

# recording junkie

Every element of the instrument to recording chain affects the final outcome of the track. It is therefore important to use high quality elements at every stage of the process. That is not to say you won't be able to get a good performance with lackluster equipment, but it will greatly reduce the quality of something that could have been stellar.

## 1. The guitar - What are the primary variables of the instrument?

a. Pickup type. There are several types of pickups that all have their own sonic qualities. A single coil pickup as used in guitars like the Stratocaster and telecaster by fender are focused, and bright. Hum buckers on the other hand are warm, and thick in sound. Gibson Les Pauls use hum bucking pickups. Piezo electric pickups are a fuller range pickup than standard magnetic pickups used in electric guitar and are better sounding through a more full range amplifier than a typical guitar amp. Try a PA in the case of using a piezo type pickup as in the Parker guitars.

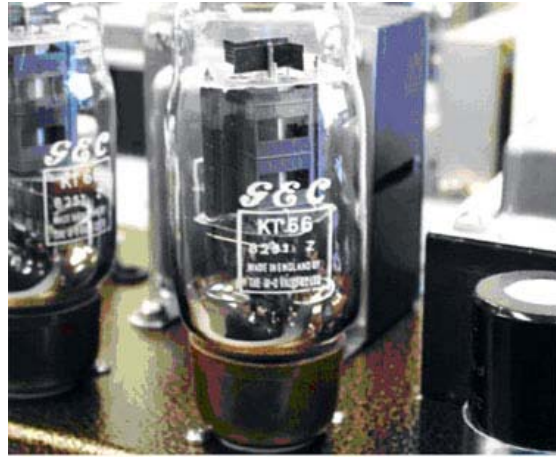


b. Strings. Most importantly NEW strings will have more harmonics than older used strings that may have rust or other gunk muffling their sound. The size of the guitar strings will affect not only tone, but also playability. Larger strings require more tension to reach proper pitch. This tension makes them a bit more difficult to fret, but also makes it possible to adjust the height of the fret board closer to the strings (you can do this by adjusting your bridge or your tremolo system or both, have a shop do it for you if you are not confident).

c. Electronics other than pickups. Try to keep all the electronics clean. Pots can get dirty and will make a lot of noise when turned. The jack can become loose and cause noise with a cable hanging from it. Replacement parts can be found from a multitude of online retailers at reasonable prices and these items don't have to be replaced very often. Only rudimentary soldering skills are necessary to replace most of these parts on a guitar.

## 2. The Amp - What are the different types

a. First, the tube amplifier. One of the primary reasons a guitarist may prefer a tube amp, in addition to the tone argument, is because a tube amplifier when over driven "soft-clips". That means instead of a hard ceiling you hit on digital and solid state amps an over driven tube amp gets a warm, smooth ceiling, resulting in a more pleasing distortion.



b. The solid state amp is designed around low distortion. Some of the best sounding clean amps are solid state. The Roland JC120 is a solid state amp and has been popular as a jazz guitarist's amplifier since its introduction in 1975.



c. An emulator amplifier is a solid state amp that has been programmed to sound similar to other popular amplifiers. I have purchased a Line6 Flextone III modeling amp myself. There are other amps I would prefer, but with limited space an emulating amp can be a good choice to expand the range of sounds you can get from a limited number of amplifiers.



### 3. The Mic - What kind and where should you put them?

a. The primary mics used in guitar amp recording are dynamic microphones such as the Shure SM58, SM57. Condenser microphones should be chosen carefully as the high level sound source can damage them. Look at your mics specs and make sure it can handle the SPL before you mic the cabinet too closely with a condenser. That said the condensers generally have a wider frequency response than dynamics so they do have their place. Ribbon mics are the typically thought of as the grail tone for guitar cab recording. They are very sensitive to sound pressure and have wonderful response at mid to high frequencies; they can be a bit bass heavy if miked too closely to the sound source. AEA makes a ribbon the R92 that is made specifically for closer miking the guitar cabinet (6-12"). (Careful with larger ribbon mics as the ribbon could get knocked off of its suspension mount.)



b. Placement is not a hard and fast science, but here are some tips to start. From these places you will almost always want to move the mic around a little to get the sweet spot. Keep in mind the closer you mic the amp the more low end the mic will pick up. Additionally the more off axis you mic the amplifier the less high end you will pick up in the recording. So to pick up more high frequencies move the mic closer to the center rather than the edges and move the mic back away from the speaker until you get the desired tone.



c. Multiple mic placements can be very beneficial. You can get differently colored versions of the same performance from one take. Multi setups give the availability of blending tracks to get tone you can't get with a lone mic setup. It also gives the important "fallback" option. You have a backup in case one of your tracks has a gremlin. This is annoying, especially when you have a great natural first

take. Those first takes never come around again and if a good one gets wasted it is a damn shame.

A potential drawback can be phase issues. With multi-mic setups you can end up with audio canceling out other tracks a little and making parts sound thin or dull. A great trick to combat this was learned from one of my friends. You can plug a metronome into your guitar amp and DI into Pro Tools. Record the tracks for the multiple microphones for at least 3 or 4 clicks. You will see the metronome spikes in the PT track window and you can use them to shift your upcoming guitar tracks in order to line them up perfectly.

4. to tape or HD.

a. The last stop for the audio in this chain is to the recording device. If you have chosen tape, you will not have to worry about recording too hot (at least you don't need to worry as much). If you are recording ITB you will need to make sure you are not clipping any of the stages. If you are recording too hot at any point in the chain you will end up hitting the ceiling of the A/D converter and the recording will sound horrible. If you are too hot, go back through your signal chain from the guitar forward and back it off at the hot spots until you get below clipping and give yourself a bit of headroom. (Note - there is some evidence that tracking quieter produces better digital recordings anyhow.)

b. Now that you have spent all this time in setup, hit the record button and capture the recording.