

# Project Lone Pine Professional Studio Monitors

## LP-6 & LP-8 Buyer's Guide





### Which Studio Monitor is the Right One for Me?

CKali Audio's LP-6 and LP-8 studio monitors have both gotten enthusiastic reviews from users across the world. But which one of them is the right choice for you? Here are some things to think about when you're buying your monitors:

Dynamic Range Listening Distance Output and Bass Response Budget and Space Limitations

#### **Dynamic Range & Distortion**

"Dynamic range" refers to the differences between the quietest quiets and the loudest louds a speaker can play. When people talk about "clarity," "detail," or "depth" that they hear from a speaker, they are often talking about dynamic range. A monitor with greater dynamic range will be easier to mix on, as details will be easier to hear. It will also sound much more natural, and be nicer to work on for a long period of time.

In addition to high dynamic range, a speaker with low distortion will also present the sound in more detail and with greater clarity. Both the LP-6 and LP-8 are exemplary for their low distortion. Distortion in the LP-6 is a full 6 dB lower than that of the nearest competitor. System THD (Total Harmonic Distortion) for the LP-6 is less than 3% below 1700 Hz, and the LP-8 is a bit better at 2.5% below 400 Hz.



The LP-6 has been praised in many reviews for its dynamic range, and how detailed everything sounds.



The LP-8 is even better, with 3 dB greater dynamic range! The graphic above is a bit of an exaggeration, but it helps to illustrate the point about how much more information is conveyed by a speaker with better dynamic range. In addition to its lower distortion, this high dynamic range makes the LP-8 sound clearer and more detailed overall.



#### **Listening Distance**

Kali Audio defines Maximum Listening Distance for a studio monitor as the maximum distance at which the monitor can play at 85 dB continuously, with 20 dB of dynamic headroom to allow for peaks in the program material. 82 db - 85 dB is the generally accepted threshold at which long periods of exposure can be damaging to hearing. 20 dB of headroom ensures that louder sections of program material still come through without the loudspeaker distorting.

The LP-6 has a Maximum Listening Distance of 2.2 Meters, and the LP-8 has a Maximum Listening Distance of 2.8 Meters. So for larger rooms, the LP-8 is the better choice.



LP-6: 2.2 Meters (7' 2")



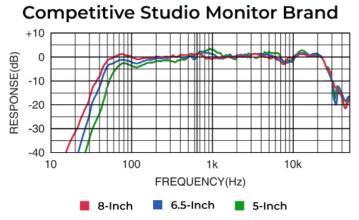
LP-8: 2.8 Meters (9' 2")



#### **Bass Response and Output**

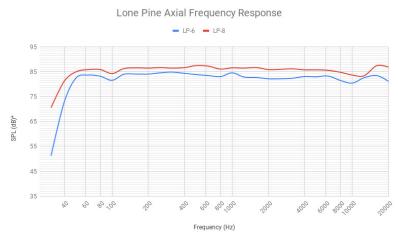
A lot of loudspeaker manufacturers make different sizes of loudspeakers that sound vastly different. In the graphic below, we have frequency responses for three different sizes of speaker from a trusted competitor.

Notice that the 8" speaker has more bass response, but mid-range response between the three speakers is largely equal, with the smaller speakers each being LOUDER than the larger ones between 700 Hz and 1.2 kHz. The smaller speakers will sound more mid-forward and the larger speakers will sound comparatively tubby.



This trend towards smaller speakers that are more mid-range heavy, and larger speakers that are more bass heavy is a common one. If you've ever heard that a small speaker sounds sweeter or more immediate, it probably has a lot to do with this trend.

Notice that this is not the case between the LP-6 and the LP-8. Kali designed both speakers for accuracy, and so they sound very much like each other. Rather than using a larger woofer to make the LP-8 a lot louder and/or a lot bassier than the LP-6, we've made them sound more or less the same, so that we can get more positive benefits out of the LP-8.



Nevertheless, the LP-8 does play a bit louder and a bit lower. So if you need extra volume, or if you're mixing a bass-heavy genre like Hip-Hop or EDM, you might be better off with the LP-8.



#### **Budget and Space Limitations**

If you've read this whole article, you've probably figured out by now that the LP-8 is the superior speaker, and is a better choice in most circumstances. However, it is quite a bit more expensive and quite a bit larger than the LP-6. A pair of LP-6 is just under \$300 in the United States, whereas a pair of LP-8 is nearly \$500.

You also might not be able to fit the larger LP-8 on a small desk. Here's a look at how the sizes compare side-by-side:



What About the Size of My Room?

All rooms are subject to a phenomenon called room modes, where bass builds up in certain parts of the room, and cancels in other parts of the room. Room modes can make it hard to make critical decisions about the bass in your mix. This phenomenon can be particularly bad in small rooms, and many people choose to use smaller speakers in these rooms. The thought is that, because the smaller speaker doesn't play as low, it will be less likely to excite room modes and overwhelm the room with bass.

Because the LP-6 and LP-8 are so close in frequency response, there is little cause for concern here. Further, room modes can be mitigated with clever placement of the loudspeakers, or acoustic treatments that target problematic frequencies.

The LP-Series loudspeakers' waveguides actually make them a particularly good choice for smaller rooms! Lateral reflections from nearby walls will help to enhance the stereo image, giving you a much more precise "view" of the mix you're working on.