

# Choir Microphones that work....really well.

By Scott Oliver

As worship styles continue to change in churches across America, (and the perception of what is or is not acceptable in terms of audio quality), we are seeing an increased push by church technical staff towards improved sound reinforcement for their choirs. A lot of clients are complaining they just can't hear the choir, or that they cannot get the level of the microphones hot enough with constant feedback issues. Seems more and more these days the oldfashioned technique of hanging some microphones above the choir is finally showing its inadequacy.

First things first....do away with the idea of hangingtype choir microphones altogether and use standmounted mics. Stand-mounted mics allow you to move them into the best-fit location for your situation. Additionally, stand-mounted mics will never be in the way of your video screens!

As we have learned so well here at Pro Audio Solutions, what really matters most in a microphone is what it sounds like. In other words, how well does it work for the intended application.



GN155 Choir Mic Base/Stand/DPA Preamp: \$599 CK47 Capsule: \$459



1700 VP: \$599



MB5050/ M1250B: \$499



PR-30 \$249



Yes, we still look at spec sheets, but once we know what is claimed, we test-drive it to see if the spec sheet is telling us the truth, and whether or not it is all that and a bag of chips. Ultimately what we are really after can't be found in the specifications, aka...the magic, the mojo, or the vibe. If you need additional tech specs about choir microphones, all you have to do is go to Google or Yahoo and use the search term "Choir Microphone" and you will get all the tech stuff you can use. If sound is what you are really after, then this article is for you!

Read on as we reveal what several microphones we adore sound like on various choirs we have encountered. Real info from the real world! One last thing, I am not going to mention the mics we have tried that didn't work. What's the point eh? If there is a microphone included in this article, it does in fact work well. Every microphone covered has a different sound or performance characteristic, and none of them are better or worse than the other; just different. A call to **Pro Audio Solutions** will help us find the best solution for your application. Don't buy ALONE!!!

#### AKG GN155 Choir & CK47 Capsule:

Once again, the famous Austrian studio microphone legend has done a fantastic job of offering a product that is of the utmost in professional execution. Very elegantly designed to be as visually neutral as possible, yet offers that "expensive" sound AKG is so well known for. Basically you buy the GN155 Choir system which includes everything except the capsule. There are multiple capsules available, but the two we have found to work best are the CK80 which is a shotgun type capsule for distances and general spoken word, and the CK47 which is more of a musical studio-sounding capsule. We like the CK47 the best of the two. We have used these on multiple choirs and have yet to find a situation that they do not perform well on. Compared to the other microphones in this comparison, the GN155/CK47 system is a bit on the warmer side of the scale. Upon the first listen it may seem that



warmer is not so desirable, but the gain before feedback ratio on this system is PHENOMENAL. If your choir is comprised of softer voices, this system will allow you to crank it up to levels the typical choir mic system could never get to before feeding back. If you need level because you are trying to bring the choir above an orchestra, the GN155/CK47 is your ticket. Period. The GN155 Choir system is also available in a wireless version if floor pockets were not installed close to the choir loft and you want to keep a really neat and clean stage free of long cable runs. While more expensive than the others listed here, it is well worth the money. If you can afford it, or several for that matter, your money will be well spent and your search for one of the world's finest choir mic systems will be over. In the hands of a skilled FOH engineer, complaints of not being able to hear and/or understand what is being sung will become nothing more than a terrible memory. Oh happy day......

#### AKG CAD/Astatic 1700 VP:

Just when we thought all that could be done with choir mics had been done, the fine folks at CAD/Astatic come along and say touché! What are we talking about? A fully variable pattern capsule, that's what! All the way from a tight Cardioid pattern to a full Omni pattern is available in real time...all the time. Why is this cool? Well if your choir size changes from week to week, or you want to use them to mic a choir one week, and a quartet the next week, just turn the knob on the box and adjust the pattern to suit your needs. This can also be extremely effective when trying to eliminate phasing and/or feedback problems. By now you must be wondering what it sounds like? Well, in a word...Neutral. The 1700VP is not a "characteradding" microphone. It is not designed to do anything but accurately reproduce what it is placed in front of it. It is a very well thought-out device that is extremely well made, and sounds really great as well. Lastly, because it is variable-pattern, it enjoys zero competition. And, the cool factor is off the chart. The 1700VP will fit on any standard mic stand, short or tall. I would add that if the user does not understand the theory of variable pattern microphones, he either educate himself, or go with a non-variable system. This unit in the hands of the right user has incredible potential. However, the VP1700 could get the novice user into real trouble if he does not know how to use it!!!!!! FEEDBACK!!!!!!

#### CAD/Astatic 1700VP



#### Audix MB5050/ M1250B:

At first glance, the Audix system looks like just another choir mic. When I first encountered it I might have said something like "oh, another choir mic, just throw it on the pile" had it not been for my past experience with Audix products. Every time I think of Audix, I'm always reminded of the INCREDIBLE build quality in all their products. Which by the way, all Audix products are Made in USA. And their quality reflects good Ol' American manufacturing. These mics have an almost military feel to them. As with all Audix products, purchasing one is akin to an investment. It is unlikely that you will ever need service on an Audix mic because they are so well made. The M1250B, which comes standard with a Cardioid capsule out of the box, Hypercardioid, Omni, and Shotgun capsules are also available as an option. While not as convenient as the Astatic 1700VP to use, if you don't need the variable pattern features of the 1700VP, you can save \$100 per system. And when you are buying multiple systems for a large choir, the \$100 savings per system can become substantial. As far as sound goes, these sound similar to the Astatic. Very neutral, and un-colored. A lot of engineers like the fact that the Audix serves more as a magnifying glass than a paintbrush. What completes the system is the MB5050 Mini-Boom. Made of carbon fiber instead of steel like the Astatic, the Audix will be a bit more stable due to its decreased weight; another sign of excellent Audix engineering. Super high quality and a no-frills design approach shows that we do in fact still build some great worldclass products here in America! These remind me of something you might see at NASA!



#### Heil PR-30:

I can already hear the naysayers now...."You can't use a Dynamic Mic on a choir". Well, at one time I thought the same thing until I had a conversation with Bob Heil. Those who know me, know that I am a huge fan of Bob Heil's largediaphragm dynamic microphone designs for everything from vocals, to guitars to drums. For those of you who don't know me, here goes...I am a huge fan of Heil microphones. On female vocals in a live situation, the Heil PR-22 has no equal. My wife is an excellent vocalist and after trying multiple microphones on her, I have settled without reservation on the PR-22 for her. Talk about magic dust being sprinkled on a vocal sound. Whew! Anyway, back to my conversation with Bob Heil. I had called Sir Heil to talk about something else and mentioned in passing that he should develop a choir mic. His reply was "I already make a great choir microphone called the PR30". What? The PR-30 on a choir? He suggested I try it as soon as I could. And, I did. And I was pleasantly surprised by what I heard. This is a very open and airy sounding mic on a choir. At first I thought it was bright sounding, and it is somewhat, but bright doesn't exactly best describe it. "Revealing" might be a better word to describe the PR-30's sound when used on a choir. The PR-30 sounds nothing like the other mics compared here. It just sounds GREAT! I have now used the PR-30 on Acoustic Guitars, Electric Guitars, Voiceovers, a Harp, and now on a Choir, and would recommend the PR-30 for anyone who is limited by budget....OR NOT! The only reservation I have received from some clients is in regards to its larger size. It is much larger than the typical choir mic. Some find it a bit obtrusive in front of their choir, but that is purely subjective. What can I say? It's a great sounding mic, it's Made in America, and it is very affordable. Lastly, Bob designed this mic to have a ton of rear rejection, so it has HUGE gain before feedback. Chances are the PR-30 may go down in history as the greatest microphone ever made. Seriously. It is an unbelievable piece, and if I could only own one microphone, this would be it. Period. If I'm ever assigned to a desert island project, I'll be taking my PR-30...for sure.

Heil PR-30



## **Conclusions:**

One of the great things about living today is the huge range of great products available, to all consumers. Sometimes though I think we audio people are getting the best of the best, especially when it comes to microphones. We sure do have a great selection here in 2010. To be honest, it's hard to buy a bad sounding microphone these days. On the other hand, the selection process can be a daunting task because of so many varieties currently being manufactured. Unlike a lot of other pro audio companies, we here at Pro Audio Solutions are died-in-the-wool gear junkies. We like to read about it, touch it, smell it, listen to it, and use it, both on the job and in our personal lives. And, when you have several warehouses packed full of some of the world's finest gear available, it makes it much easier to evaluate what's out there. And we do. As far as choir mics go, we have tried most of them, and are authorized dealers for all of them. As for the four we have covered here, these are the few, the proud, the choir mics that really do work well.

### But, what about the high-end brands?

My goal in addressing the four models mentioned above was to cover the models that most churches would consider buying when cost is a factor.....which is most churches. However, for those with the most discerning of tastes, and for those who are going to be recording their choirs, we also offer the elite models in choir microphones as well. Additionally one must be aware that buying really high-end microphones and plugging them into mid-level or economy-grade mic preamps is entirely defeating the purpose. Without high-quality mic preamps, the goodness of the high-end microphone will be lost in the substandard circuitry of the preamp. Don't waste your time, or money, if professional grade preamps are not in the budget.

If only the best will do, call us and we'll be happy to put you behind the wheel of any of the following premium brands! A word of caution.....venturing into high-end microphone and preamp territory will in fact change your perception of quality in everything you buy going forward. Enjoy!















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