



## R/ Tempe Sound FAQ Sheet

### How loud do we run our sound system?

As a general rule, we aim to not go above 95 dBA **peak** volume level during our Sunday gatherings and achieve between an 88-93 dBA **average** volume level during musical portions of our liturgy, ranges considered safe in the realm of church music for hearing as well as comparable to churches of our size and style.

### Can't you just turn it down?

We wish it were that simple! One complaint lodged against loud services is that it could damage people's hearing. While it is possible to damage hearing at many different volumes, it requires more than volume itself. Significant damage to hearing occurs through a combination of the following factors: proximity to the sound source, sustained exposure, and dBA levels.

Look at the chart below for examples of the combined factors required to result in hearing damage!

<b>Decibel Level</b>	<b>Example</b>	<b>Sustained Direct Exposure For Damage</b>
85 dBA	Snowblower	8 Hours
90 dBA	Lawnmower	2 Hours
95 dBA	Inside A Subway Car	1 Hours
100 dBA	Riding A Motorcycle	15 Minutes
105 dBA	Table Saw	3.7 Minutes
110 dBA	Jackhammer	111 Seconds
115 dBA	Emergency Vehicle Siren	57 Seconds

### What are some options for people who struggle with volume?

#### 1. Sitting in the Sanctuary where it is quieter

In general, the closer you are to the stage, the louder the sound will be. The quietest parts of our sanctuary will be the farthest overflows in distance from the stage or any of the off-center overflows. If you are unable to sit in an overflow space, then the farther you are from the stage, the less volume you may experience.



## **2. Getting earplugs that are available at the production booth**

For those who are more sensitive to sound, we offer ear plugs at our production booth every Sunday that can lessen the volume to your ears by 15-20 decibels.

## **3. Getting a sensory bag for those who may struggle with sounds.**

We also offer sensory bags at the connect desk in our lobby as another option for those who are more sensitive to sound.

## **Why do we use a full band for our music?**

### **1. It is dynamic and it fills the room**

Music is inherently dynamic! Like language and grammar, there are motifs in music that communicate emotion and posture. From classical music to musical theater to worship music, there are many roles that different instruments are able to play.

### **2. A louder volume encourages more singing**

Worshiping, specifically through song, is something we're compelled to do and more importantly, a biblical command! Whether we're tone deaf or musically inclined, there is a reality that music that strongly accompanies us encourages singing.

### **3. We want to worship with all of our emotions**

Like music, life is dynamic and we experience all different kinds of emotions. There are moments of lament and there are moments of celebration. A full band in a worship context helps cover all bases!

## **What are we doing to help make our worship gathering more engaging for everyone?**

### **1. We're having a drum enclosure built**

Drum enclosures made custom and professionally are very expensive. Fortunately, God has provided in an awesome way and someone who is a part of our congregation who



is a metal worker making it at cost! This will allow for more control of our drum volume and cymbal bleed at a small cost.

## **2. We're looking into sound treatment for our sanctuary**

Sound and room treatment is something that most worship spaces/venues see as essential for near complete control of the sound in any given space. Each room holds and forms sound differently according to the different contours and openness of the space. Sound treatment would allow for greater control of the volume and EQ of our space for both speaking moments and moments of musical worship.

Unfortunately, sound and room treatment is not cheap! For a sanctuary such as ours, a full treatment of the room could be in the range of 40 to 50 thousand dollars. For most newer worship venues, this is done when the building is first built, but being in an older building, this is something that will be more and more necessary for the longevity of our space and worship gatherings.

## **Have any additional questions?**

Feel free to reach out to our Production Director!

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