Greg Simmons from Audio Technology Magazine outlines simple steps to squeezing a better sound out of your small band PA system

I've been to a number of live gigs lately, small bands playing in small pubs, and I've seen the same scene every time. The foldback is on the brink of feedback yet the singer wants more, the whole mess is painfully loud and screeching, and the band are looking nervous because there are more people walking out than there are walking in. The space in front of the stage is a sonic void that no-one wants to pass through, let alone stand in. It doesn't take a genius to figure out what's wrong: IT'S ALL TOO LOUD.

What's the problem with musicians and small PA systems? Is it too hard to understand that a box containing two 15-inch drivers and a horn is no match for two quad boxes, a bass amp, and a drum kit at full blast? Obviously, musicians don't understand the basic principles of good live sound. So, I now present "Simmo's Four Steps to Better Sound through Small PA Systems".

Step #1: Garbage in, garbage out
This is so blatantly obvious, I can't believe I'm writing it. If you sound like crap on stage then you will sound like amplified crap through a PA system. On the other hand, if you sound good on stage, a good engineer can make you sound great - and you'll blow away the other bands who still sound like crap. So how do you sound good on stage?

Step #2: Play balanced
Sounding good on stage begins by sounding good in the rehearsal room. Next time you're in rehearsal, move into the middle of the band and take a critical listen. Can you hear all the instruments clearly? Is any one instrument dominating the others? Does it sound like a defined musical event, or sonic mush? If it's sonic mush, you've got to do something about it.

Start by writing down the volume settings of all the instrument amplifiers. Then turn them all down to zero and take a 30 minute break. Go outside and give your ears a chance to freshen up. Now go back into the rehearsal room, but don't plug your instruments in and don't touch those volume controls. Take a good look at how the band is set up. Does it encourage communication between all musicians? Or is everyone facing an imaginary audience at one end of the room? Forget the imaginary audience - you must be able to play to yourselves before you can play to others.

Set the drum kit up between the vocal PA speakers, facing into the room, and position the vocalist on the other side of the room (facing the drum kit). Now ask someone with the appropriate expertise to get the vocal PA sounding as good as possible. Start from scratch if necessary.

Put the instrument amplifiers on the sides of the room, facing inwards. Get the amps up off the floor; 33cm (i.e. one metric milk crate) is a good height. Guitar amps should be aimed at guitarists' ears, not their butts (unless their ears are in their butts), so chock them upwards. Bass needs room to develop, so move the bass amp back a bit and let it breathe. Make sure all musicians can see all instrument amplifiers, because that means they'll be able to hear them all as well.

Step #3: Play soft
With all the instrument amplifiers down to zero, start playing a song. Listen to the drums. Adjust the level of the PA so that the vocals are in a good balance with the drums. Take your time to get it right, because the vocals and the drums are your points of reference. Now, start turning up the bass amp until it sounds balanced with the drums and vocals. Add the other instruments, one at a time, turning their amps up slowly until they fit into the right balance within the room. If an instrument drowns out the vocals or drums, it's too loud. By now, you should be able to hear a much better balance of the band, and the PA system will no longer seem like a useless piece of howling crap. Take a note of the all the instrument amplifier volume settings, and stick to them. With a bit of patience, you'll get used to it.

Step #4: Learn to like it

I know what you're thinking now: "my amp isn't giving me the right tone", or "I can't get enough sustain", or any of a zillion other excuses for turning your amp up. Bad luck. The reality is that if you want to sound good through a small PA system, this is your only option. There are solutions to most of these complaints that don't require turning up the amplifier.

Now that you've got your volume settings and instrument layout sorted, use the same settings and layout when you play live (but turn the vocalist around to face the audience, of course!). Keep your amps playing to yourselves, and let the PA play to the audience. You'll get much better live sound, and you'll have far less problems with foldback. If the venue's PA is particularly small, work with the sound engineer. You may have to repeat these steps during sound check.

Enjoy yourself!

The steps above have helped countless musicians sound better, but are they going to work for you? Is your band a unified group of musicians who enjoy playing to an eager audience? If so, the steps will quickly help you fill the void. Or is your band just a bunch of immature egotists, each trying to be the star of the show? If so, you'll have a hard time making the steps work, and you can look forward to a frustrating future of playing to the sonic void. At least you'll be fulfilling the important role of being the crap reference that the better sounding bands are compared against. Somebody has to do it.