

## MICROPHONES 101

Before you buy a microphone for your audio project, you'll need to understand a few mic-related terms so you can choose wisely.

Different types of microphones use different pickup patterns, which means that each type picks up sound differently. The most common microphones you're likely to encounter are cardioid, omnidirectional, bidirectional, and shotgun. Consider each type to see if it's appropriate for the recordings you plan to make.

Cardioid mics have the most sound-sensitive part in the front. These mics are great for voice recording because they are more sensitive to the voice they're pointed toward, and less sensitive to whatever is behind or on the sides. If you plan to record outside, keep in mind that cardioid mics are sensitive to wind, so you'll need to purchase a windscreen to help cut down on those sounds.

Omnidirectional mics pick up sound from every direction, equally. This mic might work for recording several people sitting around a table talking, if everyone is close to the mic. But remember, the mic will pick up every sound in the room or environment, including the truck rumbling by outside and your cat in the kitchen meowing for dinner. If you hold it close to what you want to record, it is more resistant to wind and p-pops than a cardioid or shotgun mic.

**Bidirectional** mics pick up sound from the front and the back, but not the sides. So, it's a great choice for one-on-one interviews where you want to use only one microphone.

Shotgun mics can help you record sound when you can't get close. These mics are very sensitive, so they'll pick up wind and p-pops and loud sounds. Not ideal for windy or noisy environments. You'll definitely want a wind screen. And you should get a pistol grip to hold the mic to minimize mic-handling sounds on the recording.

In addition to the pickup patterns of microphones, you'll need to choose a mic design. Will your mic be on a stand, in your hand, or attached to a piece of clothing (lavalier)?

Lavaliers are the most unreliable since they can get muffled by clothing and pick up other, unintended, sounds.

If you decide to hold the mic in your hand, be sure to keep your hand still so the mic won't record the sound of movement.

A microphone that's on a stand will give you the best, most consistent recordings.

There's more about microphone stands on our blog: <a href="https://www.magpieaudioproductions.com/blog/microphone-stands-mistakes-and-solutions">https://www.magpieaudioproductions.com/blog/microphone-stands-mistakes-and-solutions</a>

Contact us for a FREE project consultation: info@magpieaudioproductions.com