

Microphones

A microphone is perhaps the most important link in an audio chain. As the connection between the sound source and the sound system, it must interact efficiently with both. Choosing this link successfully requires knowledge of the sound source, the sound system (including the room acoustics), microphones and the actual application.

The most common microphones used are lectern, handheld, boundary and lavalier. Best practice (though not always possible) is to place the microphone(s) as close as possible to the speaker.

A method that is sometimes suggested for overhead placement is a ceiling-mounted boundary microphone. This should be used with caution as (a) it often places the microphone too far from the desired sound source, especially in the case of a high ceiling and (b) the ceiling in buildings of modern construction is often an extremely noisy location due to air handling noise, lighting fixtures and building vibration.

Electret microphones have the highest tolerance of magnetic feedback and are therefore recommended for loop systems. Dynamic microphones should not be used as they contain moving coil magnets which can be affected by the magnetic field generated by the loop. Phantom power is provided on all PDA amplifiers, so electret microphones with internal batteries are not necessary. When deciding which microphone to use, the following guide should prove useful.

APPLICATION / MICROPHONE TYPE	MODEL NO.
Conference table (centre of tabletop, counter, etc)	AMT tie/desk mic
	APM plated mic
	MH handheld mic + G121 stand
	AMP* professional handheld mic + G121 stand
Lectern (for pulpits, lectures, etc)	AML fixed gooseneck mic, long stem
	AMLS fixed gooseneck mic, short stem
	AMD movable gooseneck mic, long stem
	AMDS movable gooseneck mic, short stem
Lavalier (for the lapel of an after dinner speaker)	AMT tie/desk mic
	AMR/LA (radio mic) - 4 selectable frequencies
Ambient mic (for audience response etc)	APM at distances of $\leq 2.5\text{m}$
	PRO45 at distances $\geq 2.5\text{m}$
Ceiling (recessed in the ceiling above a table)	APM at distances of $\leq 2.5\text{m}$
	PRO45 at distances $\geq 2.5\text{m}$
Desk Microphone with Push To Talk (PTT)	AMD/P (as AMD with PTT)
Handheld	AMH handheld mic
	AMP* professional handheld mic
	AMR/HA (radio mic) - 4 selectable frequencies

* All PDA range microphones are supplied with a connection lead apart from the AMP. If using an AMP, a range of connection leads are available, contact our sales desk for details.

To avoid interference, microphone cables should be sited at least one metre away from loop cable.