

WIRELESS MICS AND OTHER GADGETS

We were the first local dealer to discover US-made **Audix mics** over ten years ago, and they have since become a top choice of major artists due to their exceptional sound quality and feedback rejection. So when we sold wireless handheld systems, we naturally preferred to provide Audix mics with them. The problem was that few wireless manufacturers were offering superior Audix handhelds in their product line. So we often opted for purchasing cost-effective systems with transmitter modules that plugged into the base of any mic converting it to wireless operation. Then we plugged in an Audix and had the best sounding wireless system at the lowest price.

Now Audix has solved our dilemma! They've released their own **UHF wireless systems** which are equipped with a choice of their great mics in the same price range as our popular and economical Sennheiser Evolution series. Features include 200 selectable frequencies, a transmitter battery indicator *on the receiver*, up to 16-hour battery life, and rack kit. Plus, Audix now offers their new HT5 mini-headworn system for pastors and other speaking applications - the most stable and durable model on the market.

We still like Sennheiser systems for lapel mics because of their miniphone mic connection. Most companies use a multipin connector for the mic, but a miniphone is easier to repair and available in local stores (even Radio Shack) if you damage one. It also gives us the option of using a unique lapel mic which utilizes a right-angle miniphone plug for less stress (a Sanctuary Sound exclusive), and at a much lower cost without sacrificing sound quality! It's another example of how we improve dependability while saving you money.

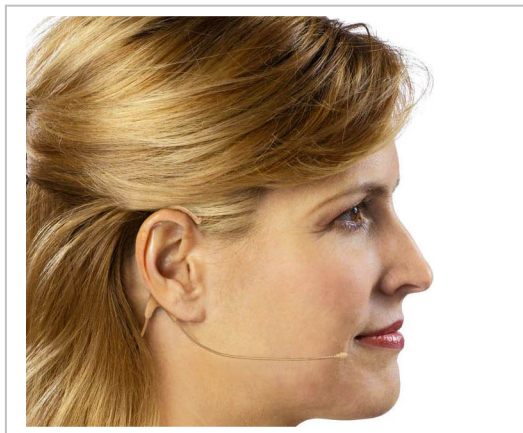


Wireless Tips

1. If you're having problems with interference and your receiver has telescoping antenna, lower the antenna one or two sections. This can weaken the signal pickup enough to eliminate interference without affecting mic pickup. (Squelch only works when transmitter is off.)
2. If you have multiple UHF systems that don't have a name display function but do have frequency selection and display, set the various MHz frequencies so the last whole number "labels" system 1 through x such as 791.000, 792.000, and 793.000 for wireless 1, 2 & 3.
3. Check and clean transmitter battery contacts often with alcohol and Q-tips to avoid static and dropout.
4. To bring a choir out over a strong band and orchestra, mic up to eight singers with wireless AT Microsets. ▶

Audio-Technica's new ATW2000 wireless handheld and bodypack systems have cut the cost of UHF while retaining important features like metal receiver casings, 1/4" and XLR outputs, 10 selectable frequencies, and rack kits included. They can also be paired with their new **MicroSet** mini-headworn which offers the small size of our popular Countryman E6 with a more stable design that costs \$100 less! Excellent for pastors and ministry theatre.

AUDIO-TECHNICA UHF



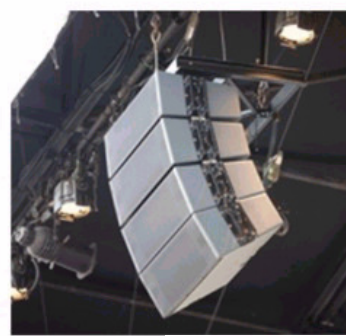
See more on mini-headworns on our website.

Conventional & Line Array Speakers

Speakers are the most crucial element in system design and the area where most installers make their biggest mistakes. At SSI, we apply both technical expertise *and* common sense to our speaker designs. We also carry some of the best designs available offering excellent sound quality, smooth coverage and dispersion absent of comb-filtering problems (typical with multiple speakers), and economy without sacrificing performance. These include **WorxAudio's** unmatched line of circular waveguide speakers, **Yamaha's** new high-power/long-throw Installation Series, and the renown **Nexo** line-arrays for the most demanding applications. For rooms large or small, we've got your listeners covered!

In rooms that demand a conventional array for more width coverage than depth, we utilize **WorxAudio waveguides** with their wide dispersion and 2" high-frequency drivers for up to 1500 seats and 75' of projection from speaker to rear seating. For deeper rooms that require more projection and a higher SPL for contemporary praise, we jump to the **Yamaha IS** speakers with 3" high-frequency drivers and a tighter 60° pattern. Along with a variety of model sizes, both of these speaker designs allow vertical or horizontal placement for meeting special needs such as low ceilings or underbalcony, and a small 6" high Yamaha model even accommodates step riser installs for supplementing front rows.

For rooms over 100 feet deep or those with more demanding coverage requirements, the **Nexo GeoS** line array is the most economical and "talked about" high-performance speakers I've seen. They offer superb response, small size and light weight for easy suspension (less than 29lbs each!), easy-adjust array hardware, and a unique horn that can be configured for either 120° or 80° width coverage.



CD Recording & Duplication



Most churches don't realize that CD recording and duplication has become much cheaper than cassette in recent years. Besides offering better digital quality, blank CDRs can be 1/3 the price of the cheapest cassette, there are none of the considerable maintenance costs associated with mechanical high-speed cassette duplication, and material can be easily transferred to computer for editing, archiving, and internet access.

Microboards has been our prime supplier of dependable CDR duplicators, but most don't know about their best kept secret: the QD-123, a 4-drive unit that duplicates 3 CDRs at 52 times normal speed for only \$650! That's half the cost of a 1x3 cassette duplicator. Microboards also supplies CD/DVD publishers which offer automated 2-drive duplication and on-CD printing.



Marry the QD-123 with our Denon DN-C550 dual CD/CDR, and you'll have independent (and simultaneous) CD playback and CDR recording plus a 2x speed/1x1 duplicator, all for under \$1400. If you don't need CD playback, Microboard's Copywriter Live is a dual-CDR with continuous record and 20x duplication for the same price!



Favorite Quotes

- I can do only one thing at a time, but I can avoid doing many things simultaneously.
- I've reached the age where the only thing I can exercise is caution.
- People live longer than ever before, a phenomenon compelled by the 30-year mortgage.
- A positive attitude won't solve everything, but will annoy enough people to be worth the effort.
- If you can't be kind, have the decency to be vague.
- If the future belongs to our kids, why do they spend money like there's no tomorrow?
- If at first you *do* succeed, try not to look astonished.
- A truly happy person is one who can enjoy the scenery on a detour.
- Scratch a dog and you'll find a permanent job.
- If you want to be a leader, just obey the speed limit on a winding two-lane road.
- Raising teenagers is like nailing Jell-O to a wall.
- By the time you can make ends meet, they move the ends.
- Nostalgia isn't what it used to be.
- Indecision is the key to flexibility.
- An atheist is one with no invisible means of support.
- The problem with the rat race is even if you win, you're still a rat.

M7CL



Centralogic.

This is a new standard in live sound digital mixers. Following in the footsteps of Yamaha's world-class PM1D modular and PM5D digital consoles, the M7CL is the first to offer all the digital advantages priced below that of a less-than-comparable analog console. Available in 40 and 56-channel models, it features touch screen control, all channel faders and manual editing controls available simultaneously (no layer switching), 16 aux sends, 8 DCA fader groups, up to 16 onboard 31-band graphic EQs, total mix memories with recall and protect, and USB jumpdrive port for data storage and security key access. For large format mixers, this is now the unmatched choice. See more on our website [News page](#).

New In-Ear Monitors

NOW SHIPPING!



Galaxy Audio has broken the price barrier with their new UHF wireless in-ear monitor system with 64 user-selectable channels. It is available as a single system for under \$500, or as a 1-transmitter/4-receiver package for under \$1000 (perfect for multiple backup vocalists or as a quality hearing-assistance system). Now you can afford the freedom and low stage levels of wireless IEM.

New! Ministry Sound Packages



Sound install packages have rarely been offered due to the complexity and variations demanded of configurations for different rooms. Now with advances in current and evolving sound technology, it is uniquely possible for us to offer a variety of discount system packages completely installed and tuned that provide world-class performance at economical prices. And Sanctuary Sound is one of the few dealers in the country with the collection of state-of-the-art equipment needed to do this. Here's why it works:

The Mixer - In the past, analog mixers have suffered the most limitations by lacking true expandability and requiring considerable external processing and integration. The cost, complexity, and cabling required would increase based on a myriad of input, output, and speaker processing needs. Those limitations have been all but eliminated by the newest *digital mixers*. Now we have the built-in advantages of programmable routing, expandability, 8-16 aux/monitor feeds, and signal processing for all inputs and outputs that allows us to custom-configure the mixer itself for specific needs. Extra equipment no longer has to be continuously figured into the system design.

The Speakers - For the most part, speakers have used basic square horn designs that have been very finicky about coverage and how multiple enclosures interacted together. Now advanced design *circular waveguides and line arrays* minimize these unforgiving attributes. Where both designs offer improved response and interaction, quality waveguides offer a unique dispersion of both long-throw and short-throw patterns from a single speaker while line arrays provide the most defined and easily adjustable coverage for larger rooms. Now speaker designs can be packaged based on a maximum room size. (Typical systems cover a 180° seating arc and rooms up to 100' square.)

PACKAGES - If you're looking for a brand new sound system, here are just two examples of turnkey digital packages we've prepared:

\$12,500. A startup 16-channel system with optional expansion to 24 channels, three flyware-equipped waveguide speakers with 12" woofer and 2" driver, two waveguide floor wedges and two Hot Spot monitors, handheld and mini-earworn wireless mics, three floorboxes with all mic and monitor connections, 2300watts of amplification, hardware, snake, cables, stands, full installation and ready to plug-in (or add) your mics and instruments.

\$28,900. A 32-channel system with more of the above plus two 18" subwoofers, six concert-grade vocal mics, two handheld and two mini-earworn wireless systems, choir/ensemble and pulpit condenser mics, Aviom in-ear monitor system, CD playback and CDR recording.

We still provide our broad range of customized systems and upgrades. Contact us to find out more about system packages and pricing.

More than products . . . Performance.

Sanctuary Sound

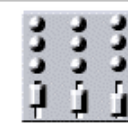
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Digital vs Analog Mixers by Ira White

There was a recent article title in **Technologies for Worship** magazine (www.tfwm.com) that caught my eye: **The Dirt On Digital Mixers**. As one who has been engineering on and installing analog and digital mixers for years, I have seen a lot of misrepresentation on both and thought this might be another misguided opinion against digital mixers in the worship environment. I was pleasantly surprised when the author turned out to be an experienced and insightful engineer honestly expressing the advantages of digital.

It is time that ministries understood that this has become the 21st-century mixing technology, and all the old myths have gone up in smoke with recent digital offerings. They are sonically superior to most analog mixers and easier to run in many respects. Their layout encourages operators to know more about what they're doing (unlike analog where anyone can turn knobs without knowing the ultimate outcome), they display much more helpful information, and digital can always get you back on track instantly if someone does mess up.

It has also been a curious contradiction to me that while many system contractors are installing comparatively expensive and complex software-based video systems in place of outdated projection methods for obvious reasons of quality and flexibility, the same companies will recommend against a digital mixer and install a basic analog next to all this high-tech multimedia gear even though sound is uniquely vital to the entire service. (Of course, this may be understandable if they aren't a digital mixer dealer.) Though many are now gravitating to digital system processors by numerous manufacturers, these only offer limited digital advantages to a predominantly analog system. The good news: digital mixers actually incorporate most if not all system processing which can eliminate the need for any external devices.

Three years ago, my ratio of installing analog to digital was about 5 to 1 in favor of analog. Now it has become 5 to 1 in favor of digital. The reason? Ministries are recognizing the distinct benefits. My own concerns have long been based on the fact that church sound can incorporate crucial elements of speaking, music, and drama, all for discriminating listeners of every age group, all on high-tech equipment, yet it is run primarily by non-professional volunteers. This seems to be a recipe for disaster and often is. Digital mixers, when configured properly, can be a blessing by doing at least 80% of the work automatically and having the ability to reset everything perfectly with the touch of a button. That's called *consistency*. That's also called *peace of mind*.

There are also misunderstandings about cost. A basic 24-channel analog mixer alone plus a digital signal processor capable of processing only mains and three aux outputs would run around \$5000. For the same cost, a 32-channel digital configuration would offer sophisticated processing for all inputs plus mains and eight auxes (that's 42 processors!) along with memory store & recall of numerous complete mixer and system settings. A 40-channel analog+processor package with 10 aux sends would be at least \$20,000 while a digital console with 16 auxes and 58 processors would cost thousands less. In other words, where feature-packed digitals may cost more than some basic analog mixers alone, they can end up being less because you don't have to buy and install extra essentials.

It becomes apparent from a cost standpoint that analog mixing is no longer a bargain. If you have a pro engineer on-staff who is a diehard analog user for one reason or another, I would respect his wishes as long as he truly understands the current nature of digital and is not just avoiding change. He must also consider the benefit to others of less skill if he is not the only one running the system. One crucial point is that newer digitals can provide level and editing control for all channels simultaneously without the need for fader-layer switching. A final concern is if you have major artists coming in from time to time, often with their own touring engineers. From that standpoint, most engineers are familiar with and typically prefer Yamaha consoles, so they are the safest and most reputable digital choice around the world. As sound director for my church, my team and I had to qualify digital before making the change three years ago. We're all glad we did, and it has served admirably for national artist concerts by Todd Agnew, Sara Groves, Nicole Mullin, and Paul Wilbur.

In closing, all I can say is that digital consoles deserve serious if not priority consideration before any mixer upgrade. In most cases, I believe you'll find that anything less would be a trip backwards into the "stone-age". And here at Sanctuary Sound, you can trust in our unique experience and insight in providing digital systems that optimize quality, flexibility, and ease of use.

See information on the new Yamaha M7CL digital console in this issue and on our website News page.



In-Ear

Monitors

An added feature of using Yamaha digital mixers is their unique compatibility with the **Aviom multichannel IEM** (In-Ear) stage monitoring system. Aviom offers an exclusive module designed for Yamaha card slots which equips the mixer with digital routing and CAT5 output for running Aviom A16II personal mixers. The A16IIs are small, digital mini-mixers used by individual performers on stage for personalized 16-channel monitor mixes of direct, group, or aux outputs from the house mixer. Each A16II mixer will store monitor setups for multiple users, and can feed its mix output to earbuds, headphones, or wireless IEM for perfect monitoring with no feedback or added stage levels. *See more on the News page of our website.*