

MIKING A SINGING GUITARIST BY Bruce Bartlett

When you mike both your guitar and voice with a mic on each, that can create a hollow sound, a filtered tone. This phenomenon is called "phase interference" or a "comb-filter effect". It's due to the guitar mic picking up the voice and the vocal mic picking up the guitar. When the two mic signals are mixed together, they interfere with each other.

To prevent that, you need to capture only the vocal with the vocal mic, and capture only the guitar with the guitar mic. In other words, you need both mics to have good separation or isolation.

To isolate your vocal mic's signal, you could sing with lips touching the vocal mic grille and aim the mic upward about 45 degrees. That way, the vocal mic aims away from the guitar, so the vocal mic's cardioid pickup pattern rejects the guitar sound. Put a foam pop filter on the vocal mic to prevent breath pops

To isolate the guitar's signal with a stand-mounted cardioid mic, aim the mic downward about 45 degrees and place the mic just to the right of the sound hole, about 3 inches away.

Close-miking a vocal or guitar will result in a bassy, boomy tone due to microphone proximity effect. You might want to gradually turn down the bass on your mixer's vocal and guitar channels until the amplified tone or timbre is natural. That also reduces low-frequency feedback. The Bartlett Guitar Mic needs little or no EQ.

Our Guitar Mic (or Guitar Mic B) has excellent isolation from the voice. That's because the microphone is very close to the guitar, just inside the sound hole where the sound is loud. So not much gain is needed for the Guitar Mic, and that greatly reduces leakage from the voice. Result: no phase issues, a natural sound. That mic placement also reduces feedback.

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