



### **What does an amplifier do?**

Simply put, an amplifier's delivers clean power to your speakers. Most speakers are passive devices, meaning they require external power to operate. In a typical home theater environment, an amplifier is connected to an A/V receiver, which acts as a preamp. The amplifier receives an electrical signal from the preamp then amplifies the signal before it reaches the speakers. It must accomplish this task without introducing noise or distortion to the signal. The stable power the amp provides to the speakers can enhance sound quality and clarity. While adding a separate amplifier will increase the cost of an A/V system, the benefits are quickly realized in terms of performance.

### **Can my AV receiver power my home theater system or do I need a separate amplifier?**

It depends on the system but in most cases you can use an A/V receiver to power your surround sound speakers. Today's A/V receivers have at least five channels of amplification to power surround sound speakers. Keep in mind, however, that AV receivers have a lot of other duties including connecting and switching audio and video sources; decoding surround sound formats like Dolby and DTS; and tuning in analog, digital and satellite radio signals. Providing power to your speakers is just one of its many tasks. If you're the kind of listener who hears subtle differences in sound quality, you might consider adding a separate amplifier.

### **Can I use a power amplifier alone to play music?**

If the power amp has RCA inputs, you certainly can. You can connect a DVD player, MP3 player, iPod, or laptop computer using a mini 3.5mm to RCA adaptor cable. The 3.5mm connects to the audio/headphone output on your device. This setup is often used for separate audio systems in a bedroom or out on the patio where surround sound processing or a radio tuner isn't required.

### **What are the different types of amps?**

Categories of amps include: Mono, 2-channel and Multi-channel. Typically used for subwoofers, a mono amplifier combines both left and right channels then amplifies the signal into a one channel. By channel we mean one speaker, so two channels equals two speakers. A 2-channel amplifier supplies juice to both left and right channels, which is why they are also called stereo amps. A multi-channel amp has power for more than two channels, and separates the channels into zones. Models like the OSD MX1260 include power for 6 zones or 12 channels (speakers). Multi-channel amps are often used to power whole audio systems.

### **What is a Bridgeable Amp?**

A bridgeable amp is when two separate channels are combined into one channel. This doubles the power. For instance, say you have an amp that is 100 Watts x 2 channels. If you combine or "bridge" the channels, you'll get an amp that has 200 Watts x 1 without the risk of overloading the amp. A good example of where this application comes in handy is rooms with only one speaker. In these cases, the speaker will receive either the left or right stereo information, not both. With a mono signal you'll get the full information from one speaker. The tradeoff is that you end out with one output (speaker A output but not speaker B output). In addition, the speaker load must be at 8 ohm.

### **What is Automatic Source Switching?**

Automatic source switching means the amplifier has dual sources: input #1 and input #2. There is no physical switch to choose between them because it is done automatically. Input one takes priority over input #2, so if input #1 is active (playing) then Input #2 is in standby mode. When you turn off #1, input #2 becomes active. If you turn on # 1 again, input #2 goes back into standby mode. Dual source switching does not allow you to play the two sources simultaneously. It simply means you can switch between sources such as DVD or your iPod.