

PA sound systems - basic set-up rules

Always turn on the power last - after you have connected up the whole sound system

Always turn the power off first - before you strip down the sound system

Microphones should always be connected to inputs marked 'mic' on amplifiers

Radiomic systems usually have two outputs – the XLR output should preferably be connected to inputs marked 'mic' on amplifiers and the jack output should preferably be connected to inputs marked 'aux' or 'line' on amplifiers

Remember - you must still project your voice when using any sort of microphone amplification system

ALWAYS use the microphone from a position behind the loudspeakers

CD players and cassette decks should always be connected to inputs marked 'aux', 'CD', 'cassette' or 'line' on amplifiers

Commercial and industrial projection, horn & column type (100v line) loudspeakers should always be connected to the 100v line terminals on amplifiers

Hifi, disco and similar cabinet type (8 ohm - low impedance) loudspeakers should always be connected to the 8-16 ohm terminals or connectors on amplifiers - NEVER connect these speakers to the 100v terminals on amplifiers

NEVER use 100v line & 8 ohm speakers on the same sound system

Inputs

Microphones should only be connected to inputs marked mic or microphone while line sources such as CD players, cassette deck and line outputs on radiomic receivers should only be connected to inputs marked aux, line, CD etc. As a rule of thumb a jack output on a radiomic receiver is line level and an XLR output is mic level

Speaker Leads

Internal fuses will blow and the amplifier will be damaged if you use faulty speaker leads (or speakers). Always look after your interconnect cables - they are easily damaged - especially in a portable or mobile sound systems. The leads and any damage directly caused by using faulty leads is not covered by the Sound Services or manufacturers warranty unless the leads exhibit a manufacturing fault. Immediately STOP USING THE SYSTEM if you suspect that you have damaged the speaker leads or speakers in any way.

Maximum volume that a PA sound system is capable of producing before incurring equipment damage will be apparent by noticeable audio distortion - this may well occur when the volume control(s) are set well down from their maximum position! If you can hear distortion the sound system is being damaged! Turn the volume and the bass down! Never use more than two 8 ohm speakers with aerobics and other portable sound systems.

Acoustic Feedback (Howl)

To avoid acoustic feedback (howl) microphones must never be used in front of or otherwise near to any loudspeakers. Always ensure that the person wearing/using the microphone/radiomic does not go within 3m to 4m of the loudspeaker(s).

Body worn (lapel) mics should be central on the body and around 20cm below the mouth (on a tie, for instance). Feedback is very likely with this sort of microphone – body worn microphones can only be used to reinforce the voice.

Headworn microphones should always be protected by a foam windshield and be worn as near to the mouth as possible and well below the nose so that breath noises do not become a problem.

Hand held microphones sound 'warmer' and exhibit less feedback if they are close to the mouth.

Remember - you must still project your voice when using any sort of microphone system.

Feedback is primarily caused by proximity of microphone(s) to loudspeaker(s), incorrect placement of loudspeakers, too much volume and/or incorrect tonal settings on the amplifier such as far too much bass.

The microphone(s) must always be used from behind the loudspeakers.

Other Considerations

Please note that radiomic receivers can be effected by CD players & other RF sources - keep your radiomic receiver at least 300mm away from any CD player, ghetto blaster or music system.

Please read all manufacturers instructions prior to using any equipment.

For sports, aerobics, dance and other exercise based activities it is preferable to wear you radiomic transmitter belt pack in a custom pouch and belt such as the IMG or Strike belts.

Induction loops for the hard of hearing must reach BS6083 Part 4 1981 and the requirements of the RNID.