

The PA “Trifecta”

Speaker moves in, speaker moves out

By Sully

Here... these are for you. Let me count that back – One (1) pair floppy plaid shoes; one (1) Bravo-52 latex red rubber nose (with custom strap); two (2) mechanical chickens with servo-waste evacuation system; and three and one-half (3 1/2) cans of I told you so (generic substitute).

“I must ask you to put on these garments, pick up the chickens and proceed about your business until load out. This demand is in accordance with our technical rider, which clearly states in verbiage Grouping 3,

Subsection F, Line U: ‘...all drivers must exhibit the correct DC polarity as specified by their manufacturer. Should a DC polarity inversion be suspected and confirmed through qualified empirical method by (the artist’s) engineer, the specified and introduced lead system system engineer (A1) for the sound system provider must and will don a garb of traditional JESTER SUPPLIES (as provided by artist’s representative) and wear said fashion until such time as artist’s engineer deems the A1 has

reached a sufficient level of contrition.’ We appreciate your cooperation in this matter.”

It doesn’t really say that. The production manager for the artist that I mix does, however, begin the sound portion of our show advance with this caveat: Our front of house guy will confirm the DC polarity of your rig using a combination of software-based FFT and handheld pulse checkers. If he’s just been mugged prior to load in and the thief has absconded with all his gear, he will still stagger naked up to your PA with a 9-volt battery and a screw gun. This will happen. If there is a problem, he will find it.

Along the way, he will also find every off-center diaphragm, sketchy cone compliance and secret TRS-to-Edison connection in your rig. To spare yourself the misery of having your pants pulled down in public, please confirm that everything is moving the right way before it leaves the shop.

Is he kidding? Nope – burned out two Makita batteries this year alone opening boxes. I’ve officially dubbed last summer the “Summer Of Left Isn’t Right.” Using my nifty calculator with LOG function, I’ve determined that there was a 13 dB increase in the amount of systems we were provided that had a significant difference between the left stack and the right stack. Some days it was subtle...pink noise coming from the left, the sound of me asking if the all amps were powered up coming from the right.

Then there were the 4 dB to 5 dB (SPL) inconsistencies in magnitude responses I was seeing in April, which paled against the 9 dB to sometimes



10 dB variances I was encountering in September.

This wasn't comb filtering from a spherical array in a geometrically symmetric room; this was daddy's leaving the house on one side and mama's coming home for the night on the other. Big deluxe, textbook inversions with a very demonstrative phase wrap right through the middle of a null at crossover.

I call it the PA Trifecta: the sound of the Left, the sound of the Right, and then the composite of both. Pick one, flip front of house, and make sure management stands only there, with their heads strapped into a neck immobilizer.

SPLENDID BOXES

My hands-down favorite was panning a signal to the left and getting three of the six compression drivers on one side and four of the 12 cone drivers on the other. Panning it right yielded all of the compression drivers on one side, a frontfill, two subs, and I'm pretty sure the soda machine started vending Skittles.

Time to pause for a second and make sure something is clear – I am ALWAYS pulling for the PA company. Honestly, what I want to do is turn to the system tech, shake his/her hand vigorously and gush about how truly splendid the boxes are. (I've also found that proffering a half-eaten yet properly wrapped Milky Way will also go a long way toward cementing a friendship.)

Instead, too often, I'm treated to wildly different responses coupled with the now absolutely classic (I actually have this printed on a T-shirt), "worked fine last night..." This statement is usually uttered with a spectacular amount of affected indifference.

My retort, now equally worn out, is a paraphrasing of a statement made by a very good friend of mine years ago – to wit: "the only difference between last night and tonight is you." (Takin' it right to third grade...)

I guess, given my nature, what I really want is intense concern. You know, a significant "Hmmm..." from the system tech, a quick confab with his second, and a suggestion to me that I go get a coconut donut and all will be better when I return.

It's how I handle the situation when I'm the system guy. Abject internal mortification coupled with a smooth verbal map of the directions to catering. Then, engineer properly shooed... warp 3 triage. After all, whether you own everything or work for a PA company, when the keys are handed off to a guest engineer, you are effectively saying, "I've checked this through and it meets with my approval."

If something is wrong, three things are assumed: (1) You didn't check it through carefully enough; (2) The problem is beyond your skill level; (3) You own your own big floppy shoes and red nose and "know what? You're pretty sure they match your cape very nicely."

In all fairness, I've been handed rigs by a shop that I had no part in prepping. Many times it was as if the shop manager sat me down, looked deeply into my eyes and told me he was putting a long piece of splintery two by four in the truck and I would know what to do with it when the time came. On days like that it's sometimes easier to introduce myself as the LD who's actually only helping out with sound... but I can't.

No matter what the back-story, the guy or gal coming in today only wants to know that it works and works properly. No excuses. My reputation that day will be tied to the functioning state of that rig.

MAMBO ON GLASS

But back to the "L&R and which one of these things is not like the other." There are, without a doubt, very subjective aspects of our field. What sounds good to one person may sound like two ferrets mamboing on glass to another.

Equally there are simply some cold hard objective facts as well. Things like... your PA is not time aligned. That is a trademark. (If time could be aligned, I'd be rich and you would be my slave. I'd also have a giant Sweet Tart dispenser in my bedroom.) Or should 13 of 26 drivers be blown on one side of the PA finding half out of polarity on the other side does not make things a wash and give you time for a nap.

Without turning this into a very

special episode, here's my basic idea. Before anyone you could look foolish in front of shows up (excluding video), power up the PA and listen to it. Even if it sounded great last night, do a bandpass check and then turn the whole thing on together. If it sounds different, now's a great time to figure out why. If the PA is flown, press the big button under the down arrow on the motor control. You might as well check this ahead of time since you really only have a two in five chance somebody won't say something later.

Here's another tip. If you're running late and have just discovered a discrepancy, tell the band engineer straight up, "Hey, there's something here I need to sort out, sorry. Can you give me a couple minutes?"

Say this even if it's a complete lie and you have no idea what's wrong. I guarantee if the guy (or gal) is qualified and professional, they will immediately add 10 "attaboys" into your petty cash fund just for caring. Look earnest enough and they might even get you water and do helpful things like tell road stories that have no bearing on anything except tacitly coupling their name with someone famous. (Ooooh... just the thought of it makes me yearn for tomorrow.)

I'm attending a meeting later this week with all of the band engineers on the planet. After the pre-screening (a bit like the airport except it weeds out whining, complaining, and technically incompetent FOH guys), I'll shout over the gate to the three people that make it through and discuss these issues with them.

Here's my proposal: I'll try and get them not to torture your PA so badly that it gets in a snit and stomps off, if all the system engineers on the planet vow to stop trying the Jedi mind trick on us when we walk in – "There is nothing wrong with this PA, let us pass... there is nothing wrong with this PA, let us pass."

As the kids say... Peace. I hope they mean it. ■

Sully is currently out mixing platinum country artist Joe Nichols. He'll be coming to a venue near you armed with devices of mass instruction. Reach him at sully@fairwarning.co.uk.