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## **Amplifying the Front Ensemble: *How To and How Much?***

By: Rob Ferguson

In today's modern marching percussion ensemble amplification is very quickly becoming the norm. Whether we are looking at drum corps, marching band, or indoor marching percussion, we are seeing more and more ensembles choosing to use varying amounts of amplification. Like any voice in the front ensemble, amplification is a CHOICE. As more groups decide to implement amplification it is important that we realize that there are still many very successful ensembles that do not currently choose to amplify. I emphasize that because as you decide to amplify your front ensemble it is important that you are committed to maximizing its contribution like you would any player or instrument that you have in your ensemble. When I see individuals struggle with amplification it usually derives from the lack of knowledge or attention the staff members choose to contribute to it. In addition, as in any choice we make as instructors, there are pro's and con's to every decision. I will discuss a few of these throughout this article. My clinic is entitled "Amplifying the Front Ensemble: How To and How Much?". Just like discussing tuning in a battery ensemble, it is impossible to define the "right way" to amplify. Rather, I hope to offer some options and suggestions to help you make successful and creative choices in your amplification.

To begin with the "How to..." it is important that you first establish some basic understanding of the equipment involved and what each piece in the chain is responsible for. It is also important that you gain a basic vocabulary of the terms and equipment used in amplification. There are many excellent guides to amplification available both online or at your local music store. Here I will focus primarily on the items and needs of a front ensemble. The most basic chain of equipment to amplify a keyboard or other percussion instrument is as follows: microphone, mixer, power amplifier, and speakers. As there are many different options in each of those categories I will not begin to elaborate on those options. As you prepare to amplify your front ensemble here are a few questions you may want to consider:

- Are you buying a new sound system or trying to adapt an existing system?
- Does this system have to be used for other applications/ ensembles?
- Which instruments are you intending to mic?
- What is your budget?
- Does your application allow a staff member to run the system or must there be a student operating the mixer during shows?

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As you begin to mic your ensemble there are two significant choices to make. Which instruments get mics, and how are you going to mic each instrument? In amplifying keyboards, a typical setup is usually two mics for marimbas and one mic for vibraphone, xylophone, or bells. You also have the option to mic under the instrument or over top of the bars. Each option works well, however, depending on the content of the written book, certain setups will work better. Over the bars will tend to increase your articulation and give slightly more subtlety of shaping. The negative of that is bleed from backfield sounds such as horn line, battery percussion and cymbals attached to the keyboards. Under the keyboard will tend to give you a little more resonance and warmth, especially in the low register and with rolled passages. The negative of that is some articulation loss especially in high velocity passages. In my clinic we will mic instruments both ways in order to allow you the listener to decide which option you prefer. There is also the issue of microphone types. There are endless microphone selections available. We will also discuss the major types and the ideal uses of each of these types. We will also examine ways to mic timpani, hand drums, auxiliary percussion, racked percussion, and special effect sounds.

This brings us to the biggest question..."How much"? As I said earlier it is a matter of choices. During the clinic I hope to allow you the listener the option to decide for yourself, as you would decide your battery tuning scheme. First and foremost you must remember that amplification is a tool, not an answer. It will not make it cleaner, it will only amplify the sound you put into the microphone. Good sound quality going in means good sound quality coming out. The inverse is also unfortunately true. If used well and balanced well with the ensemble, amplification can not only allow you increased projection but also a new level of nuance and expression that will also get heard at the top row of your venue. It can also open up an entire new world of instrument and sound choices that previously could not be considered due to lack of volume. Instruments such as log drums, doumbeks, small shakers, etc. can now be balanced in the ensemble sound without playing them in an uncharacteristic manner. In the clinic we will take a passage of music and allow you to experience it completely acoustic and then completely amplified and begin to allow you to assess the value of amplifying each instrument involved.

Lastly, I will be addressing a number of typical sound system do's and do not's as well as how to prep your system and instruments to set up quickly and minimize problems in performance situations. Just like a marching snare drum, a little care at the beginning of the season can prevent tragedy in a show warm up. I will be giving out a handout containing numerous setups and suggested wiring diagrams for each. In addition, here are a few simple but important reminders when using amplification with your front ensemble:

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- Have and inclement weather plan. (tarps, etc.)
- Avoid rolling wheels over cables whenever possible.
- Always make sure your speakers are in front of your microphones to avoid feedback.
- Make sure you recoil all cables prior to a performance for speed of setup.
- Make sure you know where your power source at the performance site is located.
- The more your students understand the equipment, the more responsible they will become with it.
- Anywhere you might need spare heads or sticks, you will probably need spare cables.
- Never let the sound system take priority over the performers and the performance.

While this is a brief overview, I hope this begins to add insight into the world of amplification. At my clinic I will be joined by the front ensemble from the Glassmen Drum and Bugle Corps. I will be utilizing them to perform musical excerpts while we vary the amplification and mic choices so each of the listeners can begin to take note of the options that best suit their needs. In addition I will be providing a hand out containing mic setups, mic choices, sample system setups, and more tips for ease of use of the equipment.

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