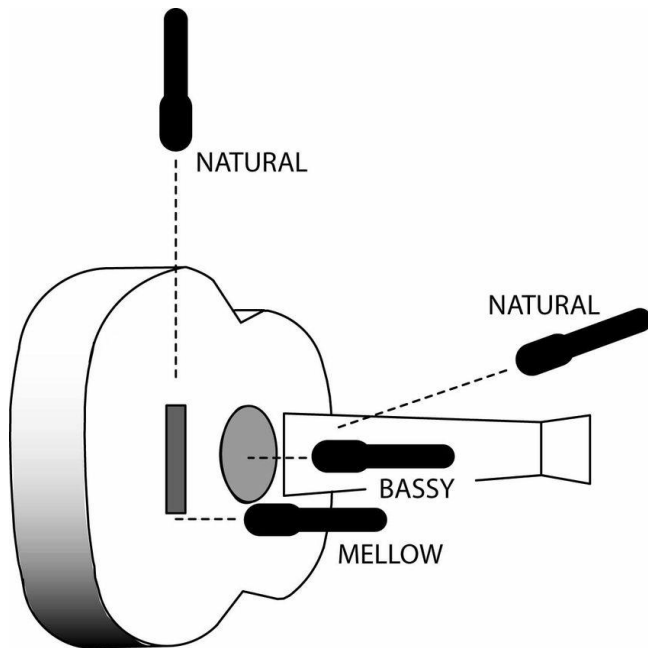


BEGINNER'S GUIDE TO HOME RECORDING ON A BUDGET

Part 5: Popular studio mic techniques



Listed below are some common mic techniques used in recording studios. Each method is just a suggested starting point, not a rule. Use your ears. If a method doesn't sound good to you, change the mic distance or position. Many of these techniques are for overdubbing, rather than recording all the instruments at once.

In general, small-diaphragm condenser mics are popular for acoustic instruments and cymbals. Large-diaphragm condenser mics for vocals and bass instruments. Dynamic mics for guitar amps and drums. Ribbon mics for horns. But you can use almost any mic on any instrument if it sounds good to you.

Acoustic guitar: 8" from where the neck joins the body.

Mandolin: 8" from the lower f-hole.

Banjo: 8" from a point halfway between the bridge and rim.

Acoustic bass: A few inches below the bridge, about 8" from the body. To capture more pluck sounds, mix in a second mic near the plucking fingers and roll off the bass in that mic. Maybe mix in a pickup.

Fiddle (old-time, bluegrass or country): 1 foot over the bridge. Aim toward an f-hole for a warmer sound; aim toward the fingerboard for a brighter sound.

Cello: A few inches below the bridge, about 8" to 12" away.

Sax: About 1 foot away and 8" to 12" above the bell.

Vocal overdub: 8" from the singer with a pop filter between the mouth and mic.

Singing guitarist: One mic just to the right of the sound hole, about 3" away, aiming about 45 degrees downward. Another mic with a foam pop filter about 1" from the mouth, aiming up about 45 degrees. Roll off the excess bass.

Electric guitar amp: About 2" off-center of a speaker cone, about 1" away.

Drums (one mic on a small drum kit): Try a large-diaphragm condenser mic about 6 inches over the kick drum, even with the beater head, angled down about 45 degrees.

Drums (two mics on a small drum kit): Use the One-mic method above, plus another mic in the kick near the beater head. Put a pillow or blanket against the head to dampen the sound.

Drums (acoustic jazz): Stereo pair overhead, plus another mic about 2" above the snare-drum rim, plus another mic in the kick near the beater head if possible.

Drums (multiple mics): One mic about 2" above the snare-drum rim, aiming at the center of the head. Another mic on each tom tom, about 2" over the rim, aiming at the center of the head. Spaced pair of mics about 1 to 2 feet over the cymbals, equidistant from the snare, with low frequencies below 500 Hz filtered out. Place another mic in the kick near the beater head.

Grand piano: Raise the lid. Place one mic about 8" to 12" over the treble strings, about 8" horizontally from the hammers, and another mic about 8" to 12" over the bass strings about 2 feet horizontally from the hammers. Or try a coincident or near-coincident stereo pair about 8" horizontally from the hammers.

Upright piano: Aim the soundboard into the room. Mike the sound board about 8" away with two spaced mics.

Horns: Mike about 1 to 2 feet away, on-axis to the horn for a bright sound, or about 45 degrees off-axis for a mellow sound.

Accordion or concertina: One mic on each side about 6" away.

Leslie organ speaker: Stereo pair near the top louvers mixed with another mic near the low-frequency speaker.

Orchestra or symphonic band: Use a stereo pair (spaced, coincident, or near-coincident mics) raised about 14 feet and 12 feet behind the conductor. Move the mics closer for less room sound, farther for more room sound.

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