Mana Recording Studios

Mixing Requirements and Guidelines

This document is list of requirements and guidelines for projects that are being sent to us for mixing. The goal of this document is to help us maximize the time we actually spend mixing your project, and to help you in delivering your project in the best condition possible.

1. General Requirements

1.1 Project Delivery

- All materials should be mailed to the studio on a hard drive and we would prefer that you use a drive that at least has Fire wire 400. We would recommend the LaCie Rugged Hard Disk series. It has Fire wire 400/800, USB 2.0, does not require an external power source, and it comes in a shock absorbent case, which is perfect for shipping. It also does not require a driver to run, does not need to be formatted, and works on both Macs and PCs.

-Always, always, ALWAYS double-check the material on the hard drive. If you moved Pro Tools sessions onto the drive, make sure they open and all the audio is there.

-YOUR MATERIAL NEEDS TO ARRIVE AT THE STUIDO IN A TIMELY FASHION. We can't stress this enough. Our schedule at the studio can get pretty tight, with very little down time between projects. For example, if we are scheduled to start your project on the 3rd of the month, please don't wait till the 2nd to ship it. We understand that things happen from time to time that are beyond anyone's control, but it is important that you communicate to us as soon as possible if your project is going to be delayed for any reason.

1.2 Sessions and File Set Up for Pro Tools Users

-All songs should have their own individual Pro Tools session located within it's own project folder.

-We prefer to have all material recorded at a bit depth of 24 bits with a sampling rate of 48 kHz. The audio files can be either WAV or AIFF, no preference.

-All tracks should be LABLED CLEARLY AND SIMPLY. For example, the kick drum should be labeled KICK, the trigger impulse or resample kick should be labeled KICK TRIGGER, the direct input for the bass should be labeled BASS DI, etc. It's also important to have all the tracks organized within the session. All the drum tracks should be together, all the guitars, all the vocals, keyboards, etc.

-If for some reason you used automation in your working mix, we would prefer that you remove it. Even if it were something that you want to take place in the mix (for example, a panning automation of a vocal part), we would prefer to do it ourselves. An easy way to

remove all automation is to select all the tracks using the selector tool, go to the Edit drop down menu, and in the Clear Special tab select "Clear All Automation".

-All aux sends, aux tracks, group busses, master faders, VCA masters, and plug-ins should be removed. Basically the only thing we want in the session is the actual audio tracks. Having the tracks grouped is ok as long as they are clearly labeled.

1.3 For Users of Logic, Sonar, Cubase, Nuendo, Etc.

-When working with material that was not recorded in Pro Tools, we would prefer to just receive the consolidated or "rendered" audio files. If you are using Logic or Sonar, please do not send OMF files. It is very, very IMPORTANT that you make sure all your edits/punch ins are cross faded and are as seamless as possible before you consolidate your audio.

-All material should be recorded at a bit depth of 24 bits and a sampling rate of 48 kHz. Pro Tools is the platform we use to mix in, and it will not recognize 32 bit files, or any bit depth over 24 bits. Keep this in mind if you're using a program that goes above 24 bits. Also, it is always better to start the project at 24 bits, rather than 32 bits and rendering the files down to 24 bits. The audio files can either be WAV or AIFF, no preference.

-All files should have a start time of 0:00:00.

-All files should be MONO files. We can accept stereo files, but it is our preference to have everything as individual files.

-All audio files should be LABLED CLEARLY AND SIMPLY. For example, the kick drum should be labeled KICK, not Audio File 1_01 or whatever default name would be assigned within the program.

-All files should be organized into folders for each song. Meaning, all the audio files for Song 1, should be in a folder labeled Song 1. You can even go a step further and divide up the instruments into individual sub folders (Drums, Guitars, Vocals, etc.). I won't say that we require that last step, but it would help us out.

-Certain programs like Cubase will render any plug-ins, automation, volume, and pan settings that are on the tracks when you export them. It is very important that you remove all plug-ins and automation, and that you make sure the fader in the program is set to unity gain or "0", along with having the pan set at center. When you export them, make sure to export them MONO, and not STEREO. If for example you recorded your overheads for the drum kit to a stereo track, simply divide the track into two mono tracks and label them left and right.

2. Tracking Guidelines and Requirements

2.1 Drums

-We would prefer to have the drums tracked without any compression and minimal EQ. This allows us to have more options in the way we can shape the drums in the mix.

-All drums should be mic'd individually. For example, all toms should have their own mic, each kick drum, etc. We would like to have the snare mic'd on the top and bottom. The phase on the bottom snare mic needs to be flipped out of phase. If the studio you are working at, or the gear you are using cannot do this, please indicate this in the mixing notes.

-We would like to have the hi-hat and the ride cymbal mic'd separately from the overhead cymbals. If there is a secondary or stationary hat, it's probably a good idea to mic it separately.

-Overhead micing is a very important, if not the most important part of recording the drum kit. The XY stereo pair is a popular technique for micing cymbals and is also a very good one if done properly. Micing cymbals in pairs or individually is also a good technique, once again, if done properly. It is a good rule of thumb that if you are using more than 4 mics on the overheads (not including the hat and ride) that you are probably going to have a lot of phasing going on and should be using the XY method instead. The key is to make sure all cymbals are cutting through clearly, with a nice stereo image of the cymbals, and no phasing between the mics.

-It is a good idea to take samples of the kit at the end of each song. Have the drummer lay down multiple hits of the snare, and each tom, with a good amount of decay time between hits.

-If you are not sending a Pro Tools session. Make sure you include in your mixing notes the specific panning of all the drums and cymbals. Please specify if the panning is from drummer or audience perspective.

2.2 Guitars, Bass, and Reamping

-We prefer to have the guitars tracked without any compression and minimal EQ.

-This should go without saying, but when recording stereo rhythm guitars, copying the same performance and panning it the opposite way WILL NOT make it stereo. It will still be a mono track. Stereo rhythm tracks need to consist of two performances.

-All guitars should be recorded dry, meaning no printed effects on the actual tracks. For example, if you are recording a solo, don't print the delay on the solo track. If you want to record the delay, print it on a separate track.

-When tracking bass, minimal compression and EQ on the recorded amp track is all right, but the D.I. track should have no EQ or compression.

-A lot of our clients send us their projects with the intent of us reamping their guitars and bass. Even if this were not the case, we would strongly encourage you to record a D.I. (Direct Input) of all guitar parts, including the solos and the bass. We appreciate the fact that a lot of artists try to capture their sound in the studio with the producer or engineer they are working with. We will always try to use the recorded amp tones that are sent to us, at the request of the artist, and most times it works out fine. Never the less, it is a good back up plan to record the D.I. tracks and not use them, than to not have them and be painted in a corner. See the diagram on page 5 to learn how to properly record a DI track for reamping.

2.3 Vocals

-When tracking vocals, we understand that a certain amount of compression is sometimes needed. We urge you to keep it as light as possible, as over compression cannot be undone later. It is better to not compress the vocals at all as they are being recorded and instead apply heavier compression on the playback. This gives the vocalist the comfort of hearing their vocals compressed, and allows you to hear the vocals in a more finished form. All without committing to the compression that is being applied, and allowing us to do more with the vocals in the mix.

-The same guidelines for compression should also be followed for applying EQ.

2.4 Synth and Keyboards

-If you are recording a track using a keyboard, you should always record it stereo. Make sure you are using the same type of mic pre for the left and right, and make sure the levels are set the same. Make sure the recording levels are not too hot, as keyboards tend to clip mic preamps easily.

-Do not apply any EQ or compression to the keyboard tracks.

-It is always a good idea to record a MIDI track of the synth or keyboard performance. Make sure it is labeled the same as the corresponding audio track.

2.5 Editing, Clean up, Etc.

-For the most part, your sessions should be ready to go when we receive them. Any clean up, fixing, smoothing, etc. should be done on your end. All the tracks should be edited (noise, bleed, etc.) and faded/cross faded. The more prepared the tracks are when we receive them, the more time we can spend focused on making the mix the best it can be, which is what you hired us to do.

Recording A Direct Signal From Your Guitar

Recording a direct signal from your guitar is really simple. Plug a 1/4" instrument cable from the output of the guitar into the input of the direct box. Plug another 1/4" instrument cable from the output marked "Thru" on the direct box into the input of the amplifier. Mic up the amplifier for recording. Next, plug a balanced XLR cable from the Lo-Z output of the direct box into the input of a mic preamp. The basic function of a direct box is turning a Hi-Z signal like a guitar, into a Lo-Z signal like a microphone, so set the preamp as if you were setting it for a microphone. While a good level should be achieved, do not record the signal too hot! DO NOT eq, compress, or apply effects to the DI signal. The recorded amp track will be recorded simultaneously with the DI track. Once you setup the DI track, the playback can be muted during the tracking process.

Guitar

Direct Box

Overdrive Pedal
(If you are going to use an OD
Pedal, this is the place to put it
in the chain.
NOT before the DI Box)

Amplifier

Mic

Preamp

Preamp

Recording Interface