

It's in understanding these topics that will get you on the path to consistent mixes that are guaranteed to sound great in all playback systems. It's important to note that this list is in no particular order and one is not necessarily any more important than the other. Some things may be easier to achieve but not more important. They all play an equally vital role in the process and they all need to be implemented correctly for this process to yield results. Just doing 3 or 4 things on this list will not get you the consistency that you're after and it's crucial that you have this understanding before we get started. And the great thing about this guide is that it gives you all of the information in plain sight and will make it easy for you to see where you might be going wrong and make the necessary adjustments to get you on the right track.

And just to note, I will not be taking a deep dive into these subjects in this guide because there is far too much to cover with many of them and is far beyond the scope of this video. The purpose of this guide is to make you aware of elements you need to know so you know exactly what you need to study and work on moving forward to get real results. But I will be leaving you guys with some great resources & recommendations throughout the guide to put you in the right direction for success.

So with that being said, let's get started!

1. USING REFERENCE TRACKS

Using a reference track is one the most utilized strategies in mixing and it has been for a long time now. Pretty much all professional mix engineers use reference tracks for a great reason.

Let's look at the benefits to using reference tracks:

- It's the easiest technique on this list that anyone can implement to immediately get results
- It's such an effective technique that works every time you implement it
- Using reference tracks is the best way to map out a direction for your mixes to ensure they're heading to the right destination. Many new mixers really struggle with knowing what their end destination needs to be simply because they don't have a reference point and they don't have enough experience to know when a mix is complete.
- Reference tracks give you a perfect example of how a well mixed song sounds in your particular mixing environment and eliminates almost all of the guesswork as to how to balance your mix in all the necessary areas. And we will discuss how to work around the imperfections of your room when we touch on having an acoustically treated room section of this guide.

Once you understand the importance of using reference tracks, we now have to look at the best ways to utilize reference tracks in order for you to maximize your results.

1. **Use a mix that you know was done professionally** - It completely defeats the purpose of using a reference track if the reference was not done well. Because if it wasn't done well, it won't translate well either. So always make sure you source out a professional level track to reference with.
2. **Use AB software -** Using AB software makes using reference tracks much easier and much more effective. This software allows you to seamlessly switch back and forth between multiple tracks to make referencing a breeze. And always remember to AB your tracks often through the entire mix process to keep yourself on track to the goal. We all know how easy it can be to get sidetracked when working on a mix!
3. **Tip*** Remember that professionally released music is mastered so don't try to reference your unmastered mix to the exact specs of the mastered song. Just do your best to get it in the ballpark and then match up the fine tuned details in the mastering process.

Now there's a lot of different AB software available but in my opinion, Metric AB from Plugin Alliance is the best. But other options include:

- Izotope Ozone
- Youlean loudness meter
- Perception AB

For a live tutorial on using reference tracks make sure you check out my video on [how to master a song](#) to see how using reference tracks works in action.

2. HAVING AN ACOUSTICALLY TREATED SPACE

When it comes to getting your mixes to translate well in all playback systems there's one all important word that you need to always remember and that word is **accuracy**! And when we talk about acoustic treatment and why it's so important to recording and mixing, this is the primary reason. Let me put it this way, if you are mixing in a room that is not acoustically treated to some degree, the chances of your mixes ever having any chance of translating well is slim to none. And in this case, your only hope of getting any decent result is using reference tracks or using a solid set of reference grade headphones. Simply put, if your room is not treated then audio coming out of your speakers just won't be accurate to it's true source sound causing you to have all sorts of balance issues and ultimately making all sorts of mixing mistakes that will hinder any chances of your mixes translating well.

And the need for acoustic treatment in your space always depends on your experience level and what your goals are. Generally, beginners will not bother with room acoustics for three primary reasons. One; they don't understand how important it is to optimizing sound. Two; They don't care how important it is to optimize sound. And three; it's too expensive and is not worth putting money into over getting more and better gear. But I will assume that if you're reading this guide, you're definitely at the stage of needing to get some acoustic treatment in your space if you don't have any or if you don't have enough of it. Especially if you're trying to get this translation thing figured out.

Now room acoustics and soundproofing are extremely large topics and could literally be discussed for days and far beyond the scope of this guide. But what I need you to take away from this is that your room needs to be sufficiently acoustically treated to get the desired result you want. At the minimum you need bass traps, and wall panels. Now of course there are other

products that can and should be used such as ceiling clouds and monitor Isolation pads which are all necessary in order to maximize accuracy and optimize your results.

But what's important now is that you're aware of how crucial having a treated space is towards your quest for your tracks to translate well and if you begin doing what you can to get this process going for your studio.

Resource:

- For information on room acoustics and how to set up your space effectively, check out this chapter from my up and coming Ebook, **The Home Recording Studio Manual**.
- Setting Up Your Room

3. MONITORING

The first aspect of monitoring is about how and what medium you're using to listen to your music through, which is of course either through speakers or headphones. The second aspect of monitoring has more to do with science and how we set up our listening environment. Monitoring goes hand in hand with room acoustics and plays a massive role in how your mixes will turn out and ultimately, their ability to translate well. And I can't stress it enough just how important it is to not overlook this aspect of the mixing process. But unfortunately, this is a common mistake that many beginners and intermediates make and wonder why things don't sound quite right when they listen to their tracks outside of their studio. They're either indifferent or uneducated to how much of a factor proper monitoring techniques plays a role in their ability to have their mixes translate well. Neglecting proper monitoring setups completely disrupts the balance of your space sonically and destroys any chances of accurate mixing.

If you're really new to mixing and music production, you may not even be aware that there is a specific way you should be setting up your room to optimize your results. But the good news is that there's always ways to make your space sound better regardless of the space that you're in. When it comes to setting up your room for best listening results, these things are all somewhat subjective, but there's also a large element of science involved that make the fundamentals of setting up our space very straight forward. But just like room acoustics, this is a massive subject to cover and is way beyond the scope of this guide.

So for now, we're just going to make sure that we have our basics in order when it comes to monitoring and how to set up your space, which is:

- **Where to establish your listening position**
- **Monitor Placement**

Resource:

- Check out this Module ([The beginners guide on how to setup your space](#)) from my new upcoming Ebook, The Home Recording Studio Manual, to get a deeper look into monitoring and how to setup your space

4. MASTERING

So when it comes to the science of getting your mixes to translate well, it's really odd to me that mastering doesn't come up more in this conversation. Even though we know how big of a difference it makes in the final result of our tracks, so many new producers just aren't aware of how much impact mastering has on how our tracks will translate in other playback systems. Generally speaking, most mixes that don't have any mastering done to them will almost never translate well across the board and that's the cold truth of it. Even if it's a well balanced mix, there's just too many factors that need to be addressed in the mastering stage that are essential and fundamental to making sure our tracks sound great everywhere. And being unaware of this fact is where so many new mixers and producers go wrong when they're trying to tackle this problem.

And even though mastering plays a major role in this, it still doesn't mean that mastering will guarantee all of your mixes to translate well. It's really important that you understand this. The mix still has to be done well for mastering to be able to play its proper role in the equation. So make sure that your tracks are mastered well to increase the probability of your mixes translating well.

Resource:

- Check out my youtube video [How to master a song for beginners!](#)

5. MIXING IN MONO (OR CHECKING YOUR MIXES IN MONO)

Now if this is your first time hearing about this technique, it probably sounds like a really strange thing to do. And if you've ever listened to your monitors in mono, you know that it sounds much worse (different) than listening in stereo. By nature, mono sources are much flatter and duller than stereo mixes and therefore are much less appealing to the ear. And even though this is true, many professional mix engineers do all of their mixing in mono. Now this is a common debate amongst mixers but the fact is that there are definite advantages to mixing in mono. And these advantages play a massive part in how well your mixes will translate across the board. A mix that sounds good in mono is much more likely to translate well to different listening environments and systems. This is because mono mixing ensures that the core elements of the track are solid and well defined.

There are 7 key benefits to mixing in mono:

1. **Phase Coherence**: Mixing in mono helps identify and correct phase issues between tracks. When tracks are panned in stereo, phase problems can be masked, but they become apparent in mono. Correcting these issues ensures a more cohesive and punchy mix.
2. **Balance**: It forces you to focus on the balance of the mix. Since there is no panning to rely on, you need to ensure that each element has its own space in the frequency spectrum. This results in a mix where each element is clearly audible.
3. **Compatibility**: Many playback systems, such as smartphones, Bluetooth speakers, and some club PA systems, play back audio in mono. Ensuring that your mix sounds good in mono guarantees better compatibility across different playback scenarios.
4. **Center-Panned Elements**: Elements that are panned center in a stereo mix, such as vocals, bass, and kick drum, can be more accurately balanced in mono. This ensures that the most critical elements of your mix are well-balanced and prominent.
5. **Clarity and Focus**: Mixing in mono can help in achieving a cleaner and more focused mix. Since you cannot rely on panning to separate elements, you are forced to use EQ, compression, and volume to create space and clarity.
6. **Avoiding Masking**: It helps in identifying masking issues where certain frequencies might be clashing. This is especially useful for low-end elements like the bass and kick drum, which can often compete for space.
7. **Streamlined Workflow**: Mixing in mono can sometimes lead to a more streamlined and efficient workflow, as it removes the complexity of dealing with stereo field placement and allows you to focus solely on the balance and tonal quality of your mix.

And I will admit that mixing in mono was challenging for me in the beginning mainly because I didn't start playing around with the technique until 6 or 7 years into my journey. I was so accustomed to mixing in stereo that it took me a while to get adjusted and get the results I was after. So If you're new to the concept of mixing in mono, my advice would be to ease into this technique and check your mixes in mono every once in a while rather than making an immediate switch over. This technique can be tricky to get right at first and definitely takes some time and practice to get adjusted to. And if you don't happen to have a monitor controller with a mono button, there's great free software available such as Voxengo MSED to make your signal mono with the click of a button. So start practicing this technique the next time you mix and you'll see how key of a technique it is to have your mixes translate.

Resource:

- [Voxengo MSED](#)

6. USE RELIABLE PLAYBACK SYSTEMS

So you're probably wondering what I mean by using "reliable" playback systems? Of course, having multiple playback systems to reference your mixes is essential to finalizing the mix (and master). And in most cases we only have a few options at our disposal to do so, especially when you're first starting out. But using reliable systems doesn't mean that you need top of the line audio products. It means that you work with what you have and train your ears to know how the specific systems you have translate music. So you don't need a premium audio system in your car, $2000 speakers and $600 headphones to get things right. You just need consistency with the tools you have and that you know how they sound.

For most of my mixing career, the playback systems that I've used to reference my tracks have been my primary monitors (Mackie HR824), my single (mono) Avantone mix cube and my car stereo. Unlike most engineers, for years, I didn't reference much in headphones. It wasn't until about three years ago that I started using my headphones (Neumann NDH 20) to reference my mixes regularly. But the point here is that you have your go to's and stick with them. And of course it's ok to upgrade and change gear to more accurate sources over time, but just beware that there's always an extended time period of needing to train your ears to the new products in order to confidently know how they are translating your mixes.

The ideal reference systems are systems that are the ones that are most popularly used amongst consumers when listening to music, such as apple ear pod headphones, portable

speakers and car stereos. But whatever you choose, make sure you use at least 3 different reference points if possible for the best results.

Resource:

- Try using this product [Mix Checker](#) from Audified as it allows you to reference many different sound sources all in one plugin which can be an extremely useful tool if you don't have many options to reference your tracks with.

7. USE HEADPHONE MONITORING SOFTWARE (IF YOU'RE MIXING IN HEADPHONES)

If you predominantly mix in headphones and are currently not using some form of headphone monitoring software then you're just shooting yourself in the foot when it comes to your mixes translating well. Even if you've been accustomed to mixing in headphones without headphone monitoring software for a long time and you've managed to get decent results up until now, good headphone monitoring software will always give you more accurate results when mixing in headphones. And I stress the word "good' software here, because all headphone monitoring software is definitely not all made equal so I will offer up some suggestions on software in the resources section of this chapter.

If you're new to mixing then many of you might not even be aware of what headphones monitoring software is. So let's take a look at what this amazing software is and why it's such a powerful tool for headphone mixers.

Headphone monitoring software refers to applications designed to simulate the experience of listening to music or audio through studio monitors and also simulates different room types, while using regular headphones. This type of software helps address some of the common challenges associated with mixing and monitoring audio through headphones.

Here are some of the key features and benefits:

1. **Room Simulation**: These programs can simulate the acoustics of various studio environments, allowing users to hear their mixes as if they were in a professionally treated room. This includes simulating the sound reflections and spatial characteristics of different studio monitor setups.

2. **Stereo Field Correction**: Headphone monitoring software can correct the exaggerated stereo imaging that is often a problem with headphones. This provides a more realistic and balanced stereo field, similar to what you would hear through speakers.
3. **Frequency Response Correction**: Headphones have unique frequency response characteristics that can color the sound. Monitoring software can apply correction curves to flatten the frequency response of the headphones, providing a more accurate and neutral listening experience.
4. **Crossfeed**: Crossfeed simulates the natural blending of sounds between both ears that occurs when listening to speakers. This helps reduce the extreme left-right separation that can happen with headphones, making the listening experience more natural and similar to speakers.
5. **Custom Profiles**: Some software allows users to create custom profiles for their specific headphones. This ensures that the corrections and simulations are tailored to the exact model being used.

In my opinion, headphone monitoring software has been a complete game changer and has revolutionized our ability to get accurate mixes through headphones.

Resource:

Here's some suggestions for great headphone monitoring software:

- [All of the Waves NX plugins & Abby Roads Studio 3](#)
- [Slate Digital VSX software](#)

8. MIX AT LOW VOLUME LEVELS

To be completely honest with you, initially I wasn't even going to put this one on the list for this guide. But the more I thought about it, the more I realized that it's an extremely important key in having your mixes translate well and just as important of a tool as any that we've discussed so far. Most of us have this horrendous tendency to always want to listen to music loud, especially when we're creating it and working on it. And this is even more true when we're younger and our ears seem like their bulletproof. But not only is mixing at high volumes inherently bad in terms of long term ear damage, but it is also incredibly damaging to our mixes in the short term as it gives us ear fatigue very rapidly. And this ear fatigue significantly diminishes our ability to make correct mixing decisions in real time. Mistakes that we can make out until our ears are rested and reset. If you're not familiar with the concept of ear fatigue, it is definitely a subject

that you need to be educated on as a mixer and plays a massive role in how well you can effectively mix music.

The other key benefit to mixing at low levels is that if you can get your mix to sound big and punchy when it's low, it will always sound great when it's turned up louder and generally when played back in other systems. But conversely, if you mix at high volume levels, they very rarely translate well when you turn the volume back down to normal listening levels. This is because the frequencies are exaggerated and it's also psychologically proven that humans believe that louder music sounds better than quieter music. And this greatly affects how your mix will translate in other playback mediums. So for all of you young producers and engineers out there, not only will you save your ears from any future permanent damage, but in the short term, your ears fatigue less and your mixes will translate much more consistently across the board.

Resource:

- Click [here](#) to see my post on ear fatigue

CONCLUSION

The key Xfactor in your mixes translating well every time

Many of the topics that we've covered in this guide are things that can and should be implemented to your space and work flow immediately. But it's also important to understand that some of these techniques will take time to develop before you start seeing those consistent results. So allow yourself some time to build your skills in these areas. The important thing is that you now know exactly what needs to be done to cure this nasty plague we all have as mixers and producers. Because I can guarantee that with the proper application of these subjects we've covered, you will finally be able to get those beautiful studio and headphone mixes sounding fire everywhere. But remember that if one of these factors isn't done correctly, it can and will throw off the balance of the rest of them. So these things need to all be done effectively in tandem in order to get those elusive consistent results you're after.

And before we end this guide, I want to quickly discuss the invaluable X factor of **experience**. The more you mix, the more consistent your results will be. And the more you mix, the more you know how your music will translate in your specific playback systems. And trust me, I know more than anybody how frustrating it is to get this aspect of mixing in the bag. It took me even

longer to master this because I didn't have a guide like this to help me put it all together. But having your mixes translate well in all playback systems is essentially the hallmark of a mix well done and undoubtedly one of the most important aspects to becoming a consistent mixer. Because let's face it, if a mix only sounds good in your space, then it's no good. But now you're armed with the tools to be able to get it done and finally turn that corner of becoming a great mixer.

If you enjoyed this content please check out some of these incredible mixing courses from Intession Music Tech!

In this premium course I break down in detail how I approach mixing a song from start to finish in a seven step process. This course was intentionally designed to be done in real time so that you can observe the workflow and mindset of a professional engineer approaching his craft. From the entire editing process to how to organize your session for optimum efficiency. Mixing lead vocals, the chorus, background vocals, drum and instrument mixing, finalizing the mix, mastering and everything in between. Learn all of the tips and techniques from a pro that will give you a proven system to follow to make you more efficient and more confident with your mixes.

Click here for more info!
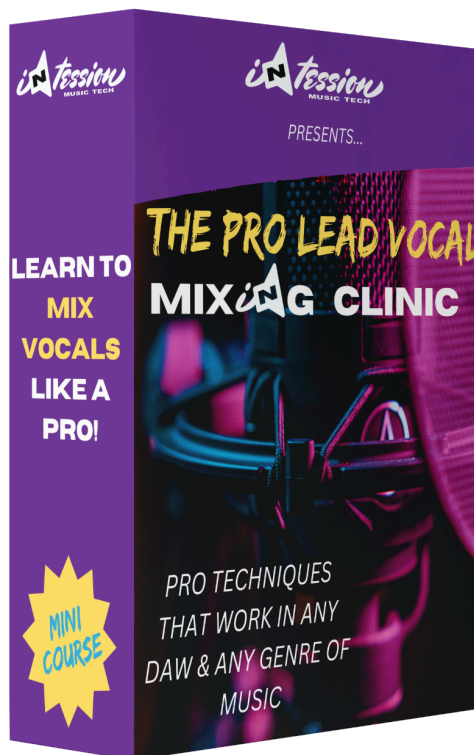
The techniques and concepts we're going to cover in this course have come from over 10 years of trial and error, study and most importantly, real time experience of literally working on thousands of

vocals. So I truly understand how difficult and frustrating it is to not be able to consistently get a "professional" sounding vocal that stacks up to your favorite songs and mixes.

So in this mini course we will look at what I believe to be the key elements that make up a "pro" lead vocal and some powerful techniques to help us achieve these elements to consistently get you a pro vocal mix.

[Click here for more info!](#)

In this mini course, you're going to learn the fundamental professional beat mixing techniques that I've studied and cultivated since 2012 that are guaranteed to work in any DAW and on any genre of music across the board. These are proven beat mixing techniques that have been refined over the course of 12 years of study, experience & mixing thousands of different beats in all different genres of music. This mini course has been designed to give you a system to consistently achieve professional

level results with your beat mixes without using long drawn out techniques that require a ton of time to learn. We will look at the key eq, compression, stereo width, delay, saturation, reverb, subgrouping, subgroup processing & mastering techniques that make up the foundation of professional beat mixing to help you get over the hump of having flat, lifeless beats with no clarity, no punch and no dimension. This mini course is designed to help you eliminate the guesswork of what you need to do in order to consistently take your mixes to the next level and be able to have your music compete with your favorite songs and favorite producers.

Click here for more info!