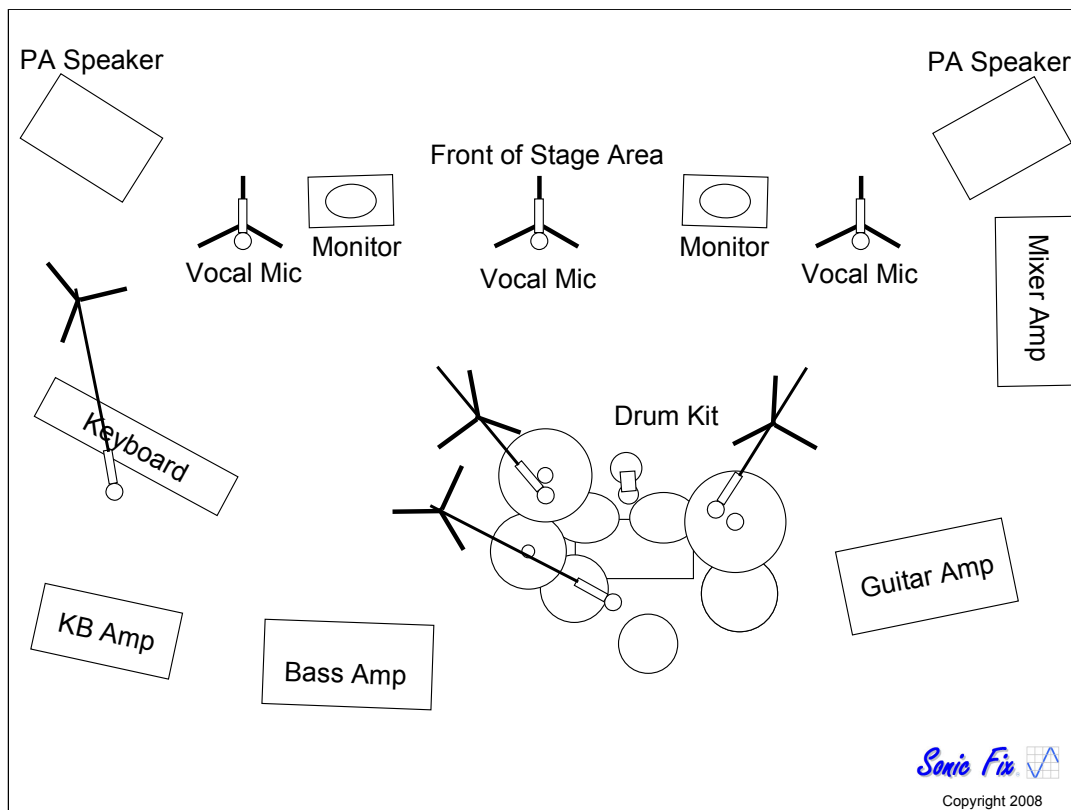


Improve Your Live Sound with *Sonic Fix*



Setup Notes

- 1) PA Speakers mounted on tripod poles raised as high as possible (consistent with safety), angled (rotated) inwards by approximately 20 degrees, and tilted downwards by 5-6 degrees (using special angled adaptors for safety). This arrangement will even-out volume throughout the room, offer some protection for the audience closest to the speakers and reduce the possibility of feedback and reflections. Bass bins should always be on the floor.
- 2) Vocal Mics should be placed such that they are behind the main PA speakers and well off-axis to avoid feedback. Ideally, the axis of the Mic body should be in line with the Monitor but the size of the stage or number of Microphones may prevent this. Where Keyboards or Drums require vocal Mics, a Boom Adaptor should be used. Guitar and Bass may also prefer this arrangement because it provides greater space for playing the Instrument. Vocal Mics should always have a Cardioid (directional) Response as a minimum. A Powered Monitor driving an Un-Powered Slave is a cost-effective way of providing reasonable on-stage monitoring without becoming too costly. A Mixer-Amp is a convenient way of reducing system complexity and the number of connecting leads. 12 Channels is enough for most applications.
- 3) It's generally a good idea to place Instrument Amplifiers (the Backline) as far back as possible because it gives the players a better idea of their volume and improves the quality of the sound that they hear. Of course there are often practical limitations because of the size of the "Stage". Space in Pubs is nearly always limited.
- 4) There are several different ways in which the Drums can be amplified but a simple and effective method is to use a "proper" Bass Drum Mic. For small venues this may be all that is necessary. The addition of two strategically placed Overhead Boom-Mounted Cardioid Response Mics will capture most of the Drum kit sounds. These Mics should be angled downwards. Careful positioning in terms of height and direction will give reasonable coverage of Cymbals and Hi-Hat and upward-facing Drum-Skins. Set the Mixer Volumes low to avoid feedback.
- 5) The diagram assumes a typical Hall or Large Pub/Club Venue with maximum audience of perhaps 100-200 people. A PA of no more than 500W RMS Per Channel should be adequate. As the size of the venue increases further refinements can be added such as a Mic to boost the Guitar Amp volume through the PA without the on-stage volumes getting too loud. Bass and Keyboards can be connected directly to the PA Mixer via their DI outputs. Of course, more PA power and speakers will be required as well. Don't forget to use an Earth-Check Safety Plug to check all Power Outlets.
- 6) Finally, You Must Route Your Cables Safely – When the lights go down you may not see Power Leads and Other Cables on the Floor so make absolutely sure that they will not get under your feet and they are either Taped Down or completely clear of where you, or anyone else may walk.
- 7) **DISCLAIMER** – Whilst this information is provided in good faith, Sonic Fix shall not, in any way, be liable for any damages or loss, either personal, material or financial, arising from the use of this free guide.