

In many ways a microphone is 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, the room acoustics, microphones and the actual application.

Electret microphones have the highest tolerance of magnetic feedback and are therefore recommended for loop systems (all PDA amplifiers have phantom power so electret microphones with internal batteries are not necessary). Dynamic microphones should not be used as

they contain moving coil magnets which can be affected by the loop's magnetic field.

Best practice is to place the microphone as close as possible to the person speaking. Also, to avoid interference, microphone cables should be kept at least one metre away from loop cable.

A method sometimes suggested to capture speech is a ceiling mounted boundary microphone. This should be used with caution as it often places the microphone too far from the sound source. In addition, ceilings can be noisy locations due to air handling noise, lighting and vibration.

MICROPHONE APPLICATION / SUGGESTED MODEL GUIDE

Conference table (centre of tabletop, counter, etc):

AMT tie/desk mic APM plated mic
AMP* professional handheld mic

Lectern (for pulpits, lecture theatres, etc):

AML fixed gooseneck mic, long stem
AMLS fixed gooseneck mic, short stem
AMD moveable gooseneck mic, long stem
AMDS moveable 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 $\leq 2.5\text{m}$
AMC cardioid mic + APXM plate at distances $\leq 6\text{m}$
PRO45 at distances $\leq 12\text{m}$

Desk Microphone with Push To Talk (PTT):

AMD/P (as AMD with PTT)

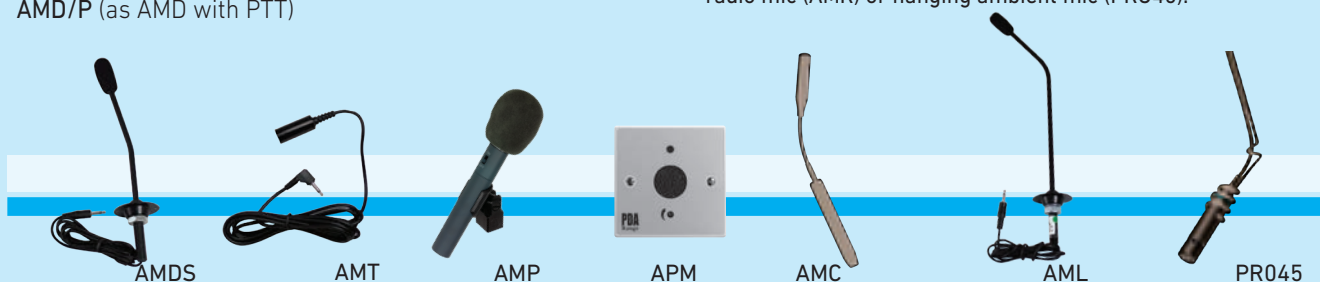
Ceiling (recessed in the ceiling above a table):

APM at distances of $\leq 2.5\text{m}$
AMC cardioid mic + APXM plate at distances $\leq 6\text{m}$
PRO45 at distances $\leq 12\text{m}$

Handheld:

AMC cardioid mic + APXM plate
AMP* professional handheld mic
AMR/HA (radio mic) - 4 selectable frequencies

*All microphones except the AMP are supplied with a connection lead. If using an AMP, a range of connection leads are available - contact our sales desk for details. Our APM plated mic is designed to cover areas up to 25m^2 ($5\text{m} \times 5\text{m}$). To cover larger areas with this mic, divide the area of the room by 25 to work out how many APMs are required and lay them out in a grid pattern (max. 10 APMs). Alternatively, consider using a radio mic (AMR) or hanging ambient mic (PRO45).



Induction Loop Cable

Many PDA range hearing loop kits include loop cable as standard. For those that don't you can select the cable you require from the list below. Single core cable is ideal for floor or ceiling loops. Copper foil tape is less obtrusive under carpets.

LOOP1/W 0.5mm² Single Core Induction Loop Cable

LOOP2/W 1mm² Single Core Induction Loop Cable

LOOP3/W 1.5mm² Single Core Induction Loop Cable

LOOP4/W 2.5mm² Single Core Induction Loop Cable

FLAT1005 0.5mm² Insulated Flat Copper Foil Tape

FLAT2005 1mm² Insulated Flat Copper Foil Tape

FLAT3005 1.5mm² Insulated Flat Copper Foil Tape

TAPE/P 50m Printed "LOOP CABLE" foil tape

