



Wade Goeke is the owner of Chandler Limited. His company produces some of the finest high end microphone pre amps, compressors, and equalizers for recording studios. His client list includes Abbey Road Studios, Billy Corgan, Brian May, The Goo Goo Dolls, Lenny Kravitz, Paul McCartney, Peter Gabriel, and more. He has years of experience in product design and in recording music. We are truly honored to have him join our team of tech columnists to share his knowledge about recording guitar tracks and music. Here's part two with GJD's Pro Audio Insider:

*GJD: Wade, can you please tell us what are the different types of microphones available for recording steel string acoustic guitars?*

WC: Ah, so many choices. For me, its usually a small diaphragm condenser, either tube or solid state depending on the situation, or large diaphragm tube mic. I think many people tend to consider small diaphragm the way to go, but don't forget the pictures of John Lennon with his Gibson acoustic with a big 'ol U47 in front. My favorite choices for small diaphragm are KM53 and 54 for tube mics, and KM83 for solid state. For large diaphragm I like U67 and Manley Reference. Personal taste, there are many mics out there of these types that will do the trick and it will depend on your pre amp and outboard processing. I tend to work as simply as possible. One mic, one guitar, play. No phase problems, no long setup times. Especially relating to a Guitar oriented site such as this, it seems best to approach recording from a get a good sound in a reasonable time frame and then be CREATIVE! Also, we must all remember that the most important part is the performance. For me, it can be easy to tweak the recording but if the playing isn't there you're already screwed.

Also I tend to use double (or more) tracks to change, modify, or beef up the sound. You can change mics, eqs, compressors etc for each track and give each its own personality. When you mix them together the sum (hopefully) is cooler than the parts. Lastly, having decent gear and knowing how to use it can be a source of inspiration, especially with microphones.

*GJD: Please describe the specifics of these microphones?*

WC: Well the KM53 and 83 are omni. As I mentioned last article, omni is my favorite options for all type of guitar because of its natural pick up pattern. Just to clarify, the KM54 is cardioid. The U67 is switchable pattern and I tend to use it cardioid. The Manley reference in cardioid. Here's a cool point about the KM53. Its omni as previously stated and has a slight high end rise purposely built in. It really gives the source a nice rich high end response. So it has the effect of an omni but some of the texture of a cardioid pattern. The capsule is also the same as used in

the M50 (which today sell for about \$18,000 each) which are often used for orchestra recording, in the decca tree configuration. Lester Smith, Abbey Road technician since about 1962, told me that in a pinch they would remove KM53 capsules to fix M50s. So if you find yourself recording at Abbey Road make sure you get a KM53 with a capsule :-). Ken, let me add one more thing. As a disclaimer, I should mention that there are many other mic choices at all different price ranges. Obviously, I was just talking about some high end microphones choices.