



DON  
BARBER

# SOUND & LIGHTING

## THE HOWS AND WHYS OF ELIMINATING MICROPHONE STANDS

I would like to examine one component of a live sound system which can greatly affect the system's overall sound. The microphone stand.

The purpose of a microphone stand and its associated hardware - boom arms, goose necks etc. - is to hold a microphone in front of a sound source in order to reproduce sound through the various mixing and amplifying components of the sound system.

As simple as this seems, the stand's ability to do this well, without picking up extraneous noise and vibrations or producing noises itself, can be critical to the overall sound quality.

By analyzing the specific source pickup requirements within your own setup and then utilizing the most efficient method of fulfilling those requirements, you should be able to save money and time and avoid a lot of unnecessary aggravation.

Mic stands are the last thing to get thrown in the back of the truck so they have a penchant for bending, breaking and generally falling apart. I'm sure many of you have already enjoyed the juicy blood blisters you get when a mic stand collapses in your hand or you've discovered the unique rhythm of tumbling microphones as a boom arm dies in the middle of a drum roll.

Mic stands are also expensive. A boom stand can set you back fifty bucks which can add up quickly even on a twelve input board. The big based models often used on drum overheads and keyboard vocals run easily over seventy-five dollars.

There are two basic types of mic stands - the tripod and the disk base.

Tripods collapse flat and are relatively light, so they're easier to pack and transport. This can be an important consideration if your doing a lot of flying. Tripods can often be more stable around a drum kit and, at additional expense, can have sophisticated shock mounting. This makes them popular in studios.

A disk stand isn't necessarily any easier to fit around drum kits but because they have a smaller base diameter and a lower centre of gravity, they're less prone to taking a nose dive from a wandering guitar cord or some loose flying feet.

Disk stands are cheaper but they're also heavy and awkward to pack.

Basically mic stands are a pain. No matter how you deal with them there's a lot of weight to carry around and numerous little parts to break and lose.

My solution is to get rid of as many of them as possible, or at least get them down to the smallest size and numbers as you can.

There are a variety of desk stands and short stands with smaller, lighter bases. These can be used on kick drums and amps and things that are close to the ground. A desk stand will do the job with less stage space, less likelihood of being knocked over and a lot less money. Better yet, there's a marvelous little device called a flange adaptor which can be permanently mounted to hold a boom arm or a goose

neck. You can position a mic in front of an amplifier or on a keyboard setup with less than half the hardware and cost of a regular stand. Years ago it was common to mount mic clips into Leslie cabinets. With the addition of a goose neck the same principle can apply to all of your stage amps. Using a mic is important on guitar amps where the speaker is integral to the sound quality. For bass, pedals, keyboards etc. a direct box can reproduce a cleaner, more accurate sound. Direct boxes are cheaper than mics and best of all you don't need a stand at all.

Drum kits can use a lot of mics. Even on a four-piece kit, six is a minimum if you are close miking which means six stands, most of them booms and a heavy based overhead. In many cases you're using a drum riser so the stands can be mounted directly into it or you could employ a rack to hold cymbals, percussion, even some toms, as well as a lot of your mics. Consider the miking as part of the kit and see how you can integrate the overall setup instead of just adding the mics as an afterthought. There are clamps which will mount on to drums or cymbal stands, but be careful that you don't end up with a lot of rumble being induced. Good shock mounted microphones or shock mount adaptors or clips can overcome a lot of these problems.

There are other clamps which can mount on the side of a vocal stand for miking acoustic guitars, accordions etc.

By this point you should only have a few actual stands to deal with, mostly for vocal mics. So take the money you've saved and invest in some cases for your hardware. If you intend on breaking down your stands for travel, it's a good idea to keep the bases in a separate box so that they can't attack your threads and clutches.

Take the time you've saved and use it to maintain the stands you have. Those little rubber feet on the disk base do help against stage vibration. There's a rubber cap on the extension shaft inside the stand that stops the annoying rattle of one part hitting the other. If you lose it, a good wad of tape wrapped around the shaft should do the trick.

By designing around your setup you can achieve a consistent miking and pickup format, which will ensure you're getting good sound at the source, while cutting a lot of costs and unnecessary hardware. It can make your setup and your packing a lot easier and faster.

Sound companies really appreciate a together act in this regard. Think about your setup as an individual or a group and I'm sure you can save time, money and headaches.

Keep stages clean and clear, help eliminate mic stands!

*Don Barber has worked as a touring and concert sound engineer since 1974. He is currently vice-president of Westbury Sound & Lighting and president of Select Concert Products Inc.*