

# Microphone Terminology

- **Electret Condenser Microphone** A type of condenser microphone whose transducer contains an electret material that permanently retains an electrical charge, and does not require the external voltage source required by other types of condenser transducers to polarize the diaphragm.
- **Feedback** In acoustics, the undesirable leakage of audio from loudspeakers back into a microphone, resulting in a loud squeal or howling sound, or in less severe cases, a hollow ringing sound quality or whistles.
- **FET** Field-effect transistor, typically used as an impedance converter at the element in a condenser microphone.
- **Figure-8 or Figure-of-8** A bi-directional microphone pattern, with two equal lobes 180 degrees apart. Also describes some antenna patterns, such as that of a dipole.
- **Gain Before Feedback** The amount of total gain that can be achieved in an audio system, from microphone to speakers, before the onset of acoustic feedback.
- **Ground Lift Switch or Ground Lifter** A switch to disconnect the shield of a balanced audio cable from the local equipment ground. In certain situations, can eliminate ground loop and hum problems.
- **Ground Loop** A condition where the local grounds at each end of a length of cable are at a different AC potential. This sometimes causes hum and noise problems and may require the use of corrective measures such as a ground lift switch on the equipment.
- **Harmonic Distortion:** Undesired signal harmonics at the output of a device which were not present at the input.
- **Hi-Z:** (High impedance) A loosely-defined audio term used to describe devices whose input or output impedance is greater than approximately 5,000 ohms. High-impedance mics typically are 20,000+ ohms.
- **Hum:** A continuous undesired audio component at the frequency of the incoming AC power line, or a harmonic.
- **Hypercardioid:** Describes the pickup pattern of one type of directional microphone. Its front lobe is somewhat narrower than that of the cardioid microphone, and it possesses a small rear lobe in which the sound pickup is out-of-phase with that of the front lobe.
- **Hz:** An abbreviation for Hertz, the number of cycles per second of a signal.
- **Impedance:** The opposition to the flow of an AC signal offered by a circuit or device.
- **kHz:** Kilohertz, 1,000 Hertz, or one thousand cycles per second.