

Microphone Types

Use omni-directional microphones when you need:

- All round pick-up
- Pick-up of room reverberation
- Low sensitivity to pop (explosive breath sounds)
- Low handling noise
- No up-close bass boost
- Extended low frequency
- Low cost

Use uni-directional mics when you need:

- Selective pick-up
- Rejection of room acoustics, background noise, leakage
- Better gain before feedback
- Coincident or near-coincident stereo miking

Use a cardioid pick-up when you need:

- A broad-angle pick-up of sources in front of mic
- Maximum rejection of sound approaching rear of mic

Use a super cardioid when you need:

- Maximum difference between front and rear
- More isolation than a cardioid

Use a hyper cardioid when you need:

- Maximum side rejection
- Maximum isolation, rejection of reverberation leakage, feedback and background noise

Use a bidirectional microphone when you need:

- Front and rear pick-up, with side sounds rejected (for across-table interviews or 2-part vocals)
- Maximum isolation of an orchestral section miked overhead, aiming down.
- Blumlein stereo miking (2 bidirectional mics crossed at 90 degrees)