

Miking – Tips and Tricks from the Professional

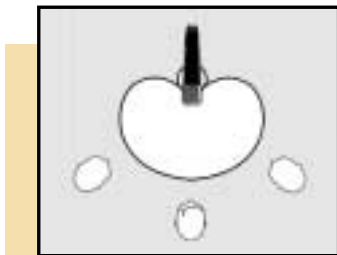
For perfect miking, the sound engineer needs two things: the right microphone and the right microphone position.

Lead Vocals

For best results use a uni-directional microphone (cardioid or supercardioid) with good high-frequency response. A windscreens minimizes pop noises from the singer's mouth and spares the mic capsule from saliva. Position the mic approximately five inches away, level with the vocalist's mouth. Mics placed too far or too close to a source can mean everything from far too much ambient noise to overwhelming bass response (so-called proximity effect). This effect is sometimes used deliberately to enhance the depth and warmth of a voice. Make sure the singer is positioned away from hard reflecting surfaces in order to minimize the ambient noise caused by reflected sound.

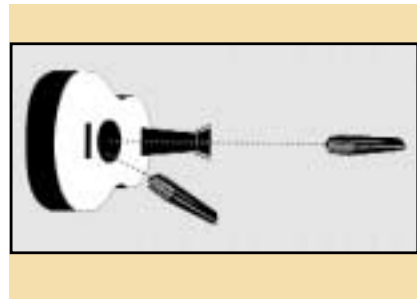
Group Vocals

Cardioid-pattern dynamic microphones work especially well in this role. Position groups of three or four singers in a quarter-circle, with the microphone at about eye-level and pointed slightly downwards, approximately a foot away from the center of the group.



Acoustic Guitars

Acoustic guitars actually sound best when miked by two microphones. We recommend condenser microphones (such as the ME 64/K6), which are usually better receptors of high frequency sounds than dynamic mics. Place the first mic about six inches away from the front of the guitar, slightly off-axis and aiming at a point between the soundhole and the bottom of the neck (see drawing). Place a second condenser mic approximately



three feet away, pointed directly at the guitar. This mic picks up the overall sound of the guitar, as well as some of the room's ambience. Now use a mixing board to blend the two different mic sounds.

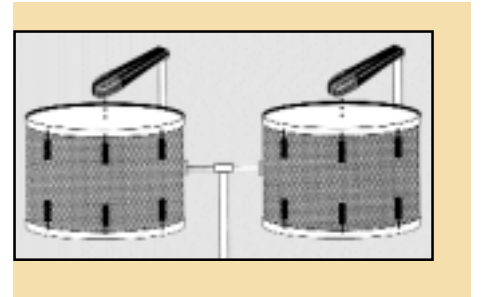
Guitar amplifier

Use a microphone such as the e 609, which is specifically designed to handle the extremely high sound pressure levels generated by a guitar amp. Drape the microphone over the amplifier so that it hangs directly in front of one of the amp's speakers. Feel free to experiment for tonal variations! Be sure the mic is addressing the speaker correctly, with the "pickup" side facing inward.

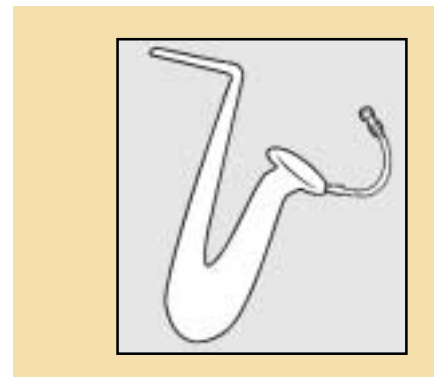


Drums

These require a variety of mic techniques. For snares, use a microphone that can handle the tremendous sound pres-



sure levels and transients of the drum, pointed across the drum, and a dynamic mic (such as the e 604) from below the snare, pointing upward. For toms, the MD 421 II is a standard. Place it approximately three inches above and slightly inside the rim. For the bass drum, you want something that handles a lot of signal, like the e 602. Condenser microphones, and their exceptional high-frequency response, are especially well suited to miking cymbals and hi-hats.



Wind Instruments

For example the saxophone! Sound reflections caused by reflective surfaces are integral parts of the sound. So set up with the bell of the instrument facing toward a hard reflective wall, and place a dynamic microphone (such as the evolution™ e 608) a few inches above the bell.