

# 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 staffs towards improving the sound reinforcement of their choirs. A lot of clients are complaining that they just can't hear the choir, or that they can't get the level of the microphones high enough to hear the choir without constant feedback issues. To be honest, we have found that these complaints can almost always be traced back to inadequate microphones, hung over the choir in the wrong place. And in some cases they simply have too many choir microphones. Remember, the more active microphones you have on your choir the more chances you have for feedback and phasing issues. This is definitely a case when more is not always better.

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 Stand-Preamp: \$599 CK47 Capsule: \$459



MB5050/ M1250B: \$499



PR-30: \$249

1700 VP: \$599



Yes, we still look at spec sheets, but once we see 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 here has a different yet unique sound or performance characteristic, with none of them being 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 them up to levels the typical choir mic system could never achieve before feeding back. If you need level because you are trying to bring the choir above an orchestra, the GN155/CK47 is your ticket. However, we found the CK47 capsule is better suited to louder choirs due more to the perceived high-frequency roll-off. 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 them, your money will be well spent and your search for the ultimate yet affordable choir mic system 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

#### 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! Everything 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 minute, and a guartet the next, just turn the knob on the box and adjust the pattern to fit 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 "character-adding" microphone. It is not designed to do anything but reproduce (very effectively we might add) what it is placed in front of it. It is a very well thought out device that is very well made, and sounds really great as well. Lastly, because it is variable pattern, it enjoys little competition in a very crowded market. And, the "cool" factor is off the chart. We especially like the blue LED. Very cosmopolitan...indeed. The 1700VP will fit on any standard mic stand, short or tall.

#### 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 with the others" 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 build quality. 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 made so well. 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. Stellar build quality and a nofrills design execution reveals that we do in fact still build some great world-class 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. In some ways it sounds more like a condenser, than a condenser. 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 other clients is in regards to its 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. It is an unbelievable piece, and if I could only own one microphone, this would be it. Period. If I'm ever exiled to a desert island, I'll be taking my PR-30 with me...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, you really can't 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 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 for release we also offer the elite models in 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. So the investment in a high-end microphone should be accompanied by a high-end preamplifier. So, if only the best will do, call us and we'll be happy to put you behind the wheel of Ferrari or Rolls Royce! A word of caution though.....venturing into high-end microphone and preamp territory will in fact change your perception of quality in everything you buy going forward. Expensive microphones and expensive preamps always sound expensive. Enjoy!















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