

Microphones

Types of Microphone Transducer (pickupthingy):

They all work by changing vibrations in the air into an electrical signal.

Condenser - Capacitor, one plate vibrates, this changes charge

Dynamic - Induction coil vibrates in magnetic field

Ribbon - Thin metal ribbon vibrates in magnetic field

Types of Polar Pick-up Pattern:

Omnidirectional - Picks up from all angles equally

Bidirectional - Picks up sound from front/ back only.

Cardioid - Picks up from front mainly.

Supercardioid - Same as Cardioid but little at back.

Hypercardioid - Same as Supercardioid but less at sides.
(This is the most unidirectional pickup pattern)

Types of casing:

Hand held - Vocal mike, most common on-screen.

Rifle - Most common boom mike, interference tube.

Studio - Vocal mike, usually suspended, highest quality.

Lavalier - Tiny Mike on a tie clip, used for wide shots.

Types of wind protection:

Softie - Fluffy thing

Zeppelin - Hard metal gauze

Wind screen - Usually comes with the microphone

Pop filter - Screen of material stretched onto a circle

Selection and Placement:

Using these specifications, you have the ability to select a microphone and an appropriate placement of that microphone for every recording situation you may encounter.

Example of good microphone selection:

“Shaun of the Dead”, the sequence where Dylan Moran gets ripped to shreds by the mob of Zombies. His screams were recorded with a mike on the end of a long boom pole. If that mike had been an hypercardioid rifle then you would hear his screams and not much else. Because they used an omni-directional mike on the day, the sound of the hundred hungry moaning zombies is heard as well.