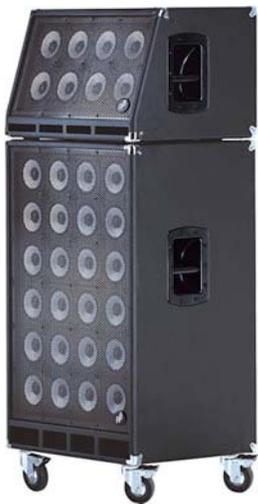




## The Theory Behind Using 5" Drivers for Bass

Traditional bass myth glorified large drivers. On the surface, this seems sensible. Large drivers equal big sound and low bass. But look more closely. Like a heavyweight fighter, the big driver is inherently ponderous. It isn't quick on its feet. It's slow to start, even slower to stop. Its large cone is prone to flexing and distortion. It's a kind of Neanderthal, brute and primitive - a slightly dazed clobber.



Phil Jones Piranha cabinets bring the true science of bass into the 21st century. They use large numbers of small drivers. How can small drivers reproduce bass? It's surprising but pretty straightforward. Their output simply drops off more rapidly with distance. But parallel enough of them and they're like a swarm of bloodthirsty Piranhas. Now their combined surface area equals or exceeds that of a single big woofer. More importantly, an armada of motors powers this aggregate compound driver. The combined voice coils and magnets of all individual drive units exert far superior control than the single motor of the equivalent giant woofer. Each one is optimized for superior heat dissipation and massive motor force to control a small 5-inch cone with unrelenting grip. By sharing the workload, each driver operates only in the optimized part of its power band where torque is greatest. It never approaches redline where dynamic compression limits all conventional designs like the proverbial brick wall.

The result? Blinding reflexes. Stop and go with Swiss precision. True responsiveness of the cone translates the subtlest of input changes into real-time signal. No delay, no rhythmic drag, no wooliness.

Small drivers are also far superior reproducers of high and mid frequencies than large speakers. The harmonic signature of your instrument gains expressiveness. The Phil Jones Piranha woofer is linear from 25Hz to 15kHz and performs as a true full-range driver. It reproduces all the fundamentals and harmonics a bass is capable of.





Some manufacturers and players use a mix n' match approach of combining smaller and larger drivers; but different speakers have different attack, sustain and decay resulting in dissimilar feel and mismatched tone. It's like playing flat-wound and round-wound strings on the same instrument. Shouldn't your bass speak with a single voice?

The small Piranha driver expands the harmonic envelope of your bass. Look at a high altitude night sky far away from the big city's light pollution. You'll see stars you never knew existed. With Piranha woofers, you hear overtones you couldn't before. You become a tone poet with a new language. You create expressions for feelings that remained dormant for lack of proper words. With higher sensitivities, Piranha cabs also play louder than traditional cabinets. Think of it as quadrupling your amp's power or adding spare headroom when you need it.