

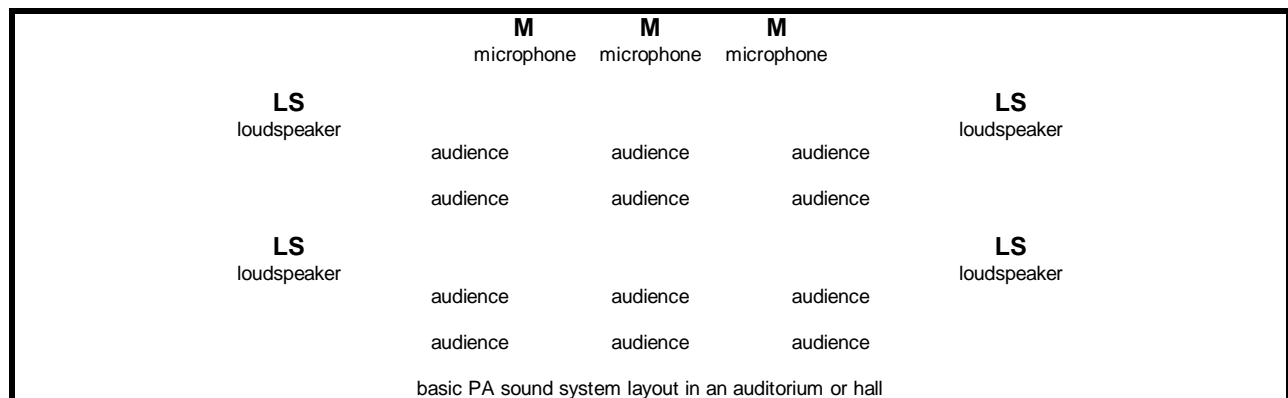
Advice from **sound services**

sound services PA sound systems - basic 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 should preferably be connected to inputs marked 'mic' on amplifiers
- Remember - you must still project your voice when using any sort of microphone amplification system
- 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 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

sound services 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. Feedback is very likely with this sort of microphone - it 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.
- 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.
- The microphone(s) must always be behind the loudspeakers.



sound services Licences

Licences from PPL (Phonographic Performance Ltd) on 0207 437 0311, PRS (Performing Rights Society) on 0345 581868 or 0207 580 5544, MCPS (Mechanical Copyright Protection Society) and others are required prior to playing any pre-recorded or live music to the public - this includes music from sources such as radio, tape, video, jukebox, TV, disc, record, computer, hard disc, live bands, discotheques or any other device.

sound services Batteries

- DO NOT use re-chargeable Nicad or NiMh batteries with radiomic systems – as rechargeable batteries are rated at 8.4 volts rather than 9v the radiomic will only work for a short time before it detects the voltage as too low to function correctly.
- Dry cell and re-chargeable batteries are not covered by the Sound Services or manufacturers warranties.
- Please ensure that the manufacturers instructions including the initial charge and use of rechargeable batteries and their recommended care of rechargeable batteries is noted and passed on to all users of battery operated equipment.
- Never attempt to recharge any style or make of dry cell battery.
- Always fully charge Nicad and NiMh rechargeable batteries prior to use.



sound services Radiomicrophones

- Radiomic systems should preferably be connected to inputs marked 'mic' on amplifiers
- Remember - you must still project your voice when using any sort of microphone amplification system
- 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)
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- 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
- The microphone(s) must always be behind the loudspeakers
- DO NOT use re-chargeable Nicad or NiMh batteries with radiomic systems – as rechargeable batteries are rated at 8.4 volts rather than 9v the radiomic will only work for a short time before it detects the voltage as too low to function correctly.
- VHF radiomics will normally transmit up to 33m (100ft) from the receiver in the poorest conditions - in optimum conditions this distance can, at times be doubled. UHF radiomics will not normally extend beyond this 33m maximum
- Always remember to keep radiomic transmitters at least 2 to 3m from their receivers and use each transmitter at least a 1m or away from other transmitters
- Remember that the radiomic transmitter and receiver should have 'line of sight' between each other
- Please note that radiomic receivers can be effected by CD players - 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 Strike or Pacific belts

sound services 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 system. 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 maximum! 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.

sound services Other Considerations

- Please note that radiomic receivers can be effected by CD players - 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 Strike or Pacific belts.
- Induction loops shall reach EN60118-4 (formally BS6083 Part 4 1981), BS7594 and the requirements of the RNID.

sound services Construction Industry Tax Deduction Scheme

Please note: "that the installation of security systems including burglar alarms, closed circuit television and public address sound systems are specifically excluded from the Construction Industry Tax Deduction Scheme". Should you require further information please obtain a copy of booklet IR14/15 in the Construction Industry Series, September 1992 from your local Inland Revenue Office. This exclusion requires that no financial deductions be made to any payments for tax purposes.

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sound services Guarantee

- We offer our own 12 month RETURN TO BASE warranty in addition to manufacturers guarantees and your legal rights.
- Cassette and CD mechanisms are, however, covered only for 2000 hours of actual use. This usually equates to around 24 months average use. (We normally find that cassette & CD players last a lot longer than their warranty period if they are looked after, kept clean and treated & operated correctly).
- Ingress of dirt, fluid & foreign objects, damage to cables & connectors, damage and corrosion caused by moisture such as saliva, perspiration, battery leakage & chlorinated atmospheres are expressly not covered by the warranty.
- Batteries are not covered by any warranty and CD optical pick-ups, cassette pinch wheels together with capstan motors & drive parts together with repairs are covered for 90 days only from date of purchase or delivery.
- The warranty is strictly RETURN TO BASE only and does not cover any carriage incurred returning equipment to Sound Services, any loss of earnings or any other costs whatsoever or any equipment not supplied by sound services.
- Sound Services is not required to loan equipment while any service or repair work is undertaken.
- All service and repair work carries a further 90 day warranty - however this warranty strictly applies only to the parts replaced and to the original reported and repaired fault.
- Only faults described in detail can be traced and diagnosed - faults not adequately described may not be located - this will inevitably increase the workshop bench time which the equipment is subject to.
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