



HOW TO FIND THE RIGHT PRO SOUND GEAR FOR YOU!

With the wide variety of name brands, models, features and countries of origin, it can be very confusing to find the right instrument for you.

At Music Go Round, we are all about “The right gear for the right customer.” In an effort to further support our philosophies, we have created an easy to follow, but detailed document on how to find the right Pro Sound gear for your needs.

Of course, Music Go Round LOVES USED gear, but this document will benefit you if you are looking at new or used products.

Here are some FAQ's our sales associates hear every day!

Q: There are many different types of microphones. What is the best type for me?

A: You are correct, there are many types of mics, but for most of our customers, they will find use in two types: Dynamic and Condenser.

- **Dynamic** mics are the most common and most affordable. If you have ever spoke into a mic that looks like an ice-cream cone, you have used a dynamic mic. In a dynamic microphone, the diaphragm moves either a magnet or a coil when sound waves hit the diaphragm, and the movement creates a small electrical current. That current is sent through the cable to the mixer, then power amp and ultimately comes back as amplified sound through your speakers.

Condenser microphones are essentially a capacitor, with one plate of the capacitor moving in response to sound waves. The movement changes the capacitance of the capacitor, and these changes are amplified to create a measurable signal. Condenser microphones usually need a small battery to provide voltage across the capacitor. A condenser mic is more precise and typically has a broader frequency response (higher highs and lower lows) than a dynamic microphone.

If you are playing in a live band, a dynamic mic is perfect for vocals, guitars, bass and drums...or any other live instrument. They are durable and affordable and typically represent 90% or more of the microphones we stock and sell.

Q: My band needs a practice PA...what do we need and how much power should we have?

A: A good practice PA is vital for your rehearsals, so you should be certain to have enough power and speakers to cover the volume of your drums, but not to damage hearing or “mush” the sound of your band. Simply put, the less volume you use during rehearsals, the better you can hear all of the parts...and the better you will perform!

Here are some guidelines that we typically recommend:

- **Mics:** Each vocalist should have a mic and a stand for rehearsals. While sharing mics on stage looks cool, rehearsals are meant for practicing your trade.
 - Make it easy on your band and have every member that sings/screams/raps/talks have their own mic.
- **Power:** This subject is debatable, but a practice PA should start around 100w of power. As the old saying goes, you can never have too much power and “clean head-room” is always a blessing. If you can afford more power, it is always good to have.
 - The last thing you need to hear at rehearsals is a tortured and distorted PA that can barely keep up with your drummer (unless that is the effect you are going for!). A simple powered mixing head or small mixer and power amp should suffice.
- **Mixer:** The easiest way to get this done is by purchasing a powered mixer. These units will contain a 4 to 8 channel mixer and a power amp all in one box. They are portable, no-nonsense products that are very functional and cost-effective.
 - You will need at least as many channels as you have microphones for your rehearsal. An additional input for a CD player or MP3 player is always a good idea as well.
- **Speakers:** Again, nothing crazy is needed. A big wall of speakers LOOKS cool, but is really overkill and can easily promote excessive volumes and damaged hearing. A pair of “12” & horn” or “15” & horn” speaker cabinets on speaker stands should easily cover your needs.
 - Some bands prefer to practice in a “stage” setting where they would have monitor cabinets in front of them, which is also a good idea.

Music Go Round always suggests keeping it simple when it comes to rehearsal gear. The more complicated you make it, the harder it is to operate and get a sound that is satisfactory. Our gear experts are prepared to help you put together the best practice PA for your bands needs...all you have to do is stop in and ask!

Q: What is the difference between all of the different effects? Delay, reverb...they all sound the same to me!

A: An effect is an enhancement to the original signal. It is typically applied after the signal has entered the mixer. An external unit called an “effect processor” delivers an effect. The common types of effects are: reverb, delay, chorus and EQ

- **Reverb** is the electronic or analog simulation of natural room echo. Clap your hands in an empty room and you will hear natural reverb. It is the “sound” of open space and helps make a signal sound large, like it does in a natural setting.
- **Delay** is also known as echo and is the digital or analog reproduction and repetition of the original signal. Just like your visit to the Grand Canyon (Hello...Hello...Hello), Delay repeats the original signal at a specified time and volume difference from the original. As with reverb, this effect helps make the original signal larger and broader than the “dry” signal.
- **Chorus** is similar to a VERY short delay process. So short that it sounds like two of the same signal being played at the same time or a “doubled” signal...hence the term “chorus.” The effect is sometimes compared to what a 12-string guitar sounds like as ½ of the strings are doubled and produce the same tone.
 - Chorus is more commonly used on guitars and basses, but can find its use in vocals and recording as well.
- **EQ** is the acronym for Equalization. Just like your home or car stereo with “bass” and “treble” adjustments, an equalizer controls the amount of specific frequencies in the signal, allowing you to add or subtract that frequency from the final mix.
 - Every PA system: practice, club or arena, will have an EQ in the processor chain. They are simply that important to making the sound coming out of your PA “good” to your listener’s ears.

There are many other types of effects and processors that do wondrous and magical things. To discuss other types of processing, consult the gear experts at the Music Go Round nearest you!

Q: On the back of my amp, next to the speaker jack, it says “8Ω minimum.” What the heck does that mean?

A: The omega sign refers to “ohms” or a measurement of electrical resistance. Because neither you nor me can really explain Ohm’s law, we’ll simply recommend this:

- If you check the back of your speaker cabinet, you will see a rating next to the input jack that gives you an impedance rating (4, 8 or 16). You simply want to make sure that your amp has a similar rating on the back of it...matching an 8Ω load with an 8Ω speaker. We’ll leave the physics lesson for AFTER band rehearsal!

Q: Is there a difference between speaker cable and instrument cable? Can I use them for either application?

A: Yes, there is a huge difference between speaker (un-shielded) and instrument (shielded) cables. While you *could* use a speaker cable for instrument applications, you won't like the result, as your signal will be as noisy as two cats fighting in a back alley! You should NEVER use an instrument cable as a speaker cable. Here is the reason why:

- **Instrument Cable** is made up of three pieces: copper wire, a fabric "shield" and a rubber coating. The fabric shield protects the copper wire from outside interference or RF. This shielding, when carrying very high impedance loads (like from a guitar, bass, keyboard or microphone) works in its intended fashion. If a higher powered, lower impedance signal is fed through a shielded cable, the fabric shield actually heats up and could even smolder. This would be considered BAD! The cable is simply not intended to handle a load of this "power". You could potentially damage your amplifier in this process as well.
- **Speaker Cable** is unshielded cable. Simply put, it is intended to move amplified signals from a power source (amp) to the speakers. As stated before, it won't do any harm, but certainly will not sound good.

We always recommend that you mark your cables so you know what goes where.

Q: What accessories will I need to complete my PA purchase?

A: Check out the other document on our "Pro Sound" page for advice on getting started. We have a complete list of products and accessories to make sure you get started on the right foot!